

>Great Falls College MSU

# Great Falls College MSU Catalog for 2010-2011

This catalog contains general information about the campus and specific information about degree programs. If you have questions or comments, please contact admissions@gfcmsu.edu.

- \* Addendum to Catalog
- + College of Technology in Bozeman Transitioning to MSU-Bozeman's Gallatin College **Programs**

View Course Descriptions AST, DRFT, DE and WLDG

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## **Dean's Welcome**

## Dear Prospective Student:

I believe one of life's greatest accomplishments is the attainment of educational goals we set for ourselves. Here at MSU–Great Falls, we are committed to helping you attain your goals. We are a student-centered institution, proudly focused on student success through quality instruction and learning. Our students come to us from all walks of life and we relish the diversity each individual brings to the campus community.

There has never been a better time to pursue a college credential with MSU–Great Falls. We offer programs in high-demand, high-wage career areas such as healthcare, business, information technology and our new construction trades program. A degree in these or any of our other outstanding programs is a first step in your new career. Our campus boasts a tremendous placement rate for graduates entering the workforce.

If your education goals include a four-year degree or beyond, MSU–Great Falls offers a high-quality, affordable place to start. The College offers the Montana University System Core and Associate of Arts/Associate of Science degrees along with numerous articulation agreements with other Montana universities all leading to ease of transfer as you move on to your bachelor degree program.

MSU–Great Falls understands today's students need flexibility and easy access to education. For this reason, we offer more online courses than most of the big campuses in Montana with various programs entirely online. In addition, MSU–Great Falls has numerous evening courses to accommodate working individuals.

Not only does MSU–Great Falls offer associate degree and certificate programs, but there are many opportunities for you to update your skills or learn a new hobby through our professional and continuing education, customized training, and special community events.

Finally, you will not find a better value than the education you receive at MSU–Great Falls. The quality education, small class size, individual attention, helpful student services, and exceptionally affordable tuition all add up to a smart investment in your future.

On behalf of the faculty and staff at MSU–Great Falls, I wish you much success in your educational pursuits and look forward to playing a part in helping you accomplish your goals. Welcome to MSU–Great Falls.

Sincerely, Joe Schaffer, Dean/CEO

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# **Tagline**

Changing Lives – Achieving Dreams

## Vision

In the next decade, MSU–Great Falls will play a leading role in transforming the lives of our students, their communities and the economic prosperity of Montana by responding to learner and community needs through the use of partnerships, innovation, outreach and technology.

## Mission

Our Mission is to foster the success of our students and their communities through innovative, flexible learning opportunities for people of all ages, backgrounds, and aspirations resulting in self-fulfillment and competitiveness in an increasingly global society.

## Values

- Accountability –We ensure our decisions are data-informed and grounded in the best interest of our students and their communities.
- Integrity We value civic responsibility, high academic standards, ethical practices, and the courage to act.
- Lifelong Learning We believe education is a lifelong necessity and commitment; we
  personify this belief by engaging and reengaging students from all generations in
  learning opportunities.
- Respect We value differences and treat others with civility, encouraging open and honest communication.
- Responsiveness We recognize and act upon opportunities to be innovative, flexible, and adaptable to our students' and communities' needs.
- Student Success We are dedicated to student success and achievement; we strive to meet the educational needs of our students and their communities.

## Core Themes

At Great Falls College MSU we live the community college experience through an open-access admissions policy, a comprehensive educational program, a focus on teaching and learning, and a philosophy of student-centeredness. We strive to attain our Mission through the Core themes and Goals of:

- Workforce Development: Through applied programming our students successfully attain a credential leading to life sustaining careers;
- 2. Transfer Preparation: Our students complete transfer programming and successfully

transfer toward a four-year degree;

- 3. **Academic Preparation**: We prepare individuals for success in college coursework through developmental (remedial) education and adult basic education; and
- 4. **Community Development**: As the community's college, we support social and economic development through outreach, lifelong learning, and active partnership.

## **EIGHT ABILITIES**

The faculty and staff of MSU–Great Falls College of Technology have deemed the following abilities to be central to the personal and professional success of all graduates:

- Communication: The ability to utilize oral, written and listening skills to effectively interact with others.
- Quantitative Reasoning: The ability to understand and apply mathematical concepts and models.
- 3. **Inquiry and Analysis:** The ability to process and apply theoretical and ethical bases of the arts, humanities, natural and social science disciplines.
- 4. **Aesthetic Engagement:** The ability to develop insight into the long and rich record of human creativity through the arts to help individuals place themselves within the world in terms of culture, religion, and society.
- Diversity: The ability to understand and articulate the importance and influence of diversity within and among cultures and societies.
- Technical Literacy: The ability to use technology and understand its value and purpose in the workplace.
- Critical Thinking: The ability to understand thinking that is responsive to and guided by intellectual standards such as relevance, accuracy, precision, clarity, depth, and breadth.
- 8. **Effective Citizenship:** The ability to commit to standards of personal and professional integrity, honesty and fairness.

## CORE INDICATORS OF INSTITUTIONAL EFFECTIVENESS

MSU – Great Falls College of Technology (MSUGF) is committed to continuous improvement, the evaluation of institutional effectiveness, and the assessment of student learning. This commitment is reflected through an assortment of activities and processes emanating from the College's mission, vision, values, core themes, and strategic plan.

As we strive to become more performance-based in the allocation of resources and create a mission-centric model to document our effectiveness, MSUGF has established a set of measures to guide our processes. These measures, known as core indicators of institutional effectiveness [1], support our everyday operations and assist us as we seek continuous improvement towards mission fulfillment.

MSUGF's core indicators of institutional effectiveness [2] stem from the Montana Board of Regent's system measures of effectiveness, federal accountability law and policy, and the College's Mission and Core Themes. The core indicators of institutional effectiveness are summarized in the following:

Core Indicator 1: Participation (Credit-Bearing)

Core Indicator 2: Regional Market Penetration Rates

Core Indicator 3: Persistence (Retention)

Core Indicator 4: Graduation Rates

Core Indicator 5: Demonstration of Abilities

Core Indicator 6: Success of Remedial Students in Developmental Coursework

Core Indicator 7: Success of Remedial Students in Subsequent and Related Coursework

Core Indicator 8: Workforce Degree Production

Core Indicator 9: Job Placement and Earnings

Core Indicator 10: Licensure and Certification Pass Rates Core Indicator 11: Employer Satisfaction with Graduates

Core Indicator 12: Transfer Degree Production

Core Indicator 13: Transfer Rates

Core Indicator 14: Performance after Transfer

Core Indicator 15: Participation (Professional & Continuing Education)

Core Indicator 16: Contract Business Training

[1] A core indicator is "...a regularly produced measure that describes a specified condition or result that is central (or foundational) to the achievement of a college's mission and to meeting the needs and interests of key stakeholders" (Alfred, Shults, and Seybert, 2007, p. 12). Alfred, Shults, and Seybert (2007, p. 23) identified sixteen core indicators of effectiveness for community colleges. If applied comprehensively, these indicators will establish the foundation for a model of institutional effectiveness that will allow us to document our performance. We have adapted those core indicators and they are divided into five components related to our mission: student progress; developmental education; outreach; workforce development; and transfer preparation (Alfred, Shults, & Seybert, 2007, p. 23).

[2] Core Indicators of Institutional Effectiveness are assessed at the institutional level. In addition departments and divisions maintain and assess their effectiveness with unit-level indicators.



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## **General Information**

#### NOTICE CONCERNING MATERIALS DESCRIBED IN THIS CATALOG:

All provisions within this catalog are subject to change without notice.

While the College will make every effort to provide all described courses and programs, the final decision regarding availability will be determined by enrollment, available faculty, funds, and employer training needs.

#### Governance

Great Falls College MSU is a two-year technical/community college within Montana's public university system. Central administrative control of the College is vested exclusively in the Montana Board of Regents. The Regents have full power, responsibility, and authority to supervise, coordinate, manage, and control the colleges and universities within the Montana University System.

Although a stand-alone institution for purposes of institutional accreditation, budget, personnel, and management, Montana State University—Great Falls College of Technology has been affiliated with Montana State University since July 1, 1994.

## Accreditation

Great Falls College MSU is accredited by the Northwest Commission on Colleges and Universities, a regional postsecondary accrediting agency. Regional accreditation assures the quality of the educational experience and facilitates the transfer of credit to state and national colleges and universities.

In addition, the Dental Assistant, Dental Hygiene, Emergency Medical Technician, Health Information Technology, Medical Assistant, Physical Therapist Assistant, Practical Nurse, Respiratory Care, and Surgical Technology programs are accredited and/or approved by their respective state and/or national agencies.

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

## **Important College Regulations and Policies**

## **Crime Awareness and Campus Security**

It is the policy and commitment of the College to afford its students, employees, and visitors a campus and educational environment that is as safe and free of crime as possible. Students, employees, and visitors contribute to overall campus safety by reporting criminal activity, by securing personal possessions, and by being aware of personal safety when entering or exiting the campus buildings. A brochure which provides campus crime prevention information as well as statistics on the incidence of campus crime is available in Student Central.

## **Drug-Free Campus Policy**

In compliance with the Drug Free Workplace Act of 1988, Public Law 101-690, Montana State University—Great Falls College of Technology is committed to a good faith effort to provide a drug-free campus. Therefore, the manufacturing, distribution, sale and/or abuse of illicit and/or prescription drugs, or the inappropriate use of alcohol at the College or in any activity affiliated with the College is prohibited. In addition, the College will enforce the Board of Regents' policy, Section 503.1, of the Policy and Procedures Manual regarding alcoholic beverages. Students must comply with this policy as a condition of attendance. Violations of this policy will result in disciplinary action up to and including expulsion and/or referral for prosecution. At the discretion of the Dean of the College of Technology, a student violating the policy may be required to satisfactorily complete a drug or alcohol abuse rehabilitation program as an alternative to expulsion or as a condition for readmission.

According to information provided by the U.S. Department of Education, drug and alcohol abuse may cause personal health problems, as well as interfere with work, school and daily living performance.

The Great Falls community has a number of excellent resources available to assist an individual who is having difficulty with drug and/or alcohol abuse. Student Central Advisors at the MSU–Great Falls College of Technology are familiar with community resources and are available to refer individuals for assistance and/or treatment to overcome the problem of drug or alcohol abuse. If an individual is reluctant to approach College personnel, information about assistance programs may be obtained by calling the Community Help Line - 761-6010.

#### **Equal Opportunity Policy**

Montana State University–Great Falls College of Technology is committed to the provision of equal opportunity for education, employment, and participation in all College programs and activities without regard to race, color, gender, marital status, disability, age, disadvantage, religion, political affiliation and/or national origin.

The College's Equal Opportunity Officers are the Executive Director of Human Resources and the Assistant Dean of Student Services, 2100 16th Avenue South, Great Falls, MT 59405. Telephone: 406-771-4300.

#### **Sexual Harassment Policy**

Title VII of the Civil Rights Act of 1964 prohibits discrimination on the basis of gender. Sexual harassment is a form of gender-based discrimination. Montana State University–Great Falls College of Technology prohibits and will not tolerate sexual harassment on its premises, within any of its programs, services or other College-sponsored activities, or by anyone acting as an agent of the College.

MSU–Great Falls College of Technology uses the definition of sexual harassment set forth by the U.S. Equal Employment Opportunity Commission which states:

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitutes sexual harassment when submission to or rejection of this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work performance or creates an intimidating, hostile, or offensive work environment.

Title IX extends these protections to include students. Other consumers and members of the general public who come into contact with the College or its agents are covered by this policy as well.

Any employee who believes he or she is experiencing sexual harassment should immediately contact the College's Executive Director of Human Resources to discuss options for resolving the issue. Students should contact the Assistant Dean of Student Services and anyone else should contact the College's Dean. Individuals are generally encouraged to attempt to resolve the issue informally by discussing their concerns with the alleged harasser, his or her supervisor, or both. However, the College recognizes that sexual harassment is a sensitive and potentially volatile issue, and if it is not feasible for the harassed individual to follow this recommended procedure, the appropriate agent should be contacted initially to begin an investigation. All complaints will be handled with discretion and information provided in the initial complaint and during the course of the investigation will remain as confidential as possible. The identity of both the complainant and the alleged harasser will be protected.

Any individual found to be guilty of violating the College's sexual harassment policy will be

subject to discipline commensurate with the nature of the offense. Disciplinary action up to and including

termination (or dismissal in the case of a student, termination of a contract in the case of a contractual relationship, or restricted access to the College in the case of a member of the general public) may be implemented.

Individuals who submit complaints and/or participate in the investigation process are protected from retaliation due to their participation. Anyone engaging in retaliatory behavior will be in violation of the College's sexual harassment policy, and therefore subject to appropriate disciplinary action as outlined above.

MSU–Great Falls College of Technology is committed to providing and ensuring a safe, positive learning environment that is free from harassment. A complete version of this policy may be obtained from Human Resources or online at <a href="https://www.gfcmsu.edu">www.gfcmsu.edu</a>

## Student Central

Student Central is a type of "One Stop Student Shop" for students at MSU–Great Falls College of Technology. Located at the north end of campus, just inside the big atrium entrance, students can have confidence that everything they need in terms of services and information will be right there. Student Central contains the following services and functions for the College's students:

- · Academic Advising
- Admissions
- · Assistant Dean of Student Services
- Career Services
- · Facilities Director
- Financial Aid
- Recruitment
- Registrar
- Retention
- Student Accounts
- Student Assistance Foundation
- TRIO/Educational Opportunity
- · Veteran's Services



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# **Student Central - Admissions**

- Admission Requirements
- Advising
- Applicants
- Cancellation, Refund & Grading Policy for Courses Numbered 194 and 094\*
- Credit by Examination
- New Student Registration and Orientation

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- Registration
- Registration Requirements
- Residency Requirements
- Transfer From Other Institutions
- Transfer To Other Institutions
- Tuition & Fees Policy
- Tuition & Fees Schedule



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# **Student Central - Academic Information**

- Academic Progress
- Adding & Dropping Courses
- Attendance
- Common Course Numbering
- Course Numbering System
- Course Substitution/Course Waiver
- Degrees Offered
- Student Evaluation of Courses
- Grading
- Graduation
- Honors
- Transcript of Record
- Withdrawal from the College





# Student Central - Financial Aid

TITLE IV SCHOOL CODE 009314

Regular Office Hours: Monday-Friday 8:00 am - 5:00 pm

**Phone:** 406.771.4334 or 800.446.2698

FAX: 406.771.4410 Email: finaid@gfcmsu.edu Mailing Address

Great Falls College MSU, Financial Aid Office, 2100 16th Ave. South, Great Falls, MT 59405

- Application Process
- Assistance in Applying
- Attendance
- Changes to Financial Aid Policies
- Disability Disclosure Statement
- Electronic Notification
- Eligibility Requirements
- Federal Family Education Loan Program (FFELP)
- Financial Aid Federal Direct Loan Program
- Tuition Waivers
- Financial Aid Programs
- Priority Deadlines
- Return of Title IV Funds
- Scholarships
- Satisfactory Academic Progress Requirements
- State & Local Services
- · Veterans' Benefits
- Withdrawals / Changes in Enrollement



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# **Student Central - Student Information**

- Academic Integrity Policy
- Change of Program
- Complaint Procedure
- Disability Services For Students
- Family Educational Rights and Privacy Act (FERPA)

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- Learning Center
- Library





# The Extended Learning Division

By offering innovative and flexible learning opportunities, the Extended Learning Division helps meet the diverse training needs for our internal campus community as well as the external community, as far-reaching as other countries. Made up of both the Distance Learning and the Outreach Departments, the Extended Learning Division anticipates and assesses needs for higher education, workforce training and facilitates the delivery of coursework and programs to meet those needs. The Division creates and sustains an environment of integrity, openness and innovation in providing and communicating the value of the many educational opportunities that we offer.

## **DISTANCE LEARNING DEPARTMENT**

The College offers online courses which are an extension of the on-campus course offerings. Over 120 online courses are offered in General Education, Computer Technology, Business, Health Science, and Office Technologies. Emphasis is placed on offering online courses which support programs at the Great Falls College MSU, as well as other units of the Montana University System.

## **PROGRAMS AND OFFERINGS**

- Associate of Applied Science Degrees
  - Health Information Technology
  - Medical Billing & Coding Specialist
  - Medical Transcription
- Certificate of Applied Science Degrees
  - Computer Assistant (approx. 80% online)
  - Health Information Coding Specialist
  - Medical Billing Specialist
  - Medical Transcription
- Transfer Degree Options
  - Montana University System Core for Transfer
  - Associate of Arts
  - Associate of Science
- Professional Certificate Option
  - Pharmacy Technician (PHA)
  - Public Safety Communications (PSC)

Additional information, including detailed course descriptions, is available on the web at <a href="http://distance.gfcmsu.edu">http://distance.gfcmsu.edu</a>.

## **ONLINE COURSES**

The College uses a variety of delivery methods to best accommodate students and hires qualified faculty, both inside and outside of the Great Falls area, to meet the needs of students working part- and full-time. Faculty are trained and supported by the Distance Learning Department to deliver effective instruction over the Internet. The majority of our online courses are delivered using the D2L Brightspace learning management system. Online students follow the same registration procedures as campus-based students. Online students have full access to Great Falls College MSU library resources, online tutoring through the Learning Center, and have the opportunity to order textbooks online through the COTtage Bookstore (http://www.thecottagebookstore.com). The College plans distance learning opportunities, coordinates their delivery with academic departments, and provides student

and faculty support services. Please contact the Distance Ed office for more information about the programs and/or course offerings. Students at a distance are an important part of the campus community!

## MIXED-MODE (HYBRID) COURSES

A hybrid or mixed-mode course combines the traditional classroom setting with an online component. The amount of on-campus class time varies but is less than a traditional face-to-face course. Students enjoy the flexibility and convenience of an online course as well as the benefits of meeting face-to-face for interactive classroom instruction.

# WEB-ENHANCED COURSES

Many of the on-campus courses are web-enhanced and use various online tools to enrich the course. An instructor may post their syllabus, lecture notes, handouts, grades, and allow email contact online. Assignments may be turned in electronically.

## ADVANTAGES FOR ONLINE COURSES: YOU CAN -

- Take courses from the comfort of your home.
- Earn a degree online while you work.
- Log in and complete assignments any time of day or night.
- Complete prerequisite courses online before relocating.
- Save on travel and childcare costs.
- Blend a course with your work schedule.
- Enjoy learning through an online environment.

## CHALLENGES: YOU MUST -

- · Be self-motivated.
- Learn to communicate effectively using technology to connect with other students, faculty, and the Distance Learning Department by using e-mail, phone calls, and posting to discussion groups.
- Beware of procrastination—online courses follow the same calendar as on-campus classes.
- Learn to use the technology along with course content.
- Own, purchase, or gain access to updated software and a newer personal computer, the latest version of Microsoft Office Professional and the newest Internet Explorer or Mozilla Firefox browser are recommended.
- Read instructions and all course materials versus attending on-campus course lectures.
- Have regular access to an Internet-ready computer and basic computer skills.

## YOU MAY -

• Be required to find a testing proctor or come on campus to take exams for your online course(s), especially Mathematics, Accounting, and Computer Application courses.

For answers to questions about distance learning opportunities, please visit our website or call the Distance Learning Department at 406-771-4440 or 800-446-2698, ext. 4440. The Distance Learning Department is located on campus in A120 and provides orientations, trainings, and technical support.

## **OUTREACH AND WORKFORCE DEVELOPMENT**

An integral and growing part of the College's outreach mission are those activities termed "professional and continuing education" specifically, learning opportunities providing workforce preparation, employee training or re-training, business support, and life-long learning. These educational activities are offered through the Outreach Department and may be organized under varying instructional formats -- workshops, seminars, conferences, institutes, symposia, colloquia, short courses, etc.; however, they are aligned in their focus on imparting information to community members, employers, employees, and other groups in a high-quality, results-oriented manner. These activities are a major component of the workforce development mission extending the College's resources throughout the community.

The Outreach Department offers credit-bearing Certificates and degree programs in addition to individual credit and non-credit bearing Professional and Continuing Education courses. A variety of non-credit courses and certification programs numbered (094) are offered both on campus and online. Credit-bearing courses numbered (194) serve as general electives for Associate of Arts or Science degrees at the college and provide excellent professional development opportunities for teachers requiring recertification with the state.

#### 094 COURSES

Courses assigned a 094 number are considered non-credit professional and continuing education courses. They are typically offered to provide condensed coursework to meet the needs of working students and professionals in need of skills upgrades, to fulfill some of the requirements of Certificates, and other professional certification needs (e.g. OPI Renewal Units for Montana K-12 Teacher Certification). These courses are transcripted as Continuing Education Units (CEU's) and are eligible for Montana OPI Renewal Units. They are transcripted on the student's continuing education transcript. This includes online certification and courses offered through Cengage Learning, Ed2go and Gatlin.

#### 194 COURSES

Courses assigned a course number of 194 are considered credit-bearing professional and continuing education courses. They are typically offered to provide condensed coursework to meet the needs of working students, professionals in need of skills upgrades, to fulfill some of the requirements of Certificates, offer a diversity of electives for Associate of Arts or Associate of Science degree seeking students, and fill certain professional certification needs (e.g. Montana K-12 Teacher Certification). These courses are eligible for financial aid for students using them as electives in degree and certificate programs where authorized. Students should consult their advisor to identify whether 194 courses will apply toward their program requirements. 194 courses are transcripted on the student's undergraduate transcript. 194 courses provide participants with the latest in technology, business, health and human development and other topics meeting the current trends and demands of the workplace. These credit-bearing courses (typically 1 credit) are offered each semester on the MSU – Great Falls campus and through the College of Technology in Bozeman.

Semester schedules with both 094 and 194 courses covering a variety of training topics are mailed to those interested. Please call the college at 406-771-4300 or 1-800-446-2698 to request that your name be added to the mailing list. You can also join our mailing list by going to our website at http://outreach.gfcmsu.edu.

## **OUTCOMES: PROFESSIONAL AND CONTINUING EDUCATION**

- To provide personal enrichment and lifelong learning opportunities to both our campus population as well as to individuals from the community;
- To provide business support, training and/or retraining to meet workforce needs;
- To provide diverse options for students that will allow them to fulfill the demands of their academic programs and/or financial aid requirements.

## CONTINUING EDUCATION UNITS (CEU'S)

All non-credit professional and continuing education courses offered through the Division are transcripted as Continuing Education Units (CEU's). These are awarded to the student upon successful completion of the course and are recorded on the student's continuing education transcript. CEU's are awarded based on national accreditation guidelines of 1 CEU = 10 contact hours. In addition to CEU's, courses offered through the Division are also eligible for Office of Public Instruction (OPI) Renewal Units. These are awarded on a 1 Renewal Unit = 1 Contact hour formula and must be requested by the student.

## **CUSTOMIZED TRAINING**

MSU – Great Falls' Outreach helps to meet the needs of workforce training in the greater Great Falls area in the form of customized training assistance to businesses, including those located in rural communities, to maximize their ability to make a profit. By developing customized training programs matched to business needs, the centers bring together groups of people for effective exchange of knowledge, and provide specialized, effective training for all areas of business. Examples of training currently being offered include: Customer Service, Telephone Etiquette, Sales Training, Train the Trainer, Supervisory Skills, Records Management, Communication Styles, Time Management, Business Plans, Cash Flow Management, Computer Skills, Marketing on the Internet, E-Commerce, Advertising, Successful Business Writing, Conflict Management, Technology Applications and Professional Image, among other topics.

The Outreach Department strives to provide the highest quality training solutions to area businesses. We invite you to join other great local companies and programs-Great Falls Clinic, Pacific Power and Light Montana, Veterans Upward Bound and Montana Air National Guard Family Program, to name a few who have taken advantage of this powerful training resource.

Call Linda McNeill for more information, 406-454-3217

## **DEGREES AND CERTIFICATES**

The Extended Learning Division offers Professional Certificate programs which provide the student with the opportunity to move rapidly into the job market with a core of skills. The Certificate programs are offered during the day, late afternoon, evening and online to afford individuals the opportunity to earn credits while working. Students completing and graduating with Certificates have the opportunity to participate in the graduation ceremony. Serving as pivotal courses in many degree and certificate programs, these courses provide students the opportunity to utilize the credits to earn a degree or a certificate at a later date.

## **DEGREE AND CERTIFICATE PROGRAMS**

Associate Degree and Certificate programs are offered through the Extended Learning Division and the College's Academic Departments. These programs digress from the traditional academic structure through non-standardized coursework to both the on- and off-campus communities. These programs are frequently offered through cohorts, evening, weekend, online, and accelerated programs to meet the needs of working students and others who require various flexibilities to meet their educational goals. Current programs include:

# ~ EMS: Fire & Rescue Technology (Associate of Applied Science - AAS)

This degree program combines technical fire and rescue training with general education courses to fulfill Associate of Applied Science Degree requirements. It also incorporates the opportunity to transfer credits toward a bachelor's degree in Fire Administration. The Fire and Rescue Technology Option is offered as a cooperative endeavor between Great Falls College MSU College of Technology and Montana State University Fire Services Training School–Great Falls.

# ~ Radiologic Technology Associate of Applied Science Degree Completion Option (AAS)

Students who have successfully completed and documented that they graduated from an accredited Radiologic Technology program, are currently working in the field of radiology, and possess a current Radiologic Technologist State license may apply to the College's Radiologic Technology AAS Degree Completion program and earn a College degree by taking as little as 17 college credits.

## **INDUSTRY STANDARD CERTIFICATIONS**

Great Falls College MSU offers Certificate programs and courses that lead to Industry Standard Certification. Students who successfully complete these programs and/or courses are prepared to sit for certification exams. The certification programs are as follows:

#### **IT Certification Information**

For more information on various industry certifications, please visit the websites listed below:

Cisco certifications: <a href="https://www.cisco.com">www.cisco.com</a>
CompTIA certifications: <a href="https://www.comptia.org">www.comptia.org</a>

Microsoft certifications: www.microsoft.com/traincert

Oracle certifications: <a href="https://www.oracle.com">www.oracle.com</a> World Organization of Webmasters:

www.webprofessionals.org/certification/index.html

## MSU - Great Falls Testing Center

The Great Falls College MSU Testing Center is an official Prometric, Pearson VUE, and Certiport testing facility. Prometric, Pearson VUE, and Certiport are the world's leading provider of computer-based testing and assessment services.

The Testing Center offers more than 125 exams in various categories, including information technology certification and professional licensure. These exams include:

Microsoft Certifications (MCP, MCSA, MCSE, MCAS)
CompTIA Certifications (A+, Network+)
Cisco Certification (CCDA, CCNA, CCNP)
Oracle Certification (DBA, OCP)
Certified Internet Webmaster (Web Developer, site designer)

## RESGISTERING FOR EXAMS

To learn more about registering for an exam, please call (406) 771-4391 during business hours Monday through Friday. Exams can be scheduled during the hours of 1pm to 5 pm

Monday, 9am to 5 pm Tuesday through Thursday, 9am to 12pm on Fridays. Special appointments for exams may be available by contacting the Testing Center.

Register in person for Certiport exams (e.g. Microsoft Office Specialist) or online at www.2test.com (Prometric) or www.pearsonvue.com (Pearson VUE).

## **OUR LOCATION**

The MSU – Great Falls Testing Center is housed on the MSU – Great Falls Campus at 2100 16th Ave South, Great Falls, MT 59405.



**Great Falls College MSU** | 2100 16th Ave. South | Great Falls, MT 59405
Toll Free 800.446.2698 | FAX: 406.771.4317 | TTY: 406.771.4424 | Copyright 2008. All rights reserved.

## MONTANA UNIVERSITY SYSTEM CORE

In our world of rapid economic, social, and technological change, students need a strong and broadly-based education. General education helps students achieve the intellectual integration and awareness they need to meet challenges in their personal, social, political, and professional lives. General education courses introduce great ideas and controversies in human thought and experience. A solid general education provides a strong foundation for the life-long learning that makes career goals attainable. The breadth, perspective, and rigor provided by the core curriculum helps students become educated people.

Montana State University-Great Falls College of Technology's General Education Core reflects the Montana University System's General Education Core. As students work on the Montana University System General Education Core, they should attempt to select classes that are also required in their major. That efficient use of coursework could help students complete their degrees more quickly, since the classes could be used to satisfy both the requirements of the major and the requirements of the MUS General Education Core. After completion of core requirements students will be able to:

- Demonstrate understanding of major findings and ideas in a variety of disciplines.
- Demonstrate understanding of methods, skills, tools and systems used in a variety of disciplines, and historical, theoretical, scientific, technological, philosophical, and ethical bases in a variety of disciplines.
- Use appropriate technologies to conduct research on and communicate about topics and questions; to access, evaluate and manage information; to prepare and present their work effectively, and to meet academic, personal, and professional needs.
- Demonstrate critical analysis of arguments and evaluation of an argument's major assertions, its background assumptions, the evidence used to support its assertions, and its explanatory utility.
- Understand and articulate the importance and influence of diversity within and among cultures and societies.
- Understand and apply mathematical concepts and models.
- Communicate effectively, through written and oral communication and through other forms as appropriate.

## STUDENT LEARNING OUTCOMES FOR MSU-GREAT FALLS CORE:

# COMMUNICATION

## (ENGLISH COMPOSITION AND ORAL COMMUNICATION):

- Demonstrate an understanding of writing as a series of tasks, including finding, evaluating, analyzing, and synthesizing appropriate sources, and as a process that involves composing, editing, and revising.
- Demonstrate critical reading and analytical skills, including understanding an argument's major assertions and assumptions and how to evaluate its supporting evidence.
- Demonstrate research skills, integrate one's own ideas with those of others, and apply the conventions of attribution and citation correctly.
- Use Standard Written English and edit and revise one's own writing for appropriateness.
- Enhance the fluency and range of vocabulary and syntax with which to meet the requirements of different rhetorical situations.
- Develop proficiency in oral discourse.

- Produce and deliver a clear, well organized verbal presentation.
- Interact in a collaborative, synergistic manner within a small-group problem-solving meeting.
- Use appropriate technologies to conduct research on and communicate about emerging issues and to access, evaluate, and manage information to prepare and present one's work effectively.
- Demonstrate understanding of the interconnections of knowledge within and across disciplines.

#### **MATHEMATICS:**

- Interpret mathematical modes given verbally, or by formulas, graphs, tables, or schematics, and draw inferences from them.
- Represent mathematical concepts verbally, and where appropriate, symbolically, visually, and numerically.
- Use arithmetic, algebraic, geometric, technological, or statistical methods to solve problems.
- Use mathematical reasoning with appropriate technology to solve problems, test conjectures, judge the validity of arguments, formulate valid arguments, check answers to determining reasonableness, and communicate the reasoning of the results.
- Recognize and use connections within mathematics and between mathematics and other disciplines.

## **HUMANITIES/FINE ARTS:**

- Investigate the role and values of art in human life and demonstrate an understanding of the significance of specific art forms to the cultures that create and adopt them.
- Describe specific processes by which works of painting, sculpture, architecture, music, dance, theater, film, multi-media, or environmental art are created.
- Demonstrate the dependence of meaning upon cultural and historical context when analyzing works of art.
- Compare and contrast one work of art with another or one medium with another to illuminate both.
- Investigate the variety of human culture and demonstrate an understanding of the ways in which cultures have changed.
- Understand and employ a wide range of humanistic, qualitative, quantitative, theoretical, or philosophical methods for recording and explaining human experience.
- Identify and assess one's own and others' values; identify the underlying premises in one's own and others' arguments.
- Investigate the role and value of literature in human life and demonstrate an understanding of the significance of specific literary works or genres to the cultures that create them and adopt them.
- Identify and use a variety of arts materials, techniques and resources while creating works of art.

## **NATURAL SCIENCE:**

- Use quantitative information and/or mathematical analysis to obtain sound results and recognize questionable assumptions.
- Demonstrate understanding of the broad principles of science and the ways scientists in a particular discipline conduct research.
- Make observations, understand the fundamental elements of experimental design, generate and analyze data using appropriate quantitative tools, use abstract reasoning to interpret the data and formulae, and test hypotheses with scientific rigor.

- Understand the role that human diversity plays in the practice and history of science.
- Demonstrate proficiency in the collection, interpretation, and presentation of scientific data.

## **SOCIAL SCIENCES/HISTORY:**

- Demonstrate knowledge of findings and theories in the social and behavioral sciences
- Demonstrate an understanding of investigative methods used in the social and behavioral sciences.
- Demonstrate critical thinking about arguments in the social and behavioral sciences and evaluate an argument's major assertions, its background assumptions, the evidence used to support its assertions, and its explanatory utility. Demonstrate knowledge of important findings and theories in social and political history.
- Demonstrate an understanding of investigative methods used in social and political history.

#### **CULTURAL DIVERSITY:**

- Investigate major issues and scholarly approaches related to diversity.
- Analyze concepts and implications of diversity.
- Demonstrate an understanding of historical, cultural, social, or political conditions and the ways in which they influence the status, treatment, or accomplishments of various groups.
- Articulate how diversity helps shape the role of the individual and the interconnections and relationships within and among groups across societies and cultures

## **CULTURAL HERITAGE OF AMERICAN INDIANS:**

Courses include significant content related to the cultural heritage of American Indians.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$4537
Application Fee	\$30
Lab Fees	\$60
Books	\$600
TOTAL:	\$5227

MUS Student Health Insurance Premium approx \$1600/year if needed

## MONTANA UNIVERSITY SYSTEM CORE COURSES

OFFERED ONLINE AND ON CAMPUS.

## COMMUNICATION--6 CREDITS (Need 3 writing & 3 verbal credits)

COURSE	NO.	TITLE	CREDITS	GRADE	
WRIT	101**	College Writing I	3†		
		AND 1 of the following			
COLS	101	First Year Seminar	3†		
COMM	130	Public Speaking	3†		
COMM	135	Interpersonal Communication	3†		

## **MATHEMATICS--3 CREDITS**

COURSE	NO.	IIILE	CREDITS	GRADE
М	116**	Math for Health Careers	3†	
M	121**	College Algebra	3+	
M	145**	Math for Liberal Arts	3†	
M	152**	Precalculus Algebra	4†	

M	153**	Precalculus Trigonometry	3†	
M	171**	Calculus I	4†	
STAT	216**	Introduction to Statistics	4†	

#### **HUMANITIES/FINE ARTS--6 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE
ART	101	Intro to Visual Arts	3†	
ART	114	Art Fundamentals	3†	
ART	140	Drawing I	3†	
DE	161	Introduction to Design	3†	
ENGL	217	Creative Writing	3†	
LIT	110	Intro to Literature	3†	
LIT	231*	Ancient to Ren World Lit	3†	
LIT	232*	Modern World Lit	3†	
LIT	291	Special Topics - Literature	3†	
HUM	242	Gender & Equality	3†	
MUSI	101	Enjoyment of Music	3†	
MUSI	105	Music Theory I	3†	
MUSI	203	American Popular Music	3†	
MUSI	207	World Music	3†	
PHL	101	Introduction to Philosophy	3†	
PHL	110	Introduction to Ethics	3†	

## NATURAL SCIENCE--7 CREDITS (Must include 1 lab course)

		CILEDITO (Mase merade 2 las eea.		
COURSE	NO.	TITLE	CREDITS	GRADE
BIOB	101**	Discover Biology	4†	
BIO	107**	Fund of Human Biology/Lab	4†	
BIOB	160*	Principles of Living Systems/Lab	4†	
BIOB	170*	Principles of Biological Diversity/Lab	4†	
BIO	205	Personal Nutrition	3†	
CHMY	101*	Chemistry for the Consumer	3†	
CHMY	121*	Intro to General Chemistry/Lab	4†	
CHMY	141*	College Chemistry I/Lab	4†	
CHMY	143*	College Chemistry II/Lab	4†	
GEO	101	Introduction to Physical Geology/Lab	4†	
PHYS	110	Survey of Natural Sciences	3†	
PHYS	130	Fund Physical Science w/Lab	4†	

## **SOCIAL SCIENCES / HISTORY--6 CREDITS**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
ECNS	201	Principles of Microeconomics	3†	
ECNS	202	Principles of Macroeconomics	3†	
HSTA	101N	American History I	3†	
HSTA	102N	American History II	3†	
HSTA	255N	Montana History	3†	
HSTR	101	Western Civilization I	3†	
HSTR	102	Western Civilization II	3†	
PSCI	210	Intro to American Government	3†	
PSYX	100	Introduction to Psychology	3†	
PSYX	230	Developmental Psychology	3†	
SOCI	101	Introduction to Sociology	3†	
SOCI	121	Introduction to Criminal Justice	3†	

## **CULTURAL DIVERSITY--3 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE
ANT	101	Intro to Anthropology	3†	

CDEDITS CDADE

BUS	249	Global Marketing	3†	
HUM	244	American Cultural Values	3†	
LIT	215N	Literature of the West	3†	
LIT	289N	Intro to Native American Literature	3†	
NAS	201N	Montana's American Indians	3†	
NAS	215N	Native American Religious Traditions	3†	
SIGN	101	Intro to American Sign Language	3†	

## **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

## **TOTAL CREDITS - 31**

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

As students work on the MUS general education core, they should attempt to elect classes that are required in their major. That efficient use of coursework could help students complete their degree more quickly, since the classes could be used to satisfy both the requirements of the major and the requirements of the MUS General Education Core.

Students should consult with the intended receiving institution to determine whether or not additional core courses may be required to satisfy that institution's General Education Core.

Upon completion of the General Education Core, please notify the Registrar to have the core indicated on your transcript. A form requesting that the MUS Core be transcripted is available in Student Central and on the web site at <a href="http://www.msugf.edu/admissions\_records/forms.html">http://www.msugf.edu/admissions\_records/forms.html</a>. This will need to be turned in to the Registrar's Office upon completion of the program.

## **ASSOCIATE OF ARTS DEGREE**

The Associate of Arts (AA) focuses on education across academic disciplines. Focusing on integration of information while increasing a student's employability, the AA focuses on transferability to a baccalaureate program.

To receive the AA degree, the following requirements must be completed:

- Montana University System Core Requirements (31 semester hours);
- Computer Skills/Usage requirement (3 semester hours);
- 9 credits of coursework in the arts, humanities and social sciences;
- 17 credits of Electives; and
- A final cumulative grade point average of at least 2.0.

Courses taken to fulfill one specific requirement, including courses in the Concentration or Elective blocks, may not be used to fulfill another specific requirement; thus, a course taken to fulfill the Cultural Diversity requirement in the Montana University System Core may not be used as an Elective.

## **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Demonstrate the outcomes achievable by completing the Montana University System Core;
- Select and use the appropriate technologies for personal, academic or career tasks:
- Think critically about theories and applications from multiple disciplines when evaluating information, solving problems, and making decisions.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$7530
Application Fee	\$30
Lab Fees	
Books	\$790
TOTAL:	\$8420

MUS Student Health Insurance Premium approx \$1600/year if needed

I. MONTANA UNIVERSITY SYSTEM CORE - 31 SEMESTER HOURS OFFERED ONLINE AND ON CAMPUS.

COMMUNICATION--6 CREDITS (Need 3 writing & 3 verbal credits)

COURSE	NO.	TITLE	CREDITS	GRADE
WRIT	101**	College Writing I	3†	
		AND 1 of the following		
COLS	101	First Year Seminar	3†	
COMM	130	Public Speaking	3†	
COMM	135	Interpersonal Communication	3†	

## **MATHEMATICS--3 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE
M	116**	Math for Health Careers	3†	
M	121**	College Algebra	3+	
M	145**	Math for Liberal Arts	3†	
M	152**	Precalculus Algebra	4†	
M	153**	Precalculus Trigonometry	3†	
M	171**	Calculus I	4†	
STAT	216**	Introduction to Statistics	4†	

## **HUMANITIES/FINE ARTS--6 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE

ART	101	Intro to Visual Arts	3†	
ART	114	Art Fundamentals	3†	
ART	140	Drawing I	3†	
DE	161	Introduction to Design	3†	
ENGL	217	Creative Writing	3†	
LIT	110	Intro to Literature	3†	
LIT	231*	Ancient to Ren World Lit	3†	
LIT	232*	Modern World Lit	3†	
LIT	291	Special Topics - Literature	3†	
HUM	242	Gender & Equality	3†	
MUSI	101	Enjoyment of Music	3†	
MUSI	105	Music Theory I	3†	
MUSI	203	American Popular Music	3†	
MUSI	207	World Music	3†	
PHL	101	Introduction to Philosophy	3†	
PHL	110	Introduction to Ethics	3†	

#### NATURAL SCIENCE--7 CREDITS (Must include 1 lab course)

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
BIOB	101**	Discover Biology	4†	
BIO	107**	Fund of Human Biology/Lab	4†	
BIOB	160*	Principles of Living Systems/Lab	4†	
BIOB	170*	Principles of Biological Diversity/Lab	4†	
BIO	205	Personal Nutrition	3†	
CHMY	101*	Chemistry for the Consumer	3+	
CHMY	121*	Intro to General Chemistry/Lab	4†	
CHMY	141*	College Chemistry I/Lab	4†	
CHMY	143*	College Chemistry II/Lab	4†	
GEO	101	Introduction to Geology/Lab	4†	
PHYS	110	Survey of Natural Sciences	3†	
PHYS	130	Fund Physical Science w/Lab	4†	

## **SOCIAL SCIENCES/ HISTORY--6 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE
ECNS	201	Principles of Microeconomics	3†	
ECNS	202	Principles of Macroeconomics	3†	
HSTA	101N	American History I	3†	
HSTA	102N	American History II	3†	
HSTA	255N	Montana History	3†	
HSTR	101	Western Civilization I	3†	
HSTR	102	Western Civilization II	3†	
PSCI	210	Introduction to American Governmen	it 3†	
PSYX	100	Intro to Psychology	3†	
PSYX	230	Developmental Psychology	3†	
SOCI	101	Introduction to Sociology	3†	
SOCI	121	Introduction to Criminal Justice	3†	

## **CULTURAL DIVERSITY--3 CREDITS**

COLUBER NO

COURSE	NO.	TITLE	CREDITS	GRADE
ANT	101	Intro to Anthropology	3†	
BUS	249	Global Marketing	3†	
LIT	215N	Literature of the West	3†	
LIT	289N	Intro to Native American Literature	3+	
HUM	244	American Cultural Values	3†	
NAS	201N	Montana's American Indians	3†	
NAS	215N	Native American Religious Traditions	3†	
SIGN	101	Intro to American Sign Lang	3†	

## **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### **II. COMPUTER SKILLS/USAGE--3 CREDITS**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3†	
OP any Cl	T 2 crodit	hour course that has CARR 120 as a	nroroquicito	

en any en a dicare nous course that has en in 1220 as a prerequisite

NO MORE THAN 5 CREDITS OF COURSES NUMBERED 194 MAY BE

APPLIED TOWARD THE DEGREE.

## III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES--9 CREDITS

Students may choose coursework numbered 100 or above from any of the following discipline areas to complete the required 9 credits of coursework in arts, humanities, and social sciences. (ART) Art, (ANTH) Anthropology, (COMM) Communication, (ECNS) Economics, Educational Psychology (EDPY or EDU 221 only), (ENGL) English (except ENGL 118, ENGL 119 or ENGL 120), (HSTA, HSTR) History, (HUM) Humanities, (LIT) Literature, (MUSI) Music, (NAS) Native American Studies, (PHL) Philosophy, (PSCI) Political Science, (PSYX) Psychology, (SIGN) American Sign Languages, (SOCI) Sociology, and (WRIT) Writing.

#### **IV. ELECTIVES - 17 CREDITS**

Students may choose coursework numbered 100 or above from any discipline area to complete the required 17 credits of electives. Students may not choose or may not count the following courses: MATH 100, MATH 101, MATH 103, MATH 104, MATH 108, M 108, M 111,0 ENGL 118, ENGL 119, ENGL 120

## **TOTAL PROGRAM CREDITS - 60**

 $^{\sim}$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

## **ASSOCIATE OF ARTS DEGREE**

The Associate of Arts (AA) focuses on education across academic disciplines. Focusing on integration of information while increasing a student's employability, the AA focuses on transferability to a baccalaureate program.

To receive the AA degree, the following requirements must be completed:

- Montana University System Core Requirements (31 semester hours);
- Computer Skills/Usage requirement (3 semester hours);
- 9 credits of coursework in the arts, humanities and social sciences;
- 17 credits of Electives; and
- A final cumulative grade point average of at least 2.0.

Courses taken to fulfill one specific requirement, including courses in the Concentration or Elective blocks, may not be used to fulfill another specific requirement; thus, a course taken to fulfill the Cultural Diversity requirement in the Montana University System Core may not be used as an Elective.

## **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Demonstrate the outcomes achievable by completing the Montana University System Core;
- Select and use the appropriate technologies for personal, academic or career tasks;
- Think critically about theories and applications from multiple disciplines when evaluating information, solving problems, and making decisions.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$7530
Application Fee	\$30
Lab Fees	
Books	\$790
TOTAL:	\$8420

MUS Student Health Insurance Premium approx \$1600/year if needed

I. MONTANA UNIVERSITY SYSTEM CORE - 31 SEMESTER HOURS OFFERED ONLINE AND ON CAMPUS.

## **COMMUNICATION--6 CREDITS**

(Need 3 writing & 3 verbal credits)

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
WRIT	101**	College Writing I	3†	
		AND 1 of the following		
COMM	130	Public Speaking	3†	
COMM	135	Interpersonal Communication	3†	

## **MATHEMATICS--4 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE
M	116**	Math for Health Careers	3†	
M	121**	College Algebra	3+	
M	145**	Math for Liberal Arts	3†	
M	152**	Precalculus Algebra	4†	
M	153**	Precalculus Trigonometry	3†	
M	171**	Calculus I	4†	
STAT	216**	Introduction to Statistics	4†	

## **HUMANITIES/FINE ARTS--6 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE
ART	101	Intro to Visual Arts	3†	
ART	114	Art Fundamentals	3†	
ART	140	Drawing I	3†	
DE	161	Introduction to Design	3†	
ENGL	217	Creative Writing	3†	
LIT	110	Intro to Literature	3†	
LIT	231*	Ancient to Ren World Lit	3†	
LIT	232*	Modern World Lit	3†	
LIT	291	Special Topics - Literature	3†	
HUM	242	Gender & Equality	3†	
MUSI	101	Enjoyment of Music	3†	
MUSI	105	Music Theory I	3†	
MUSI	203	American Popular Music	3†	
MUSI	207	World Music	3†	
PHL	101	Introduction to Philosophy	3†	
PHL	110	Introduction to Ethics	3†	

## NATURAL SCIENCE--7 CREDITS (Must include 1 lab course)

COURSE	NO.	TITLE	CREDITS	GRADE
BIOB	101**	Discover Biology	4†	
BIO	107**	Fund of Human Biology/Lab	4†	
BIOB	160*	Principles of Living Systems/Lab	4†	
BIOB	170*	Principles of Biological Diversity/Lab	4†	
BIO	205	Personal Nutrition	3†	
CHMY	121*	Intro to General Chemistry/Lab	4†	
CHMY	141*	College Chemistry I/Lab	4†	
CHMY	143*	College Chemistry II/Lab	4†	
GEO	101	Introduction to Geology/Lab	4†	
PHYS	110	Survey of Natural Sciences	3†	
PHYS	130	Fund Physical Science w/Lab	4†	

#### **SOCIAL SCIENCES/ HISTORY--6 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE
ECNS	201	Principles of Microeconomics	3†	
ECNS	202	Principles of Macroeconomics	3†	
HSTA	101N	American History I	3†	
HSTA	102N	American History II	3†	
HSTA	255N	Montana History	3†	
HSTR	101	Western Civilization I	3†	
HSTR	102	Western Civilization II	3†	
PSCI	210	Introduction to American Governmen	it 3†	
PSYX	100	Intro to Psychology	3†	
PSYX	230	Developmental Psychology	3†	
SOCI	101	Introduction to Sociology	3†	
SOCI	121	Introduction to Criminal Justice	3†	

#### **CULTURAL DIVERSITY--3 CREDITS**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
ANT	101	Intro to Anthropology	3†	
BUS	249	Global Marketing	3†	
LIT	215N	Literature of the West	3†	
LIT	289N	Intro to Native American Literature	3+	
HUM	244	American Cultural Values	3†	
NAS	201N	Montana's American Indians	3†	
NAS	215N	Native American Religious Traditions	3†	
SIGN	101	Intro to American Sign Lang	3†	

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

## **II. COMPUTER SKILLS/USAGE--3 CREDITS**

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3†	
OR any CI	T 3 credit	hour course that has CAPP 120 as a	prerequisite	

NO MORE THAN 5 CREDITS OF COURSES NUMBERED 194 MAY BE

APPLIED TOWARD THE DEGREE.

## III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES--9 CREDITS

Students may choose coursework numbered 100 or above from any of the following discipline areas to complete the required 9 credits of coursework in arts, humanities, and social sciences. (ACTG) Accounting, (ART) Art, (ANTH) Anthropology, (BUS) Business, (COMM) Communication, (ECNS) Economics, Educational Psychology (EDPY or EDU 221 only), (ENGL) English (except ENGL 118, ENGL 119 or ENGL 120), (HSTA, HSTR) History, (HUM) Humanities, (LIT) Literature, (MUSI) Music, (NAS) Native American Studies, (PHL) Philosophy, (PSCI) Political Science, (PSYX) Psychology, (SIGN) American Sign Languages, (SOCI) Sociology, and (WRIT) Writing.

#### **IV. ELECTIVES - 17 CREDITS**

Students may choose coursework numbered 100 or above from any discipline area to complete the required 17 credits of electives. Students may not choose or may not count the following courses: MATH 100, MATH 101, MATH 103, MATH 104, MATH 108, M 108, M 111,0 ENGL 118, ENGL 119, ENGL 120

No more than 5 credits of courses numbered 194 may be applied toward the degree.

## **TOTAL PROGRAM CREDITS - 60**

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

## ASSOCIATE OF SCIENCE DEGREE

The Associate of Science (AS) Degree focuses on education in specific knowledge areas, most typically in math and natural sciences. Focusing on integration of information while increasing a student's employability, the AS focuses on transferability to a baccalaureate program.

To receive the AS degree, the following requirements must be completed:

- Montana University System Core Requirements (31 semester hours);
- Computer Skills/Usage requirement (3 semester hours);
- 9 credits of coursework in Math and Science
- 17 credits of Electives; and
- A final cumulative grade point average of at least 2.0.

Courses taken to fulfill one specific requirement, including courses in the Elective block, may not be used to fulfill another specific requirement; thus, a course taken to fulfill the Natural Science requirement in the Montana University System Core may not be used as an Elective.

Students who complete the Associate of Science degree will:

- Demonstrate the outcomes achievable by completing the Montana University System Core;
- Select and use the appropriate technologies for personal, academic or career tasks;
- Think critically in evaluating information, solving problems and decision-making;
- Consider the application of the natural and physical sciences and mathematics in the context of today's world.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$7530
Application Fee	\$30
Lab Fees	
Books	\$790
TOTAL:	\$8420

MUS Student Health Insurance Premium approx \$1600/year if needed

# I. MONTANA UNIVERSITY SYSTEM CORE - 31 SEMESTER HOURS OFFERED ONLINE AND ON CAMPUS.

## COMMUNICATION--6 CREDITS (Need 3 writing & 3 verbal credits)

Course	No.	Title	Credits	Grade
WRIT	101**	College Writing I	3†	
		AND 1 of the following		
COLS	101	First Year Seminar	3†	
COMM	130	Public Speaking	3†	
COMM	135	Interpersonal Communication	3†	

## **MATHEMATICS--3 CREDITS**

Course	No.	Title	Credits	Grade
М	116**	Math for Health Careers	3†	
M	121**	College Algebra	3+	
M	145**	Math for Liberal Arts	3†	
M	152**	Precalculus Algebra	4†	
M	153**	Precalculus Trigonometry	3†	
M	171**	Calculus I	4†	
STAT	216**	Introduction to Statistics	4†	

## **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits	<u>Grade</u>
ART	101	Intro to Visual Arts	3†	
ART	114	Art Fundamentals	3†	
ART	140	Drawing I	3†	
DE	161	Introduction to Design	3†	
ENGL	217	Creative Writing	3†	
LIT	110	Intro to Literature	3†	
LIT	231*	Ancient to Ren World Lit	3†	
LIT	232*	Modern World Lit	3†	
LIT	291	Special Topics - Literature	3†	
HUM	242	Gender & Equality	3†	
MUSI	101	Enjoyment of Music	3†	
MUSI	105	Music Theory I	3†	
MUSI	203	American Popular Music	3†	
MUSI	207	World Music	3†	
PHL	101	Introduction to Philosophy	3†	
PHL	110	Introduction to Ethics	3†	

## NATURAL SCIENCE--7 CREDITS (Must include 1 lab course)

Course	No.	Title	Credits	<u>Grade</u>
BIOB	101**	Discover Biology	4†	
BIO	107**	Fund of Human Biology/Lab	4†	
BIOB	160*	Principles of Living Systems/Lab	4†	
BIOB	170*	Principles of Biological Diversity/Lab	4†	
BIO	205	Personal Nutrition	3†	
CHMY	101*	Chemistry for the Consumer	3+	
CHMY	121*	Intro to General Chemistry/Lab	4†	
CHMY	141*	College Chemistry I/Lab	4†	
CHMY	143*	College Chemistry II/Lab	4†	
GEO	101	Introduction to Geology/Lab	4†	
PHYS	110	Survey of Natural Sciences	3†	
PHYS	130	Fund Physical Science w/Lab	4†	

## **SOCIAL SCIENCES/ HISTORY --6 CREDITS**

Course	No.	Title	Credits	Grade
ECNS	201	Principles of Microeconomics	3†	
ECNS	202	Prinicples of Macroeconomics	3†	
HSTA	101N	American History I	3†	
HSTA	102N	American History II	3†	
HSTA	255N	Montana History	3†	
HSTR	101	Western Civilization I	3†	
HSTR	102	Western Civilization II	3†	
PSCI	210	Introduction to American Government	3†	
PSYX	100	Intro to Psychology	3†	
PSYX	230	Developmental Psychology	3†	
SOCI	101	Introduction to Sociology	3†	
SOCI	121	Introduction to Criminal Justice	3†	

## **CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title	Credits	Grade
ANT	101	Intro to Anthropology	3†	
BUS	249	Global Marketing	3†	
LIT	215N	Literature of the West	3†	
LIT	289N	Intro to Native American Literature		
HUM	244	American Cultural Values	3†	

NAS	201N	Montana's American Indians	3†	
NAS	215N	Native American Religious Traditions	3†	
SIGN	101	Intro to American Sign Lang	3†	

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

## **II. COMPUTER SKILLS/USAGE--3 CREDITS**

Course	No.	Title	Credits Grade
CAPP	120	Introduction to Computers	3†
or any CIT	3 credit ho	ur course that has CAPP 120 as a pre	requisite

# NO MORE THAN 5 CREDITS OF COURSES NUMBERED 194 MAY BE APPLIED TOWARD THE DEGREE,

#### **III. CONCENTRATION IN MATH AND SCIENCE--9 CREDITS**

Students may choose coursework numbered 100 or above from any of the following discipline areas to complete the required 9 credits of electives. (BIO) (BIOB) (BIOM) Biology, (CHMY) Chemistry, (GEO) Geology, (M) Math\*\* (except 090, 095, 096, 108, or 111), (PHYS) Physical Science

## **IV. ELECTIVES--17 CREDITS**

Students may choose coursework numbered 100 or above from any discipline area to complete the required 17 credits of electives. Students may not choose or may not count the following courses: MATH 100, MATH 101, MATH 103, MATH 104, MATH 108, M 108, M 111, ENGL 118, ENGL 119, ENGL 120

## **TOTAL PROGRAM CREDITS - 60**

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

## **ASSOCIATE OF SCIENCE DEGREE**

The Associate of Science (AS) Degree focuses on education in specific knowledge areas, most typically in math and natural sciences. Focusing on integration of information while increasing a student's employability, the AS focuses on transferability to a baccalaureate program.

To receive the AS degree, the following requirements must be completed:

- Montana University System Core Requirements (31 semester hours);
- Computer Skills/Usage requirement (3 semester hours);
- 9 credits of coursework in Math and Science
- 17 credits of Electives; and
- A final cumulative grade point average of at least 2.0.

Courses taken to fulfill one specific requirement, including courses in the Elective block, may not be used to fulfill another specific requirement; thus, a course taken to fulfill the Natural Science requirement in the Montana University System Core may not be used as an Elective.

Students who complete the Associate of Science degree will:

- Demonstrate the outcomes achievable by completing the Montana University System Core;
- Select and use the appropriate technologies for personal, academic or career tasks;
- Think critically in evaluating information, solving problems and decision-making;
- Consider the application of the natural and physical sciences and mathematics in the context of today's world.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$7530
Application Fee	\$30
Lab Fees	\$70
Books	\$790
TOTAL:	\$8420

MUS Student Health Insurance Premium approx \$1600/year if needed

# I. MONTANA UNIVERSITY SYSTEM CORE - 31 SEMESTER HOURS OFFERED ONLINE AND ON CAMPUS.

## COMMUNICATION--6 CREDITS (Need 3 writing & 3 verbal credits)

Course	No.	Title	Credits	Grade
WRIT	101**	College Writing I	3†	
		AND 1 of the following		
COMM	130	Public Speaking	3†	
COMM	135	Interpersonal Communication	3†	

## **MATHEMATICS--3 CREDITS**

Course	No.	litle	Credits	Grade
M	116**	Math for Health Careers	3†	
M	121**	College Algebra	3+	
M	145**	Math for Liberal Arts	3†	
M	152**	Precalculus Algebra	4†	
M	153**	Precalculus Trigonometry	3†	
M	171**	Calculus I	4†	
STAT	216**	Introduction to Statistics	4†	

# **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits	Grade
ART	101	Intro to Visual Arts	3†	
ART	114	Art Fundamentals	3†	
ART	140	Drawing I	3†	
DE	161	Introduction to Design	3†	
ENGL	217	Creative Writing	3†	
LIT	110	Intro to Literature	3†	
LIT	231*	Ancient to Ren World Lit	3†	
LIT	232*	Modern World Lit	3†	
LIT	291	Special Topics - Literature	3†	
HUM	242	Gender & Equality	3†	
MUSI	101	Enjoyment of Music	3†	
MUSI	105	Music Theory I	3†	
MUSI	203	American Popular Music	3†	
MUSI	207	World Music	3†	
PHL	101	Introduction to Philosophy	3†	
PHL	110	Introduction to Ethics	3†	

## NATURAL SCIENCE--7 CREDITS (Must include 1 lab course)

Course	No.	Title	Credits	Grade
BIOB	101**	Discover Biology	4†	
BIO	107**	Fund of Human Biology/Lab	4†	
BIOB	160*	Principles of Living Systems/Lab	4†	
BIOB	170*	Principles of Biological Diversity/Lab	4†	
BIO	205	Personal Nutrition	3†	
CHMY	121*	Intro to General Chemistry/Lab	4†	
CHMY	141*	College Chemistry I/Lab	4†	
CHMY	143*	College Chemistry II/Lab	4†	
GEO	101	Introduction to Geology/Lab	4†	
PHYS	110	Survey of Natural Sciences	3†	
PHYS	130	Fund Physical Science w/Lab	4†	

## **SOCIAL SCIENCES/ HISTORY --6 CREDITS**

Course	No.	Title	Credits	Grade
ECNS	201	Principles of Microeconomics	3†	
ECNS	202	Prinicples of Macroeconomics	3†	
HSTA	101N	American History I	3†	
HSTA	102N	American History II	3†	
HSTA	255N	Montana History	3†	
HSTR	101	Western Civilization I	3†	
HSTR	102	Western Civilization II	3†	
PSCI	210	Introduction to American Government	3†	
PSYX	100	Intro to Psychology	3†	
PSYX	230	Developmental Psychology	3†	
SOCI	101	Introduction to Sociology	3†	
SOCI	121	Introduction to Criminal Justice	3†	

## **CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title	Credits	<u>Grade</u>
ANT	101	Intro to Anthropology	3†	
BUS	249	Global Marketing	3†	
LIT	215N	Literature of the West	3†	
LIT	289N	Intro to Native American Literature		
HUM	244	American Cultural Values	3†	
NAS	201N	Montana's American Indians	3†	
NAS	215N	Native American Religious Traditions	3†	

SIGN 101 Intro to American Sign Lang 3†

CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### **II. COMPUTER SKILLS/USAGE--3 CREDITS**

Course	No.	Title	Credits Grade
CAPP	120	Introduction to Computers	3†

# III. CONCENTRATION IN MATH, SCIENCE, AND INFORMATION TECHNOLOGY--9 CREDITS

Students may choose coursework numbered 100 or above from any of the following discipline areas to complete the required 9 credits of electives.

(BIO) (BIOB) (BIOM) Biology, (CAPP) Computer Applications, (CHMY) Chemistry, (CIT) Computer Information Technology, (CSCI) Computer Science/Programming, (GEO) Geology, (ITS) Information Technology Systems, (M) Math\*\* (except 090, 095, 096, 108, or 111), (PHYS) Physical Science

COURSES NUMBERED 194 WILL NOT BE APPLIED TO THE CONCENTRATION AREA.

## **IV. ELECTIVES--17 CREDITS**

Students may choose coursework numbered 100 or above from any discipline area to complete the required 17 credits of electives. Students may not choose or may not count the following courses: MATH 100, MATH 101, MATH 103, MATH 104, MATH 108, M 108, M 111, ENGL 118, ENGL 119, ENGL 120

**NO MORE THAN 5 CREDITS OF COURSES NUMBERED 194 MAY BE APPLIED TOWARD THE DEGREE.** 

## **TOTAL PROGRAM CREDITS - 60**

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

## **ACCOUNTING**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Jon Nitschke** 

Upon completion of the Accounting Degree program students will be prepared for employment in general accounting occupations. They will be prepared to work in public, private, or governmental agencies as accounting clerks, accounting technicians, bookkeepers, accounting support personnel, or payroll assistants.

## **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Prepare financial records for a business.
- Prepare and interpret financial statements of a business while applying generally accepted accounting principles.
- Understand internal controls necessary in business organizations.
- Perform accounting functions for sole proprietorships, partnerships and corporations.
- Use computerized accounting software.
- Communicate professionally, both orally and in writing.
- Compute payrolls and prepare basic federal and state payroll tax forms and returns.
- Prepare basic income tax returns for individuals and businesses using commercial tax preparation software.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	30
Books/Supplies	2700
TOTAL	\$8780

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	101	Accounting Procedures I	3†	
CAPP	120	Introduction to Computers	3+	
BUS	106	Introduction to Business	3+	
WRIT	101**	College Writing I	3+	
M	108	<b>Business Mathematics</b>	<u>4+</u>	
		Subtotal	16	

## **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	102*	Accounting Procedures II	3†	
ACTG	180*	Payroll Accounting	3†	
CAPP	156*	MS Excel	3+	
COMM	135	Interpersonal Communication	3+	
M	145	Math for Liberal Arts OR		
M	121**	College Algebra	<u>3+</u>	
		Subtotal	15	

## **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	201*	Principles of Financial Accounting	3†	
ACTG	205*	Computerized Accounting	3†	
CAPP	158*	MS Access	3+	
CAPP	105*	Short Courses: Computer Calculators	1+	
		Electives	4+	
		Subtotal	14	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	202*	Principles of Managerial Accounting	3†	
ACTG	211*	Income Tax Fundamentals	3†	
BUS	255	Legal Environment	3+	
CAPP	154*	MS Word	3+	
WRIT	122	Introduction to Business Writing	3+	
		Subtotal	15	

## SUGGESTED ELECTIVES

COURSE	NO.	TITLE	CREDITS	GRADE
BUS	230*	Management	3	
BUS	249	Global Marketing	3	
CAPP	112*	Short Courses: MS PowerPoint	1	
CIT	229*	Web Page Construction	3	
CIT	231*	Web Page Design	3	
CIT	280*	Desktop Publishing	3	
ECNS	201	Principles of Microeconomics	3	
ECNS	202	Principles of Macroeconomics	3	
STAT	216**	Introduction to Statistics	4	
	OR Oth	er courses with advisor approval		

## TOTAL PROGRAM CREDITS - 60~

~ Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

## **AVIATION**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Ryan Haskins** 

Note: Program offered ONLY at the College of Technology in Bozeman

+ College of Technology in Bozeman Transitioning to MSU-Bozeman's Gallatin College Programs

Students completing the AAS in Aviation will have all credentials required to pursue a career as a professional pilot. The program offers in-depth training in all stages of pilot certification: Private Pilot, Instrument Rating, and Commercial Pilot. The program also offers classroom training in Aircraft Systems, Advanced Navigation Systems, Aviation Safety, Flight Instructor/ Aircraft Theory, and Aviation Regulations and Professional Conduct.

## **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Apply knowledge in aviation to adapt to emerging aviation trends.
- Conduct themselves professionally and ethically.
- Understand and analyze the role of aviation safety and human factors to the aviation industry.
- Describe meteorology as it relates to aviation.
- Independently fly and safely operate airplanes for which they are rated.
- Demonstrate an understanding and the appropriate application of aeronautical principles, design characteristics, and operational limitations, for a variety of aircraft as it relates to the student's career goals
- Communicate effectively using both written and verbal skills.
- Demonstrate proficiency in math computation for aviation and modern society.
- Demonstrate effective skills in the use of computers and aviation related technology.

Job opportunities range from high-profile occupations as pilots for national carriers to less well-known, but in-demand work as pilots for cargo services, air taxis, media aircraft, corporate jets, or spacecraft. Students who combine the AAS with a Bachelor's degree will be especially competitive in the entry level job market.

Completion of the AAS in Aviation requires that students contract with a flight school recommended by the Aviation MSU–GF Advisory Council to complete the flight training leading to their Private pilot, Commercial pilot, and Instrument licenses. Upon submission of these certificates the student will receive credit for the following courses.

AST 142-Private Pilot Flight (50 flight hours) 2 credits
AST 242-Instrument Flight (75 flight hours) 2 credits
AST 252-Commercial Flight (125 flight hours) 4 credits

Students may enter the program having already completed flight training. If they have not completed flight training, the sequencing of courses in this outline is highly recommended.

FAA medical certificates are issued by FAA designated Aviation Medical Examiners (AMEs), and are required by all pilots who operate aircraft. The names, addresses and phone numbers of AMEs in your area may be found at the FAA web site (www.faa.gov/pilots/amelocator/) or you may contact the MSU–GF Director of Aviation for more information. Fees for FAA medical exams can range from \$90-\$120 depending on your location.

A student enrolled in the Aviation Science Technology Program must obtain at least a Class II medical certificate before his or her first training flight.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	30
Flight Training	36574
Books/Supplies	
TOTAL	•

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FALL SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
AST	141	Aviation Fundamentals	3+	
AST	142	Private Pilot Flight (50 flight hours)	2+	
AST	143	Basic Air Navigation	3+	
CAPP	120	Intro to Computers	3+	
M	145**	Math for Liberal Arts OR		
	any mat	th course in the MUS General Ed Core	3+	
		Subtotal	14	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AST	171	Aircraft Systems	3+	
AST	241*	<b>Advanced Navigation Systems</b>	3+	
AST	242	Instrument Flight (75 Flight Hours)	2+	
AST	243*	Instrument/Commercial Theory I	3+	
AST	250	<b>Aviation Operations</b>	3+	
		Subtotal	14	

## **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AST	245*	Instrument/Commercial Theory II	3+	
AST	252*	Commercial Flight		
		(125 flight hours)	4+	
AST	261	Aviation Safety	3+	
COMM	135	Interpersonal Communication	3+	
PHYS	130	Fundamentals of Physical Science w/	Lab <u>4+</u>	
		Subtotal	14	

## SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
AST	260*	Flight Instructor Theory	3+	
AST	262*	Advanced Aircraft Theory	3+	
AST	263*	Aviation Regulations and		
		Professional Conduct	3+	
AST	281*	Certified Flight Instructor flight		
		OPTIONAL	1	
PHYS	110	Survey of Natural Science	3+	
WRIT	101**	College Writing I	<u>3+</u>	
		Subtotal	15-16	

## TOTAL PROGRAM CREDITS - 60 OR 61~

 $^{\sim}$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# BUSINESS ADMINISTRATION - ENTREPRENEURSHIP

## ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisors: Marilyn Besich & Teri Dwyer

The Business Administration – Entrepreneurship program of study is designed to prepare students for employment in management positions in small business enterprises or to create and operate their own small business enterprises.

## **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Utilize mathematical concepts and theories to analyze the viability of a business and to use those concepts and theories in the decision making process
- Develop an understanding of societies and cultures and use that understanding to implement business practices reflecting the diversity of customers and employers.
- Incorporate social science theories and constructs from the fields of psychology and sociology into the application of management theories.
- Analyze the legal requirements and ethical implications of business decisions and how such decisions affect the business, community and society.
- Utilize computer hardware and software to effectively manage information.
- Analyze the feasibility of a business opportunity through development of a business plan.
- Utilize oral, written and listening skills to demonstrate an understanding of business practices and theories and effectively interact with others.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	
Books/Supplies	
TOTAL	\$8880

MUS Student Health Insurance Premium approx \$1600/year if needed

## **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	101	Accounting Procedures I	3†	
BUS	106	Introduction to Business	3†	
CAPP	120	Introduction to Computers	3†	
M	108	<b>Business Mathematics</b>	4†	
WRIT	101**	College Writing I	<u>3†</u>	
		Subtotal	16	

## SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	102*	Accounting Procedures II	3†	
ACTG	180*	Payroll Accounting	3†	
BUS	230*	Management	3†	
COMM	135	Interpersonal Communication	3†	
PSYX	100	Intro to Psychology	3†	
		Subtotal	15	

## **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	201*	Principles of Financial Accounting	3†	
BUS	235*	Marketing	3†	
BUS	238*	Human Resource Management	3†	
CAPP	156*	MS Excel	3†	
M	145**	Math for Liberal Arts OR		
M	121**	College Algebra	<u>3†</u>	
		Subtotal	15	

## **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	202*	Principles of Managerial Accounting	3†	
BUS	240*	Advertising	3†	
BUS	260*	Entrepreneurship	3†	
BUS	255*	Legal Environment	3†	
WRIT	122*	Intro to Business Writing	3†	
		Subtotal	15	

#### TOTAL PROGRAM CREDITS - 61~

~ Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

## **BUSINESS ADMINISTRATION - MANAGEMENT**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisors: Marilyn Besich & Teri Dwyer

This program is designed to meet the diverse needs of 21<sup>st</sup> century managers by providing an in depth analysis of interrelated and multidisciplinary management constructs. It focuses on the development of organizational objectives, implementation of strategic initiatives, budget planning and financial analysis, delegation and empowerment, relationship management, employee supervision and performance evaluations. It includes development of "soft skills" such as business etiquette, emotional intelligence, social capital, and civic duties.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Utilize oral, written, and listening skills to demonstrate an understanding of business practices and theories and effectively interact with others.
- Utilize mathematical concepts and theories to analyze the viability of a business and to use those concepts and theories in the decision-making process.
- Incorporate social science theories and constructs from the fields of psychology and sociology into the application of management theories.
- Develop an understanding of societies and cultures and use that understanding to implement business practices reflecting the diversity of customers, employees and employers.
- Analyze the legal requirements and ethical implications of business decisions and how such decisions affect the business, community, and society.
- Utilize computer hardware and software to effectively manage information.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	30
Books/Supplies	2725
TOTAL	\$8805

MUS Student Health Insurance Premium approx \$1600/year if needed

## **FALL SEMESTER**

NO.	TITLE	CREDITS	GRADE
101*	Accounting Procedures I	3†	
120	Introduction to Computers	3†	
106	Introduction to Business	3†	
101**	College Writing I	3†	
108**	<b>Business Mathematics</b>	<u>4†</u>	
	Subtotal	16	
	101* 120 106 101**	101* Accounting Procedures I 120 Introduction to Computers 106 Introduction to Business 101** College Writing I 108** Business Mathematics	101*Accounting Procedures I3†120Introduction to Computers3†106Introduction to Business3†101**College Writing I3†108**Business Mathematics4†

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	102*	Accounting Procedures II	3†	
ACTG	180*	Payroll Accounting	3†	
BUS	230*	Management	3†	
COMM	135	Interpersonal Communication	3†	
PSYX	100	Introduction to Psychology	<u>3†</u>	
		Subtotal	15	

## **FALL SEMESTER**

-				
COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	201*	Principles of Financial Accounting	3†	
BUS	235*	Marketing	3†	
BUS	238*	Human Resource Management	3†	
CAPP	156*	MS Excel	3†	
M	145**	Math for Liberal Arts OR		
M	121**	College Algebra	<u>3†</u>	
		Subtotal	15	

## **SPRING SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
ACTG	202*	Principles of Managerial Accounting	3†	
BUS	255*	Legal Environment	3†	
BUS	275*	Strategic Management	3†	
CAPP	154	MS Word	3†	
WRIT	122**	Intro to Business Writing	3†	
		Subtotal	15	

#### TOTAL PROGRAM CREDITS - 61~

 $^{\sim}$  Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

## **BUSINESS FUNDAMENTALS**

#### CERTIFICATE OF APPLIED SCIENCE DEGREE

Advisors: Marilyn Besich & Teri Dwyer

The Business Fundamentals program is designed for persons seeking employment in entry-level business positions assisting small business enterprises.

## **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Maintain accounting records;
- Meet the public;
- Manage office functions; and
- Market the business.

The Business Fundamentals program also offers individuals needing technical business assistance courses to upgrade knowledge and skills.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$3025
Application Fee	30
Books/Supplies	1350
TOTAL	\$4405

MUS Student Health Insurance Premium approx \$1600/year if needed

#### FIRST SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	101	Accounting Procedures I	3†	
CAPP	120	Introduction to Computers	3†	
BUS	106	Introduction to Business	3†	
WRIT	101**	College Writing I	3†	
M	108	<b>Business Mathematics</b>	<u>4†</u>	
		Subtotal	16	

## SECOND SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	102*	Accounting Procedures II	3†	
ACTG	180*	Payroll Accounting	3†	
CAPP	154*	Microsoft Word	3†	
CAPP	156*	MS Excel	3†	
COMM	135	Interpersonal Communication	3†	
CAPP	105*	Short Courses: Computer Calculators	<u>1</u> †	
		Subtotal	16	

## **TOTAL PROGRAM CREDITS - 32~**

 $<sup>^{\</sup>sim}$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

## **CARPENTRY**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Patrick Schoenen** 

NOTE: This program is in moratorium and will not be accepting new students in 2010-2011, however, the CAS Carpentry program is still accepting new students. Please contact the Business and Technology department at 406-771-4391 for more information.

The Carpentry AAS degree program is designed to prepare students for entry-level employment at construction companies. The curriculum is aligned with the National Center for Construction Education and Research (NCCER) program curriculum. The training material is all standardized, competency-based, and task driven. The curricula are developed by the industry for the industry. Students will have the opportunity to earn national certification through NCCER for five of the five levels of NCCER curriculum. The student is then entered into a National Registry as having proven competence at the designated level. Program courses cover the basic to advanced fundamentals of:

- Safety, hand & power tools, & rigging;
- OSHA's 10 hr safety certification;
- Floor systems, wall, ceiling, & roof framing, windows & doors, basic stair layout, exterior finishes, roof applications, barriers, & metal studs, interior finishes;
- Welding for carpenters
- Concrete and its uses, foundations and flat work along with basic site layout protocol;
- · Estimating and reading plans;
- Computer Aided Drafting (CAD);
- Intro to Business.

The program will take advantage of internship opportunities along with various hands on projects.

Students entering the program should have good manual dexterity skills, good physical condition, like to work outdoors in changing weather conditions and be comfortable working at varying heights.

## **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Use construction skills in an entry-level residential or commercial construction job;
- Have possibilities of having the required apprenticeship time reduced;
- Utilize oral, written and listening skills to demonstrate an understanding of business practices and effectively interact with others.

## **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6834
Application Fee	30
Lab Fee	800
Books/Supplies	840
TOTAL	\$8504

#### **FALL SEMESTER 1**

COURSE	NO.	TITLE	CREDITS	GRADE
М	111	Technical Mathematics	3†	
CNST	115*	Construction Calculators & Estimating	1†	
CARP	120*	Carpentry Basics & Rough-in Framing	6†	
CARP	150*	Beginning Carpentry Practicum (90 hr	s) <u>3†</u>	
		Subtotal	16	

#### **SPRING SEMESTER 1**

COURSE	NO.	TITLE	CREDITS	GRADE
COMM	135	Interpersonal Communication	3†	
WRIT	095**	Developmental Writing <b>OR</b> higher	3-4†	
CNST	120*	Introduction to Site Layout & Concret	e 3†	
CNST	150*	Construction Site Safety	2†	
CARP	130*	Exterior Finishing, Stair Construction		
		& Metal Stud Framing	4†	
CARP	152*	Intermediate Carpentry Practicum (90	hrs) <u>3†</u>	
		Subtotal	18-19	

#### **SUMMER SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CARP	240*	Summer Carpentry Internship		
		(135-170 hrs)	3-6†	
		Subtotal	3-6	

#### FALL SEMESTER 2

COURSE	NO.	TITLE	CREDITS	GRADE
DRFT	156	Introduction to CAD	3†	
WELD	151*	Welding for Carpenters	2†	
CARP	230*	Advanced Roof, Floor, Wall, & Stair Sy	stems 6†	
CARP	250*	Advanced Carpentry Practicum (90 hr	s) <u>3†</u>	
		Subtotal	14	

#### **SPRING SEMESTER 2**

COURSE	NO.	TITLE	CREDITS	GRADE
BUS	106	Introduction to Business	3†	
CNST	220*	Advanced Concrete Working	5†	
CARP	220*	Interior Finishing	5†	
CARP	252*	Capstone Carpentry Practicum (120 h	rs) <u>4†</u>	
		Subtotal	17	

#### TOTAL PROGRAM CREDITS - 68-72~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **CARPENTRY**

#### CERTIFICATE OF APPLIED SCIENCE DEGREE

**Advisor: Patrick Schoenen** 

MSU–Great Falls COT Carpentry program curriculum is aligned with the National Center for Construction Education and Research (NCCER). The training material is all standardized, competency-based, and task driven. The curricula are developed by the industry for the industry. Students will have the opportunity to earn national certification in various modules of the NCCER for two of the five levels of NCCER curriculum. The student then is entered into a National Registry as having proven competence in successfully completed modules.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Communicate effectively in a construction site environment.
- Demonstrate a working knowledge of construction site safety hand and power tools, and basic rigging.
- Perform entry level carpentry skills involved in rough framing.
- Perform entry level carpentry skills involved in exterior finishes, roofing applications, insulation and moisture barriers, metal studs, basic stair layout, installation of exterior doors and windows.
- Perform entry level carpentry skills involved in concrete and site layout protocol.
- Estimate materials necessary in the completion of the phases of construction being taught.
- Have completed experience which may reduce their on-the-job apprenticeship requirements.

Students entering the program should have good manual dexterity skills, good physical condition, like to work outdoors in changing weather conditions and be comfortable working at varying heights.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$3025
Application Fee	30
Lab Fees	400
Books/Supplies	790
TOTAL	\$4245

#### **FALL SEMESTER**

COURSE	NO.	TITLE C	REDITS	GRADE
M	111	Technical Mathematics	3†	
CSTN	100*	Fundamentals of Construction Technology	ogy 3†	
CSTN	115*	Construction Calculators & Estimating	1†	
CSTN	120*	Carpentry Basics & Rough-in Framing	5†	
CSTN	160*	Beginning Carpentry Practicum	3†	
		Subtotal	15	

#### **SPRING SEMESTER**

<b>COURSE</b>	NO.	TITLE	REDITS	GRADE
COMM	120*	Interpersonal Skills in the Workplace	1†	
WRIT	104**	Communication Skills in the Workplace	2†	
CSTN	171*	Site Prep, Found, & Concrete Installation	n 3†	
CSTN	135*	Basic Rigging	2†	
CSTN	145*	Exterior Finishing, Stair Construction,		
		& Metal Stud Framing	4†	
CSTN	161**	Construction Concepts & Bldg Lab II	3†	
		Subtotal	15	

#### TOTAL PROGRAM CREDITS - 30~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# COLLISION AND REFINISHING TECHNOLOGY

**Certificate of Applied Science Degree** 

Advisor: Bob Ewen

NOTE: This program is in moratorium and will not be accepting new students in 2011-2012. Please contact the Business and Technology department at 406-771-4391 for more information.

The Collision and Refinishing Technology program offers both variety and challenge. Each damaged vehicle presents a different problem. Repairers must develop appropriate methods for each job using their broad knowledge of automotive construction and repair techniques.

The program offers training to students who seek marketable skills in auto body repair, painting, welding, and auto body shop management. Electives are combined with regular course work enabling students to develop business skills.

Students are required to provide their own hand tools, safety glasses, and protective clothing. A complete list of the required tools and equipment is available from the advisor.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Identify and demonstrate proper safety practices and procedures;
- Formulate a repair plan based on currently accepted practices;
- Straighten and align damaged sheet metal panels;
- Prepare and apply accepted filler materials;
- Remove, align, and install bolt-on components;
- Execute proper sheet metal welding techniques;
- Repair modern automotive plastics and composites;
- Prepare a vehicle for spot or complete refinishing;
- Mix and apply modern automotive refinish materials;
- demonstrate a clear understanding of both written and verbal communication skills.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$3012
Application Fee	30
Clothing	100
Lab Fees	190
Tools	1600
Books/Supplies	585
TOTAL	\$5517

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
TB	121	Intro to Collision Repair	4†	
TB	122*	Non-structural Collision Repair	4†	
WLDG	141*	Welding Sheet Metal	1†	
TB	123*	Intro to Refinishing	4†	
M	111*	Technical Mathematics	<u>3</u> †	
		Subtotal	16	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ТВ	221	Structural Collision Repair	6†	
TB	222*	Plastic and Composite Repair	3†	
TB	223*	Advanced Refinishing	4†	
WRIT	104*	Workplace Communications	2†	
COMM	120*	Communication Skills in the Workplace	e <u>1†</u>	
		Subtotal	16	

#### **TOTAL PROGRAM CREDITS - 32~**

 $^\sim$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **COMPUTER ASSISTANT**

#### CERTIFICATE OF APPLIED SCIENCE DEGREE

**Advisor: Jeff Brown** 

The Computer Assistant program prepares individuals for operation of software programs and a basic knowledge of managing data and files. Coursework is designed to provide a solid foundation for microcomputer operation and develop essential business and computer skills. The course of study will prepare students to:

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Create, manage, and modify databases and attain the Microsoft Certified Application Specialist – Access.
- Create, manage, and modify electronic spreadsheets and attain the Microsoft Certified Application Specialist – Excel.
- Create, manage, and modify word processing documents and attain the Microsoft Certified Application Specialist – Word.
- Create effective web pages that include links, graphics, sound, tables, forms, and style sheets using common editors.
- Troubleshoot and repair microcomputers and attain the CompTIA A+ certification.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$3024
Application Fee	30
Books/Supplies	1050
TOTAL	\$4105

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FIRST SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3+	
CIT	229*	Web Page Construction	4+	
OMM	135	Interpersonal Communication	3†	
WRIT	101**	College Writing <b>OR</b>		
WRIT	122**	Intro to Business Writing	3†	
M	095**	Intermediate Algebra OR		
M	121**	College Algebra <b>OR</b>		
M	152**	Precalculus Algebra <b>OR</b>		
M	171**	Calculus I	3-4+	
		Subtotal	16-17	

#### **SECOND SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	112*	Short Courses: MS Powerpoint	1†	
CAPP	154*	MS Word	3†	
ITS	280*	Computer Repair & Maintenance	4†	
CAPP	156*	MS Excel	3†	
CAPP	158*	MS Access	<u>3†</u>	
		Subtotal	14	

#### TOTAL PROGRAM CREDITS - 30-31~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# COMPUTER INFORMATION TECHNOLOGY MICROCOMPUTER SUPPORT

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisor: Jeff Brown

Upon completion of the Microcomputer Support Degree, students will be able to maintain personal computers, repair and troubleshoot common hardware problems, and use and assist end-users in using common software applications.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Create, manage, and modify databases as preparation for the examination to attain the Microsoft Certified Application Specialist – Access.
- Create, manage, and modify electronic spreadsheets as preparation for the examination to attain the Microsoft Certified Application Specialist – Excel.
- Create, manage, and modify word processing documents as preparation for the examination to attain the Microsoft Certified Application Specialist – Word.
- Create, modify, and troubleshoot computer programs using Visual Basic to develop computer programming skills.
- Create effective web pages that include links, graphics, sound, tables, forms, and style sheets using common editors.
- Implement, administer, and troubleshoot computer systems that incorporate Microsoft Windows Vista as preparation for the examination to attain the Windows Vista Configuration Microsoft Certified Technology Specialist 70-620.
- Install, configure, operate, and troubleshoot medium sized router and switched networks as preparation for the CCNA (Cisco Certified Network Associate) certification;
- Troubleshoot and repair microcomputers as preparation for the examination to attain the CompTIA A+ certification.
- Train and support microcomputer end-users to include developing and delivering training modules and developing strategies for providing ongoing technical support.

## **ESTIMATED RESIDENT PROGRAM COST:**

\$6050
30
140
2150
\$8370

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3+	
М	095**	Intermediate Algebra <b>OR</b>		
M	121**	College Algebra <b>OR</b>		
M	152**	Precalculus Algebra OR		
М	171**	Calculus I	3-4+	
WRIT	101**	College Writing I OR		
WRIT	122**	Intro to Business Writing	3+	
ITS	150*	CCNA 1: Exploration	3+	
ITS	152*	CCNA 2: Exploration	<u>3+</u>	
		Subtotal	15-16	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ITS	210*	Network Operating Systems - Desktop	3+	
COMM	135	Interpersonal Communication	3†	
CAPP	158*	MS Access	3+	
ITS	250*	CCNA 3: Exploration	3+	
ITS	252*	CCNA 4: Exploration	3+	
		Subtotal	15	

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CSCI	110*	Programming with Visual Basic I	3†	
CAPP	154*	MS Word	3+	
BUS	106	Introduction to Business	3+	
CIT	229	Web Page Construction	3+	
		Technical Electives***	<u>2+</u>	
		Subtotal	15	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ITS	280*	Computer Repair and Maintenance	4+	
CAPP	156*	MS Excel	3+	
ITS	298*	Internship/Cooperative Education	3†	
		Technical Electives***	<u>5</u> †	
		Subtotal	15	

# TOTAL PROGRAM CREDITS - 60-61~

 $^{\sim}$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# COMPUTER INFORMATION TECHNOLOGY NETWORK SUPPORT

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Bruce Gottwig** 

The Computer Technology Program prepares individuals to assume a role in computer support with skills and responsibilities in user support, hardware and software troubleshooting, and basic system maintenance.

The Network Support Degree prepares students for a career in supporting Local Area Networks (LAN) and Wide Area Networks (WAN) with a focus on the skills required to understand and manage the operation of a small and large computer network.

Upon completion of the Network Support Degree, students will be able to successfully design, implement, manage, and maintain effective network infrastructures for both home and corporate clients as an entry level network technician / system administrator.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Utilize TCP/IP applications to prove their understanding of networking protocols used to control modern networking infrastructures.
- Master the concepts of the theoretical OSI networking model.
- Create, maintain, and troubleshoot both wired and wireless network infrastructures and infrastructure devices.
- Employ and master the skills needed to create and maintain server based networks using both Microsoft Windows and Open source Linux server systems
- Develop and implement a logical troubleshooting and maintenance system for Personal Computing systems.
- Prepare for networking support industry standard certifications such as:
   CCNA, CCNP, MCSA or MCSE, and CompTIA Network+.

#### **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	30
Lab Fees	210
Books/Supplies	2100
TOTAL	\$8390

MUS Student Health Insurance Premium approx \$1600/year if needed

## **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3+	
ITS	125	Fund of Voice and Data Cabling	3†	
ITS	150*	CCNA 1: Exploration	3†	
ITS	152*	CCNA 2: Exploration	3+	
M	095**	Intermediate Algebra <b>OR</b>		
M	121**	College Algebra <b>OR</b>		
M	152**	Pre-calculus Algebra <b>OR</b>		
M	171**	Calculus I	3/4+	
		Subtotal	15/16	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ITS	210*	Network Operating Systems - Deskto	3†	
ITS	250*	CCNA 3: Exploration	3+	
ITS	252*	CCNA 4: Exploration	3+	
WRIT	122**	Intro to Business Writing <b>OR</b>		
WRIT	101**	College Writing I	3+	
ITS	280*	Computer Repair and Maintenance	<u>4</u> †	
		Subtotal	16	

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE	
COMM	135	Interpersonal Communication	3+		_
ITS	215*	Network Operating Systems – Dir Infra	ast. 4†		
ITS	260*	CCNP 1: Advanced Routing	4+		
CIT	XXX**	Technical Electives***	4+		
		Subtotal	15		

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE	
ITS	298*	Internship/Cooperative Education	3†		
ITS	217*	Network Operating System – Admin/A	pps 4+		
ITS	264*	CCNP 3: Building Multilayer Switched	Net 4†		
CIT	XXX**	Technical Electives***	4+		
		Subtotal	14		

#### TOTAL PROGRAM CREDITS - 60-61~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

<sup>\*\*\*</sup> Technical electives must be approved by faculty advisor

# COMPUTER INFORMATION TECHNOLOGY WEB DESIGN

## **ASSOCIATE OF APPLIED SCIENCE DEGREE**

Advisor: Tim Paul

The Computer Technology Program prepares individuals to assume a role in computer support with skills and responsibilities in user support, hardware and software troubleshooting, and basic system maintenance.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Write, control and troubleshoot XHTML and CSS in order to create effective and current web pages using industry standard applications.
- Investigate and implement current languages and utilities to assess their effectiveness in the development of web pages and design.
- Employ and master graphical editing and animation techniques using industry standard applications.
- Develop web sites and other forms of design.
- Discover techniques and style that may act as models for their own work.
- Collaborate in various roles typical in web and design work.

#### **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	30
Lab Fees	35
Books/Supplies	1875
TOTAL	\$7990

MUS Student Health Insurance Premium approx \$1600/year if needed

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
BUS	106	Introduction to Business	3†	
COMM	135	Interpersonal Communication	3†	
CAPP	120	Introduction to Computers	3+	
WRIT	101**	College Writing I OR		
WRIT	122**	Intro to Business Writing	3+	
M	095**	Intermediate Algebra OR		
M	121**	College Algebra <b>OR</b>		
M	152**	Pre-calculus Algebra <b>OR</b>		
M	171**	Calculus I	3-4†	
		Subtotal	15-16	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ITS	280*	PC Troubleshooting & Main	4†	
ITS	210*	<b>Computer Operating Systems</b>	3+	
GDSN	109*	Digital Photography	4+	
GSDN	130*	Typography	<u>3+</u>	
		Subtotal	14	

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ITS	150*	CCNA 1: Exploration	3†	
CSCI	110*	Programming with Visual Basic I	3†	
CAPP	158*	MS Access	3+	
GDSN	217*	Digital Design	3†	
CIT	229*	Web Page Construction	<u>4</u> †	
		Subtotal	16	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CIT	231*	Web Page Design	3†	
CSCI	210*	Web Programming	3†	
GDSN	222*	Capstone Portfolio	3†	
CIT	280*	Desktop Publishing	3†	
		Elective Option	<u>3+</u>	
		Subtotal	15	

#### SUGGESTED ELECTIVES

COURSE	NO.	TITLE	CREDITS	GRADE
CIT	206*	Database Management II	3†	
CIT	290*	New Web Technologies	3†	

## TOTAL PROGRAM CREDITS - 60-61~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **COMPUTER NETWORK INFRASTRUCTURE**

#### CERTIFICATE OF APPLIED SCIENCE DEGREE

**Advisor: Bruce Gottwig** 

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Demonstrate an entry level understanding of network infrastructure cabling.
- Install and basically configure network routers and switches.
- Pass the Cisco Certified Network Associate industry standard certification exam with at least an 80%.
- Pass the CompTIA A+ industry standard certification exam battery with at least an 80%.
- Obtain and keep an entry level computer networking professional position in the workforce.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$3924
Application Fee	30
Lab Fees	140
Books/Supplies	1050
TOTAL	\$5144

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3†	
ITS	150*	CCNA 1: Exploration	3†	
ITS	152*	CCNA 2: Exploration	3+	
ITS	125*	Fund of Voice and Data Cabling	3†	
M	095**	Intermediate Algebra OR		
M	121**	College Algebra <b>OR</b>		
M	152 **	Pre-calculus Algebra OR		
M	171**	Calculus I	3/4†	
		Subtotal	15-16	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
WRIT	122**	Intro to Business Writing OR		
WRIT	101**	Composition I	3+	
ITS	250*	CCNA 3: Exploration	3†	
ITS	280*	Computer Repair and Maintenance	4†	
ITS	252*	CCNA 4: Exploration	3†	
COMM	135	Interpersonal Communication	3†	
		Subtotal	16	

# TOTAL PROGRAM CREDITS - 31-32~

<sup>~</sup> Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules. Computer Server Administration

# **COMPUTER SERVER ADMINISTRATION**

#### CERTIFICATE OF APPLIED SCIENCE DEGREE

**Advisor: Bruce Gottwig** 

The Computer Server Administration program prepares individuals for employment in the computer networking field, specifically focusing on server management, maintenance, and administration. Students in this program gain hands-on experience with computer hardware, software and networks. Upon successful completion of the program, the student will have the needed skills to sit for CompTIA Network+, Linux+ and Microsoft MCSA/MCSE certifications.

#### **OUTCOMES: GRADUATES ARE PREPARED TO**

- Demonstrate an advanced level understanding of Microsoft 2003 server configuration;
- Demonstrate a basic understanding network infrastructure design and configuration;
- Demonstrate a basic understanding of the Linux server operating system;
- Pass the MCSA / MCSE industry standard certification exam battery with at least an 70%;
- Obtain and keep a computer server professional position within the workforce.

#### **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$4288
Application Fee	30
Lab Fees	70
Books/Supplies	1375
TOTAL	\$5763

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FALL SEMESTER**

COURSE	NO.	TITLE C	REDITS	GRADE
CAPP	120	Introduction to Computers	3+	
M	095**	Intermediate Algebra OR		
M	121**	College Algebra <b>OR</b>		
M	152**	Pre-calculus Algebra OR		
M	171**	Calculus I	3/4+	
ITS	215*	Network Operating Systems – Dir/Infra	st. 4+	
ITS	150*	CCNA 1: Exploration	3+	
ITS	152*	CCNA 2: Exploration	3+	
		Subtotal	16-17	

#### SPRING SEMESTER

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
ITS	224*	Introduction to Linux	4+	
ITS	217*	Network Operating Systems – Admin/	Apps 4†	
ITS	210*	Network Operating Systems - Desktop	3†	
WRIT	122**	Intro to Business Writing OR		
WRIT	101**	College Writing I	3+	
COMM	135	Interpersonal Communication	3†	
		Subtotal	17	

#### TOTAL PROGRAM CREDITS - 33-34~

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **DENTAL ASSISTANT**

#### CERTIFICATE OF APPLIED SCIENCE DEGREE

**Advisor: Robin Williams & Carmen Perry** 

**Student Information and Application Packet:** 

http://www.msugf.edu/webs/Dental%20Assisting%20packet.pdf

Dental Assistants are important members of the dental health care team and primarily help to increase the efficiency and productivity of the dental practice by assisting the dentist in delivering patient care. Other employment opportunities and/or responsibilities include dental health education, performing expanded duty dental care on patients, business practice, or working with dental insurance or dental supply companies. Because dentists employ two or three dental assistants, employment opportunities are excellent.

The Dental Assistant program will:

- Maintain an instructional curriculum that meets the accreditation standards of the American Dental Association Council on Dental Education and of the local dental community.
- Deliver relevant learning experiences and curriculum sequencing to assure graduates achieve adequate knowledge and skill to enable them to be employed in the field as entry level Dental Assistants.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Sit for the national certification examination administered by the Dental Assisting National Board.
- Perform entry level skill and competence in assigned chairside dental assistant duties and responsibilities (including expended duty functions as defined by the Montana Board of Dentistry.)
- Substantiate the mastery of oral radiography theory and techniques.
- Utilize dental-specific software for the operation of a dental practice.
- Demonstrate appropriate cultural, legal, ethical, and professional values (including adherence to HIPAA standards.)
- Articulate dental language appropriate in business, clinical, and educational situations.
- Apply OSHA Infection control standards during all aspects of dental care and practice.
- Improve potential to meet program graduation requirements by participating in academic advisement and other supportive services.

The MSU – Great Falls Dental Assistant program is a one-year (11 month) limited enrollment certificate program and accepts up to 18 students each year. Applicants are advised to contact Student Central or a program advisor for further program information specific to admission requirements.

Interested students must complete an application to the program (separate from the institution application) for program acceptance. These students must have already successfully (C- or better) completed M 065 (Pre-algebra) and WRIT 085 (Intro to College Reading/Writing) OR their equivalents OR are currently at the competency level for the program-required math and writing courses.

Following acceptance to the program, students complete three semesters

concluding with a summer semester when the students are enrolled in clinical practice. Students will be required to purchase uniform attire and provide own transportation (and lodging, if applicable) to and from clinical site assignments.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	· ·
Application Fee	30
Insurance	18
Uniforms	250
Lab Fees	390
Books/Supplies	1325
TOTAL	\$6550

#### MUS Student Health Insurance Premium approx \$1600/year if needed

#### The Dental Assistant program sequence is as follows:

(The student, however, may complete any or all of the general education coursework (non-DA) prior to entry to the Dental Assistant program, ie: M 90 or higher, WRIT 095 or higher, and/or COMM 135 or PSYX 100)

A grade of "C-" or above must be achieved in all courses to advance in the program and to graduate.

#### **FALL SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
DA	115	Head, Neck & Oral Anatomy	4†	
DA	118	Dental Office Management	2†	
DA	120	Oral Radiology/Radiography I	3†	
DA	123	Chairside Theory and Practice I	4†	
DH	110	Theory of Infection Control and Dis. P	rev. 1+	
WRIT	095**	Developmental Writing or higher	3-4†	
		Subtotal	17-18	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
DA	121*	Oral Radiology/Radiography II	2†	
DA	124*	Chairside Theory and Practice II	4†	
DA	150*	Dental Sciences/Preventive Dentistry	4†	
DA	165*	Dental Specialties	3†	
M	090**	Introductory Algebra OR higher	3-4†	
		Subtotal	16-17	

## **SUMMER TERM**

COURSE	NO.	TITLE	CREDITS	GRADE
COMM	135	Interpersonal Communication <b>OR</b>		
PSYX	100	Intro to Psychology	3†	
DA	190*	Clinical Practice and Seminar	<u>7†</u>	
		Subtotal	10	

All required Dental Assistant program coursework must be successfully ("C- "or better) completed prior to enrollment in DA 190, with the exception of Interpersonal Communication or General Psychology.

#### TOTAL PROGRAM CREDITS - 43-45~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **DENTAL HYGIENE**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisors: Kim Woloszyn, Gail Staples, Linda Wing & Dr. Bonnie Lederman

The Dental Hygienist is a licensed professional member of the healthcare team who integrates the roles of educator, consumer advocate, practitioner, manager and researcher to support total health through the promotion of oral health and wellness. The focus of dental hygiene is on preventing and treating oral disease.

Upon receipt of the Associate of Applied Science Degree, successful completion of the National Dental Hygiene Board Examination is required. The graduate will also need to obtain a license for the state he/she wishes to practice in by successfully completing a regional practical examination (WREB). The dental hygienist must practice in accordance with the requirements of the individual state practice acts and abide by requirements to maintain licensure.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Formulate comprehensive oral hygiene care plans that are patient centered and based on current scientific evidence.
- Employ professional judgment and critical thinking to identify, assess, analyze, and creatively address situations in a safe and ethical manner.
- Demonstrate effective interpersonal skills through verbal and written communication.
- Demonstrate leadership skills and provide service to the community through health promotion activities and education.
- Apply the concepts of oral health prevention and promotion to improve overall wellness.
- Provide safe and competent dental hygiene services to all individuals who seek treatment regardless of age, physical status or intellectual ability.
- Demonstrate appropriate cultural, legal, ethical and professional values at all times.
- Collaborate with other healthcare professionals.
- Practice within the standards established by the profession and identify parameters of accountability.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$9075
Application Fee	30
Insurance	30
Lab/Program Fees	1050
Books/Supplies/Instruments	5500
TOTAL	\$15685

# MUS Student Health Insurance Premium approx \$1600/year if needed

Students will be required to purchase dental instruments, supplies, uniforms and may also be required to provide transportation to clinical sites and lodging costs depending on the clinical sites selected.

The MSU–Great Falls College of Technology's Dental Hygiene Program is a limited enrollment program, accepting 16 students each year. Interested students are urged to contact the Admissions Office and the Dental Hygiene Program Advisors for student advising specific to admission requirements and criteria for program acceptance.

#### **PREREQUISITE COURSES**

COURSE	NO.	TITLE	CREDITS	GRADE
BIO	213**	Anatomy & Physiology I/Lab	4†	
BIO	214*	Anatomy & Physiology II/Lab	4†	
BIOM	250*	Microbiology for Health Sciences/Lab	4†	
WRIT	101**	College Writing I	3†	
M	116**	Mathematics for Health Careers OR		
		Any math course in the MUS Core	3-4†	
CHMY	121*	Intro to General Chemistry/Lab OR Bo	OTH	
CHMY	141*	College Chemistry I/Lab AND		
CHMY	143*	College Chemistry II/Lab	4-8†	
		Subtotal	22-27	

All prerequisite courses and dental hygiene program application must be completed by June 10th of the year prior to applying for enrollment into program. A grade of "C" or above must be achieved in all prerequisite & program courses to advance in the program and to graduate.

# PROGRAM COURSE REQUIREMENTS

#### **FALL SEMESTER**

COURSE	NO.	TITLE (	CREDITS	GRADE
DH	101	Intro to Dental Hyg/Preclinic	2†	
DH	102	Intro to Dental Hyg/Preclinic Lab	2†	
DH	110	Theory of Infect Control & Dis. Prevent	ion 1†	
DH	118	Oral Anatomy for Hygienists	3†	
DH	122	Oral Radiology /Lab	3†	
		Subtotal	11	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AH	140*	Pharmacology	2†	
DH	150	Clinical Dent Hyg Theory I	2†	
DH	151	Clinical Dent Hyg Practice I	4†	
DH	160	Periodontology I	3†	
DH	165	Oral Histology & Embryology	2†	
DH	123*	Radiographic Interpretation	1†	
DH	240	Local Anesthesia/		
		Nitrous Oxide Theory & Lab	<u>2†</u>	
		Subtotal	16	

#### SUMMER SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
DH	220	Dental Nutrition Health	3†	
DH	201	Periodontology II	2†	
DH	210	Clinical Dent Hyg Theory II	2†	
DH	211	Clinical Dent Hyg Practice II	<u>4†</u>	
		Subtotal	11	

## **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
COMM	130	Public Speaking <b>OR</b>		
COMM	135	Interpersonal Communication	3†	
DH	130	Dental Materials	2†	
DH	215	General and Oral Pathology	3†	
DH	241	Gerontology & Special		
		Needs Patients	2†	
DH	250	Clinical Dent Hyg Theory III	2†	
DH	251	Clinical Dent Hyg Practice III	<u>5†</u>	
		Subtotal	17	

# SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
DH	230	Community Dental Health and Education	on 2†	
DH	235	Prof. Issues & Ethics in Dental Practice	2†	
DH	280	Clinical Dent Hyg Theory IV	1†	
DH	281	Clinical Dent Hyg Practice IV	5†	
PSYX	100	Intro to Psychology OR		
PSYX	230	Developmental Psychology	3†	
SOCI	101	Introduction to Sociology	3†	
		Subtotal	16	

# TOTAL PROGRAM CREDITS - 93-98~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

Subtotal 15

# **DESIGN DRAFTING TECHNOLOGY**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Kirk Mattingly (Great Falls)** 

Tabby Jagger (Temporary - Bozeman)

NOTE: This program will be offered at the College of Technology in Bozeman and will accept new Bozeman students beginning Fall semester 2009.

+ College of Technology in Bozeman Transitioning to MSU-Bozeman's Gallatin College Programs

This program will not be offered in Great Falls and will not accept new Great Falls students beginning summer semester 2009. Please contact the Business, Trades, and Technology division at 406-771-4391 for more information.

In the Design Drafting Technology program students acquire the skills necessary for entry-level drafting jobs in the design/drafting industry.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Create detail and assembly drawings to American National Standards Institute (ANSI) standards on the drawing board;
- Create detail and assembly drawings using computer-aided design software (CAD);
- Create two-dimensional layouts from three-dimensional solid models using CAD software;
- Create a complete set of residential plans using CAD software;
- Create a site plan including topography using CAD software;
- Create thematic maps from GIS data; and
- Solve graphical problems using the principles of descriptive geometry.

#### **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	30
Lab/Program Fees	40
Books/Supplies	1875
TOTAL	\$7995

#### **FALL SEMESTER 1**

COURSE	NO.	TITLE	CREDITS	GRADE
DRFT	120	Blueprint Reading	2†	
COMM	135	Interpersonal Communication	3†	
CAPP	120	Intro to Computers	3†	
DRFT	131	Technical Graphics I	4†	
M	152**	Precalculus Algebra	<u>4†</u>	
		Subtotal	16	

# **SPRING SEMESTER 2**

COURSE	NO.	TITLE	CREDITS	GRADE
DRFT	132*	Descriptive Geometry	3†	
DRFT	156	Introduction to CAD	3†	
DRFT	140	Professional Practices	3†	
WRIT	101	College Writing I	3†	
M	153**	Precalculus Trigonometry	<u>3†</u>	

#### **FALL SEMESTER 1**

COURSE	NO.	TITLE	CREDITS	GRADE
DRFT	201*	Residential Drafting	3†	
DRFT	256*	3D CAD	3†	
ITS	280*	Comp Repair & Maintenance	4†	
MFGT	205	Manufacturing Processes	3†	
CET	173	Architectural Construction and Materi	als <u>3</u> †	
		Subtotal	16	

#### **SPRING SEMESTER 2**

COURSE	NO.	TITLE	CREDITS	GRADE
DRFT	205*	Machine Drafting	3†	
DRFT	244*	Topographical Mapping	3†	
		& GIS Applications		
DRFT	260	Aerospace Drafting	3†	
DRFT	261	Civil Drafting	3†	
DRFT	298	Internship	<u>4</u> †	
		Subtotal	16	

#### **TOTAL PROGRAM CREDITS - 63~**

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.



# **Course Descriptions**

This section includes a brief description of each credit course offered on a regular basis by Montana State University–Great Falls College of Technology.

Each listing includes a course number, course title, number of credits awarded, prerequisites, co-requisites, term(s) offered, and course descriptions. The following letters are used to specify the term each course is offered:

- F Fall Semester
- S Spring Semester
- SU Summer Term

Please Note: Courses scheduled for any term may be cancelled due to low enrollment.

While the terms each course is offered are shown, students should consult the Schedule of Classes published prior to registration each term for the most up-to-date information on course offerings. Courses offered on "Sufficient Demand" are indicated as such in the course descriptions.

#### **Definitions:**

**Co-requisite:** A co-requisite is a control measure for enrollment in a particular course, group of courses, or a program. A co-requisite course must be taken at the same time as another course or series of courses. Some co-requisite courses are linked by content, and other times courses are designated as co-requisites to keep a cohort of students together. See specific program handbooks for the application of this tool in specific programs.

**Prerequisite:** A prerequisite is a course or placement score that is required before a student is eligible for the next process or course. Many programs have groups of courses that are prerequisites to their application process. Many courses have prerequisites that are another course or a score on a placement test (ACT/SAT/Compass). See each course description or program application documents for details.

Consult the Programs and Transfer sections of this catalog and/or an advisor for specific information about each course and which courses meet program or transfer requirements.

\*\*Please note that most MSU–Great Falls College of Technology courses require you to utilize advanced technology. Examples include online research, library usage, computer communication, electronic submission of assignments, online quizzes, etc.

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# Course Descriptions - Accounting (ACTG)

#### **ACTG 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **ACTG 101 ACCOUNTING PROCEDURES I**

Credits: 3 Term: (F,S)

Prerequisites: M 090 or qualifying test score

Content of the course covers the complete accounting cycle including creating source documents, journalizing transactions, posting to ledgers, preparing worksheets and basic financial statements including the income statement and balance sheet, end-of-period closing activities, payroll and special journals for both service and merchandising businesses.

#### ACTG 102 ACCOUNTING PROCEDURES II

Credits: 3 Term: (F,S)

Pre OR Corequisites: M 108

This course is a continuation of Accounting Procedures I. Additional topics covered include notes payable and notes receivable, valuation of receivables and uncollectible accounts, valuation of inventories, plant assets and depreciation, partnership accounting, corporate organization, capital stock, worksheets, taxes, dividends, and corporate bonds, statement of cash flows and comparative financial statements.

# **ACTG 180 PAYROLL ACCOUNTING**

Credits: 3 Term: (F,S)

Prerequisites: ACTG 101

Pre OR Corequisites: CAPP 120, M 108

Students will become knowledgeable in the payroll records required to comply with various federal and state laws affecting payroll. The Federal Fair Labor Standards Act and the Montana Wage/Hour laws are studied. Students will develop skills in actual payroll preparation. Activities include computing gross salaries, social security, federal and state income tax deductions, journalizing payroll transactions, posting to ledgers and preparation of federal and state payroll tax returns, and reports.

# **ACTG 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### ACTG 201 PRINCIPLES OF FINANCIAL ACCOUNTING

Credits: 3 Term: (F)

Prerequisites: ACTG 102,

Pre OR Corequisites: M 095 or qualifying test score

This course is an introduction to financial accounting principles. Specific topics studied include generally accepted accounting principles and concepts, the accounting cycle, financial statement preparation, internal controls, cash, short-term investments, receivables, inventory, plant and intangible assets, current and long-term liabilities including present value concepts, corporations and stockholders equity, the statement of cash flows, and financial statement analysis.

#### ACTG 202 PRINCIPLES OF MANAGERIAL ACCOUNTING

Credits: 3 Term: (S)

Prerequisite: ACTG 201

This course is an introduction to managerial accounting principles concerned with providing information to managers for use in planning and controlling operations and in decision making. Specific topics studied include manufacturing cost concepts for job and process cost accounting, service department cost allocation, cost-volume-profit analysis, master and flexible budgeting, standard costs and variance analysis, capital

budgeting and relevant costs.

#### **ACTG 205 COMPUTERIZED ACCOUNTING**

Credits: 3 Term: (F)

Prerequisites: ACTG 102, ACTG 180

Corequisites: ACTG 201

Students will complete a variety of accounting projects using microcomputer accounting

software.

# **ACTG 211 INCOME TAX FUNDAMENTALS**

Credits: 3 Term: (S)

Prerequisites: ACTG 180, ACTG 201

This course introduces students to the basic income taxation principles, concepts, and procedures of individuals, proprietorships, partnerships, and corporations.

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# Course Descriptions - Allied Health (AH)

#### **AH 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### AH 103 FUNDAMENTALS OF HEALTH OCCUPATIONS

Credits: 2

Terms: (F, S, SU based on sufficient demand)

Students are introduced to the variety of professions in the healthcare industry and explore basic health care concepts and skills.

# **AH 104 INTRODUCTION TO DENTISTRY**

NOTE: This is a pilot course effective 2009-2010.

Credits: 1 (15 lecture hours)

Terms: (F; S & SU Based on Sufficient Demand)

An introductory course in the history of dentistry along with its many facets including private and public health clinical settings. The various roles that make up the dental team along with their specific functions will be explored. Introduction to the levels of preventive dentistry as well as an introduction to dental terminology will be included.

# **AH 108 DISEASE CONCEPTS**

Credits: 2

Terms: (F, S, SU)

Prerequisites: BIO 107 or BIO 127

This course is designed to provide students in the Health Sciences field with foundational knowledge of the general mechanisms of disease, and the clinical manifestations of disease commonly seen in the health care environment. Disease processes specific to each body system are studied, and treatment interventions and prognosis discussed.

#### AH 110 EXPLORING COMPLEMENTARY AND ALTERNATIVE MEDICINES

Credits: 2

Terms: (F, S, SU)

This course examines the vast selection of therapeutic interventions known as alternative or complementary medicines being presented to today's consumers.

# **AH 120 INTRAVENOUS THERAPY**

Credits: 1

Terms: (F,S,SU Based on Sufficient Demand)

Prerequisites: Students must be enrolled the last semester of the

Practical Nurse program, or be enrolled in the second year of the Respiratory Care program, or obtain instructor approval.

Intravenous Therapy covers IV therapy principles including anatomy of the arm and hand with particular attention to the veins, IV equipment, IV solution flow rates calculation, infection control,

potential complications and IV documentation. Each student will perform IV starts on a mannequin arm, and when proficient, initiate IVs on people.

#### **AH 125 FUNDAMENTALS OF FORENSIC SCIENCE**

Credits: 2

Term: (SU, Based on Sufficient Demand)

In Fundamentals of Forensic Science, students will examine the philosophical, rational and practical framework that supports a case investigation. The unifying principles of forensic science to the pure

sciences will be examined, and students will be introduced to the unique ways in which a forensic scientist must think. Topics will include the experimental method and some of the ways in which a forensic analysis can be confounded. The various forensic science occupations will also be explored.

## **AH 140 PHARMACOLOGY**

Credits: 2 Terms: (F,S)

Prerequisite: Successful completion of prerequisite courses for specific programs, or

instructor approval.

This course reflects the ever-changing science of pharmacology and responsibilities in administering pharmacological agents. The purpose of this course is to promote safe and effective drug therapy by

providing essential information that accurately reflects current practice in drug therapy and facilitating the comprehension and application of knowledge related to drug therapy. Application requires the knowledge about the drug and the patient receiving it. General principles of drug

administration, terminology, drug regulation, standard references and legal responsibilities are included as well as major drug classifications and therapeutic implications.

# AH 150 FITNESS FOR LIFE

Credits: 2 Terms: (F,S)

This course is designed to educate, support, and motivate individuals toward a life-long commitment to physical fitness including nutrition for health and weight management; establishing physical fitness goals; and planning for physical strength improvement and/or maintenance. Exercise laboratory experience allows students to apply physical fitness principles.

#### **AH 180 BASIC PHARMACEUTICALS**

Credits: 1 Terms: (F, S, SU)

This course provides basic knowledge of the most commonly prescribed pharmaceuticals needed to analyze health care information for various health science support functions. Emphasis is on classification, indications, therapeutic effects, side effects, interactions, and contraindications of new, current, and newly introduced applications of existing medications.

#### **AH 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide

students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### AH 219 NUTRITION AND DIET THERAPY FOR NURSES

Credits: 2 Term: (S)

Prerequisites: BIO 213 or CHM 111

An introduction to basic normal and clinical nutrition. The fundamentals of nutrition and the special nutritional needs throughout the various stages of life will be addressed. The appropriate uses of diet therapy in restoring and maintaining health will also be covered. This class is offered for nursing and pre-nursing students only.

## AH 260 Workflow Analysis & Redesign

3 CR (F, S, SU)

Pre Reg or Co-Reg: Consent of Instructor

This course covers fundamentals of health workflow process analysis and redesign as a necessary component of complete practice automation. Process validation and change management are also covered to include workflow analysis and process mapping to support an EHR that will lead to quality and performance improvement.

#### AH 265 Electronic Health Record in Medical Practice

3 Cr. (Hrs. 2 Lec., 1 Lab)

Term: (F, S, SU)

Pre Req or Co-Req: HCI 2156 OR Consent of Instructor

Students will learn the personnel functions and associated workflows required in an ambulatory care physician clinic and how to prepare for, implement and use an electronic health record (EHR) to achieve a paperless office environment and improved quality of care. Office function, associated workflow and EHR use will include all office personnel roles from receptionist through nurse and physician. EHR use will include both inoffice functions and its role in Health Information Exchange (HIE) with other health care providers and organizations including laboratories, pharmacies, consulting physicians and payers.

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# Course Descriptions - Allied Health Medical Assisting (AHMA)

## **AHMA 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

### **AHMA 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

## AHMA 201 MEDICAL ASSISTING CLINICAL PROCEDURES I

Credits: 4 Term: (F)

Prerequisite/Co-requisite: Instructor approval – BIO 127 and BIO 128 with a grade of "C-" or

higher

This course is designed to develop a basic knowledge of skills and practices of the allied healthcare professional assisting in a clinical setting. Units include Universal Precautions, patient preparation, preparing for and assisting with examinations, infection control, surgical asepsis, pharmacology, and drug administration.

#### AHMA 203 MEDICAL ASSISTING CLINICAL PROCEDURES II

Credits: 4 Term: (S)

Prerequisite: AHMA 201 with a grade of "C-" or higher

This course is designed to introduce students to additional skills and practices of the allied healthcare professional assisting in a clinical setting. Units include laboratory orientation, collecting and handling laboratory specimens, hematology, physical therapy, electrocardiography, emergencies, first aid, and nutrition.

#### AHMA 280 MEDICAL ASSISTING EXAM PREPARATION

Credits: 2
Term: (S)

Prerequisite: Consent of Instructor

This course is designed for students completing the Medical Assisting Program. Current topics in Medical Assisting will be discussed and students will work on preparing for the AMT (American Medical Technologists) registration exam and/or AAMA (American Association of

Medical Assistants) certification examination.

# **AHMA 298 MEDICAL ASSISTING EXTERNSHIP**

Credits: 4 Term: (SU)

Prerequisite: Instructor approval and AHMA 201 and AHMA 203 with a grade of "C-" or higher

Students gain practical experience in clinical medical environments where they have an opportunity to perform various clinical and administrative procedures under supervision. Students are expected to use competencies required for the medical assistant.

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# Course Descriptions - Allied Health Medical Support (AHMS)

#### **AHMS 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **AHMS 105 HEALTHCARE DELIVERY**

Credits: 2
Term: (F, S, SU)

This introductory course acquaints students with an overall view of the healthcare system. Topics include organization, financing, and delivery of healthcare through various types of facilities, agencies, health organizations, and hospitals. Medical ethics, professional behavior, and patient rights are also covered.

#### **AHMS 108 HEALTH DATA CONTENT AND STRUCTURE**

Credits: 3
Terms: (F, S, SU)

Prerequisites or Co-requisites: AHMS 144

This course provides orientation to the health information department and its organization interrelationships in healthcare facilities. This course also covers the content and format of the health record (both conventional and alternative formats), quantitative and qualitative analysis of the record according to regulatory and accreditation standards, numbering, filing, retention, storage, and destruction of records. Application will be provided using extensive discussion and assignments designed to approximate real life situations.

# AHMS 118 HEALTH CARE PERSONNEL AND SUPERVISION

Credits: 2 Term: (S)

Legal requirements, theories, and techniques for supervision at the first- and midmanagement level are the topics of this course. Supervision processes, including communicating, organizing, directing, motivating, controlling, and evaluating are assessed for application in healthcare organizations through the use of case studies.

#### **AHMS 142 INTRODUCTION TO MEDICAL TERMINOLOGY**

Credits: 1

Terms: (F,S, SU)

This course promotes knowledge of the elements of medical terminology for professional and personal development. Exercises in each unit will stress definitions, spelling, and

pronunciation of medical words. The course is designed to build an understanding of the logical method used to form medical terms, including word analysis and word building.

AHMS 144 BASIC MEDICAL TERMINOLOGY

Credits: 3

Terms: (F, S, SU)

The goals of this course are to promote knowledge of the elements of medical terminology for professional and personal development, the ability to spell and pronounce medical terms, an understanding of medical abbreviations, and an appreciation of the logical method found in medical terminology. This includes word analysis and word building. Knowledge of terms relating to body structures, positions, directions, divisions and planes will be required. An awareness of current health events is encouraged, as is knowledge of basic scientific and specialty areas in healthcare practice.

#### **AHMS 156 MEDICAL BILLING FUNDAMENTALS**

Credits: 4
Terms: (F, SU)

Prerequisites or Corequisites: AHMS 144

This course is designed to introduce students to the major national medical insurance programs, including Medicare, Medicaid, Blue Cross/Blue Shield, and TRICARE. Topics covered will include plan options, carrier requirements, state and federal regulations, abstracting from source documents, manual claim form completion, legal and ethical issues, and a review of diagnostic and procedural coding.

# AHMS 158 LEGAL AND REGULATORY ASPECTS OF HEALTHCARE

Credits: 3

Term: (S, others based on sufficient demand)

Prerequisites: WRIT 095 or higher

This course covers basic knowledge of the legal, regulatory, and ethical aspects of healthcare including: doctrines, principles, and processes of civil law; state licensure and national accreditation standards; and professional requirements for personal liability, confidentiality, and documentation of the health record. Application will be provided using extensive discussion and assignments designed to approximate real life situations.

#### AHMS 160 BEGINNING PROCEDURAL CODING

Credits: 3 Term: (F, S)

Prerequisites: BIO 127 Co-requisites: AHMS 201

This course covers basic and intermediate levels of theory and application of CPT principles to code procedures documented in healthcare records. Students perform basic and intermediate coding using real health records, case studies, and scenarios. HCPCS coding is also covered. Application will also include book and an introduction to encoder software. This coding class requires hands-on coding skills, and knowledge of basic use of applicable coding books.

# **AHMS 162 BEGINNING DIAGNOSIS CODING**

Credits: 3 Term: (F,S)

Prerequisites: BIO 127 Co-requisites: AHMS 201

This course covers basic and intermediate levels of theory and application of ICD-CM principles and guidelines for coding and sequencing diagnoses and procedures. Students perform basic and intermediate coding using real health records, case studies, and scenarios. Application will focus on book coding with a brief overview of encoder software. This coding

class requires hands-on coding skills, knowledge of basic use of applicable coding books.

#### **AHMS 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **AHMS 201 MEDICAL SCIENCE**

Credits: 3 Terms: (F, S)

Prerequisites: AHMS 144, BIO 127 or BIO 213

This course provides basic knowledge of the most common diseases, anomalies, treatments, and procedures needed to analyze healthcare documentation for various health science support functions including abstracting, coding, transcription, auditing, and reimbursement. Drug classification, diagnostic tests, pathology, laboratory, radiology, nuclear medicine, and ultrasound procedures are also included.

#### **AHMS 208 HEALTHCARE STATISTICS**

Credits: 2

Term: (F, others based on sufficient demand)

Prerequisites or Co-requisites: M 090 or M 108, CAPP 120

This course will include gathering, compilation, and computing of healthcare-related statistics, use of research, surveys, and statistical methods for developing healthcare data into information for various requesters.

#### **AHMS 212 CPT CODING**

Credits: 3 Term: (F,S)

Prerequisite: AHMS 160

Basic understanding of the CPT, ICD-CM, coding principles should already be established. This advanced course will cover medical necessity, coding issues for specific body systems, and for general conditions. Intensive coding application will be achieved through the use of real health records, case studies, and scenarios. Application will include the use of encoder software. DRGs, APCs, RUGs, RBRVs, and the Correct Coding Initiative (CCI) will also be covered in this class. This coding class requires hands-on coding skills, and knowledge of basic use of applicable coding books.

#### AHMS 214 ICD-9 CODING

Credits: 3 Terms: (F,S)

Prerequisite: AHMS 162

Basic understanding of diagnostic and procedural coding principles should already be established. The course requires interpreting ICD-9-CM coding and reporting guidelines to sequence and assign appropriate diagnostic codes for both inpatient and various outpatient settings. Compliance issues associated with various IPPS reimbursement systems such as MS-DRGs, as well as APCs are covered. Encoder software will complement the ICD-9-CM manual in the application of coding processes. Clinical information will be interpreted from brief case studies and progress to the use of a patient's complete health record.

#### **AHMS 220 MEDICAL OFFICE PROCEDURES**

Credits: 3
Term: (F, S, SU)

Prerequisite: CAPP 120 and AHMS 144

Students will utilize medical office software to perform basic administrative procedures in the medical office. These include: scheduling, managing patient accounts, and office documentation. An emphasis will be placed on professionalism, legal and ethical issues, and HIPAA standards.

#### **AHMS 227 HEALTH INFORMATION MANAGEMENT**

Credits: 3

Term: (F, others based on sufficient demand) Prerequisite or Co-requisite: AHMS 108

General and financial management topics are studied in this course. The management functions of planning, organizing, directing, and controlling are related to the healthcare environment. Specific healthcare examples of budgeting, managerial accounting and selection, procurement, and maintenance of equipment and supplies are provided through extensive application of healthcare-related case studies and student projects.

#### **AHMS 240 CLINICAL QUALITY ASSESSMENT**

Credits: 3

Term: (S, others based on sufficient demand) Prerequisites: CAPP 120 AND M 090 or M 108

The principles and procedures of quality, utilization, risk, and compliance processes used to improve the quality of patient health care are taught in this course. Quality assessment and improvement standards and requirements of licensing, accrediting, fiscal and other regulatory agencies are presented. Methods for identifying variations and deficiencies for follow-up action will be achieved using extensive discussion and assignments designed to approximate real life situation.

# AHMS 245 SIMULATED LAB: MEDICAL SUPPORT

Credits: 2

Terms: (S, others based on sufficient demand)

Prerequisites: AHMS 108, CAPP 120 Pre or Coreqs: AHMS 162; AHMS 160

Lab based course in which students utilize the AHIMA virtual Lab. The Virtual Lab exposes students to software utilized in health information management and healthcare reimbursement. Professionalism in the workplace will also be covered. This course is a mastery-level course, where students utilize skills acquired in previous programmatic courses. Coding of authentic records will be included.

# AHMS 252 COMPUTERIZED MEDICAL BILLING

Credits: 3 Term: (S)

Prerequisites: AHMS 156

This course will build on topics covered in AHMS 156. Students will study characteristics and requirements of each type of insurance including: indemnity plans, HMOs, PPOs, Worker's Compensation (state by state variances). Students will also discuss the adjudication process, resolve reimbursement problems and respond to claims reviews and appeals. Students will use medical office software package to complete assignments.

## **AHMS 255 MEDICAL TRANSCRIPTION I**

Credits: 3 Terms: (S, SU)

Prerequisite: AHMS 144, CAPP 120, OO 107 or 108, or instructor approval

Students are introduced to ethical considerations, rules, regulations, forms, and techniques in recording medical documents. Transcription of various medical reports is required with emphasis on competency in medical vocabulary, spelling, punctuation, and extensive usage of medical reference materials.

#### AHMS 256 MEDICAL TRANSCRIPTION II

Credits: 3 Term: (F)

Prerequisites: AHMS 255 with "C-" or better

This course is designed to increase speed and accuracy in transcribing medical data with exposure to advanced technical language in a variety of specialties. Special attention is on speed, accuracy, production, style, and formats. The AHDI Book of Style will be utilized throughout the course.

#### AHMS 257 MEDICAL TRANSCRIPTION III

Credits: 3 Terms: (S, SU)

Prerequisites: AHMS 256 with "C-" or better

This is a capstone class in medical transcription. Students will transcribe a variety of provider-generated medical reports in all specialty areas, demonstrating progressively demanding accuracy and productivity standards. Emphasis will be placed on proofreading and correcting transcribed documents, noting and correcting inconsistencies and inaccuracies, and utilizing the AHDI Book of Style and other references appropriately. Professionalism and job seeking techniques will also be discussed.

#### **AHMS 258 PRACTICUM IN MEDICAL TRANSCRIPTION**

Credits: 3 Term: (SU only)

Prerequisites: Successful completion of AHMS 257

During the medical transcription practicum, students will transcribe a minimum of 10 dictated hours of actual healthcare provider-generated dictation. This may occur in an externship setting or in a simulated professional practice setting. The focus will be on building speed and accuracy, applying the guidelines of the Book of Style, and using productivity tools appropriately.

# **AHMS 280 OVERVIEW OF HEALTH INFORMATICS SYSTEMS**

Credits: 4
Term: (F, S, SU)

Prerequisites: AHMS 144, CAPP 120

This course will cover the principles of analysis, design, evaluation, selection, acquisition, and utilization of information systems in healthcare. Also included in this course are the technical specifications of computer hardware, software, networks, and telecommunications. Furthermore, this course will provide an understanding of technology's role in healthcare. The course will emphasize the intellectual use of information strategic planning, decision support, program management, high quality patient care, and continuous quality improvement. Application will be provided using extensive discussion and assignments designed to approximate real life situations.

## **AHMS 288 HIT EXAM PREPARATION**

Credits: 3 Term: (S)

Prerequisite or Co-requisites: AHMS 298

The course provides a forum for students to prepare for the Registered Health Information Technician (RHIT) national examination sponsored through AHIMA. Reviewing and integrating new knowledge, regulations, and standards in the field of health information technology will be achieved. Guidance on the completion of job applications, preparing a resume, writing

cover and follow-up letters, and job interviews (as both applicant and interviewer) are studied and practiced.

#### AHMS 298 HIT - PROFESSIONAL PRACTICE EXPERIENCE

Credits: 1-3 Term: (S)

Prerequisite: Approval of the Program Director

Students in this course will gain professional practice experience in their program of study. Students create written records of their experiences and will complete assigned projects as

indicated.

# AHMS 298A HICS/CODING - PROFESSIONAL PRACTICE EXPERIENCE

Credits: 2 Term: (S)

Prerequisite: AHMS 108, 156, 160, 162,

Corequisite: AHMS 212, 214

Lab based course in which students utilize the AHIMA virtual Lab. The Virtual Lab exposes students to software utilized in health information management and healthcare reimbursement. Professionalism in the workplace will also be covered. This course is a mastery-level course, where students utilize skills acquired in previous programmatic courses. Coding of authentic records will be included. This course serves as a virtual practical experience.

# AHMS 298B Medical Billing/Coding Professional Practice Experience

Credits: 1-3 TERM: (S, SU)

Prerequisites: Approval of the Program Director

Students in this course will gain professional practice experience in their program of study. Students create written records of their experience and will complete assigned projects as indicated in their Professional Practice Experience Manual. This course is scheduled for 80 hours off campus. Each student will be responsible for their own transportation to and from the health care facility and any necessary living expenses.

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# Course Descriptions - Anthropology (ANT)

#### **ANT 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### ANT 101 INTRODUCTION TO ANTHROPOLOGY

Credits: 3

Terms: (F, S, SU based on sufficient demand)

This course provides an introductory survey of the basic theory and practice of the four classic fields of anthropology: physical anthropology, archaeology, linguistics, and cultural anthropology. The focus of the course is on the evolution of the human species, theories of early culture, reconstruction of the past through archaeological analysis, and structure and usage of language and its relationship to culture. The student will become familiar with the basic concepts of anthropology, its sub-disciplines, methods used to study and understand other cultures, and the general theories of cultures.

#### **ANT 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

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# Course Descriptions - Art (Art)

#### **ART 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### ART 101 INTRODUCTION TO VISUAL ARTS

Credits: 3

Terms: (F, S, SU)

This slide lecture course will introduce the students to forms of creative expression within visual arts, encouraging the students to more actively explore art verbally and in written form. The course material will focus on various issues of aesthetic expression rather than the historical development of the arts.

# **ART 114 ART FUNDAMENTALS**

Credits: 3 Terms: (F, S)

This course is an exploration of visual concepts through studio projects supplemented by lecture, discussion, and writing assignments. Art fundamentals will be investigated through drawing, color theory, and 3-dimensional processes.

# **ART 140 DRAWING I**

Credits: 3

Terms: (F, S, SU)

This course introduces the fundamentals of drawing with consideration for line, form, space and perspective in rendering from three-dimensional shapes, still life, landscape or the human

form utilizing a variety of drawing materials. Emphasis will be placed on learning to see and render basic shapes, line quality, value, light and shadow, texture, mass, perspective and composition. Students will be encouraged to apply these skills to develop a personal style of drawing.

#### **ART 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.





# Course Descriptions - Biology (BIO)

#### **BIO 080 BASIC SCIENTIFIC CONCEPTS & SKILLS**

Credits: 3 (3 lecture)

Terms: (F, S based on sufficient demand)

This course is intended for students with limited exposure to biology, chemistry, and/or physical sciences. This course introduces students to basic scientific principles and processes in preparation for further study in the sciences.

#### **BIO 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **BIO 107 FUNDAMENTALS OF HUMAN BIOLOGY/LAB**

Credits: 4 (3 lecture, 1 lab)

Terms: (F,S,SU)

Placement required: Students must place into M 090 or higher AND place into WRIT 101 or

higher.

This course introduces students to the structure and function of the human body. Topics such as the fundamental principles in organic and inorganic chemistry, cellular metabolism, cellular anatomy, cellular biology and histology will be covered and subsequently applied to the physiology of the body as whole. Organ systems to be covered in this course include cardiovascular, lymphatic, respiratory, nervous, musculoskeletal, and endocrine.

Completion of this course and/or Chem 121 with a C or better is **strongly recommended** before enrolling in BIO 213 Anatomy & Physiology I.

#### **BIO 127 ANATOMY AND PHYSIOLOGY I FOR NON-CLINICAL MAJORS**

Credits: 4 (Lecture only, no lab)

Terms: (F,S)

This course is the first in an online, two-course sequence for non-clinical health majors which provides a comprehensive study of the anatomy and physiology of the human body. The course will take a systemic approach covering all body systems. Topics will include structure, function and interrelationships of organ systems. The course will provide a foundation for students entering non-clinical health careers.

# **BIO 128 ANATOMY AND PHYSIOLOGY II FOR NON-CLINICAL MAJORS**

Credits: 3 (Lecture only, no lab)

Terms: (F,S)

Prerequisites: BIO 107 or BIO 127

This course is the second in a two-course sequence for non-clinical health majors. The course will build on the topics explored in the first semester. Body systems will be covered in greater depth, and the focus will be on the interrelationships between systems. In addition to structure and function, an emphasis will be placed on the body processes which maintain homeostasis. The course will take a problem based approach allowing students to use critical thinking skills and apply knowledge from both semesters.

#### **BIO 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **BIO 202 HUMAN ANATOMY FOR RAD TECHS**

Credits: 3 (3 lecture)

Terms: (S)

Placement required: Students must place into M 095 or higher AND place into WRIT 101 or

higher.

This course is an integrated study of the human body in which the detailed anatomy of the skeletal, respiratory, circulatory, digestive, nervous, urinary, and reproductive systems is covered. This course is designed to provide students with the fundamentals of human anatomy necessary for successful completion of the Radiologic Technology program at MSU–COT by providing an interactive, hands-on learning environment. BIO 107 - Fundamentals of Human Biology/Lab is highly recommended before enrolling in this course.

#### **BIO 205 PERSONAL NUTRITION**

Credits: 3 Terms: (F,S)

To understand the science of human nutrition and apply nutrition and food concepts to the individual during critical stages of the life cycle. To demonstrate the consumer skills needed to achieve optimal nutritional status.

# BIO 213 ANATOMY AND PHYSIOLOGY I LECTURE/LAB

Credits: 4 (3 lecture, 1 lab)

Terms: (F,S)

Placement required: Students must place into M 095 or higher AND place into WRIT 101 or

higher.

This course is an integrated study of the human body in which histology, anatomy and physiology of each system is covered. The first semester (part I) of this sequence incorporates molecular, cellular and tissue levels of organization for the integumentary, skeletal with articulations, muscular, and nervous systems. Laboratory experience will include experimentation, microscope work, observations, and dissection. BIO 107 and CHMY 121 strongly recommended.

# BIO 214 ANATOMY AND PHYSIOLOGY II LECTURE/LAB

Credits: 4 (3 lecture, 1 lab)

Terms: (F,S)

Prerequisites: BIO 213 with a grade of "C-" or higher

This course is an integrated study of the human body in which the histology, anatomy and physiology of each system is covered. The second part of this two semester course sequence involves the study of the following systems: sensory, endocrine, cardiovascular with hematology, lymphatic with immunology, respiratory, urinary with water, electrolyte and acid base balance, digestive with nutrition and reproductive systems. Laboratory experience will include experimentation, microscope work, observations, and dissection. Upon completion of CHMY 121, Anatomy & Physiology I and II, with labs, will transfer to MSU–Bozeman as

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Anatomy & Physiology I and II.

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# Course Descriptions - General Biology (BIOB)

#### **BIOB 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **BIOB 101 DISCOVER BIOLOGY/LAB**

Credits: 4 (3 lecture, 1 lab)

Terms: (F,S,SU)

Placement required: Students must place into M 090 or higher AND place into WRIT 101 or

higher.

This course introduces basic biological principles including the cell, the interrelationship of structure and function, and the characteristics and classification of living things. Students will examine the five kingdoms of organisms (monera, protista, fungi, plants, animals), concentrating on vascular plants and vertebrate animals, as well as reproduction and basic ecological concepts. This general education course is designed for non-science majors. Laboratory experience will include experimentation, microscope work, observation, and dissection.

# **BIOB 160 PRINCIPLES OF LIVING SYSTEMS/LAB**

Credits: 4 (3 lecture, 1 lab)

Term: (\$ 2011 based on Sufficient Demand) Prerequisites: CHMY 121 or CHMY 141

Placement required: Students must place into M 090 or higher AND place into WRIT 101 or

higher.

This course is designed to help students understand and apply major concepts in molecular and cellular biology including: biological macromolecules, cell structure and function, major biochemical

pathways (cellular respiration and photosynthesis), cell division, Mendelian genetics, modern biotechnology, early development, and major control mechanisms within the body. Students will also examine the scientific method.

# **BIOB 170 PRINCIPLES OF BIOLOGICAL DIVERSITY/LAB**

Credits: 4 (3 lecture, 1 lab)

Term: (F 2010 based on Sufficient Demand)

Placement required: Students must place into M 090 or higher AND place into WRIT 101 or

higher.

This course is designed to help students understand and apply major concepts in organismal biology including the diversity, evolution, and ecology of organisms. The origin of life and the evolution of cells, classification and evolution of organisms, major domains and kingdoms of life, natural selection and evolution, species diversity, ecosystems organization and energy flow, community interactions, population ecology and behavioral

ecology will be discussed. CHMY 121 or higher is highly recommended.

#### **BIOB 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **BIOB 275 GENERAL GENETICS**

Credits: 3

Term: (S based on Sufficient Demand)

Introduction to classical and molecular genetics of eukaryotes, with emphasis on transmission genetics, the structure and regulation of genes, and mechanisms of genetic change.





# Course Descriptions - Business (BUS)

#### **BUS 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **BUS 106 INTRODUCTION TO BUSINESS**

Credits: 3 Terms: (F,S)

This course provides an overview of business from a broad perspective. Topics covered include business ownership, free enterprise, management, human resources, marketing, finance, and accounting and data systems.

# **BUS 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# **BUS 230 MANAGEMENT**

Credits: 3 Terms: (F,S)

Prerequisite: BUS 106

This course is a study of basic management and organizational principles of business firms. Emphasis is on effectively working through others to achieve objectives. This is done by exploring planning, decision making, organizing, leading, staffing, controlling, EEOC requirements, appraising performance, handling disciplinary problems, and stress and time management.

#### **BUS 235 MARKETING**

Credits: 3 Terms: (F, S)

Prerequisite: BUS 106

This course is designed to develop students' knowledge of marketing terminology and strategies. Subject areas covered include product development, the marketing concept, consumer behavior, research, pricing, channels of distribution, and promotion.

#### **BUS 238 HUMAN RESOURCE MANAGEMENT**

Credits: 3 Term: (F)

Prerequisite: BUS 230

This course explores the human resource management function in a corporate setting and focuses on the development of knowledge and skills that human resource managers employ. Emphasis will be placed on such subjects as the selection process, employment law, labor relations, compensation, performance development, corporate training and maintaining effective environments. The classes are designed to familiarize participants with current human resource practices and laws that apply to human resource careers regardless of their field.

#### **BUS 240 ADVERTISING**

Credits: 3 Term: (S)

Prerequisite: BUS 106

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.

#### **BUS 249 GLOBAL MARKETING**

Credits: 3 Term: (F)

This course will explore the historical and current perspective of international trade focusing on structures, strengths and weaknesses, marketing environment and regulation, currency issues, and factors affecting success and failure in international marketing.

# **BUS 255 LEGAL ENVIRONMENT**

Credits: 3 Term: (F)

Prerequisite: BUS 106

This course is designed to increase students' level of awareness of law in the business environment. Topics covered include contract law, sales contracts, agency and employer/employee relationships, torts, securities regulations, antitrust law, and product liability.

## **BUS 260 ENTREPRENEURSHIP**

Credits: 3 Term: (S)

Prerequisite: BUS 230, BUS 235, ACTG 201 or Instructor consent.

Co requisite: WRIT 220

This course guides students through the development of a business plan, concentrating on market and industry analysis, competitive analysis, site selection, cash flow analysis, marketing, finance, and management. Students will develop a competition quality business plan for a company of their choice. Students should register for both WRIT 220 and BUS 260 in their final semester. On-campus offering of WRIT 220 is recommended for Entrepreneurship students.

#### **BUS 275 STRATEGIC MANAGEMENT**

Credits: 3 Term: (S)

Prerequisite: BUS 230

This course explores the issues of defining corportate-level mission, objectives, and goals,

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and is intended to provide students with a pragmatic approach that will guide the formulation and implementation of corporate, business, and functional strategies. It includes a focus on the analysis of the firm's external and internal environment to identify and create competitive advantage in a changing business climate.

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# Course Descriptions - Computer Applications (CAPP)

## **CAPP 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

## **CAPP 101 SHORT COURSES: THE INTERNET**

Credits: 2 Terms: (F,S,SU)

This course will teach skills in using the Internet as an information and educational resource as well as its impact on global society. Internet components explored will include the World Wide Web, FTP, Email, and basics of creating a web page. Social implications of the Internet and its impact on issues such as copyright and fair use will be explored. Thoughtful examination and research on the future of the Internet will conclude the class.

## **CAPP 105 Short courses: COMPUTER CALCULATORS**

Credits: 1 (I/2 semester)

Term: (S)

Prerequisite: M 108

Students master the touch method of entering data on the ten-key numeric keyboard. Speed and accuracy are emphasized on computer ten-keys using the desktop calculator. Ten-key functions will be used to solve common mathematical problems.

#### **CAPP 112 SHORT COURSES: MS POWERPOINT**

Credits: 1

Term: (Based on sufficient demand)

Prerequisite: CAPP 120

This course is an introduction to the use of presentation software to create and design group presentations and slide shows. Students will be required to create group presentations to be delivered to an audience.

## **CAPP 120 INTRODUCTION TO COMPUTERS**

Credits: 3 Terms: (F,S,SU)

Using both lecture and lab experience, this course introduces the technology and terminology of computer systems and demonstrates how computers have impacted individuals and society. The course also provides instruction in the basics of operating systems and word processing, spreadsheet, and database software.

## **CAPP 152 WORDPERFECT**

Credits: 3 Term: (S)

Prerequisite: CAPP 120, OO 107, or consent of faculty

Corel WordPerfect software is used to create documents used in academic, professional, and business environments. These functions include formatting and editing documents, revising documents, managing documents, printing documents, using projects, creating headers and footers, inserting footnotes, creating columns, formatting tables and inserting formulas, using styles, changing fonts, sorting and extracting text, merging documents, formatting macros, creating graphics, and creating charts.

## **CAPP 154 MS WORD**

Credits: 3 Terms: (F,S)

Prerequisite: CAPP 120

Word processing software is used to create documents used in academic, professional, and business environments. These functions include editing, selecting, find and replace, document assembly, graphics, printing, headers and footers, columns, file management styles, math features, fonts and other print features, tables, sort and select, merges, macros, and reference tools.

#### **CAPP 156 MS EXCEL**

Credits: 3

Terms; (F,S SU)

Prerequisite: CAPP 120

This course introduces students to business applications using spreadsheets. Emphasis will be placed on the essential functions of spreadsheet operation, as well as an introduction to some advanced spreadsheet features such as lookup functions and list management. This course covers expert level skills for the Microsoft Certified Application Specialist (MCAS) certification in Microsoft Excel.

## **CAPP 158 MS ACCESS**

Credits: 3 Terms: (F,S,SU) Prerequisite: CAPP 120

This course covers expert level skills for the Microsoft Certified Application Specialist (MCAS) certification in Microsoft Access. Use of application software focuses on data queries (both Query-By-Example and Structured Query Language), report and form generation, multiple table relationships, and interface techniques. Database administration and customization techniques will also be covered.

## **CAPP 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

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# Course Descriptions - Chemistry (CHMY)

#### **CHMY 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **CHMY 101 CHEMISTRY FOR THE CONSUMER**

Credits: 3 Terms: (F)

Prerequisite: M 090 or qualifying math placement assessment score

This course is an introduction to chemistry that emphasizes the influence of chemistry on one's everyday life. Topics may include food chemistry, dyes and fibers, home products, acid rain, air pollution, medicines, and beauty aids. Common household products, such as soap, aspirin, toothpaste, face cream, and fertilizers are prepared in the lab.

## CHMY 121 INTRO TO GENERAL CHEMISTRY/LAB

Credits: 4 (3 lecture, 1 lab)

Terms: (F, S, SU)

Prerequisite: M 090 or qualifying math placement assessment score

This course is a survey of the principles of inorganic chemistry with emphasis on scientific measurement; atomic structure; chemical periodicity; chemical bonding and nomenclature; chemical reactions and stoichiometry; gas laws; properties of liquids, solids, and solutions; acid-base chemistry; and some electrochemistry and nuclear chemistry. This course is designed for students entering health science or nursing programs. The laboratory portion of the course provides hands-on experience dealing with the topics covered in the lecture portion. In order to have the greatest success in this course, it is highly recommended that students possess strong algebra skills.

## CHMY 123 INTRO TO ORGANIC & BIOCHEMISTRY/LAB

Credits: 4 (3 lecture, 1 lab)

Terms: (S)

Prerequisite: CHMY 121 with a grade of "C-" or higher

This course is a survey of the principles of organic chemistry and biochemistry with emphasis on nomenclature; structure and classification; properties; and applications of organic and biological compounds. Some discussions of metabolism and cellular processes are also included. This course is designed for students entering health science or nursing programs. The laboratory portion of the course provides hands-on experience dealing with the topics covered in the lecture portion.

## CHMY 141 COLLEGE CHEMISTRY I/LAB

Credits: 4 (3 lecture, 1 lab)

Terms: (F: Offered in the Fall on even-numbered years)

Prerequisites: M 095 or qualifying math placement assessment score

The first course in the two-semester general chemistry sequence covering the general principles of modern chemistry. Topics covered include: atomic structure, stoichiometry, chemical reactions, chemical bonding, the periodic table, and the states of matter. The laboratory portion of the course provides hands-on experience dealing with the topics covered in the lecture portion. The experimental nature of the science of chemistry and the mathematical treatment of data are emphasized.

## CHMY 143 COLLEGE CHEMISTRY II/LAB

Credits: 4 (3 lecture, 1 lab)

Term: (Based on Sufficient Demand)

Prerequisite: CHMY 141 with a grade of "C-" or higher

The second course in the two-semester general chemistry sequence. Topics covered include: solutions, chemical equilibrium, acids and bases, thermodynamics, and kinetics. The laboratory portion of the course provides hands-on experience dealing with the topics covered in the lecture portion.

#### **CHMY 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

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# Course Descriptions - Collision Repair (TB)

NOTE: This program is in moratorium and will not be accepting new students in 2011-2012. Please contact the Business & Technology department at 406-771-4391 for more information.

## **TB 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcripted on the student's continuing education transcript.

#### TB 112 AUTO AND PAINT SHOP SAFETY

Credits: 1 Term; (F)

A departmental orientation for new students in classroom and lab policies and procedures will be conducted in this course. Specialized tools used in the auto repair industry, shop safety, paint guns, hydraulic equipment, and air compressors, the proper use and care of personal safety equipment, and the safe handling and disposal of various chemicals are introduced.

## TB 121 INTRO TO COLLISION REPAIR

Credits: 4 Term: (F)

Corequisites: TB 122, TB 123, & WELD 152

Covers shop safety, the handling of hazardous materials and toxic waste, basic methods and tools used in the repair of automotive sheet metal, proper methods of metal identification and automobile construction. Students are also introduced to estimating, damage analysis, the proper use and care of tools, measuring devices, fasteners and shop manuals.

#### TB 122 NON-STRUCTURAL COLLISION REPAIR

Credits: 4 Term: (F)

Corequisites: TB 121, TB 123, & WELD 152

Covers proper assessment, removal, replacement and alignment methods used on today's vehicles. Students are also trained in the proper set up and use of Metal Inert Gas (MIG) welding equipment.

## **TB 123 INTRO TO REFINISHING**

Credits: 4 Term: (F)

Corequisites: TB 121, TB 122, & WELD 152

Introduces students to proper preparation and application techniques, including blending of

color coats, used when applying modern undercoats and refinish topcoats, with a strong emphasis on personal safety. Students also learn the causes, prevention and repair methods associated with various paint defects.

## **TB 130 BASIC AUTO CONSTRUCTION**

Credits: 2 Term: (F)

This course will introduce students to the automotive body-repair business. Technical aspects of the auto design, the construction materials, as well as the classroom study of damage classification

and repair techniques will be introduced.

#### **TB 134 CORRECTING SHEET METAL**

Credits: 3 Term: (F)

Prerequisite: TB 130

Theory and practice in manipulative skills are given in this course. Students will receive instruction and lab experience in roughing, bumping metal, shrinking, fillers and sanding. The theory and practice of welding thin gauge mild steel with a wire feed MIG welder will be taught.

## TB 136 CORRECTING COLLISION DAMAGE

Credits: 5 Term: (S)

Prerequisite: TB 134

This course involves the study of impact forces and the transfer of energy through a vehicle. Students will study the unit-body and full-framed vehicle locating primary and secondary damage.

## TB 141 SURFACE PREPARATION AND UNDERCOATS

Credits: 3 Term: (F)

This course introduces students to the processes involved in preparing metal surfaces for different types of undercoats. The importance of corrosion protection is also covered in this course.

## **TB 142 TOP COAT APPLICATION**

Credits: 3 Term: (F)

Students in this course will learn the basic theory of top coat application and the tools and equipment used in the process. These procedures will then be put to use in the shop on practice panels.

## **TB 150 PAINT REMOVAL**

Credits: 3 Term: (S)

Prerequisite: TB 141

Students will evaluate and study the condition of old paint film and its thickness as well as analyze the most efficient way of removal using chemical strippers, bead blasters, or mechanical sanders.

## **TB 153 OVERALL REFINISHING**

Credits: 3 Term: (S)

Prerequisite: TB 142

This course includes a comprehensive study of auto refinishing techniques. Students will develop skills in sanding and masking operations used to properly refinish a complete automobile with urethane basecoat-clearcoat.

## **TB 154 PAINT PROBLEMS**

Credits: 1 Term: (S)

Co requisite: TB 153

Students will participate in laboratory practice and preparation to determine the causes of various paint failure due to break down, improper preparation, incompatible materials, wrong use of materials, or poor spray techniques.

**TB 194 PCE TOPIC** 

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcripted on the student's undergraduate transcript.

#### TB 220 FIBERGLASS AND PLASTIC REPAIR

Credits: 3 Term: (F)

Prerequisite: TB 136

This course covers the different repair procedures and materials for repairing the plastics and composites found in modern automobiles. Refinishing procedures for these materials are also covered in this course.

#### TB 221 STRUCTURAL COLLISION REPAIR

Credits: 6 Term: (S)

Prerequisites: TB 122, TB 123, & WELD 152

Corequisites: TB 222 & TB 223

Covers methods used in the inspection, measurement, and repair of structural body damage. This class adheres to guidelines as prescribed by vehicle manufacturers, I-CAR and ASE.

## TB 222 PLASTIC AND COMPOSITE REPAIR

Credits: 3 Term: (S)

Prerequisites: TB 122, TB 123, & WELD 152

Corequisites: TB 221 & TB 223

Covers identification, pretreatment, and the repair of plastics and composites that are used in the manufacture of modern automobiles. Students are also trained in the proper refinishing methods required for these materials.

#### **TB 223 ADVANCED REFINISHING**

Credits: 4 Term: (S)

Prerequisites: TB 122, TB 123, & WELD 152

Corequisites: TB 221 & TB 222

Covers more advanced refinishing topics including the basics of color theory, tinting, and multistage finishes.

#### **TB 243 PANEL REPLACEMENT**

Credits: 3 Term: (F)

Prerequisite: TB 136

This course will give students practical experience in removal and replacement of weld-on and adhesive bonded panels, door skins, and rocker, quarter and top panels.

## **TB 245 PRODUCTION BODY REPAIR**

Credits: 3 Term: (S)

Prerequisite: TB 243

In this course, students' work will be compared to industry flat rate charges used when repairing damage. The learning experiences are simulated to on-the-job work conditions stressing quality and shop flat-rate time. Students will be expected to function as an employer would expect in areas such as dependability, working independently, and customer relations.

## TB 246 TOTAL BODY REBUILDING AND SECTIONING

Credits: 3 Term: (S)

This course covers the theory and practice in the use of body measuring equipment including tram gauges and centering gauges. Students will use frame and body pull systems to return a lab vehicle to its proper dimensions and will study the theory of full-body sectioning and proper use of recycled parts.

## TB 248 SPOT REPAIR AND BLENDING

Credits: 3 Term: (F)

Co requisite: TB 153

This course provides an overview of the procedures used when performing spot repairs on modern vehicles.

#### **TB 249 PAINT FORMULATION AND TINTING**

Credits: 3 Term: (F)

Co requisite: TB 248

This course provides instruction and practice in the process of mixing paint from tinting colors. Assigned lab projects will give students the opportunity to mix, adjust, and tint to achieve a blendable color match.

## TB 250 PRODUCTION REFINISHING

Credits: 3 Term: (S)

Prerequisite: TB 249

Emphasis in this course will be on refining skills and increasing productivity and will be timed for comparison with industry standards.

#### **TB 254 SPECIALTY FINISHES**

Credits: 1

Term: (S)

Prerequisite: TB 253

This course provides instruction and practical experience in custom finishes as well as new production applications. Students will receive instruction and lab experience using metal flake, pearl, and candy.

## **TB 255 ESTIMATING COLLISION DAMAGE**

Credits: 3 Term: (S)

This course will focus on instruction in the procedures of estimating collision and refinishing repairs. A study will be made of parts catalogs, flat-rate manuals, and computer estimation programs.

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# Course Descriptions - Computer Information Technology (CIT)

#### CIT 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### CIT 194 PCE TOPIC

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

## **CIT 206 DATABASE MANAGEMENT II**

Credits: 3 Term: (S)

Prerequisite: CAPP 158

Database Management II explores database systems through practical database design, implementation and management topics. Basic data modeling concepts will be explored with respect to the major data models: relational, entity relationship model, hierarchical, network, and object oriented. The relational model will be stressed. Students will learn, using normalization techniques, how to avoid Data anomalies. Database implementation and management using Oracle SQL will be covered in depth.

#### **CIT 229 WEB PAGE CONSTRUCTION**

Credits: 4 Term: (F)

Prerequisites: CAPP 120, CAPP 101, or instructor approval

This course focuses on the skills and concepts necessary to create effective web pages that include links, graphics, sound, tables, forms, and style sheets using common editors as well as search engine optimization, buying a domain name and hosting. Other utilities, such as image mapping and graphics editing software, will also be examined and utilized. Software is required; contact Distance Learning Office for details.

## **CIT 231 WEB PAGE DESIGN**

Credits: 3 Term: (S) Prerequisites: CAPP 120, CIT 229, or instructor approval

This course continues to utilize the skills developed in CIT 229 to build Web pages, concentrating on high profile, advanced applications to develop their craft. Students will research the essentials of good Web design and will master the skills necessary to create their own styles and designs. Management of community client sites will be established and published.

## **CIT 280 DESKTOP PUBLISHING**

Credits: 3 Term: (S)

Prerequisite: CAPP 120 and GSDN 217 or instructor approval

Students learn to design, prepare, edit, and enhance publications by integrating text, graphics, spreadsheets, and charts that have been created in other software programs. They build skills in using a desktop publishing software program by creating publications such as newsletters, brochures, advertisements, programs, business cards, and stationery.

## **CIT 290 NEW WEB TECHNOLOGIES**

Credits: 3 Term: (S)

Prerequisite: CAPP 120

With the ever-changing world of the Internet, adjustments and applications regularly appear that make

our interaction with others, both, actually and virtually, more rich, more interactive, and more immediate.

This course researches and examines these developments, making a thoughtful and deep analysis of the latest trends and implementations in Web technologies, along with developing judgments about their effectiveness and predictions about their enduring qualities.



# Course Descriptions - Construction Trades (CSTN)

#### **CSTN 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **CSTN 100 FUND OF CONSTRUCTION TECHNOLOGY**

Credits: 3 Term: (F)

Co-Requisites: CSTN 115, CSTN 120, CSTN 160

This course is the Core Curriculum for Introductory Craft Skills under the National Center for Construction Education (NCCER). This course is NCCER's basic course for all construction, maintenance and pipeline occupations. This course covers basic safety obligations of workers, supervisors and managers; reviews the role of company policies and OSHA regulations; introduces trainees to hand and power tools widely used in the construction industry, and their proper uses. Students will also become familiarized with basic blueprint terms, components and symbols.

## **CSTN 115 CONSTRUCTION CALCULATORS & ESTIMATING**

Credits: 1 Term: (F)

Co-Requisites: CSTN 110, CSTN 120, CSTN 160

This course is specific to the uses of calculator specific to construction. (I.e. Master Pro) for task such as weight, volume, rises/run, diagonals, slopes etc. Also included is basic estimating specific to the carpentry field.

## **CSTN 120 CARPENTRY BASICS & ROUGH-IN FRAMING**

Credits: 5 (59 lecture hours/75 shop hours)

Term: (F)

Co-requisites: CSTN 100, CSTN 115, CSTN 160

This course covers eight different module topics. It starts by introducing the carpentry trade, including history, career opportunities, and requirements. The course includes study and practice required for framing a simple structure. Specific topics are building materials, fasteners and adhesives, hand and power tools, reading plans & elevations, floor systems, wall and ceiling framing, roof framing and windows and exterior doors.

## **CSTN 135 BASIC RIGGING**

Credits: 2 Term: (S)

Co-Requisites: CSTN 145, CSTN 161, CSTN 171

Pre-Requisites: CSTN 100, CSTN 115, CSTN 120, CSTN 160

Following the NCCER Core Curriculum unit, the student will cover the basics of slings, hitches, rigging hardware, sling stress, hoist and rigging operations and practices. It also includes industry standard OSHA 10-hour construction training. Students who successfully complete the OSHA training will earn a course completion card recognized and generally required by most construction sites.

#### CSTN 145 EXTERIOR FINISHING, STAIR CONSTRUCTION & METAL STUD FRAMING

Credits: 4 (37 lecture hours/70.5 shop hours)

Term: (S)

Co-Requisites: CSTN 135, CSTN 161, CSTN 141

Pre-Requisites: CSTN 100, CSTN 115, CSTN 120, CSTN 160

Introduces students to materials and methods for thermal & moisture barriers, sheathing, exterior siding, stairs, and roofing. Students will layout and build a simple stair system as well as a metal stud wall with door and window openings.

## **CSTN 160 CONSTRUCTION CONCEPTS & BUILDING LAB**

Credits: 3 (90 shop hours)

Term: (F)

Co-Requisites: CSTN 100, CSTN 115, CSTN 120

Provides hands-on experience in which the student applies, with minimal supervision the basic skills and knowledge presented thus far in the NCCER Carpentry Program. This course is designed as a practical task-oriented application utilizing the basic skills covered in prerequisite classes.

## **CSTN 161 CONSTRUCTION CONCEPTS & BUILDING LAB II**

Credits: 3 (90 shop hours)

Term: (S)

Co-Requisites: CSTN 135, CSTN, 145, CSTN 171

Pre-Requisites: CSTN 100, CSTN 115, CSTN 120, CSTN 160

Provides hands-on experience in which the student applies with supervision the basic skills and knowledge presented thus far in the NCCER Carpentry Program. The course is designed ...

as a practical

task-oriented application.

## **CSTN 171 SITE PREP, FOUNDATIONS & CONCRETE INSTALLATION**

Credits: 3 Term: (S)

Co-Requisites: CSTN 135, CSTN 145, CSTN 161

Pre-Requisites: CNST 100, CSTN 115, CSTN 120, CSTN 160

A study of the various techniques for concrete utilization in residential and light construction from the theoretical concepts of hydration to the practical experience of verifying site conditions; interpreting data used to establish conditions of level, square, plumb, parallel; and perpendicular; tying steel; and placing and finishing a concrete slab.

## **CSTN 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

## **CSTN 201 ADVANCED CONCRETE WORKING**

Credits: 5 Term: (S)

Co-Requisites: CSTN 220, CSTN 299

Pre-Requisites: WLDG 103, CSTN 230, CSTN 260

Provides basic knowledge of concrete materials and tools and provides hands-on experience in which the student applies with supervision those basic skills and knowledge presented in the area of concrete. The course is designed as a practical task-orientated application utilizing the basic skills learned in CSTN 171. The course will emphasize the advanced application in the area of concrete foundations, flatwork, forms, reinforcing, handling, and placing concrete.

#### **CSTN 220 INTERIOR FINISHING**

Credits: 5 (32 lecture hours/85.5 shop hours)

Term: (S)

Co-Requisites: CSTN 201, CSTN 299

Pre-Requisites: WLDG 103, CSTN 230, CSTN 260

This course studies interior building materials. Course material ranges from installation techniques for interior trim, countertop, base & wall cabinets, suspended ceiling, wood & metal doors.

## CSTN 230 ADVANCED ROOF, FLOOR, WALL & STAIR SYSTEMS

Credits: 5 (62 lecture hours/43 shop hours)

Term: (F)

Co-Requisites: WLDG 103, CSTN 260

Pre-Requisites: CSTN 135, CSTN 145, CSTN 161, CSTN 171

This class takes off from where CSTN 120 & 130 finished. Students will elevate their study in various installation methods and materials for various roofing, & flooring systems. Under wall systems students will study interior & exterior wall construction methods for residential and commercial structures. To add to the student's knowledge learned in CSTN 145, Stair Construction & Metal stud framing, students will study staircase construction and metal building construction.

## CSTN 260 CONSTRUCTION CONCEPTS & BUILDING LAB III

Credits: 3 (90 shop hours)

Term: (F)

Co-Requisites: WLDG 103, CSTN 230

Pre-Requisites: CSTN 120, CSTN 145, CSTN 161, CSTN 171

Provides students the opportunity to practice skills they have acquired in the entire carpentry program. It includes task-oriented projects in which students can apply many of the skills and knowledge that they have been presented throughout the NCCER Carpentry Program. This course is designed as a practical task-oriented exercise utilizing a variety of the skills covered in all the NCCER Modules and provides the necessary time for taking the Performance assessments' for certification under NCCER.

## **CSTN 298 INTERNSHIP: CARPENTRY**

Credits: 3-6 (135 - 270 hours)

Term: (SU)

Pre-Requisites: CSTN 135, CSTN 145, CSTN 161, CSTN 171

An internship is individually based. The intent is to allow students who have meet the prerequisites an opportunity to experience work out in the industry before committing to full-time employment. Some students may use it as an opportunity to get employment within a company while many students will use it as a means of broadening their perspective as to types of construction work available and the daily operations of companies.

## **CSTN 299 CAPSTONE: CARPENTRY**

Credits: 4 (120 shop hours)

Term: (S)

Co-Requisites: CSTN 201, CSTN 220

Pre-Requisites: WELD 151, CSTN 230, CSTN 260

The course is designed as a practical task-oriented application utilizing the ADVANCED skills

learned in CSTN 220 & 230. The course will emphasize advanced application in the area of exterior and interior finishing. This course provides hands-on experience in which the students take the Performance Assessments for certification under NCCER with MINIMAL supervision using the skills and knowledge presented in the NCCER Carpentry program.





# Course Descriptions - College Studies (COLS)

#### **COLS 089 DISTANCE LEARNING FUNDAMENTALS**

Credits: 1 Terms: (F,S)

This course is designed for students who have never taken an online or hybrid course. Essential online course skills, troubleshooting techniques, and student success skills will be covered. Course activities will focus on developing the skills and confidence necessary to be successful when taking a course in an on-line or hybrid format. This enables students to select and use appropriate technologies for personal, academic, or career tasks.

#### **COLS 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### COLS 100 EFFECTIVE ACADEMIC PRACTICES

Credits: 3
Terms: (F,S)

This course is designed to help students make a smooth transition to college academics and to help students maximize their potential in all courses. This course requires students to define their purpose in pursuing a college education, understand their learning preferences and implement learning and study strategies, become acquainted with professors, academic advisors, and resources at MSU–Great Falls as well as how to seek academic assistance, and set short and long term academic and career goals.

## **COLS 101 FIRST YEAR SEMINAR**

This Class offered at the COT In Bozeman

Credits: 3 Term: (F)

This course serves as an introduction to college level critical thinking based on the central theme determined each semester. A cross-disciplinary approach will study the chosen theme through the lenses of areas such as biology, culture, literature, and history both in the classroom and beyond in field trip experiences. Potential themes include (but are not limited to) the Missouri River, the classic world, and the college experience. Individual participation in writing and the spoken word are encouraged by the small class size.

## COLS 102 NAVIGATING Great Falls College MSU (Pilot course)

Credits: 1 Term: (F, S) A survey course in the effective use of College resources and academic planning at Great Falls College MSU. Specific topics include college policies, procedures and resources, academic planning, career and major exploration, goal setting, and other areas related to student success. Students are expected to enroll in this class their first semester.

**COLS 194 PCE TOPIC** 

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.





# **Course Descriptions - Communication (COMM)**

## **COMM 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### COMM 120 INTERPERSONAL SKILLS IN THE WORKPLACE

Credits: 1 Term: (S)

This course covers the basic elements of communication in the business environment, including listening, speaking, and reading. It also looks at the importance of nonverbal communication, ethics, and professional courtesy. It discusses the importance of internal skills within the business and external skills with customers. Skills of the employment process are also included.

## **COMM 130 PUBLIC SPEAKING**

Credits: 3
Terms: (F,S)

Public Speaking is a course designed to aid students in overcoming speech anxiety through preparation and presentation of speeches in a variety of formats.

## **COMM 135 INTERPERSONAL COMMUNICATION**

Credits: 3
Terms: (F,S,SU)

This course is designed to show some of the difficulties that language and understanding present us. It is concerned with better understanding of ourselves and our semantic and interpersonal environments. It attempts to develop meaningful, effective, and sensitive means of relating to others. Varied group experiences and oral presentations provide students the opportunity to explore current topics.

## **COMM 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.



# Course Descriptions - Computer Science/Programming (CSCI)

#### **CSCI 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### CSCI 110 PROGRAMMING W/ VISUAL BASIC I

Credits: 3 Term: (F)

Prerequisites: CAPP 120, CAPP 158, M 095, or instructor approval

This course is an introduction to programming logic and computer problem-solving using aprogramming language. Students learn the fundamentals of structured program design. Hands-on emphasis is provided in programming including decision structures, looping structures, and text files. Course work stresses practical application of programming.

## **CSCI 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

## **CSCI 210 WEB PROGRAMMING**

Credits: 3 Term: (S)

Prerequisites: CIT 229

Among Web page builders and programmers there is a necessity to build pages that include programming to allow interaction between the visitor and the site as well as connectivity to databases that serve the client and site owner. Web Page Programming will explore, examine, and evaluate currently used programming languages that allow Web interactivity and connectivity. Students will be required to design pages using various languages in ways that lead the mission of the site to its desired outcomes. The overall objective of the course will be an assembly of

useful programming tools, processes and examples for the Web designer.

# **Course Descriptions - Culinary Arts (CULA)**

## **CULA 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **CULA 105 FOOD SERVICE SANITATION**

Credits: 1

Terms: F FIRST CLASS TO BE OFFERED FALL OF 2012

Preparation for and certification in a national food sanitation and food safety program.

## **CULA 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

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# Course Descriptions - Dental Assistant (DA)

#### DA 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

## DA 115 HEAD, NECK AND ORAL ANATOMY

Credits: 4 Term: (F)

The majority of this course includes content in head, neck and dental anatomy. Oral tissue embryology and histology and general human anatomic and physiologic concepts are introduced by the instructor. Tooth numbering systems and cavity classifications are emphasized as a supplement to the dental anatomy portion. Students successfully completing this course will be able to apply basic oral anatomic theory to laboratory and clinical settings.

## **DA 118 DENTAL OFFICE MANAGEMENT**

Credits: 2 Term: (F)

This course exposes students to various reception procedures and dental practice management responsibilities commonly expected in a professional dental office. Students will learn the fundamentals of computer use in the dental practice by utilizing a dental office software package. Skills include creating patient records and a database to set up patient accounts, schedule appointments, bill patient and third parties, and process payments and reports. HIPAA regulations and other legal expectations within the healthcare field will also be discussed. This course is offered in hybrid format with both on-line and on-site requirements.

## DA 120 ORAL RADIOLOGY/RADIOGRAPHY I

Credits: 3 Term: (F)

This course is the first of a series of two courses and includes both didactic and laboratory instruction. Content in this course includes the history of oral radiography, radiation, physics, x-ray equipment supplies and darkroom procedures, infection control practice, intraoral technique, biological effects of radiation, radiation protection and anatomic landmark identification and mounting. The practical component applies radiographic theory and technique in practice.

## DA 121 ORAL RADIOLOGY/RADIOGRAPHY II

Credits: 2

Term: (S)

Prerequisite: DA 115, DA 120

Oral Radiology/Radiography II includes didactic, laboratory, and clinic instruction. Content in this course emphasizes extraoral, and perfection of intraoral techniques, quality assurance in radiography, radiograph interpretation and assessment, and application of theory in the lab/clinic setting. A student satisfies the practical portion of this course by successfully performing both paralleling and bisecting intraoral periapical techniques, by exposing horizontal, vertical, pedodontic, and anterior bitewings, exposing occlusal radiographs, and demonstrating proper panoramic exposure. Other content sections include biological effects of radiation, radiation protection, specialty techniques,

identification and correction of faulty radiographs, and digital radiography. Students are expected to obtain their own prescription patients for final full mouth series. Dental assistant program students

will be prepared to sit for the oral radiology component of the Dental Assisting National Board (DANB) examination upon successful completion of this course.

## DA 123 CHAIRSIDE THEORY AND PRACTICE I

Credits: 4 Term: (F)

Corequisite: DH 110

The Chairside I course covers aspects of the clinical dental assistant's duties in a general dental practice. It includes instruction in dental instruments, equipment, materials, and basic laboratory and chairside procedures (including patient relations and charting methods). Infection control practice is heavily emphasized throughout this course.

## DA 124 CHAIRSIDE THEORY AND PRACTICE II

Credits: 4 Term: (S)

Prerequisite: DA 115, DA 123

Chairside II is a continuation of Chairside I and includes lecture, laboratory and clinical sessions. Content includes emphasis on aesthetic restorative procedures, rubber dam concepts, coronal polishing, pit and fissure sealant placement, fluoride treatments, and fabrication and placement of temporary crowns and restorations.

## DA 150 DENTAL SCIENCES/PREVENTIVE DENTISTRY

Credits: 4 Term: (S)

Prerequisite: DA 115, DA 123

This course includes the study of the oral plaque diseases and their prevention as well as an introduction to the science-based subjects of oral pathology, pharmacology, nutrition, and medical emergencies. Focus will be on the theory of the oral plaque diseases processes, the identification of associated pathologies, and the prevention of the diseases. Specific content areas also include drug classifications and interactions, fluoride, oral hygiene technique, and patient education.

## **DA 165 DENTAL SPECIALTIES**

Credits: 3 Term: (S)

Prerequisites: DA 115, DA 123

The clinical specialties course includes an introduction to six dental specialties: periodontics; endodontics, fixed and removable prosthodontics, oral surgery, pediatric dentistry and orthodontics. It includes theory in the individual specialties along with procedure set-ups (armamentarium), materials used, and instrumentation. The student will also apply the knowledge in a laboratory procedures setting.

## DA 190 CLINICAL OFFICE PRACTICE AND SEMINAR

Credits: 7 Term: (SU)

Prerequisites: Program director approval required to enroll.

This is the capstone course for the program and requires the student to integrate and apply all dental concepts from earlier coursework in the clinical setting. It involves rotated extramural clinical office experience in the dental community where students actively participate in the operation of the dental practice as dental assistants in training. The on-line component of the course introduces a student to job search strategies and preparation of personal resumes and cover and follow-up letters. Interview techniques are also incorporated. This course is offered in hybrid format having both on-line and on-site requirements.

## **DA 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.





# Course Descriptions - Dental Hygiene (DH)

#### **DH 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

## DH 101 INTRODUCTION TO DENTAL HYGIENE/PRECLINIC

Credits: 2 (30 Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

An introductory course in preoperative and clinical dental hygiene concepts. The assessment phase of patient care as well as the theory of basic dental hygiene instrumentation will be emphasized.

## DH 102 INTRODUCTION TO DENTAL HYGIENE/PRECLINIC LAB

Credits: 2 (60 Lab Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

This course enables students to perform clinical dental hygiene procedures explored in DH 101. The basic clinical skills used during patient assessment and basic dental hygiene instrumentation will be emphasized.

## DH 110 THEORY of INFECTION CONTROL AND DISEASE PREVENTION

Credits: 1 (15 Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

This course introduces the infection and hazard control procedures necessary for the safety of dental professionals and their clients during the practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic

techniques, infectious diseases, and OSHA standards.

#### **DH 118 ORAL ANATOMY FOR HYGIENISTS**

Credits: 3 (45 Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

The majority of this course includes content in head, neck, and dental anatomy. Oral tissue embryology, histology, and physiology are also introduced and general anatomical concepts are reviewed by the instructor. Anatomic design and tooth numbering systems are emphasized as a supplement to the dental anatomy portion. Students successfully

completing this course will be able to apply basic oral anatomic theory to laboratory and clinical settings.

#### DH 122 ORAL RADIOLOGY/LAB

Credits: 3 (15 Lecture Hours / 30 Lab Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

This course provides a basic understanding of the fundamentals of dental radiology. Emphasis will be placed on the following foundational knowledge: radiation physics, radiation biology, and radiation health and protection. Students will be required to learn the diagnostic quality of dental radiographs, Intraoral and Extraoral radiographic techniques, processing and film mounting, quality control and assurance, special imaging techniques, interpretation of radiographs for exposure and processing errors as well as recognition of normal radiographic anatomy. Hands –on experience with both traditional and digital radiography will be provided via lab sessions. DXXTR manikins will be utilized by the students in lab sessions as well as community patients which will aid in better understanding and experience in all techniques.

## **DH 123 RADIOGRAPHIC INTERPRETATION**

Credits: 1 (15 Lecture Hours)

Term: (S)

This course is a continuation of DH 122; Oral Radiology. The course will provide the skills needed to properly interpret and read what is revealed by a radiograph. Interpretation is an explanation of what is viewed on a radiograph. Proper interpretation of dental radiographs can function as a diagnostic and educational tool for treatment planning.

## **DH 130 DENTAL MATERIALS**

Credits: 2 (15 Lecture Hours / 30 Lab Hours)

Term: (F)

Materials most often used in dentistry are studied, focusing on the characteristics, physical properties, instruction on manipulation, and practical application of each material. Safety precautions relating to each material and procedure are emphasized.

## DH 150 CLINICAL DENTAL HYGIENE THEORY I

Credits: 2 (30 Lecture Hours)

Term: (S)

This course provides foundational knowledge and basic theory for the practice of Dental Hygiene. Topics include: defined roles of the dental hygienist, dental hygiene process of care, caries and periodontal risk assessment, dental hygiene care plan, nutritional counseling, oral hygiene instruction, proper documentation, medical/dental emergencies and instrument sharpening. Theory background is used to support all clinical activities in DH 151.

## DH 151 CLINICAL DENTAL HYGIENE PRACTICE I

Credits: 4 (180 Clinical Hours)

Term: (S)

Practice in beginning instrumentation and patient assessment, providing introductory dental hygiene treatment to fellow students along with pediatric and adolescent patients. This course accompanies DH 150 Clinical Dental Hygiene Theory I.

## **DH 160 PERIODONTOLOGY I**

Credits: 3 (45 Lecture Hours)

Term: (S)

An introduction to the science and management of periodontal diseases. Emphasis on the etiology and classification of the disease, along with an overview of the anatomy and

histology of periodontal structures and dental accretions. The dental hygienists role in the recognition, prevention, and therapeutic procedures of the disease will be explored. This course will correlate theory with clinical activities in DH 151.

## DH 165 ORAL Histology and EMBRYOLOGY

Credits: 2 (30 Lecture Hours)

Term: (S)

This course provides a basic understanding of the histologic structures of the head and neck region and the amazing process of embryonic development. The field of oral histology and embryology and its pertinence to clinical dental hygiene will be explored.

#### **DH 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **DH 201 PERIODONTOLOGY II**

Credits: 2 Term: (SU)

This course is a continuation of DH 160; Periodontology I. This course is an advance study of periodontology with special emphasis on various treatment modalities and their rationale in clinical dentistry. The course will include discussion on periodontal disease progression, treatment plan sequence, instrumentation, and antimicrobials used to decrease periodontal progression, treatment plan sequence, instrumentation and antimicrobials used to decrease periodontal disease progression. This course will correlate with DH 210 and DH 211.

## DH 210 CLINICAL DENTAL HYGIENE THEORY II

Credits: 2 (30 Lecture Hours)

Term: (SU)

A continuation of DH 150, this course increases the emphasis on the principles of instrumentation in periodontal therapy. Topics will include power scaling, air powered polishing, tobacco cessation, and effective ergonomic principles. Students will be introduced to various adjunctive services that can be integrated to provide comprehensive patient care. Theory background is used to support activities in DH 211.

## DH 211 CLINICAL DENTAL HYGIENE PRACTICE II

Credits: 4 (180 Clinic Hours)

Term: (SU)

A continuation of DH 151, this course provides additional practical experience in clinical patient treatment with an emphasis on early periodontal disease and subgingival deposits. Offered in conjunction with DH 210.

## **DH 215 GENERAL AND ORAL PATHOLGY**

Credits: 3 (45 Lecture Hours)

Term: (F)

Pathology is the science that studies diseases. This course will present various pathologic processes; including pathogenesis, etiology, inflammation, tumor development, systemic manifestations, and

developmental disturbances. This course emphasis is the study of oral diseases and the recognition of their conditions. Students will utilize this information during their clinical practice.

## **DH 220 DENTAL NUTRITION HEALTH**

Credits: 3 (45 Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

To understand the science of human nutrition and the application of basic nutrition principles to achieve optimal nutritional status throughout the life cycle. To understand the impact of nutrition on oral health and the impact of oral health on nutritional status. Enrollment limited to dental hygiene students and students with instructor permission.

#### DH 230 COMMUNITY DENTAL HEALTH AND EDUCATION

Credits: 2 (30 Lecture and Community Service Hours)

Term: (S)

A presentation of various methods and material used in community dental health education. The course provides an understanding of basic research and statistical concepts needed for sound community health practices. Emphasis on the use of evidenced based philosophy for acquiring, assessing, interpreting, critically analyzing, and incorporating scientific literature into community health practices. Field assignments in selected social settings and projects will encourage student participation in community dental health care.

## DH 235 PROFESSIONAL ISSUES & ETHICS IN DENTAL PRACTICE

Credits: 2 (30 Lecture Hours)

Term: (S)

A study of the legal restrictions and ethical responsibilities associated with the practice of dental hygiene and dentistry.

#### DH 240 LOCAL ANESTHESIA / NITROUS OXIDE THEORY AND LAB

Credits: 2 (15 Lecture Hours and 30 Lab Hours)

Term: (S)

This course is a combination of didactic learning as well as hands- on experience with a lab component. The course builds upon prior foundational knowledge of neurophysiology and dental anatomy as well as introducing pharmacology of local anesthetics and vasoconstrictors. Considerable attention is spent on the following areas; specifically as they pertain to the proper administration of dental local anesthesia: the drugs, the armamentarium, the techniques, and the complications. Emphasis will be placed on Emergency Medicine in the dental office to assure proper preparation and management of common medical emergencies. Nitrous Oxide/Oxygen Sedation will focus on equipment and safety as well as systemic effects and administration techniques.

## **DH 241 GERONTOLOGY & SPECIAL NEEDS PATIENTS**

Credits: 2 (30 Lecture Hours)

Term: (F)

This course provides preparation for clinical experiences with geriatric and special needs patients. The course will explore the aging process from a physical, social, psychological and financial perspective as well as the disease processes of special needs individuals. Emphasis will be placed on accommodation and innovative management to help determine patient treatment.

## DH 250 CLINICAL DENTAL HYGIENE THEORY III

Credits: 1 (15 Lecture Hours)

Term: (F)

A continuation of DH 210, this course expands beyond the basic concepts of dental hygiene theory with exposure to more difficult oral conditions and various modes of treatment. Topics include: effective patient communication, aspects of cultural diversity in regard to

patient communication and treatment, dental hygiene care plan, phases of treatment, coding treatment, and root morphology, advanced instrumentation and advanced fulcrums. Students will be introduced to formulating a case study and will utilize theory background to support all clinical activities in DH 251.

#### DH 251 CLINICAL DENTAL HYGIENE PRACTICE III

Credits: 5 (225 Clinical Hours)

Term: (F)

A continuation of DH 211, this course provides clinical activities with increased patient difficulty exhibiting moderate to advanced periodontal involvement and moderate deposits along with increased patient load. This course is offered in conjunction with DH 250.

## DH 280 CLINICAL DENTAL HYGIENE THEORY IV

Credits: 1 (15 Lecture Hours)

Term: (S)

A continuation of DH 250, this course includes advanced dental hygiene theory that will increase the student's knowledge of the profession. Attention will be given with preparation for the National Board and Regional Board exams. Students will continue to explore both Advanced and Reinforced instrumentation techniques as well as Extraoral Fulcruming techniques. Emphasis will be focused toward exploration of the Dental Specialties specifically; Periodontics, Pedodontics, Oral Surgery, and Prosthodontics. Students will continue building their case study and present the case to faculty and peers. Theory background will be used to support all activities in DH 281.

#### DH 281 CLINICAL DENTAL HYGIENE PRACTICE IV

Credits: 5 (225 Clinical Hours)

Term: (S)

A continuation of DH 251, this course provides multiple clinical experiences focused in time management, increased periodontally involved patient treatment, demonstration of being safe to practice by successfully completing required competency assessments. This course will challenge the students' critical thinking skills in the development of a personal learning contract. This activity is designed to allow students in their last clinical course of the program to reflect on their weaknesses to set objectives and provide evidence that they have accomplished clinical improvements along with exploration of individual interest for future aspirations. This course is in conjunction with DH 280, Clinical Dental Hygiene Theory IV.

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# **Course Descriptions - Economics (ECNS)**

#### **ECNS 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **ECNS 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **ECNS 201 PRINCIPLES OF MICROECONIMICS**

Credits: 3

Term: (F based on sufficient demand)

This course examines the subsystems of the economy such as the economics of the individual, the firm, and the industry. Study includes analysis of the pricing mechanism of the economy and the theories of income distribution.

## **ECNS 202 PRINCIPLES OF MACROECONIMICS**

Credits: 3

Term: (S based on sufficient demand)

This course presents the principles underlying the operation of a macroeconomic system through the study of the national and world economies as a whole. Topics explored include gross domestic product, full employment, economic growth, surplus and deficits, income distribution, balance of trade, protectionism, government policies, and international trade.

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# Course Descriptions - Education (EDU)

#### **EDU 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **EDU 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **EDU 200 Introduction to Education**

Credits: 3

Terms: (F, S, SU)

This class explores the profession of teaching by connecting theory to real-life experiences in the field. Students will cover the development of students, diversity, learning strategies, motivation, classroom management, assessment of learning, and construction of a professional portfolio through seminar discussions, in school observations, interviews, and personal reflection.

#### **EDU 211 MULTICULTURAL EDUCATION**

Credits: 3

Terms: (S based on sufficient demand)

This course helps current and future teachers reflect on their own heritage and how it relates to people of other economic, social cultural, ethnic, gender, religious, and sexual orientation groupings. An emphasis is placed on democratic community building in a multicultural society.

## **EDU 221 EDUCATIONAL PSYCHOLOGY & MEASUREMENT**

Credits: 3

Terms: (F, S based on sufficient demand)

This course explores the physical, psychological, and cognitive development in students of all ages within the contexts of education, family, and society. Emphasis is given to applying brain-based research, stages of learning, and psychological factors influencing the learning process to classroom management and educational evaluation.

## **EDU 270 INSTRUCTIONAL TECHNOLOGY**

Credits: 3

Terms: (F based on sufficient demand, S)

Prerequisite: CAPP 120, challenge exam, or instructor approval

Prospective teachers are introduced to the uses of technology to enhance the education experience. Students will learn to use media software common in educational settings for a variety of instruction purposes.





# Course Descriptions - Electrical (ELEC)

#### **ELEC 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **ELEC 130 ELECTRIC MOTORS AND GENERATORS**

Credits: 3 Terms: (S)

Prerequisites: EET 120

This course covers an introduction to the terminology and basic principles of DC and AC motors and generators. Students will study single phase and three phase motors and generators and operational controls. Common AC and DC power generation equipment and testing techniques will also be covered.

## **ELEC 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

## **ELEC 230 PROGRAMMABLE LOGIC CONTROLLERS**

Credits: 3 Terms: (F)

Prerequisites: EET 120

This course covers an introduction to a variety of programmable logic controllers (PLCs). The applications, operations, and programming of PLC's will be covered with an emphasis on programming. Computers and manual methods will be used to program PLCs.

## **ELEC 231 ELECTRONIC DRIVE SYSTEMS**

Credits: 3 Terms: (S)

Prerequisites: EET 121

This is an advanced course in electronic drive systems used in industrial applications. Electronic control of Direct-Current and Alternating Current motors, transmission and solid-state controllers, and electronic control of power generation equipment will be discussed.

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# Course Descriptions - Electrical Systems (EET)

#### **EET 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### EET 120 AC/DC ELECTRONICS I

Credits: 3 Term: (F)

This course introduces safety rules, concepts, and operating characteristics of direct current (DC) and alternating current (AC) electrical circuits. Selection, inspection, use, and maintenance for common electrical test equipment is also covered.

## **EET 121 AC/DC ELECTRONICS II**

Credits: 3 Term: (S)

This course is a continuation of the AC/DC Electronics I course. Safety rules, concepts, and operating characteristics of electrical circuits will continue to be emphasized. Capacitors, inductors, low voltage power supplies, diodes, transistors, and triodes will be introduced and analyzed.

## **EET 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **EET 240 ELECTRICAL POWER AND DISTRIBUTION I**

Credits: 3 Term: (F)

This course covers an introduction to the generation of electrical power and moving that power through a local transmission system to a substation where a customer will purchase the generated power. Safely working with components of a high voltage transmission system will also be covered.

## **EET 241 ELECTRICAL POWER AND DISTRIBUTION II**

Credits: 3

Term: (S)

This course is a continuation of the Electrical Power and Distribution I course. It covers the generation of electrical power and moving that power through a local transmission system to a substation where a customer will purchase the generated power.

#### **EET 245 DIGITAL ELECTRONICS**

Credits: 4 Term: (S)

This course covers basic digital circuits and their use in microprocessors and other digital devices. Reading digital logic schematics and building, testing, and troubleshooting digital circuits is also covered.



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# Course Descriptions - Emergency Medical Services (EMS)

#### **EMS 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **EMS 102 FUNDAMENTALS OF ADVANCED CARE**

Credits: 3 Term: (F)

Prerequisite: Consent of faculty required.

This course provides an introduction to the practice of paramedicine and will provide the student with information regarding preparatory aspects of the pre-hospital environment. Topics include: role and responsibilities of the Paramedic, well being of the Paramedic, injury prevention, medical-legal issues, Ethics, assessment and management, communication and documentation, pharmacology, venous access and medication administration, as well as airway management and ventilation.

#### **EMS 105 EMT-PARAMEDIC I**

Credits: 3 Term: (F)

Prerequisite: Instructor approval required Note: Formal acceptance into EMT-P program

This course provides the student with information and skill development in the areas of Anatomy and Physiology, Pathophysiology, and life span development. This course also covers infections and communicable diseases, behavioral, Gynecology, Obstetrics, and neonatology emergencies.

# EMS 110 EMT-PARAMEDIC I/II SKILLS LAB

Credits: 2 Term: (F)

Prerequisite: Instructor approval required Note: Formal acceptance into EMT-P program

This course provides the student with laboratory experience in the areas of assessment, physical examination, history gathering, basic and advanced airway management skills, pharmacology and the initiation and management of fluid therapy(topics covered in Fundamentals of Advance Care), as well as reinforcement and application of the medical emergencies covered in Paramedic 1 and 2.

# **EMS 115 EMT-PARAMEDIC II**

Credits: 3

Term: (F)

Prerequisite: Instructor approval required. Note: Formal acceptance into EMT-P program

This course will build upon the instructional imperatives of Paramedic I and introduce the student to cardiac emergencies, pulmonary emergencies, neurological emergencies, endocrine emergencies, and allergies and anaphylaxis emergencies.

# EMS 120 EMT-PARAMEDIC I/II CLINICAL & FIELD INTERNSHIP

Credits: 3 Term: (F)

Prerequisite: Instructor approval required.

This course introduces Paramedic students into the introductory phases I (BLS) and phase II (initial ALS) of their clinical and internship experience with a focus of the ER, OR, Ambulance ride along, and may include clinical floor experience in the areas of OB, Behavioral, and ICU.

#### **EMS 130 FIRST RESPONDER**

Credits: 3

Term: (Under Review)

Prerequisite: Must be 18 years of age to take certification examination

This course is the nationally recognized emergency medical entry level to the emergency services industry. The course provides didactic and practical experience concerning initial assessment and immediate management of trauma and medical patients. Successful course completion will allow the student to enter the Montana First Responder authorization process. All aspects of authorization/certification are the responsibility of the student.

# EMS 137 EMERGENCY MEDICAL TECHNICIAN BASIC (EMT-B)

Credits: 6 (4 lecture, 2 skills lab)

Term: (F, S, SU)

Prerequisite: Must be 18 years of age to take certification examination

This course is the nationally recommended minimum level of training for ambulance personnel and is considered the desired level of medical training by many fire departments. The course focuses on skill development in the primary responsibilities of the EMT-B, which are to bring emergency medical care to victims of emergencies, to stabilize their condition, and to transport them safely and expeditiously to an appropriate facility. This course is a combination of classroom work and practical experience. Upon successful completion of the course, graduates are eligible to sit for the Montana and National Registry certification examinations. All aspects of authorization/certification are the responsibility of the student.

# EMS 140 EMT-INTERMEDIATE I (EMT-I)

Credits: 4 (3 lecture, 1 skills lab)

Term: (F, S based on sufficient demand)

Prerequisite: Formal acceptance into EMT-I course, EMT-Basic National Certification, and minimum of one year patient care experience as an EMT B prior to sitting for the National Registry Certification Examination; Current certification in CPR according to AHA Healthcare Provider

standards or its equivalent; approved for admissions by the Medical Director.

This course is designed to bridge a nationally perceived void between the EMT-B and EMT-P levels of certification. The EMT-I will be utilized in systems where the pre-hospital care provider is required to perform skills beyond those of the EMT-B but where EMT-P level care is unavailable or unattainable. This course will refine the life-saving skills of the EMT-B in addition to providing the student with supplementary advanced life support skills that can significantly improve the quality of pre-hospital care. Course topics will include the professional roles and responsibilities of the EMT-I as well as focusing on EMS systems, medical control, medicolegal considerations, communications, medical terminology, advanced patient assessment, and the pathophysiology of shock. Student must be high school graduate or equivalent to take certification examination.

# **EMS 145 ACLS PREPARATION**

Credits: 1 Term: (F)

Prerequisite: Instructor approval required.

This course is based upon the American Heart Association course which is considered the national standard of care for advanced providers caring for cardiac patients. The program includes didactic and skills training in cardiac anatomy and physiology, acid base balance, pharmacology,

cardiac rhythm interpretation, monitor/defibrillator operation, and patient care algorithms.

#### **EMS 146 PALS PREPARATION**

Credits: 1 Term: (S)

This course is based upon the American Heart Association course that is considered the national standard of care for advanced providers caring for pediatric patients in the arrest situation. This course includes didactic and skills training in pediatric anatomy and physiology, assessment,

airway management, pharmacology, cardiac rhythm interpretation, monitor/defibrillator operation, and patient care algorithms.

#### **EMS 148 PRE HOSPITAL TRAUMA LIFE SUPPORT**

Credits: 1 Term: (S)

This course is designed to provide the advanced EMT with trauma specific knowledge and skills. The program emphasizes rapid recognition, management, and transportation of the critical patient. Course topics include mechanism of injury, assessment, advanced airway management, respiratory injuries and management, recognition and management of shock, intravenous therapy, head injuries, spinal injuries and special situations. The program was developed by the National Association of Emergency Medical Technicians and is utilized throughout the United States.

# **EMS 155 EMT-INTERMEDIATE II**

Credits: 3

Term: (S, F based on sufficient demand)

This course is a continuation of EMT - Intermediate I. This course will refine the knowledge and skills of Intermediate I in addition to providing the student with additional advanced life support skills. Course topics will include, advanced patient assessment, advanced airway management, IV therapy and shock management. Students will also be introduced to pharmacology and pharmacological interventions.

# **EMS 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **EMS 205 EMT-PARAMEDIC III**

Credits: 3 Term: (S)

Prerequisite: Successful completion of Paramedic I/II or Faculty approval

This course will continue with medical emergencies and focus on gastroenterology, urology, toxicology, hematology, and environmental conditions as they apply to the emergent prehospital arena. The second part of this course will focus on trauma consisting of trauma

systems and mechanism of injury, hemorrhage and shock, soft tissue trauma, burns, head and facial trauma, spinal trauma, thoracic trauma, abdominal trauma, and finally musculoskeletal trauma.

#### EMS 210 EMT-PARAMEDIC III/IV SKILLS LAB

Credits: 2 Term: (S)

Prerequisite: Instructor approval required.

This course is a continuation of the fall skills lab with reinforcement and application of topics already covered. Paramedic spring skills lab will also introduce new skill sets, such as assessment and management of Pediatric Advance life Support (PALS), trauma, and complete remaining medical emergencies covered in Paramedic 3 and 4 classes.

# **EMS 217 EMT-INTERMEDIATE III**

Credits: 4 (3 lecture, 1 skills lab)

Term: (S,SU based on sufficient demand)

This course is a continuation of EMT-Intermediate II and is designed to emphasize the new information in the I-99 curriculum. This course will refine the knowledge and skills of Intermediate I and II in addition to providing the student with additional advanced life support skills. Course topics will include pharmacology, medication administration with an emphasis in cardiac, cardiology and cardiac monitoring, advanced cardiac life management, advanced patient assessment, further advanced airway management, IV therapy and shock management.

#### EMS 220 EMT-PARAMEDIC III/IV CLINICAL AND FIELD INTERNSHIP

Credits: 4 Term: (S)

Prerequisite: Instructor approval required.

The clinical and field internship experience allows the students to integrate knowledge and skills from the classroom setting into actual patient care in the hospital and field domain. Students are expected to complete their clinical (in hospital) experience in anticipation of starting their internship. Students will continue to interact with hospital staff in clinical areas such as Pediatrics, OBGYN, ICU, CICU, Behavioral, OR, and ER. Students also continue ambulance ride along with an area of focus specific of advance life support, phase II in evaluation.

# **EMS 222 EMT-INTERMEDIATE I CLINICAL**

Credits: 1

Term: (F, S based on sufficient demand)

This course includes hospital and surgical center rotations such as Benefis Healthcare, Great Falls Clinic Medical Center. As well as ambulance ride along/internship experiences at places such as Great Falls Emergency Services.

#### **EMS 223 EMT-INTERMEDIATE INTERNSHIP**

Credits: 1 Term: (SU)

This course is the final stage of the EMT-Intermediate technical core classes. This course emphasizes team leadership as an EMT-Intermediate student.

#### **EMS 225 EMT-PARAMEDIC IV**

Credits: 3 Term: (S)

Prerequisite: Successful completion of Paramedic I/II or instructor approval

This course will complete the student's investigation into medical emergencies and will focus

upon pediatric emergencies and emergencies in the elderly. Other special considerations will include, abuse and assault, patients with special challenges, and acute interventions for the chronic care patient. Specific operations will also be addressed including ambulance operations, medical incident command, rescue awareness and operations, hazardous materials incidents, and crime scene awareness. Additionally, it will be within the scope of this course to prepare the successful candidate for the rigorous National Registry Certification examination.

# **EMS 227 EMT-INTERMEDIATE II CLINICAL**

Credits: 2

Terms: (S, SU based on sufficient demand)

This course is a continuation of I Clinical with primary emphasis placed on hospital emergency department rotations as well as field internship experiences at places such as Benefis Healthcare, Great Falls Emergency Services.

#### **EMS 233 INTERNSHIP**

Credits: 6 Term: (SU)

This course is the final stage of the paramedic technical core classes, with 360 minimum numbers of hours. This course continues with the application of advance life support skills and assessment techniques (phase II), transitioning into team leadership (phase III) as a paramedic student.

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# **DIETETIC TECHNICIAN**

#### **ASSOCIATE OF APPLIED SCIENCE**

Program Director/Advisor: Susan Cooper, MS, RD

Graduates of the Dietetic Technology program will have the acquired foundational knowledge and skills in medical nutrition therapy and food service management. The Dietetic Technician (DT) plays an important role in providing cost-effective nutrition care and food service to the patient, to clients and to the public. As a food and nutrition practitioner, a "diet tech" plans menus based on established guidelines, orders foods, standardizes recipes, assists with food preparation, provides basic dietary instruction, and counsels patients on food and nutrition.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Demonstrate the application of basic knowledge in anatomy, physiology, and chemistry in the practice of nutrition education.
- Prepare nutrition care plans for and provide counseling to clients from diverse socio-economic backgrounds and at each stage of the lifestyle that result in improved client nutritional status.
- Apply the principles of fitness and wellness to educating the public.
- Effectively utilize common nutrition and foodservice software programs.
- Apply knowledge of food safety and sanitation, menu planning, procurement, inventory, and quality control in food service operations.
- Describe basic principles and techniques of food preparation and evaluation.
- Employ principles of management including planning, implementation, and evaluation.
- Demonstrate basic knowledge in financial and human resources management.
- Describe and demonstrate leadership skills.
- Identify the characteristics of reliable nutrition information and apply this knowledge to assess research and statistical data.
- Demonstrate effective oral and written interpersonal communication skills with peers, patients, clients, and other health care and food service professionals.
- Describe the current scope of practice and credentialing process for diet technicians and other nutrition professionals and identify parameters of accountability.
- Understand the organization of various industries that commonly employ nutrition professionals and the role of the DTR and the RD in these organizations.
- Understand basic principles of nutrition and trends in nutrition.

The MSU—Great Falls College of Technology's Dietetic Technician Program is a limited enrollment program, accepting a restricted number of students each year. Interested students are urged to contact the Dietetic Technician Program Advisor for student advising specific to criteria for program acceptance. Look for the first application to be posted in the spring of 2012.

# **ESTIMATED RESIDENT PROGRAM COST:**

# (2011-2012 UPDATES COMING SOON!)

Tuition and Fees	\$6034
Application Fee	30
Insurance	30
Lab/Program Fees	130
Books/Supplies	2400
TOTAL	\$9424

MUS Student Health Insurance Premium approx \$1600/year if needed

#### PREREQUISITE COURSEWORK

All prerequisite courses and the dietetic technology application must be completed by May 31st of the year prior to applying for enrollment into the program.

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
WRIT	101**	College Writing I	3†	
NUTR	221	Basic Human Nutrition	3†	
BIOH	104**	Fundamentals of Human Biology OR	4†	
ВІОН	201**	Anatomy and Physiology I AND	4†	
ВІОН	211*	Anatomy and Physiology II ^	4†	
CHMY	121**	Introduction to General Chemistry/L	ab <b>OR</b>	
CHMY	141**	College Chemistry I/Lab ^	<u>4</u> †	
		Subtotal	14-18	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3†	
PSYX	100	Introduction to Psychology	3†	
COMM	130	Public Speaking	3†	
M**	121	College Algebra	3†	
NUTR	125	Intro to Prof. in Nutrition and Dietet	ics 1†	
NUTR*	251	Community Nutrition	2†	
		Required Elective ^ ^	<u>3</u> †	
		Subtotal	18	

<sup>^</sup>These courses are recommended if the student is considering seeking a bachelor's degree in dietetics.

# PROGRAM COURSE REQUIREMENTS AFTER FORMAL ACCEPTANCE FIRST CLASSES TO START PROGRAM WILL BE OFFERED FALL 2012.

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
NUTR	230*	Nutrition Counseling	3†	
CULA	105	Food Service Sanitation	1†	
NUTR	226*	Food Fundamentals	3†	
NUTR	222	Intro to Nutrition Services Mgmt	3†	
NUTR	245*	Intro to Medical Nutrition Therapy	3†	
NUTR	252*	Community Nutrition Laboratory	<u>3</u> †	
		Subtotal	16	

(Continued on next page)

<sup>^^</sup>For your required elective choose one course from the following list: COMM 135 Interpersonal Communication (3), SOCI 101 Introduction to Sociology (3), ANT 101 Introduction to Anthropology (3), CHMY 143 College Chemistry II/Lab (4), PSYX 230 Developmental Psychology (3), or STAT 216 Basic Statistics (4).

SPRING SEMESTER					
COURSE	NO.	TITLE	CREDITS	GRADE	
NUTR	225*	Basic Life Cycle Nutrition	3†		
NUTR	260*	Food Service Management	3†		
NUTR	270*	Nutrition Medical Therapy	3†		
NUTR	271*	Nutrition Medical Therapy Laborato	ry 3†		
NUTR	261*	Food Service Management Laborato	ory <u>3</u> †		
		Subtotal	15		

If students are planning to seek acceptance into the Dietetics Program at Montana State University-Bozeman, they are also encouraged to take SOCI 101 Introduction to Sociology (3) or ANT 101 Introduction to Anthropology (3), CHMY 143 College Chemistry II/Lab (4), PSYX 230 Developmental Psychology (3), and STAT 216 Basic Statistics (4).

# TOTAL PROGRAM CREDITS - 63-67~

~Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# EMERGENCY MEDICAL SERVICES (EMS) PROGRAM OFFERINGS:

- A.A.S. EMT-Paramedic degree
- C.A.S. EMT- Intermediate 99 degree
- Certificate Intermediate (EMT Basic + Intermediate classes)
- EMT-Basic
- Basic Life Support (CPR)
- ALS/BLS Refresher
- C.E.U. for EMT'S
- IV Therapy
- EMT REACH (satellite instruction) classes
- EMT-First Responder
- EMT Endorsements
- Critical Care (CCEMTP) licensed site

Course offerings are based on sufficient demand. See following pages or catalog descriptions, or call 406-268-3718, or e-mail jhenderson@msugf.edu.

# **EMT-INTERMEDIATE 99**

# CERTIFICATE OF APPLIED SCIENCE DEGREE

**Advisor: Joel Henderson** 

Upon completion of the EMT-Intermediate 99 and the EMT-Basic program, students will be prepared to begin a successful career in emergency care and transportation in emergency and non-emergency settings. Students will be prepared to sit for the National Registry Certification Examination to gain licensure.

# **GRADUATES WILL BE PREPARED TO:**

- Understand human anatomy and physiology with emphasis on the respiratory, cardiovascular, endocrine and musculoskeletal systems.
- Understand pharmacology, pathophysiology and medical terminology.
- Practice more advanced emergency medical skills that include utilization of cardiac monitors and defibrillators, provision of fluid resuscitation through intravenous access and limited pharmacological interventions.
- Demonstrate proficiency in emergency medical skills such as CPR, airway control, oxygenation, wound care, splinting, and cervical spine immobilization.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$3025
Application Fee	30
Insurance	12
Lab Fees	85
Books/Supplies	750
TOTAL	\$3902

MUS Student Health Insurance Premium approx \$1600/year if needed

STUDENTS START THE INTERMEDIATE SERIERS IN THE FALL OR THE SPRING AND COMPLETE INTERMEDIATE SERIES THE FOLLOWING SEMESTER, AS SHOWN BELOW WITH SEMESTER ONE AND SEMESTER TWO. STUDENTS MUST HAVE APPROVAL BY PROGRAM DIRECTOR PRIOR TO SIGNING UP FOR INTERMEDIATE COURSES AND HAVE A CURRENT EMT BASIC CERTIFICAT CARD. GENERAL EDUCATION CLASSES CAN BE TAKEN BEFORE, DURING, OR AFTER COMPLETION OF ACTUAL EMS INTERMEDIATE CLASSES.

# **GENERAL EDUCATION COURSES: (REQUIREMENT FOR THE C.A.S)**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
М	116**	Mathematics for Health Careers	3+	
AH	140	Pharmacology	2†	
AHMS	142	Introduction to Medical Terminology	1†	
WRIT	095**	Developmental Writing	4†	
COMM	135	Interpersonal Communication	3†	
EMS	137	EMT-Basic	<u>6†</u>	
		Subtotal	19	

# SERIES ONE (F,S) (MUST HAVE EMS 137 PRIOR TO STARTING INERMEDIATE CLASSES)

COURSE	NO.	TITLE	CREDITS	GRADE
EMS	140*	EMT - Intermediate I	4†	
EMS	155*	EMT - Intermediate II	3†	
EMS	222*	EMT - Intermediate I Clinical	<u>1</u> †	
		Subtotal	8	

#### SERIES TWO (S, SU)

COURSE	NO.	TITLE	CREDITS	GRADE
EMS	217*	EMT - Intermediate III	4†	
EMS	227*	EMT - Intermediate II Clinical	2†	
EMS	233*	EMT-Intermediate Internship	<u>1+</u>	
		Subtotal	7	

# **TOTAL PROGRAM CREDITS - 34~**

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# EMERGENCY SERVICES - EMERGENCY MEDICAL TECHNICIAN PARAMEDIC (EMT-P)

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Joel Henderson** 

Emergency Medical Services (EMS) personnel play a primary role in providing care and transportation of the sick and injured in a pre-hospital setting. MSU—Great Falls offers an A.A.S degree for the EMT-Paramedic as well as a one semester EMT-Basic course and a one semester plus an internship EMT-I99 course.

Upon completion of each EMT course, students will be prepared to sit for the National Registry Certification Examination to gain licensure and begin a successful career as a pre-hospital care provider.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Provide appropriate care and transportation in both emergency and non-emergency settings;
- Effectively communicate with other medical personnel in oral, written or electronic form:
- Follow guidelines in maintaining confidentiality of patient information;
- Demonstrate correct patient assessment and appropriate intervention and care in medical emergencies including auto accidents, heart attacks, stroke, poisoning, childbirth, substance abuse, and others;
- Demonstrate proficiency in emergency medical skills such as CPR, airway control, oxygenation, wound care, splinting, and cervical spine immobilization;
- Safely and correctly use medical equipment and technologies in patient treatment:
- Demonstrate proficiency in utilizing pharmacological interventions as needed for appropriate patient care;
- Practice advanced cardiac life support including ECG interpretation of rhythms, use of algorhythms and cardiac pharmacology;
- Demonstrate proficiency in Pre-Hospital Trauma Life Support (PHTLS).

In addition to the above, upon completion of the EMT-Paramedic AAS degree program, students will add the following benefits:

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Increase opportunities for employment with national trending requirements for A.A.S Paramedic degree;
- Increase opportunities for advancement within place of employment.

# **ADMISSION REQUIREMENTS**

• Formal acceptance to paramedic program classes is achieved through an application process. Access the following link for more information:

# HTTP://TECHNOLOGY.MSUGF.EDU/PROGRAMS/HEALTHSCIENCES/EMERG ENCY%20SERVICES/PARMEDICAPPLICATION.PDF

- General education requirements can be taken before, during, or after completion of core paramedic classes.
- Student must be certified as an EMT-Basic prior to filling out an application.
- The following are estimated fees and a suggested course of study; however students may enter in the fall, spring and summer for general education requirements.
- Applications for fall paramedic cohort may be turned in as early as Feb, 1<sup>st</sup> with a deadline of May 15<sup>th</sup>.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6834
Application Fee	30
Insurance	30
Lab Fees	295
Books/Supplies	1700
TOTAL	\$8889

#### MUS Student Health Insurance Premium approx \$1600/year if needed

# GENERAL EDUCATION REQUIREMENTS

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	142	Intro to Med Terms	1†	
BIO	213**	Anatomy & Physiology I/Lab	4†	
WRIT	101**	College Writing I	3†	
EMS	137	EMT - Basic	6†	
M	116**	Mathematics for Health Careers	<u>3</u> †	
		Subtotal	17	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
АН	140	Pharmacology	2†	
BIO	214*	Anatomy & Physiology II/Lab	4†	
COMM	135	Interpersonal Communication OR		
PSYX	100	Introduction to Psychology OR		
SOCI	101	Introduction to Sociology	3†	
		Electives	<u>7</u>	
		Subtotal	16	

# START OF (FALL) COHORT, STUDENT HAS BEEN FORMALLY ACCEPTED AS A PARAMEDIC STUDENT.

# SEMESTER ONE (FALL)

COURSE	NO.	TITLE	CREDITS	GRADE
EMS	102*	Fundamentals of Adv Care	3†	
EMS	105*	Paramedic I	3†	
EMS	110*	Paramedic I/II Skills Lab	2†	
EMS	115*	Paramedic II	3†	
EMS	120*	Paramedic I/II Clinical	3†	
EMS	145*	ACLS Preparation	<u>1</u> †	
		Subtotal	15	

# **SEMESTER TWO (SPRING)**

COURSE	NO.	TITLE	CREDITS	GRADE
EMS	146	PALS Preparation	1†	
EMS	148	Pre-Hospital Trauma Life Sup	1†	
EMS	205*	Paramedic III	3†	
EMS	210*	Paramedic III/IV Skills Lab	2†	
EMS	220*	Paramedic III/IV Clinical/Field	4†	
EMS	225*	Paramedic IV	<u>3</u> †	
		Subtotal	14	

# **SUMMER SEMESTER (INTERNSHIP)**

COURSE	NO.	TITLE	CREDITS	GRADE
EMS	233*	Internship	6†	

PROGRAM ADVISOR will work with student to choose appropriate electives; listed below are two <u>possible</u> elective tracks: a total of 7 electives are required.

# **ELECTIVE TRACK 1 (TAKEN AS A UNIT)**

COURSE	NO.	TITLE	CREDITS	GRADE	
EMS	140*	Intermediate I	4		
EMS	155*	Intermediate II	3		
EMS	217*	Intermediate III	4		
EMS	222*	Intermediate I Clinical	1		
EMS	227*	Intermediate II Clinical	2		
EMS	223*	EMT-Intermediate Internship	1		

# **ELECTIVE TRACK 2 (TAKEN AS A UNIT)**

COURSE	NO.	TITLE C	REDITS	GRADE
PSC	194	Public Safety Comm. Terms & Report W	rit. 1	
PSC	194	Stress and Crisis Intervention for PSC	1	
PSC	194	Public Safety Communications Skill	2	
PSC	194	Clinical for PSC Professionals	1	
PSC	194	Legal Responsibility, Ethics, & Law for P	SC 3	

# TOTAL PROGRAM CREDITS - 68~

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **EMERGENCY SERVICES** FIRE AND RESCUE TECHNOLOGY

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: John Culbertson** 

Today's firefighters not only respond to fire and medical emergencies but also participate in disaster response planning, hazardous material spill mitigation, enforcement of fire codes and standards, as well as delivery of safety, fire, and accident prevention programs. The work of the contemporary firefighter is multi-functional and requires a high level of expertise in relevant technical areas as well as proficiencies in written and oral communications, leadership, planning, and the ability to deal with a broad range of individuals and situations.

This degree program combines technical fire and rescue training with general education courses to fulfill Associate of Applied Science Degree requirements. It also incorporates the opportunity to transfer credits toward a four-year degree in Fire Science/Administration.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Demonstrate the skills required at the Fire Fighter 1 & 2, Hazmat Technician, Officer 1, and EMT-Basic levels of competency (this results in five professional certifications).
- Recognize and respond effectively to fire code and fire life safety issues.
- Use appropriate methods for fire suppression and extinguishment in a variety of settings.
- Detect arson.
- Provide basic emergency medical services.
- Assume supervisory responsibilities for a fire crew.
- Communicate effectively both orally and in writing.

The Fire and Rescue Technology Option is offered as a cooperative endeavor between Montana State University - Great Falls College of Technology and Montana State University Fire Services Training School-Great Falls. The availability of on-line classes through MSU-Great Falls COT will allow firefighters to complete general education degree requirements without having to relocate to Great Falls.

Program applicants should forward their requests for transfer of credit for general and technical education to the Registrar's Office at the College. Requests for transfer of credit should include official copies of transcripts. Technical credits that are not on a technical transcript need to send documents to the Registrar's Office at the College so the requests for transfer of technical credits can be reviewed

Only the credits taken from MSU-Great Falls COT are eligible for Financial Aid. FRS prefix classes are not eligible.

A residency of 7 credit hours must be taken to MSU-Great Falls to qualify for degree.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees ......\$3025

Application Fee	30
Lab Fees	25
Fire Training School	up to 6000
Books/Supplies	1050
TOTAL	\$10130

# MUS Student Health Insurance Premium approx \$1600/year if needed

#### **GENERAL EDUCATION REQUIREMENTS**

COURSE	NO.	TITLE	CREDITS	GRADE
COMM	135	Interpersonal Communication	3†	
WRIT	122**	Intro to Business Writing	3†	
M	**	090 or higher	3-4†	
PHYS	130	Fund of Physical Science with Lab	4†	
PSYX	100	Intro to Psychology	<u>3</u> †	
		Subtotal	16-17	

Required technical courses are offered at locations throughout the state, mostly on weekends. Please visit the Fire Services Training School's website at www.montana.edu/wwwfire/ for the latest schedule of technical courses and

# **TECHNICAL EDUCATION REQUIREMENTS**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
EMS	137	EMT Basic	6†	
FRS	101	Firefighter I	5†	
FRS	102*	Firefighter II	5†	
FRS	112*	Fire Inspection & Investigation	3†	
FRS	241	Fire Department Internship	3†	
FRS	245*	Fire Service Training &		
		Safety Education	2†	
FRS	250*	<b>Building Construction</b>	2†	
FRS	265*	Incident Management & Safety	3†	
FRS	270*	<b>Tactical Operations and</b>		
		Company Management	5†	
FRS	285*	Hazardous Materials	<u>5</u> †	
		Subtotal	39	

# **TECHNICAL ELECTIVES – 6 CREDITS REQUIRED**

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3	
FRS	107	Aircraft Fire & Rescue	3	
FRS	291	Hydraulics & Water Supplies	3	
FRS	290	Wildland Fire Protection	3	

S-215: Fire Operations in the Urban Interface

S-290: Intermediate Fire Behavior

S-336: Fire Suppression Tactics

# TOTAL PROGRAM CREDITS - 62-63~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **GRAPHIC DESIGN**

# ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisor: Tim Paul

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Create appropriate typographic solutions for a variety of applications and situations:
- Decide the correct medium (printed materials, packages, manufacturing and fabrication techniques, environments, websites, kiosks, or virtual environments) based on use and overall intended effect on the viewer;
- Utilize aesthetics (principles of organization, composition, color, hierarchy, balance, contrast, emphasis, depth, rhythm, use of symbolism and overall level of craft in execution) to create an emotional impact;
- Maintain a structured approach to creative process development (research, observation, analysis, prototyping, testing, evaluation) while remaining flexible and adapting to changing circumstances and parameters and gibing rigorous and unfailing attention to detail;
- Work with diverse teams (clients, audiences, content providers, researchers, administrative personnel) in an intense collaborative environment;
- Persuade clients, creative directors, sponsors and colleagues to go along with a plan, and deliver the results of the plan on time;
- Ask precise questions, convert research into design strategy, and successfully evaluate and discuss their own design efforts and the efforts of others.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6038
Application Fee	30
Lab Fees	45
Books/Supplies	2225
TOTAL	\$8338

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ART	101	Intro to Visual Art	3†	
ART	140	Drawing I	3†	
BUS	106	Intro to Business	3†	
CAPP	120	Introduction to Computers	3†	
WRIT	122*	Intro to Business Writing	3†	
GDSN	100	Intro to Graphic Design Seminar	<u>1</u> †	
		Subtotal	16	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ART	114	Art Fundamentals	3†	
BUS	240*	Advertising	3†	
COMM	135	Interpersonal Communication	3†	
GDSN	109*	Digital Photography	4†	
GDSN	130*	Typography	<u>3</u> †	
		Subtotal	16	

#### FALL SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
BUS	235*	Marketing	3†	
GDSN	217*	Digital Graphic Design	3†	
GDSN	220*	Digital Illustration & Packaging	3†	
М	108**	<b>Business Mathematics</b>	4†	
CIT	229*	Web Page Construction	<u>3+</u>	
		Subtotal	16	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CIT	231*	Web Page Design	3†	
CIT	280*	Desktop Publishing	3†	
GDSN	221*	Publishing and Pre-Press	3†	
GDSN	222*	Capstone Portfolio/Internship	3†	
		Elective Option	<u>3+</u>	
		Subtotal	15	

#### SUGGESTED ELECTIVES

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	158*	MS Access	3†	
CSCI	210*	Web Programming	3†	
CIT	290*	New Web Technologies	3†	

# TOTAL PROGRAM CREDITS - 63~

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **HEALTH INFORMATION CODING SPECIALIST**

# **CERTIFICATE OF APPLIED SCIENCE DEGREE**

Advisor: Lynn Ward

This program is offered completely on-line.

Health information coding is the transformation of verbal descriptions of diseases, injuries and procedures into alphanumeric designations used for data retrieval, analysis, and claims processing.

Upon completion of the Certificate in Health Information Coding Specialist, students will be prepared to begin a successful career as a health information coding specialist. Students are prepared to sit for the National Certified Coding Associate exam administered through AHIMA (www.ahima.org).

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Use computer applications and software in maintaining health information in health records.
- Research and rely on knowledge in correct medical terminology, anatomy and physiology, pharmacology, and disease processes.
- Identify and apply accurate diagnostic and procedural codes for reimbursement.
- Exhibit professional communication skills in oral, written, and electronic formats.
- Maintain confidentiality of health information while developing a commitment to adhering to the standards of professional integrity, honesty, and fairness.
- Interact professionally in the healthcare environment with healthcare providers, patients/clients, and the public while understanding diversity among cultures and societies.
- Apply knowledge of health information technology to solve problems while utilizing critical thinking skills.

The Health Information Coding Specialist Certificate program is approved through AHIMA and the Assembly on Education.

A grade of "C-" or above must be achieved in all courses to advance in the program and to graduate. Students must complete several prerequisite courses prior to completing some program courses.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$4537
Application Fee	30
Lab/Program Fees	75
Books/Supplies	1875
TOTAL	\$6517

MUS Student Health Insurance Premium approx \$1600/year if needed

NOTE: Curriculum is based on a full time schedule.

#### SUMMER SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	144	Medical Terminology	3†	
AH	180	Basic Pharmaceuticals	1+	
BIO	127	Anatomy and Physiology for Non-Clini	cal 4+	
CAPP	120	Introduction to Computers	3†	
		Subtotal	11	

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	105	Healthcare Delivery	2†	
AHMS	156*	Medical Billing Fundamentals	4+	
AHMS	201*	Medical Science	3+	
AHMS	108*	Health Data Content and Structure	3+	
AHMS	162*	Beginning Diagnosis Coding	3+	
AHMS	160*	Beginning Procedural Coding	<u>3†</u>	
		Subtotal	18	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
WRIT	122*	Introduction to Business Writing	3†	
M	090*	Introductory Algebra OR		
M	108*	Business Math OR higher	4+	
PSYX	100*	Introduction to Psychology OR		
SOCI	101*	Introduction to Sociology OR		
COMM	135*	Interpersonal Communication	3+	
AHMS	214*	ICD-9 Coding	3+	
AHMS	212*	CPT Coding	3+	
AHMS	298A*	HICS/Coding – Professional Practice E	хр <u>2+</u>	
		Subtotal	18	

<sup>\*\*</sup>Recommended Course: CCA Exam Preparatory Course\*\*

#### TOTAL PROGRAM CREDITS - 47~

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **HEALTH INFORMATION TECHNOLOGY**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisor: Lynn Ward

This program is offered completely on-line.

The Health Information Technology program is designed to prepare individuals to organize and evaluate health records for completeness and accuracy.

Upon completion of the AAS degree in Health Information Technology, students will be prepared to begin a successful career as a health information technologist. Students are prepared to sit for the National Registered Health Information Technologist exam administered by AHIMA (www.ahima.org)

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Use computer applications and software in maintaining health information in health records.
- Research and rely on knowledge in medical terminology, anatomy and physiology, pharmacology, and disease processes.
- Identify and apply accurate diagnostic and procedural codes for reimbursement.
- Exhibit professional communication skills in oral, written, and electronic formats.
- Maintain confidentiality of health information, while developing a commitment to adhering to the standards of professional integrity, honesty and fairness.
- Interact professionally in the healthcare environment with healthcare providers, patients/clients and the public, while understanding diversity among cultures and societies.
- Analyze qualitative and quantitative information, including graphic numerical and verbal data.
- Apply knowledge of health information technology to solve problems, while utilizing critical thinking skills.

The Health Information Technology program is accredited by the Commission on the Accreditation for Health Informatics and Information Management (CA-HIIM).

A grade of "C- "or above must be achieved in all courses to advance in the program and to graduate. Students must complete several prerequisite courses prior to completing some program courses.

#### **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$7562
Application Fee	30
Lab Fees	
Books/Supplies	2575
TOTAL	

# MUS Student Health Insurance Premium approx \$1600/year if needed

**NOTE:** Curriculum is based on a full time schedule. The courses listed below do not have to be taken in the specified order. However, if you do take them in this order, it will ensure that you have completed all prerequisites for each course. And, since not every course is offered every semester, it will ensure that you do not have to delay graduation because a certain course is not offered when you decide to take it.

\*\* Please note that if you attend part-time and/or require remediation courses in Math and/or English, it will take longer to complete your program.

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
CAPP	120	Introduction to Computers	3†	
AHMS	105	Healthcare Delivery	2†	
AHMS	144	Medical Terminology	3†	
ВІОН	112	Human Form and Function I	4†	
WRIT	122**	Introduction to Business Writing	3+	
		Subtotal	15	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE CI	REDITS	GRADE
AH	180	Basic Pharmaceuticals	1†	
AHMS	108*	Health Data Content and Structure	3†	
AHMS	201*	Medical Science	3†	
BIOH	113*	Human Form and Function II	3†	
AHMS	158*	Legal and Regulatory Aspects of Healthca	re <u>3†</u>	
		Subtotal	13	

#### SUMMER SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
COMM	135	Interpersonal Communication <b>OR</b>		
PSYX	100	Introduction to Psychology OR		
SOCI	101	Introduction to Sociology	3+	
M	090**	Introductory Algebra OR		
M	108**	Business Math OR higher	<u>4+</u>	
		Subtotal	7	

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	162*	Beginning Diagnosis Coding	3+	
AHMS	227*	Health Information Management	3†	
AHMS	280*	Overview of Health Informatics System	ıs 4†	
AHMS	156*	Medical Billing Fundamentals	4+	
AHMS	208*	Healthcare Statistics	<u>2</u> †	
		Subtotal	16	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	160*	Beginning Procedural Coding	3†	
AHMS	245*	Simulated Lab – Medical Support	2+	
AHMS	214*	ICD-9 Coding	3†	
AHMS	240*	Clinical Quality Assessment	3†	
AHMS	288*	HIT Exam Preparation	3†	
AHMS	298*	HIT – Professional Practice Experience	OR	
AHMS	298A*	HIT – Professional Practicum – Coding	2†	
*Plus a 1 cre	dit Indepen	dent Study to supplement PPE in the fiel	d of HIT	

# **TOTAL PROGRAM CREDITS - 67~**

Subtotal

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

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# HEALTHCARE INFORMATICS TECH PROFESSIONAL CERTIFICATE

**Advisor: Kathryn Peterson** 

#### Healthcare Informatics Tech Professional Certificate - Online

The Healthcare Informatics Tech Professional Certificate program has been developed in response to an estimated need for 10,000 new Health Information Technology professionals to assist in the transition of the nation's health information management from paper-based systems to electronic medical record applications and other, higher-level, systems of health information exchange. The Professional Certificate program is intended to target technology professionals and recent graduates of technology/CS programs who are transitioning to work in the health care system or allied health and healthcare professionals who currently work in the health care delivery system, but who are transitioning to Health Information Technology implementation and support roles. Both information technology and healthcare have relatively high "barriers to entry" and the professional certificate will provide an orientation to multiple aspects of the healthcare industry and healthcare informatics for these trainees.

# **OUTCOMES - GRADUATES ARE PREPARED TO:**

- Document the workflow and information management models of the practice.
- Conduct user requirements analysis to facilitate workflow design.
- Develop revised workflow and information management models for the practice, based on meaningful use of a certified EHR product.
- As the practice implements the EHR, work directly with practice personnel to implement the revised workflow and information management model.
- Working with practice staff, develop a set of plans to keep the practice running if the EHR system fails.
- Working with practice staff, evaluate the new processes as implemented, identify problems and changes that are needed, and implement these changes.
- Design processes and information flows for the practice that accommodate quality improvement and reporting.
- Ensure that the patient/consumer perspective is incorporated into EHR deployments and that full attention is paid in the deployment to critical issues of patient privacy.
- Train practitioners in best use of the EHR system, conforming to the redesigned practice workflow.

# **PREREQUISITES**:

- All applicants must have already applied to and been accepted as students at MSU-Great Falls. AND
- Comply with the elements under <u>either</u> the IT Track 1 or the Healthcare Track 2:

# IT Track 1

 Recent (completed within the past 3 years) one of the following degree programs: Associate degree in Computer Science, Network Technology, Information Technology, Business Information Technology or related field. Provide Official College transcript;

#### OR

 Older (completed within the past 4 or more years) one of the following degree programs: Associate degree in Computer Science, Network Technology, Information Technology, Business Information Technology with recent (past 3 years) related field and relevant work experience. Provide Official College transcript and proof of relevant work experience in the form of resume and a reference questionnaire from at least two workrelated individuals, one being a direct supervisor;

#### OR

 Currently enrolled in a two- or four-year Computer Science, Network Technology, Information Technology, Business Information Technology or related field with consent of Program Director;

#### OR

- Related field work experience with consent of program director. Provide proof of relevant work experience in the form of resume and a reference questionnaire from at least two work-related individuals, one being a direct supervisor;
- Applicants to the Professional Certificate program will be required to
  provide official transcripts as part of the application process.
  Unofficial transcripts may serve as the basis for provisional admission to
  the program, but official transcripts must be provided prior to the end of
  the first semester of study

# **Healthcare Track 2**

 Recent (completed within the past 3 years) one of the following degree programs: Associate degree in Medical Office Management, Health Information Management, Medical Assistant, Medical Technician, allied health or related field. Provide Official College transcript;

# OR

Older (completed within the past 4 or more years) one of the following degree programs: Associate degree in Medical Office Management, Health Information Management, Medical Assistant, Medical Technician, allied health with recent (past 3 years) related field and relevant work experience. Provide Official College transcript and proof of relevant work experience in the form of resume and a reference questionnaire from at least two work-related individuals, one being a direct supervisor;

#### OF

 Currently enrolled in a two- or four-year Medical Office Management, Health Information Management, Medical Assistant, Medical Technician, allied health or related field and consent of Program Director;

#### OR

- Related field work experience with consent of program director. Provide proof of relevant work experience in the form of resume and a reference questionnaire from at least two work-related individuals, one being a direct supervisor;
- Applicants to the Professional Certificate program will be required to
  provide official transcripts as part of the application process.
   Unofficial transcripts may serve as the basis for provisional admission to
  the program, but official transcripts must be provided prior to the end of
  the first semester of study

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$1512
Application Fee	30
Books/Supplies	425
TOTAL	\$1967

# MUS Student Health Insurance Premium approx \$1600/year if needed

# Track 1: For Information Technology Professionals – Total Credits = 17

COURSE	NO.	TITLE	CREDITS	GRADE
AMHS	105*	Healthcare Delivery	2+	
AHMS	144*	Basic Medical Terminology	3+	
AHMS	220*	Medical Office Procedures	3+	
HCI	1016*	Introduction to Healthcare Informatic	s 3+	
HCI	2156*	Health Care Facility Procedures	3+	
AH	265*	Elect Health Record in Med Practice	3+	

Track 2: For Allied Health Care & Health Care Professionals – Total Credits = 16

# SPRING SEMESTER

COURSE	NO.	TITLE CH	REDITS	GRADE
HCI	1016*	Introduction to Healthcare Informatics	3+	
AHMS	108*	Healthcare Data Content and Structure	3+	
AHMS	280*	Overview Health Informatics Systems	4+	
AH	265*	Elect Health Record in Med Practice	3+	
AH	260*	Workflow Analysis & Redesign	3+	

# **INTERIOR DESIGN**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisor: Julie Myers (Great Falls) & Patricia Nelson (Bozeman)

This program is offered both at MSU-Great Falls and the MSU-College of Technology in Bozeman.

This program is only offered in Great Falls effective fall 2010. Please contact MSU-Bozeman for more information regarding Gallatin College Programs.

The Interior Design program has been developed to prepare students with a wide variety of skills and competencies for entry into various areas of the design field, ranging from residential to commercial design. MSU–Great Falls is a National Kitchen and Bath Association (NKBA) Accredited School. Students in the Great Falls program may choose to complete 70 additional internship hours to earn a certification in the National Kitchen and Bath Association.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Understand the theory and history of design and apply design principles and elements to their projects.
- Communicate in the language of interior design using listening, verbal, and written skills to interact with clients.
- Communicate graphically according to current architectural and NKBA standards using both hand-drafting and AutoCAD techniques.
- Demonstrate research abilities and critical thinking in space planning, selection of finish materials, and application of codes for residential and commercial projects.
- Increase their body of knowledge in a wide variety of areas including construction and finish materials, color and lighting technologies, NKBA guidelines, residential and commercial codes, sustainability, and professional practice.
- Employ creative skills to create presentations of their projects using hand- and AutoCAD drafting and rendering and professional sample boards and finish schedules.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6056
Application Fee	30
Lab Fee	130
Books/Supplies	2500
TOTAL	\$8716

MUS Student Health Insurance Premium approx \$1600/year if needed

Students are strongly advised to enter the program with good keyboarding skills.

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	<u>GRADE</u>
DE	161	Introduction to Design	3†	
DE	162	Interior Design Graphics	3†	
DE	164	Historic Interiors	3†	
DE	166	Textiles & Interior Finishes	3†	
CAPP	120	Intro to Computers	<u>3+</u>	
		Subtotal	15	

#### SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
DE	163*	Presentation Drawing	3†	
DE	165*	Contemporary Interiors	3†	
DE	168*	Space Planning	3†	
DE	264*	Light, Color, Lighting Systems	3†	
DE	273*	CAD for Interior Design	<u>4†</u>	
		Subtotal	16	

#### SUMMER SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
COMM	135	Interpersonal Communication	3†	
DE	261*	Field Study	3-5†	
		Subtotal	6-8	

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
DE	262*	Studio I	4+	
DE	270*	Kitchen and Bath I	3+	
WRIT	101**	College Writing I	3+	
CET	173	Architectural Construction & Material	s 3+	
		Electives	<u>3+</u>	
		Subtotal	16	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
DE	263*	Studio II	4†	
DE	265*	Professional Practices	3†	
DE	271*	Kitchen & Bath II	3†	
M	108**	<b>Business Mathematics</b>	4†	
		Electives	<u>2+</u>	
		Subtotal	16	

# SUGGESTED ELECTIVES (6 CREDITS REQUIRED)

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	101	Accounting Procedures I	3	
ART	101	Intro to Visual Arts	3	
ART	140	Drawing I	3	
BUS	106	Introduction to Business	3	
BUS	220*	Sales	3	
WRIT	122**	Intro to Business Writing	3	
CIT	280*	Desktop Publishing	3	
DRFT	256*	3-D CAD	3	
PSYX	100	Introduction to Psychology	3	
SOCI	101	Introduction to Sociology	3	

# TOTAL PROGRAM CREDITS - 69-71~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **MEDICAL ASSISTANT**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Interim Advisor: Deborah Newton** 

Medical Assistants are specially trained to work in ambulatory medical settings such as physicians' offices, clinics, and surgical centers. These multi-skilled allied health personnel can function in both administrative and clinical areas. (The Program Director is currently working on program accreditation through the American Association of Medical Assistants (AAMA). Upon graduation from an accredited program, students are eligible to sit for the certifying examination through the AAMA.)

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Perform many "front office" tasks including insurance billing, bookkeeping, and scheduling appointments and procedures.
- Collect and prepare laboratory specimens and perform basic laboratory tests
- Perform diagnostic tests, such as suture removal, electrocardiography, and "back office" duties.
- Assist in patient care: screen patients, take vital signs, assist with office procedures, and patient exams.
- Administer medications applying pharmacology principles; maintain medical and immunization records under medical provider's supervision.
- Respond to and initiate written communications in a professional manner to patients and medical facilities.
- Follow legal guidelines in maintaining documentation and patient records and understand and apply HIPPA guidelines in the office setting.
- Utilize computer software competently for various medical office functions

# **Estimated Resident Program Cost:**

Tuition and Fees	\$6834
Application Fee	30
Lab Fee	130
Books/Supplies	2400
TOTAL	\$9394

MUS Student Health Insurance Premium approx \$1600/year if needed

# PREREQUISITE SKILLS:

Students wishing to enter the Medical Assistant program are strongly advised to be proficient in keyboarding and typing.

Completion of the Health Science Orientation is required.

A grade of "C-" or above must be achieved in all courses to advance and graduate from the program.

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
ACTG	101	Accounting Procedures I	3†	
AHMS	144	Medical Terminology	3†	
COMM	135	Interpersonal Communication	3†	
CAPP	120	Introduction to Computers	3†	
WRIT	122**	Intro to Business Writing	3†	
		Subtotal	15	

#### SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
BIO	127**	Anatomy & Physiology I nonclinical	4†	
AHMS	158*	Legal and Regulatory Aspects of Heal	thcare 3†	
M	116**	Math for Health Careers	3†	
AHMS	220	Medical Office Procedures	3†	
AH	140*	Pharmacology	<u>2</u> †	
		Subtotal	15	

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
BIO	128*	Anatomy & Physiology II nonclinical	3†	
AHMA	201*	Med Asst Clinical Procedures 1	4†	
CAPP	154*	MS Word	3†	
AHMS	156*	Medical Billing Fundamentals	4†	
		Subtotal	14	

# **SPRING SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
AHMS	255*	Medical Transcription I	3†	
AHMA	203*	Med Asst Clinical Procedures 2	4†	
PSYX	100	Introduction to Psychology	3†	
AHMS	201*	Medical Science	<u>3</u> †	
		Subtotal	13	

# SUMMER SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
AHMA	280*	Medical Assisting Exam Prep	1†	
AHMA	298*	Medical Assisting Externship	4†	
AH	120	IV Therapy	<u>1†</u>	
		Subtotal	6	

# TOTAL PROGRAM CREDITS - 63~

 $^{\sim}$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# MEDICAL BILLING SPECIALIST

#### CERTIFICATE OF APPLIED SCIENCE DEGREE

**Advisor: Deborah Newton** 

This program is offered completely on-line.

The Medical Billing Specialist works in a variety of settings including medical management organizations, physician offices, hospitals, clinics, group practices, billing companies, and education. Students in this Certificate program are trained as entry-level billing specialists.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Abstract information from patient records for reimbursement purposes;
- Use current ICD and CPT coding appropriately;
- Complete "clean" claims, CMS/UB-92, for private insurances and government programs such as TRICARE, Medicare, Medicaid, and Worker's Compensation;
- Analyze explanations of benefits (EOBs) and Remittance Advice (RA) forms and post to patient accounts;
- Amend incorrect claims, appeal claims that did not pay correctly, and trace outstanding claims;
- Understand and work within HIPPA guidelines for medical facilities; and
- Interact and communicate with other healthcare workers in a professional manner, following medicolegal and ethical standards.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$4537
Application Fee	30
Lab/Program Fees	75
Books/Supplies	1725
TOTAL	\$6367

MUS Student Health Insurance Premium approx \$1600/year if needed

Students wishing to enter the Medical Billing Specialist program are strongly advised to be proficient in keyboarding and typing.

A grade of "C-" or above must be achieved in all courses to advance and graduate from the program.

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	144	Medical Terminology	3†	
BIO	127	Anatomy and Physiology I for		
		non-clinical major	4†	
CAPP	120	Introduction to Computers	3†	
AHMS	108*	Health Data Content and Structure	3†	
AHMS	156*	Medical Billing Fundamentals	4†	
		Subtotal	17	

#### SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	201*	Medical Science	3†	
AHMS	158*	Legal & Regulatory Aspects		
		of Healthcare	3†	
AHMS	160*	Beginning Procedural Coding	3†	
AHMS	162*	Beginning Diagnosis Coding	3†	
M	**	090 or Higher	4†	
AHMS	252*	Computerized Medical Billing	<u>3†</u>	
		Subtotal	19	

# SUMMER SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
WRIT	122**	Introduction to Business Writing	3†	
AHMS	298B*	Internship in Medical Billing/Coding	1-3†	
PSYX	100	Introduction to Psychology OR		
SOCI	101	Introduction to Sociology	<u>3</u> †	
		Subtotal	7-9	

# TOTAL PROGRAM CREDITS - 43-45~

 $^\sim$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# MEDICAL BILLING AND CODING SPECIALIST

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Deborah Newton** 

This program is offered completely on-line.

Health information coding is the transformation of verbal descriptions of diseases, injuries, and procedures into alphanumeric designations used for data retrieval, analysis and claims processing. The billing/coding specialist works in a variety of settings including medical management organizations, physician offices, hospitals, clinics, group practices, billing companies, and education. Students in this program are trained as entry-level billing/coding specialists.

Upon completion of the Billing/Coding program, students will be prepared to begin successful careers as reimbursement specialists in a variety of healthcare settings. In addition, students are prepared to sit for the National Certified Coding Associate Exam.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Abstract information from patient records for reimbursement purposes.
- Research and rely on knowledge of correct medical terminology, anatomy and physiology, and disease processes to assign appropriate codes according to national and international guidelines.
- Complete clean claims for private and government insurances.
- Analyze Explanations of Benefits and Remittance Advice forms and take appropriate action.
- Use computer applications and software specific to the billing/coding environment.
- Maintain confidentiality of health information and adhere to regulations pertaining to privacy laws and guidelines.
- Professionally interact in the healthcare environment with healthcare providers, patients/clients and the public.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6834
Application Fee	30
Lab/Program Fees	75
Books/Supplies	2100
TOTAL	\$9039

# MUS Student Health Insurance Premium approx \$1600/year if needed

Students wishing to enter the Medical Billing/Coding Specialist program are strongly advised to be proficient in keyboarding.

A grade of "C-" or above must be achieved in all courses to advance and graduate from the program.

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	105	Healthcare Delivery	2+	
AHMS	144	Medical Terminology	3+	
BIO	127	Anatomy and Physiology I for		
		non-clinical majors	4+	
CAPP	120	Introduction to Computers	3†	
M	**	090 or Higher	<u>4†</u>	
		Subtotal	16	

#### **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AH	180	Basic Pharmaceuticals	1+	
AHMS	201*	Medical Science	3+	
BIO	128*	Anatomy and Physiology II for		
		non-clinical majors	3+	
AHMS	160*	Beginning Procedural Coding	3+	
AHMS	162*	Beginning Diagnosis Coding	<u>3+</u>	
		Subtotal	13	

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	108	Health Data Content and Structure	3	
AHMS	214*	ICD-9 Coding	3	
AHMS	212*	CPT Coding	3	
AHMS	280*	Overview of Health Informatics	4†	
AHMS	156*	Medical Billing Fundamentals	4†	
		Subtotal	17	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	158*	Legal & Regulatory Aspects	3†	
AHMS	252*	Computerized Medical Billing	3†	
AHMS	245*	Simulated Laboratory	2†	
WRIT	122**	Intro to Business Writing	3†	
PSYX	100	Introduction to Psychology OR		
SOCI	101	Introduction to Sociology	<u>3†</u>	
		Subtotal	14	

# **SUMMER SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
AHMS	298B*	Internship in Billing/Coding	<u>1-3†</u>	
		Subtotal	1-3	

# TOTAL PROGRAM CREDITS -61-63~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **MEDICAL TRANSCRIPTION**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Jacki King** 

This program is offered completely on-line.

Medical Transcriptionists are part of the healthcare team, working primarily with medical documents and reports. Upon completion of the program, students have the skills and knowledge necessary to perform as entry-level transcriptionists.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Use current word processing software efficiently and effectively, including developing and utilizing macros and shortcuts.
- Use medical language appropriately and understand anatomy, physiology, pharmacology, pathophysiology, laboratory tests, and diagnostic tests.
- Spell, proofread, and use correct grammar, punctuation, and syntax in medical reports.
- Understand HIPPA and follow guidelines to protect patient confidentiality and patient records.
- Transcribe reports for a variety of specialty areas, thereby increasing understanding of medical language and procedures for those specialty areas.
- Practice transcribing reports from doctors who are not native English speakers.
- Use medical references appropriately and efficiently, particularly the Book of Style.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	30
Books/Supplies	2075
TOTAL	\$8155

# MUS Student Health Insurance Premium approx \$1600/year if needed

A grade of "C-" or above must be achieved in all courses to advance and graduate from the program.

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	144	Medical Terminology	3†	
CAPP	120	Introduction to Computers	3†	
WRIT	101**	College Writing I	3†	
M	090**	Introduction to Algebra OR		
M	108**	<b>Business Mathematics</b>	4†	
TASK	090	Introductory Keyboarding	<u>3†</u>	
		Subtotal	16	

#### SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
BIO	127	Anatomy & Physiology I		
		for non-clinical majors	4†	
AHMS	108*	Health Data Content and Structure	3†	
AHMS	255*	Medical Transcription I	3†	
PSYX	100	Introduction to Psychology OR		
SOCI	101	Intro to Sociology	3†	
AHMS	158*	Legal and Regulatory Aspects of Hea	Ithcare 3+	
		Subtotal	13	

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
BIO	128*	Anatomy & Physiology II		
		for non-clinical majors	3†	
AHMS	156*	Medical Billing Fundamentals	4†	
AHMS	256*	Medical Transcription II	3†	
CAPP	154*	MS Word	<u>3†</u>	
		Subtotal	16	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	118	Health Care Personnel and Supervision	n 2†	
AH	180	Basic Pharmaceuticals	1†	
AHMS	201*	Medical Science	3†	
WRIT	122**	Intro to Business Writing	3+	
AHMS	257*	Medical Transcription III	3†	
		Subtotal	12	

# **SUMMER SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
AHMS	258*	Medical Transcription Practicum	3†	

#### TOTAL PROGRAM CREDITS - 60~

 $^\sim$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules. Medical Transcription

# **MEDICAL TRANSCRIPTION**

#### CERTIFICATE OF APPLIED SCIENCE DEGREE

**Advisor: Jacki King** 

#### This program is offered completely on-line.

Medical Transcriptionists are part of a health care team, working primarily with medical documents and reports. The College currently offers a Certificate of Applied Science program and an AAS degree. Both programs provide students with skills and knowledge necessary to perform as entry-level transcriptionists.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Use medical language appropriately and understand anatomy, physiology, pharmacology, pathophysiology, laboratory tests, and diagnostics tests
- Spell, proofread, and use correct grammar, punctuation, and syntax in medical reports.
- Understand HIPPA and follow guidelines to protect patient confidentiality and patient records.
- Transcribe, format, and edit the most common medical reports: progress notes, history and physical reports, consultations, discharge summaries, and operative reports.
- Use medical references appropriately and efficiently, particularly the Book of Style

#### **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$3026
Application Fee	30
Books/Supplies	1500
TOTAL	\$4556

# MUS Student Health Insurance Premium approx \$1600/year if needed

A grade of "C-" or above must be achieved in all courses to advance and graduate from the program.

#### **FALL SEMESTER**

Course	No.	Title	Credits	Grade
AHMS	144	Medical Terminology	3†	
BIO	127	Anatomy and Physiology I		
		for non-clinical majors	4†	
CAPP	120	Introduction to Computers	3†	
M	090**	Introductory Algebra OR		
M	108**	<b>Business Mathematics</b>	4†	
TASK	090	Introductory Keyboarding	<u>3†</u>	
		Subtotal	17	

#### SPRING SEMESTER

Course	No.	Title	Credits	Grade
WRIT	101**	College Writing I	3†	
AHMS	158*	Legal & Regulatory Aspects of Healthca	re 3†	
AHMS	255*	Med Transcription I	3†	
CAPP	154*	Microsoft Word	3†	
PSYX	100	Introduction to Psychology OR		
SOCI	101	Intro to Sociology	3†	
		Subtotal	15	

# **FALL SEMESTER**

Course	No.	Title	Credits	Grade
AHMS	256*	Med Transcription II	3†	
AHMS	201	Medical Science	<u>3+</u>	
		Subtotal	6	

#### **TOTAL CREDITS - 38~**

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# Transition to the Associate of Applied Science (AAS) Degree:

The Medical Transcription Certificate program is designed to train entry-level Medical Transcriptionists. The curriculum can be completed online so that students across the state can take advantage of this opportunity. However, the Medical Transcription profession is complex, and students should recognize the need for continuing education, even as they begin their careers. The Associate of Applied Science degree in Medical Transcription provides that opportunity.

All courses from the certificate program transfer into the AAS program. Students who continue into the AAS degree program in Medical Transcription must take an additional semester of Anatomy and Physiology to increase their understanding of human body structures and functions. In addition, students in the AAS program have the opportunity to increase computer skills, understand the entire medical record, and expand English skills - all essential to their continued success as Medical Transcriptionists. Students should discuss their long-term goals with the Program Director to determine the best course of study. The AAS degree can also be completed online

# **PHARMACY TECHNICIAN**

# PROFESSIONAL CERTIFICATE - Online (except for on-site clinical)

Advisor: Susan Gassaway

NOTE: This program is under review. Please contact the Program Advisor or the Health Sciences Division (771-4350) for more information.

As a pharmacy technician, you help licensed pharmacists provide medication and other health care products to patients. Technicians usually perform routine tasks to help prepare medication, such as counting tablets and labeling bottles. They also perform administrative duties, such as answering phones, stocking shelves, and operating cash registers. Any questions regarding prescriptions, drug information, or health matters are referred to the pharmacist. When you complete this program you will have the skills and knowledge required for an entry-level pharmacy technician position and will be prepared to take the national certification exam. Courses are online with an on-site clinical component and can be completed in as little as one, 16-week semester.

# **JOB OPPORTUNITIES:**

About 72 percent of pharmacy technicians work in retail pharmacies that are independently owned or part of a drugstore chain, grocery store, department store, or mass retailer. The other 18 percent are employed in hospitals and a small proportion work in mail-order and Internet pharmacies, offices of physicians, pharmaceutical wholesalers, and the federal government.

The U.S. Bureau of Labor and Statistics predicts the employment of pharmacy technicians to increase by 32 percent from 2006 to 2016, which is much faster than the average for all occupations. The 2008 median hourly wage in Montana was \$13.78/hr with a median annual salary of \$24, 289.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Practice as qualified, licensed pharmacy technicians working with pharmacists to provide medication and other healthcare products to patients.
- Demonstrate positive work ethic, professionalism and appropriate interpersonal skills whether in a hospital, clinical or retail setting.
- Demonstrate knowledge of medical terminology, ethics, pharmacology and healthcare delivery methods pertaining to pharmacy law, practice and calculations.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$1506
Application Fee	30
Books/Supplies	375
Program Fees	6
TOTAL	\$1917

MUS Student Health Insurance Premium approx \$1600/year if needed

The Pharmacy Technician program is a limited enrollment program accepting up to 23 students each year. If you are interested, you must apply for entry to the program. Questions about application criteria should be directed to the Extended Learning Division.

#### SPRING SEMESTER

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
AHMS	105	Healthcare Delivery	2†	
PHL	221	Intro to Philosophy & Biomed Ethics	3+	
AH	140*	Pharmacology	2†	
AHMS	144*	Medical Terminology	3†	
AH	180	Basic Pharmaceuticals	1+	
PHA	194	Intro to Pharmacy Practice, Law, & Ca	lc 4+	
PHA	194	Hospital and Community Pharmacy Pr	ractice 2+	
		Subtotal	17	

#### TOTAL PROGRAM CREDITS - 17~

~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# PHYSICAL THERAPIST ASSISTANT

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Brad Bechard & Charlene Marshall** 

The formal portion of the Physical Therapist Assistant (PTA) program begins fall semester with a limited enrollment of 16 students. There are 32 credits of pre-requisite courses which may take one year or longer to complete. All pre-requisite coursework must be completed with a grade of "C-" or higher. The student must apply for acceptance into the formal portion of the PTA program and be accepted. A grade of "76%" "C-" or "pass" is required for all coursework within the PTA program after formal acceptance.

The formal portion of the PTA program is challenging and consists of fall, spring, and summer semesters; taking one full year. This time includes built-in clinical experiences which may or may not be in the Great Falls area. Upon completion of the PTA program, the graduate is prepared to take the National Physical Therapist Assistant Examination (NPTAE) provided by the Federation of State Boards of Physical Therapy and must receive a passing score in order to become a licensed PTA. Licensure is required to practice as a physical therapist assistant in Montana and is overseen by the State of Montana Board of Physical Therapy Examiners.

The PTA program is designed to graduate individuals who are knowledgeable, competent, self-assured, adaptable, and service-oriented patient/client care providers performing their duties within the ethical and legal guidelines of the physical therapy profession as an entry-level PTA having successfully passed the NPTAE. Graduates are prepared to work in a variety of healthcare settings including acute care, outpatient, rehabilitation, and extended care.

The Montana State University—Great Falls College of Technology's Physical Therapist Assistant program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Demonstrate a combination of critical thinking skills, intervention, documentation, patient safety awareness, confidentiality, and ethical guidelines under the direction and supervision of a licensed physical therapist as outlined in the Guide to Physical Therapy Practice.
- Effectively demonstrate in the areas of education, communication, and provision of skilled interventions towards various special populations in regards to their cultural and individual needs.
- Address an area of need within the PTA scope of practice utilizing audio/visual aids and demonstration to accommodate different learning styles of the patient or community.
- Apply mathematical/statistical knowledge to help augment learning experiences through current healthcare literature and research. and
- Display a commitment to lifelong learning, ongoing professional development, and high quality care in the realm of physical therapy practice.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees .......\$7562

Application Fee	30
Lab/Program Fees	484
Insurance	24
Books/Supplies	2600
TOTAL	\$10700

# MUS Student Health Insurance Premium approx \$1600/year if needed

Background in basic sciences and proficiency in computer skills are essential to success in the Physical Therapy Assistant Program. Prior to fall admission into the PTA program students must:

- Students applying to get into this program must apply and be accepted by the College for general admission.
- Have completed high school physics AND chemistry (students without high school coursework in these areas should consult the PTA Program Director as to the appropriate college courses needed to meet this requirement)
- Have completed a minimum of 40 hours of observation at physical therapy clinics/facilities with a licensed physical therapist or physical therapist assistant in at least 2 different settings (including acute and/or rehab care observation time); observation forms are available at http://www.msugf.edu
- Show proof of computer literacy (students without high school coursework in this areas should consult the PTA Program Director as to the appropriate college courses needed to meet this requirement)
- Earn a Grade Point Average of 2.5 or higher on pre-requisite courses
- Earn a grade of "C-" or higher in all pre-requisite courses
- Provide three completed "Recommendation Forms" or reflection paper with PTA Application
- Provide completed "Application Packet Cover & Check-off Sheet" with PTA Application
- Provide completed "Application Self-Evaluation Form" with PTA Application
- Potential applicants should ensure immunizations and CPR training requirements are met. Submission of proof of immunizations, 2 PPDs, Hepatitis B vaccinations, and CPR certification is required after formal acceptance to the PTA Program.

# PREREQUISITE COURSES

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	144	Medical Terminology	3+	
SOCI	101	Introduction to Sociology	3†	
BIO	213**	Anatomy & Phys I Lecture/Lab	4†	
BIO	214*	Anatomy & Phys II Lecture/Lab	4†	
COMM	135	Interpersonal Communication	3†	
M	116**	Mathematics for Health Careers	3†	
WRIT	101**	College Writing I	3†	
PSYX	100	Introduction to Psychology	3†	
PSYX	230	Developmental Psychology	3†	
PTA	105	Intro to Physical Therapy	<u>3+</u>	
		Subtotal	32	

# **Program Course Requirements After Formal Acceptance**

# **FALL SEMESTER**

COURSE	NO.	TITLE C	REDITS	GRADE				
PTA	101*	Physical Therapist Assisting I/Lab	5†		PTA	205*	Anatomy & Kinesiology for the PTA/Lab	6†
PTA	205*	Anatomy & Kinesiology for the PTA/Lab	6+					
PTA	206*	Pathophysiology for the PTA	3+					
PTA	218*	Therapeutic Exercise for the PTA	2+					
PTA	210*	Clinical Experience I (4-week) ~ 160 hou	ırs <u>3†</u>					
		Subtotal	19					

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE	
PTA	201*	Physical Therapist Assisting II/Lab	5+		
PTA	213*	Neurorehabilitation for the PTA/Lab	6†		
PTA	215*	Introduction to Orthopedics/Lab	4†		
PTA	220*	Clinical Experience II (4-week) ~ 160 ho	urs <u>3</u> †		
		Subtotal	18		

# SUMMER SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
PTA	225*	Seminar & Project in PTA	3†	
PTA	230*	Clinical Experience III (8-week) ~ 320 h	ours <u>5†</u>	
		Subtotal	8	

# TOTAL PROGRAM CREDITS - 77 ~

 $<sup>^{\</sup>sim}$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **PRACTICAL NURSE**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

# Advisors: Cheryll Alt, Patti Kercher & Cindy Schultz

The Practical Nurse program prepares individuals to function as entry-level practical nurses with the ability to give safe, effective nursing care. The Practical Nurse program at Montana State University - Great Falls College of Technology is currently approved by the Montana State Board of Nursing.

Upon completion of the Associate of Applied Science Degree in Practical Nursing, students will be prepared to begin a successful career as a practical nurse. Students are prepared to sit for the national licensure examination for practical nursing.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Administer effective and ethical individual patient care.
- Communicate professionally with all medical and supportive staff.
- Integrate bio-psychosocial and scientific principles while providing technically competent care in a variety of healthcare settings.
- Work in a variety of health care settings such as hospitals, ambulatory care, physician's offices, home healthcare, dialysis, assisted living facilities, and other geriatric environments.
- Promote lifelong learning fostering the development of professional growth, critical thinking, and leadership.
- Demonstrate knowledge of the major health problems affecting our society.

The Practical Nurse program is a limited enrollment program. Interested students must apply for entry into the program. An application packet is available on the program website and from the Health Science Program Assistant. The length of the program is three consecutive semesters. Accepted students will be required to provide proof of Health Care Provider CPR certification, negative Tuberculosis test, and complete the Student Immunization and Verification form before the beginning of the fall semester. Computer skills are highly recommended.

The Hepatitis B immunization series is strongly recommended before entrance into the program. A student may be denied access to clinical rotations without an adequate Hepatitis B titer. Students having religious or personal conflicts against receiving Hepatitis B vaccine must sign a release form.

# ESTIMATED RESIDENT PROGRAM COST:

Tuition and Fees	\$7562
Application Fee	30
Insurance	30
Lab/Program Fees	391
Books/Supplies	2025
Uniforms	225
TOTAL	\$10263

# MUS Student Health Insurance Premium approx \$1600/year if needed

# PREREQUISITE COURSEWORK

The following courses must be completed prior to admission into the Practical Nurse Program. All prerequisite course work must be completed with a minimum grade of "C" in each course and a minimum cumulative GPA in prerequisite course work of 2.0. Grades in prerequisite courses are a major factor in ranking applications for program acceptance.

#### FIRST SEMESTER

COURSE	NO.	TITLE CREDIT	S GRADE	
BIO	213**	Anatomy & Physiology I/Lab	4†	
CHMY	121*	Introduction to General Chemistry/ Lab	3/1†	
M	121**	College Algebra	3†	
NRSG	100	Introduction to Nursing	<u>1</u> †	
		Subtotal	12	

#### SECOND SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE	
AH	219*	Nutrition & Diet Therapy		2†	
BIO	214*	Anatomy & Physiology II/Lab		4†	
WRIT	101**	College Writing I		3†	
PSYX	100	Intro to Psychology		<u>3</u> †	
		Subtotal		12	

Science courses must be completed within five (5) years of application to the program and other courses must be completed within 15 years of applying to the Practical Nurse Program.

# PROGRAM COURSE REQUIREMENTS AFTER FORMAL ACCEPTANCE

Once enrolled in nursing courses, a minimum of a grade of "C" in all courses is required to continue in the program. In the clinical setting, students must achieve a grade of 75% in all rotations of each clinical experience.

The courses listed below are required in the program of study for the Associate of Applied Science degree in Practical Nursing. The courses are offered at MSU–Great Falls College of Technology in the following sequence:

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE	
NRSG	130*	<b>Fundamentals of Nursing</b>		7†	
NRSG	135*	Nursing Pharmacology		3†	
NRSG	138*	Gerontology for Nursing		<u>2</u> †	
		Subtotal		12	

# SPRING SEMESTER

COUR	SE NO.	TITLE	CREDITS GRADE	
NRSG	140*	Adult Nursing	7†	
NRSG	142*	Maternal Child Nursing	3†	
NRSG	144*	Mental Health Nursing	<u>2†</u>	
		Subtotal	12	

# **SUMMER TERM**

COURSE	NO.	TITLE	CREDITS	GRADE	
NRSG	148*	Leadership Issues		<u>2†</u>	
		Subtotal		2	

# SUGGESTED ELECTIVES

COURSE	NO.	TITLE	CREDITS	GRADE	
AH	120*	IV Therapy		1	

<sup>\*</sup> This class is a highly recommended addition to the standard nursing curriculum. It will provide you with IV certification which many employers value or require for employment.

# TOTAL PROGRAM CREDITS - 50~

 $^\sim$  Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **PUBLIC SAFETY COMMUNICATIONS**

#### **PROFESSIONAL CERTIFICATE**

Advisor: Joel Henderson

NOTE: This program is in moratorium and will not be accepting new students in 2011-2012. Please contact the Health Sciences department at 406-771-4350 for more information.

# PUBLIC SAFETY COMMUNICATIONS PROFESSIONAL CERTIFICATE (GENERAL) – ONLINE (except for on-site clinical requirement)

The Public Safety Communications (PSC) professional certification imparts a technical edge to those applying for employment as a PSC professional (such as a 9-1-1 dispatcher). The professional certificate may be used as proof of required training before taking the Montana Law Enforcement Academy equivalency test (required for PSC professionals after and within one year of hire). Individual PSC courses may be taken by anyone who is interested in brushing up on skills needed in their profession or by students needing coursework for the EMT-Paramedic Associate of Applied Science degree. Individuals who specifically need coursework in order to take the MLEA equivalency test should enroll in the PSC professional certificate program. A criminal fingerprint background check is required for the PSC Clinical Course and is also a requirement for employment as a PSC professional. Felony convictions (and some misdemeanor convictions) will exclude a person from employment as a PSC professional. This professional certification does not guarantee employment as a PSC professional. Students wishing to be employed as a PSC Professional must meet minimum requirements for hiring as set by the Peace Officers Standards and Training council.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Have a knowledge and understanding of PSC terminology and report writing
- Have a knowledge and understanding of stress and crisis intervention strategies
- Have a knowledge and understanding of PSC communication skills, interpersonal communication skills
- Have a knowledge a and understanding of legal responsibilities, ethics and criminal and civil law practices
- Have a general knowledge and understanding of computers, computer applications

# ADVANCED PUBLIC SAFETY COMMUNICATIONS PROFESSIONAL CERTIFICATION WITH EMT-BASIC

The Public Safety Communications Professional Certificate may be completed with the EMT- Basic class. This advanced professional certificate will benefit students who are interested in the Emergency Medical Services (EMS) field but who do not want to go into the EMS program. This certificate provides valuable field experience for those interested in the Public Safety Communications profession. The Public Safety Communications Professional Certificate with EMT-Basic allows students to sit for the Montana and National Registry certification exams as well as the MLEA challenge test for dispatchers. Requirements for completing the Public Safety Communications Professional Certificate with EMT-Basic include completion of the requirements for the general Public Safety Communications Professional Certificate along with the completion of a 6-credit Emergency Medical Technician course (EMS 137). EMS 137 is the nationally recommended minimum level of training for ambulance personnel and is considered the desired level of medical training by many fire departments. The equivalency test can only be taken after being hired as a PSC professional and must be taken at the Montana Law Enforcement Academy in Helena, MT.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- All of the above General Outcomes plus;
- Have a greater knowledge and understanding of Emergency Medical Training received through completing the EMT-Basic course

#### **PREREQUISITES:**

Enrollment in either program is required to obtain the Public Safety Communications Professional Certificate. Most course work may be taken by anyone who is not specifically enrolled in the program, but the following prerequisites are required:

- · Current CPR/First Aid certification
- Advising session Advising by the MSU—Great Falls College of Technology Outreach Department for a program overview
- Online learning orientation on the MSU–Great Falls College of Technology campus

#### **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$1512
Application Fee	30
Books/Supplies	425
TOTAL	\$1967

MUS Student Health Insurance Premium approx \$1600/year if needed

# PUBLIC SAFETY COMMUNICATIONS PROFESSIONAL CERTIFICATE (GENERAL)

COURSE	NO.	TITLE	CREDITS	GRADE
PSC	194	PSC Terminology and Report Writing	g 1†	
PSC	194	Stress and Crisis Intervention for PS	C 1†	
PSC	194	PSC Skill	2†	
PSC	194	Clinical for PSC	1†	
PSC	194	Legal Responsibility, Ethics, Crimina	l 1†	
		and Civil Law for PSC	3†	
COMM	135	Interpersonal Communication	3†	
CAPP	120	Introduction to Computers	<u>3</u> †	
		Subtotal	14	

# ADVANCED PUBLIC SAFETY COMMUNICATIONS PROFESSIONAL CERTIFICATE WITH EMT-BASIC

COURSE	NO.	TITLE	CREDITS	GRADE
PSC	194	PSC Terminology and Report Writing	g 1†	
PSC	194	Stress and Crisis Intervention for PS	C 1 <sup>†</sup>	
PSC	194	PSC Skill	2†	
PSC	194	Clinical for PSC	1†	
PSC	194	Legal Responsibility, Ethics, Crimina	l 1 <sup>†</sup>	
		and Civil Law for PSC	3†	
COMM	135	Interpersonal Communication	3†	
CAPP	120	Introduction to Computers	3†	
EMS	137	EMT Basic	6†	
		Subtotal	20	

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# RADIOLOGIC TECHNOLOGY

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisors: Greg Paulauskis & Tom Liston** 

Radiologic Technologists, also referred to as Radiographers, work in a professional environment at a hospital, private office, or clinic. Radiologic Technologists are trained to perform radiologic examinations in accordance with radiation safety standards for themselves, clinical staff and their patients. Skill sets include: patient care, positioning, operating X-ray equipment, film quality assessment, technical factors, and interacting with the general public, ancillary workers, healthcare workers, and physicians.

The Radiologic Technology student learns how to accurately demonstrate body structures by determining proper exposure factors, manipulating medical imaging equipment, evaluating the radiographic image quality; and providing for patient protection, safety, and comfort during radiographic procedures. Some technologists choose to specialize in computed tomography, magnetic resonance imaging, mammography, ultrasound, nuclear medicine, positron emission tomography or radiation therapy. Some of these modalities require additional certification. The student will be introduced to these specialty areas. Radiologic Technology is an expanding field in the area of medical diagnosis and treatment. Imaging methods and procedures are updated and implemented on a regular basis.

The Radiologic Technology Program is a two-year program designed to prepare individuals with the knowledge, skills, and professional attitude necessary for successful employment as a Radiologic Technologist.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Employ professional judgment, problem solving, and critical thinking to identify, assess, and analyze the situation providing quality patient care in a safe and ethical manner.
- Demonstrate effective interpersonal skills through verbal and written communication.
- Practice within the standards established by the profession.
- Demonstrate appropriate cultural, legal, ethical, and professional values.
- Practice as a qualified registered technologist in any type of patient care facility.

Accreditation for the Radiologic Technology Program is through Northwest Commission on Colleges and Universities coursework. This regional accrediting agency is the organization that accredits MSU–Great Falls College of Technology. After completion of the program the graduate is eligible to take a nationally recognized certification examination administered by the American Registry of Radiologic Technologist (ARRT).

In seeking admission into the program, the student is required to complete the requirements of the <u>Radiologic Technology Program Student Information and Application Packet</u>. The Packet can be printed from the Program website.

Students in the Radiologic Technology Program must earn a "C-" or better in ALL classes in the two-year program. Any grade less than a "C-" in any class will result in the student having to retake that class.

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$9075
Application Fee	30
Insurance	30
Books/Supplies	1925
TOTAL	\$11,060

# MUS Student Health Insurance Premium approx \$1600/year if needed

Computer skills, Anatomy and Physiology I & II, and Chemistry are highly recommended.

#### **DEGREE COMPLETION OPTION**

Students who have successfully completed and documented that they graduated from an accredited Radiologic Technology program and possess a current Radiologic Technologist State license may apply to the College's Radiologic Technology AAS Degree Completion program and earn an Associate of Applied Science degree by taking all of the prerequisite courses listed below. A residency of 13 credit hours must be taken at MSU–Great Falls to qualify for completion. For more information contact Admissions or the Program Director of the Radiologic Technology Program.

**NOTE:** Applicants must complete the following courses with a minimum grade of "C-" in each course prior to formal acceptance into the program.

#### PREREQUISITE COURSES

COURSE	NO.	TITLE	CREDITS	GRADE
AHMS	142	Intro to Medical Terminology	1†	
BIO	202**	Human Anatomy for RAD Tech	3†	
COMM	135	Interpersonal Communication	3†	
WRIT	101**	College Writing I	3†	
M	116**	Math for Health Careers OR		
M	121**	College Algebra OR higher	3-4†	

# PROGRAM COURSE REQUIREMENTS AFTER FORMAL ACCEPTANCE

The courses below are to be taken in the order that they are listed. Admission into the Radiologic Technology program is mandatory to qualify to take the courses below.

A grade of "C-" or above must be achieved in all courses to advance and graduate from the program.

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHXR	105	Intro to Radiologic Technology	2†	
AHXR	130	Radiographic Positioning/Procedures	I 2†	
AHXR	132	Elements of Imaging I	3†	
AHXR	225	Radiobiology/Radiation Protection	3†	
AHXR	195A	Radiographic Clinical I	<u>7†</u>	
		Subtotal	17	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHXR	131*	Radiographic Positioning/Procedures	II 3†	
AHXR	133*	Elements of Imaging II	3†	
AHXR	101*	Patient Care in Radiology	2†	
AHXR	195B*	Radiographic Clinical II	8†	
		Subtotal	16	

# SUMMER SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE
AHXR	298*	Radiographic Internship	8†	
		Subtotal	8	

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHXR	230*	Radiographic Positioning/Procedures	III 4†	
AHXR	233*	Elements of Imaging III	2†	
AHXR	295A*	Radiographic Clinical III	8†	
		Subtotal	14	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHXR	231*	Radiographic Positioning/Procedures	IV 2†	
AHXR	295B*	Radiographic Clinical IV	10†	
AHXR	270	Radiographic Registry Review	2†	
		Subtotal	14	

# TOTAL PROGRAM CREDITS - 82-83~

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# RESPIRATORY CARE

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Advisor: Leonard Bates** 

Most people take breathing for granted. It's second nature, an involuntary reflex. But for the thousands, who suffer from breathing problems, each breath is a major accomplishment. Those people include patients: with chronic lung problems, such as asthma, bronchitis, and emphysema; heart attack and accident victims; premature infants; and people with cystic fibrosis, lung cancer, and AIDS.

In each case the patient will likely receive treatment from a Respiratory Therapist (RT) under the direction of a physician. RTs work to evaluate, treat and care for patients with breathing disorders. They are a vital part of a hospital's lifesaving response team that answers patient emergencies.

While most RTs work in hospitals, an increasing number have branched out into alternative care sites, such as nursing homes, physicians' offices, home health agencies, specialized care hospitals, medical equipment supply companies, and patients' homes.

RTs perform both diagnostic and therapeutic procedures, such as:

- Obtaining and analyzing sputum and breath specimens;
- Take blood specimens and analyze them to determine levels of oxygen, carbon dioxide, and other gases;
- · Interpreting data obtained from specimens;
- Measuring the capacity of patients lungs to determine if there is impaired function:
- Performing studies on the cardiopulmonary system;
- Studying disorders of people with disruptive sleep patterns;
- Operating mechanical ventilators for patients who cannot breath adequately;
- Delivering inhaled medications and medical gases;
- Teaching patients with lung disorders to maintain meaningful and active life systems.

RTs work collaboratively with other health care practitioners. Critical thinking and problem solving skills are mandatory for success in this environment. Strong verbal and written communication skills are necessary when interacting with other members of the multidisciplinary health care team as well as the patients and families. Such a role also requires a broad educational background in English composition, communication, and interpersonal relations. Computer literacy is especially important in today's health care environment.

The RT Program is a two-year program designed to help students develop the knowledge, skills and professional attitude necessary for a successful career in RT. Upon completion of the AAS degree in RT, graduates will be prepared to begin a career as an Advanced Practitioner RT. Graduates are eligible to take the National Board for Respiratory Care (NBRC) Entry Level and the Advanced Practitioner examinations.

# **OUTCOMES: GRADUATES ARE PREPARED TO:**

• Practice as a registered RT in the healthcare delivery system;

- Comply with standards-of-practice, and ethical code of the American Association for Respiratory Care;
- Apply critical thinking and problem solving skills to patient care.
- Demonstrate effective verbal and written communication as well as good interpersonal skills; and
- Safely and correctly utilize current technology and equipment in the practice of Respiratory Care.

The RT program is accredited by the Commission on Accreditation of Respiratory Care Programs.

#### ESTIMATED RESIDENT PROGRAM COST:

Tuition and Fees	\$9075
Application Fee	30
Lab/Program Fees	540
Insurance	36
Books/Supplies	1975
TOTAL	\$11656

MUS Student Health Insurance Premium approx \$1600/year if needed

#### PRE-RESPIRATORY COURSES AND SKILLS

Background in basic science and math is essential to prepare applicants to succeed in the RT program.

Prior to admission to the RT program students must have completed high school chemistry and demonstrate computer literacy. (Students without high school courses should consult the RT Program Director about the appropriate college coursework to meet this requirement.)

Prior to formal program acceptance, the applicant must successfully complete all of the program prerequisites with a minimum grade of "C-".

# PREREQUISITE COURSES

COURSE	NO.	TITLE	CREDITS	GRADE
BIO	213**	Anatomy & Physiology I/Lab	4†	
WRIT	101**	College Writing I	3†	
M	116**	Mathematics for Health Careers OR		
M	121**	College Algebra	3†	
COMM	135	Interpersonal Communication OR		
PSYX	100	Introduction to Psychology OR		
PSYX	230	Developmental Psychology	3†	
		Subtotal	13	

The courses below are to be taken in the order that they are listed. Admission into the RT program and completion of the previous semester are required.

#### **Program Course Requirements After Formal Acceptance**

A grade of "C-" or above must be earned in all required courses to continue in and graduate from the program. CPR is a prerequisite for entrance into clinical courses. Each student is required to sign a clinical contract defining their professional responsibilities and behavior and must complete two to four weeks of clinic outside of Great Falls during the summer semester.

# **FALL SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE			
BIO	214*	Anatomy & Physiology II/Lab	4†				
RC	150	Respiratory Care	3†				
RC	155	Respiratory Physiology	3†				
RC	170	Resp Tech & Procedures I	<u>5†</u>				
		Subtotal	15				
SPRING S	EMESTER	t					
COURSE	NO.	TITLE	CREDITS	GRADE			
RC	140*	Resp Care Clinic I	3†				
RC	171*	Resp Techn & Procedures II	5†				
RC	180*	Ventilator Management	2†				
RC	255*	Pulmonary Assessment	<u>3</u> †				
		Subtotal	13				
SUMMER	R SEMEST	ER					
COURSE	NO.	TITLE	CREDITS	GRADE			
RC	141*	Resp Care Clinic II	4†				
RC	260*	Neonatal Respiratory Care	<u>3†</u>				
		Subtotal	7				
FALL SEN	1ESTER						
COURSE	NO.	TITLE	CREDITS	GRADE			
EMS	145*	ACLS Preparation	1†				
RC	240*	Resp Care Clinic III	4†				
RC	245*	Resp Care Clinical Seminar I	1†				
RC	250*	Hemodynamic Monitoring	4†				
RC	275*	Pulmonary Disease	<u>2†</u>				
		Subtotal	12				
SPRING SEMESTER							
COURSE	NO.	TITLE	CREDITS	GRADE			
AH	140	Intravenous Therapy	1†				

COUNSE	110.	IIIE	CILLDITS	GIVADE
АН	140	Intravenous Therapy	1†	
EMS	146	Pediatric Advanced Life Support	1†	
RC	241*	Resp Care Clinic IV	5†	
RC	246*	Resp Care Clinical Seminar II	1†	
RC	265*	Resp Care in Alternative Sites	1†	
RC	273*	Pulmonary Function Testing	1†	
RC	280*	Supervisory Management	<u>2</u> †	
		Subtotal	12	

# TOTAL PROGRAM CREDITS - 72~

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **SURGICAL TECHNOLOGY**

#### ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisor: Sandra Allen

# NATIONALLY RECOGNIZED AS "PAE ELITE TWENTY PROGRAM"

What is a Surgical Technologist? Surgical Technologists, often referred to as "scrub nurse", "scrub tech" or "operating room tech", are integral members of the operating room team. Their role includes assisting the physician during surgery by preparing and handling instruments, equipment, supplies and medications.

Job Opportunities: Surgical Technologists usually work within the operating room itself which may offer specialization in specific fields such as orthopedics, plastics, ENT, ophthalmic or cardiovascular. However technologists may qualify for work within various medical fields such as: dental assistants, veterinary assistants, procurement technicians and instrument processing technicians without much more education than on the job training. As medical technology advances, so do the opportunities for the working surgical technologist.

**Curriculum:** The curriculum is designed as hybrid courses of lab, classroom, online instruction and surgery clinicals to provide theoretical foundations of operating room techniques. The student will learn skills in a competency-based clinical lab and apply learned skills in the clinical facilities. Within the operating room, the student will observe, and then participate in a supervised position. The student will then be expected to advance to a high level of independence by their internship.

Students who enter the program are required to rotate through clinical sites. Some clinical rotations are outside of the Great Falls area. Transportation and housing costs are the responsibility of the student.

Upon completion of the Surgical Technology Program, students will be prepared to begin a career as a surgical technologist. Students are prepared to sit for the national examination to become a Certified Surgical Technologist (CST).

The Surgical Technology Program will meet or exceed Accreditation Review Committee on Education in Surgical Technology (ARC-ST) benchmark standards on student retention, CST exam results, graduate job placement, employer satisfaction, and graduate satisfaction.

# **OUTCOMES - GRADUATES ARE PREPARED TO:**

- Work with surgeons, anesthesiologists, nurses, and other health professionals in providing direct or indirect patient care while demonstrating positive work ethic, professionalism and appropriate interpersonal skills in the surgical setting.
- Practice professional, value directed actions based on didactic and clinical knowledge, ethical principles and legal standards as a member of the surgical team.
- Organize surgical instrumentation, supplies, and equipment in an efficient manner while utilizing principles of aseptic technique for physical preparation and maintenance of the surgical environment.
- Perform under pressure in stressful and emergency surgical situations.
- Demonstrate understanding of biomedical sciences and technology as they
  apply to the patient focused events that occur in the operating room.

**Application and Registration**: The Surgical Technology Program has a limited number of students per year due to clinical space and various other factors. This requires the student to complete a conditional application one semester prior to the semester they plan to begin the program. Program begins only in the spring semester. Please call for an appointment to obtain this application from the

Program Director.

For more detailed information please visit : www.msugf.edu/Catalog/2009\_2010/Programs/SurgTech.html

**Program Accreditation:** This program is nationally accredited through CAAHEP, the Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756, 727-210-2350, mail@caahep.org in collaboration with the Accreditation Review Committee on Education in Surgical Technology (ARC-ST).

# **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$6050
Application Fee	30
Lab/Program Fees	582
Insurance	24
Books/Supplies	2050
TOTAL	\$8736

MUS Student Health Insurance Premium approx \$1600/year if needed

# PREREQUISITE COURSES

COURSE	NO.	TITLE	CREDITS	GRADE
BIO	213**	Anatomy & Physiology I with lab	4†	
PSYX	100	Introduction to Psychology	3†	
COMM	135	Interpersonal Communication	3†	
AHMS	144	Medical Terminology	3†	
BIOM	250*	Microbiology for Health Sciences/Lab	4†	
M	090**	Introductory Algebra OR higher	4†	
WRIT	095**	Developmental Writing <b>OR</b> higher	3†	
		Subtotal	24	

# PROGRAM COURSE REQUIREMENTS AFTER FORMAL ACCEPTANCE

The courses below are to be taken in the order that they are listed. Admission into the Surgical Technology program is mandatory to qualify to take the courses below. Contact Program Director for application materials

A grade of "C-" or above must be achieved in all courses to advance and graduate from the program.

# **SPRING SEMESTER**

COURSE	NO.	TITLE CRE	DITS	GRADE
PHL	221	Intro to Philosophy and Biomedical Ethics	3†	
BIO	214*	Anatomy & Physiology II with lab	4†	
AHST	101*	Introduction to Surgical Technology	3†	
AHST	<b>1</b> 15*	Surgical Lab I	3†	
AHST	154*	Surgical Pharmacology	3†	
		Subtotal	16	

# **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHST	200*	Operating Room Techniques	5†	
AHST	201*	Surgical Procedures I	4†	
AHST	215*	Surgical Lab II	3†	
AHST	250*	Surgical Clinical I	<u>4†</u>	
		Subtotal	16	

# **SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
AHST	202*	Surgical Procedures II	5†	
AHST	251*	Surgical Clinical II	5†	
AHST	298*	Surgical Internship	<u>5†</u>	
		Subtotal	15	

# TOTAL PROGRAM CREDITS - 71 ~

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

# **Sustainable Energy Technician Program**



Student Information and Application Packet
Fall 2012

Dear Prospective Sustainable Energy Technician student,

I am pleased by your interest in the Sustainable Energy Technician program at Montana State University – Great Falls, College of Technology. This packet contains both program information and an application packet.

The Sustainable Energy Technician program has limited enrollment capacity. **16 students are enrolled** in the Fall of each year. The small class size is advantageous to students, allowing them more individualized attention and more opportunity for hands-on experience. Students are selected on a first come, first served basis from the pool of completed and qualified applications. Please read the materials carefully. Only complete applications will be considered.

For additional information, answers to specific questions, or to set up an appointment, please do not hesitate to contact me.

Sincerely,

Jason Harding
Sustainable Energy Technician Program Director
(406) 268-3708
jason.harding1@msugf.edu

# MSU Great Falls College of Technology Sustainable Energy Technician Program Program Information

As the push for alternative energy gains strength around the nation and the world, companies are taking advantage of Montana's ample wind resources to develop and produce wind energy. Montana State University – Great Falls recognizes the need to teach and train the workers who will maintain the wind turbines and other alternative energy sources cropping up around the state.

#### **About the Career:**

Sustainable Energy Technicians perform general maintenance, operations, and inspections on wind turbines and related facilities. They also perform general and site specific safety awareness, utilize personal protective equipment, conduct electrical troubleshooting, repair and replacement, follow specific lock out/tag out procedures, mechanical/powertrain maintenance, hydraulic troubleshooting and demonstrate climbing proficiency. Technicians conduct visual blade inspection and physical blade repair, bolt torque testing and installation and testing of hardware and software and follow specific driving safety guidelines.

#### **Program Description:**

The Sustainable Energy Technician program offers both a one year Certificate of Applied Science (CAS), and a two year Associate of Applied Science (AAS) degree. Both of these credentials prepare graduates for technician jobs in the rapidly expanding sustainable energy industry. CAS program graduates will possess general skills in industrial safety, electrical troubleshooting, hydraulic and pneumatic system operation, and mechanical system repair. AAS program graduates will possess these same skills along with specialized skills in programmable logic controls, digital electronics, and wind turbine operations and maintenance. These specialized skills are built on a strong educational foundation in math, writing, communication, and computing.

#### Student Outcomes. Upon completion students will:

- Identify and practice safe workplace habits.
- Demonstrate familiarity with basic electrical tools and the ability to troubleshoot a basic electrical system.
- Demonstrate familiarity with basic mechanical tools and the ability to repair a basic mechanical system.
- Demonstrate a basic understanding of hydraulic and pneumatic systems.
- Demonstrate the ability to use personal computers and common operating systems and application software.
- Develop and practice professional standards of workplace communication and interpersonal skills.
- Demonstrate wind industry safety skills including climbing, rescue, and confined space procedures.
- Demonstrate a basic understanding of programmable logic controllers.
- Demonstrate a basic understanding of digital electronics.
- Demonstrate a basic understanding of AC & DC variable speed motor drives.
- Demonstrate an understanding of wind turbine operations and maintenance procedures.
- Demonstrate an understanding of college-level algebra.

#### Partnerships:

This program was developed as a workforce development project funded by the Department of Labor's Community-Based Jobs Training Grant program. Project partners include the Wind Montana project industrial advisory board and four units of the Montana University System: Montana Tech College of Technology, Montana State University-Northern, Montana State University-Billings College of Technology, and Montana State University-Great Falls College of Technology. All four campuses offer a Sustainable Energy Technician program.

#### **Related Education Courses:**

The following courses are required for graduation from the SET program. With the exception of mathematics, which should be taken early, these courses may be taken in any sequence as long as they are completed by the time you are finished with the SET program (1 year for the CAS, and 2 years for the AAS). However past experience has shown that students who complete these courses first are much more likely to be successful in the SET program.

<b>Course Number</b>	Title	Credits
WRIT 104*,±	Workplace Communication	2
CAPP 120*,±	Introduction to Computers	3
M 111*	Technical Mathematics	3
M 121±	College Algebra	3
COMM 135*,±	Interpersonal Communication	<u>3</u>
	Total	11-14

<sup>\*</sup> Denotes classes which are required for the CAS Degree

#### Math is the biggest contributing factor towards student success or failure:

Many students will need to take prerequisite math classes before taking M 121. The Math Compass test will determine your placement in math. If a student places into M 090, that is where they will start. That student would have to progress through M 090 Introductory Algebra, then to M 095 Intermediate Algebra, and finally to M 121 College Algebra. It is possible for a student to test as low as M 065, which would require them to take M 065 » M 090 » M 095 » M 121. These math classes cannot be taken concurrently, so this process can take up to 4 semesters.

There is also the possibility that a student could test directly into M 121, and not have to take M 111 (If a student has completed M121, we have the choice to waive the M 111 requirement). In this case the student will be short of the 61 credits needed for graduation from the AAS program. In this case there are electives that can be substituted for the required number of credits (see list of suggested electives at the end of this document). <u>To graduate from the AAS program you will need 61 Credits.</u>

<sup>±</sup> Denotes classes which are required for the AAS Degree

#### **Sustainable Energy Technician Program Courses:**

These courses make up the core of the SET Program, and they are taught in the following sequence. Students enter the program Fall Semester 1, and then they progress through the program in the order shown below. Students must pass all of the Semester 1 courses with a C- or better before they proceed to Semester 2, and so on. Program courses are only offered once per year, so students who earn lower than a C- in any course will need to wait a full year to retake the entire course.

Fall Semester 1		
<b>Course Number</b>	Title	Credits
SET 101*,±	Introduction to Sustainable Energy	3
EET 120*,±	AC/DC Electronics I	3
SET 102*,±	Industrial Safety and Rigging	3
SET 103*,±	Fundamentals of Mechanical Systems	<u>3</u>
	Total	12

Spring S	Semester	2
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<b>Course Number</b>	Title	Credits
EET 121*,±	AC/DC Electronics II	3
ELEC 130*,±	Electric Motors and Generators	3
SET 104*,±	Fundamentals of Hydraulic/Pneumatic Systems	<u>3</u>
	Total	9

#### Fall Semester 3

<b>Course Number</b>	Title	Credits
EET 240±	Electrical Power and Distribution I	3
ELEC 230±	Programmable Logic Controllers	3
SET 201±	Wind Technician Safety	4
SET 202±	Wind Turbine Equipment	<u>3</u>
	Total	13

#### **Spring Semester 4**

<b>Course Number</b>	Title	Credits
SET 203±	Wind Turbine Operations and Maintenance	3
EET 241±	Electrical Power and Distribution II	3
ELEC 231±	Electronic Drive Systems	3
EET 245±	Digital Electronics	<u>4</u>
	Total	13

## TOTAL PROGRAM CREDITS CAS 32 TOTAL PROGRAM CREDITS AAS 61

#### **Recommended electives:**

These courses may be helpful to SET program students, especially those who may need a few extra courses to achieve full-time status.

<b>Course Number</b>	Title	Credits
CAPP 156	Microsoft Excel	3
PHYS 110	Survey of Natural Sciences	3
WLDG 094-01	Intro to Welding	3
WLDG 094-01	Intermediate Welding	3

**Employer Expectations:** Sustainable Energy employers tell us that to be employable, Sustainable Energy technicians must:

- Be able to work in and promote a safe environment
- Be able to climb up to 260 feet on a vertical ladder and work at this elevation
- Be able to work in adverse weather conditions
- Be able to work in confined spaces
- Be able to pass a drug test
- Be able to follow exact instructions
- Be able to work under minimal supervision
- Be able to work with people in a team-oriented environment
- Be prepared to work with electrical hazards
- Be prepared for possible relocation
- Be willing to work overtime and weekends and be on call 24/7 per wind industry expectations
- Have a valid driver's license
- Have a clean driving record
- Have the ability to lift 50 pounds
- · Have an aptitude for mechanical and electrical troubleshooting

#### **Sustainable Energy Technician Program Admissions Process**

The Sustainable Energy Technician program admissions committee will review completed application packets after May 31. SET, EET, and ELEC courses are restricted entry courses. Only students who have been admitted into the program will be able to enter courses with prefixes of SET, EET, and ELEC. Students must have either completed M090, Introductory Algebra or have a placement score that places them into M095 Intermediate Algebra or a higher level math course. Completion of a Technical Mathematics course may not be used as a substitute for placement into M095.

The complete Sustainable Energy Technician program application packet must be submitted to:

Pam Buckheit
Business Trades and Technology Administrative Assistant
B116
MSU-Great Falls, College of Technology
2100 16<sup>th</sup> Avenue South
Great Falls, MT 59405

**Note:** Applications will be date and time stamped as they are received. The first 16 qualified applications will be accepted into the program. Only <u>complete</u> applications of <u>qualified</u> applicants will be considered. To be considered complete and qualified, the applicant must submit all of the required application materials and meet the math entry requirement. Only students in Good Academic Standing will be eligible for program acceptance.

**Waiting List**: After the 16 slots are filled, up to 10 students will be kept on a waiting list. If accepted students drop out of the program prior to the start of Fall2012 semester, students on the waiting list will be contacted in the order their completed and qualified applications were received, with the exception of veterans and eligible spouses of veterans. Federal Department of Labor regulations require that if there is a waiting list for the formation of a training class, priority of service is intended to require a veteran or eligible spouse to go to the top of that list. Priority of service does not apply to the admission process of the initial 16 program slots. Priority of service applies <u>up to the point</u> an individual is accepted/ enrolled in the program.

## MSU-GREAT FALLS COLLEGE OF TECHNOLOGY SUSTAINABLE ENERGY TECHNICIAN PROGRAM

#### APPLICATION PACKET COVER AND CHECK-OFF SHEET

Name	
Address	
City State	Zip Code
Telephone (Home)	(Other)
E-Mail Address	
Student ID Number	
As a veteran or eligible spouse of a veteran, understand will move me to the top of any way program. (Documentation will be requested)	vaiting list for admission into the SET

#### Check-Off List

✓	Item			
	Application Packet Cover & Check-off sheet (personal information must be complete)			
	Documentation of admission to MSU-Great Falls College of Technology and good academic			
	standing. Current students should submit an unofficial copy of their most current academic			
	transcript from Banner Web MyInfo. New students should submit a photocopy of their MSU-			
	GF acceptance letter.			
	<b>Proof of math competency.</b> Student must have either completed M090, Introductory			
	Algebra, with a C- or better, or have a math placement score that places them in M095,			
	Intermediate Algebra, or a higher level math course. Completion of a Technical			
	Mathematics course may not be used as a substitute for placement into M095.Submit			
	math placement test score documentation or transcript that shows completion of M090 or			
	higher level math.			
	Statement of Understanding. Student must complete a statement of understanding about			
	the physical requirements and demands of working as a sustainable energy technician.			
	Submit signed statement of understanding.			

**Note:** Turn all application materials in at one time so as not to risk misplacement of any items. Incomplete applications will not be reviewed. Please only send required documentation as other supplemental items will be dis carded.

## **Statement of Understanding**

## MSU-Great Falls College of Technology Sustainable Energy Technician Program

Sustainable Energy Technician jobs are physically demanding. Students who cannot meet essential job functions may continue in the program but must realize the opportunity for employment as a sustainable energy technician will be extremely limited. The essential job functions of a sustainable energy technician include the following:

\*The following guidelines were provided by the companies and employers that comprise the advisory boards for the Sustainable Energy Technician program and the Wind Montana Grant.

- Weigh less than 260 pounds (260 pounds + 50 pounds equipment = 310 maximum rating for personal protective equipment)
- Be able to climb 260 foot ladders and work at this elevation.
- Have the ability to lift 50 pounds frequently.
- Be able to work in confined spaces. This includes working extended periods of time in a bended, stooped, or other awkward position.
- Be able to pass a drug test.
- Have a valid driver's license.
- Be able to distinguish between colors which typically mark electronic and electrical components.

Name (print)	Signature	Date	
technician are extremely lin	nited.		
•		ilpioyillelli as a sustaillable elle	rigy
of these essential job functi	ons, that my opportunities for er	mployment as a sustainable ene	rgv

I have read and understand the essential job functions above. I realize that if I do not meet all

#### **WELDING TECHNOLOGY**

#### **CERTIFICATE OF APPLIED SCIENCE DEGREE**

Advisors: Kyle Gillespie (Great Falls) & David Cohenour (Bozeman)

This program is offered both at MSU-Great Falls and the College of Technology in Rozeman

This program is only offered in Great Falls effective fall 2010. Please contact MSU-Bozeman for more information regarding Gallatin College Programs.

Upon completion of this program, students are eligible to apply to be listed in the AWS National Registry of Welders.

#### **OUTCOMES: GRADUATES ARE PREPARED TO:**

- Meet safety requirements.
- Produce welds in all positions that meet industry standards using the following process(es):
  - Shielded Metal Arc Welding (SMAW)
  - Gas Metal Arc Welding (GMAW)
  - Flux Cored Arc Welding (FCAW)
- Make cuts that meet industry standards in the following process(es):
  - Plasma Arc Cutting (PAC)
  - Air Carbon Arc Cutting (CAC-C)
- Understand the use of measuring instruments and their purpose.
- · Understand power sources and current types.
- Interpret welding blueprints and weld symbols.
- Utilize basic welding metallurgy.
- Utilize oral and written communication skills in the workplace, including terminology in the welding industry.

#### **ESTIMATED RESIDENT PROGRAM COST:**

Tuition and Fees	\$3025
Application Fee	30
Tools/clothing	varies
Lab Fees	500
Books/Supplies	280
TOTAL	\$3835+

MUS Student Health Insurance Premium approx \$1600/year if needed

#### **FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE
M	111	Technical Mathematics	3†	
WLDG	110	Welding Theory I	2†	
WLDG	111	Welding Theory I Practical	3†	
WLDG	121	Welding Theory II Practical	3†	
WLDG	117	Blueprint Reading & Welding Symbols	s 3†	
WLDG	205	Applied Metallurgy	<u>2</u> †	
		Subtotal	16	

#### **SPRING SEMESTER**

<b>COURSE</b>	NO.	TITLE	CREDITS	GRADE
COMM	120	Interpersonal Skills in the Workplace	1+	
WRIT	104	Communication Skills in the Workplac	e 2+	
WLDG	120*	Welding Theory II	1†	
WLDG	122*	Welding Theory III Practical	3†	
WLDG	145*	Fabrication Basics OR		
WLDG	106*	Welding Fabrication Methods	3†	
WLDG	130*	Intro to Structural Welding	3†	
WLDG	185*	Welding Qualification Prep	2†	
		Subtotal	15	

#### TOTAL PROGRAM CREDITS - 31~

<sup>~</sup> Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.



>Great Falls College MSU >Catalog

#### **Great Falls Higher Education Center**

The campus of Montana State University-Great Falls College of Technology serves as the site for the Montana University System Higher Education Center in Great Falls. The Higher Education Center coordinates courses and programs to be delivered in Great Falls by Montana's four-year campuses. Degree programs and courses offered through the Higher Education Center are primarily designed for area residents who are interested in enrolling in a graduate or four-year degree program not currently available in Great Falls.

Recent examples include an MBA offered by the University of Montana and Bachelor degrees offered by MSU–Bozeman and MSU–Northern. Further information about the Higher Education Center in Great Falls can be requested from Montana State University-Great Falls College of Technology Welcome Desk or by calling the College at 406-761-4300 or 1-800-446-2698 or online at hec.gfcmsu.edu.

#### **Higher Education Options**

- Business
  - MSU Bozeman
  - UM Western
- Business Administration
  - MSU Northern
- Computer Information Systems
  - MSU Northern
- BSN Nursing
  - MSU Bozeman

C

**Great Falls College MSU** | 2100 16th Ave. South | Great Falls, MT 59405 Toll Free 800.446.2698 | FAX: 406.771.4317 | TTY: 406.771.4424 | Copyright 2008. All rights reserved.

## This program of study is designed for students Planning to apply to the MSU-Bozeman – BSN Nursing Program

This program of study is designed for students planning to apply to the MSU Bozeman BSN Nursing program. Students must earn a grade of 'C' or better in each of the courses with no more than one repeat per course. Students must apply to Montana State University-Bozeman's College of Nursing and go through the placement process. Beginning in Spring 2011, the placement process will be changing. Please contact Wendy Minster, Program Assistant at 406-771-4451 for more information.

THE INFORMATION ON ALL TRANSFER PROGRAMS IS SUBJECT TO CHANGE. STUDENTS SHOULD CONTACT: MSU-Bozeman College of Nursing, Great Falls Campus at 771-4450 or the main campus at 406-994-3783.

#### I. MONTANA UNIVERSITY SYSTEM CORE - 32 CREDITS

## COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	<u>Credits</u>
WRIT	101**	College Writing I	3
		AND 1 of the following	
COMM	130	Public Speaking	3
COMM	135	Interpersonal Communication	n 3

#### **MATHEMATICS--4 CREDITS**

Course	No.	Title	Credits
STAT	216**	Introduction to Statistics	

#### **HUMANITIES--3 CREDITS**

Course	No.	Title	Credits
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
ENGL	217	Creative Writing	3
HUM	242	Gender & Equality	3
PHL	101	Introduction to Philosophy	3
PHL	110	Introduction to Ethics	3

#### FINE ARTS--3 CREDITS

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3

#### **NATURAL SCIENCE--7 CREDITS**

(Must include 1 lab course)

Course	No.	Title	Credits
BIO	205	Personal Nutrition	3
	AND		
CHMY	121*	Intro to General Chem/Lab	4

#### SOCIAL SCIENCES/ HISTORY--6 CREDITS

Course	No.	Title	Credits
PSYX	100	Introduction to Psychology	3
PSYX	230	Developmental Psychology	3

#### **DIVERSITY--3 CREDITS**

Course	No.	Title	Credits
ANT	101	Intro to Anthropology	3
BUS	249	Global Marketing	3
LIT	215N	Lit of the West	3
LIT	289N	Native American Literature	3
HUM	244	American Cultural Values	3
SIGN	101	Intro to American Sign Lang	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

#### II. Additional Required Courses - 19 Credits

Course	No.	Title Cre	<u>dits</u>
BIO	213**	Anatomy & Physiology I/Lab	4
BIO	214*	Anatomy & Physiology II/Lab	4
BIOM	250*	Microbiology for Health Sciences/Lab	4
CHMY	123*	Intro to Organic and Biochem/Lab	4
SOCI	101	Introduction to Sociology	3

\*A student must complete CHMY 121 prior to, or concurrently with, Anatomy & Physiology I.

If you are interested in completing an Associate of Science with MSU-Great Falls College of Technology, please contact your program advisor to determine the additional courses needed.

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

#### This Program of Study is Designed For Students Planning to Apply to the MSU Bozeman - College of Business

The College of Business of MSU-Bozeman has a basic curriculum required for the freshman and sophomore years in Accounting, Finance, Management, and Marketing. Completion of this track will allow students to be eligible for formal admission to the MSU-Bozeman College of Admissions. Students intending to apply for admission to the MSU-Bozeman of Business must complete all program requirements, have a "C" or better in all Business courses, and have a 2.50 minimum cumulative GPA.

THE INFORMATION ON ALL TRANSFER OPTIONS IS SUBJECT TO CHANGE. STUDENTS SHOULD CONTACT THE MSU-BOZEMAN'S COLLEGE OF BUSINESS. BUSINESS@MONTANA.EDU

#### I. Montana University System Core - 31 Credits

#### COMMUNICATION--6 CREDITS

#### (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	NO.	litie	Credits
WRIT	101**	College Writing I	3
		AND 1 of the following	
COLS	101	First Year Seminar	3
COMM	130	Public Speaking	3
COMM	135	Interpersonal Communication	3

#### **MATHEMATICS--3 CREDITS**

Course	No.	Title	<u>Credits</u>
M	121**	College Algebra	3
M	152**	Precalculus Algebra	4
M	153**	Precalculus Trigonometry	3
M	145**	Math for the Liberal Arts	3
M	116**	Mathematics for Health Careers	3

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
LIT	291	Special Topics – Literature	3
ENGL	217	Creative Writing	3
HUM	242	Gender & Equality	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3
PHL	101	Introduction to Philosophy	3
PHL	110	Introduction to Ethics	3

#### **NATURAL SCIENCE--7 CREDITS**

(Must include 1 lab course)

Course	No.	Title Cred	<u>lits</u>
BIOB	101	Discover Biology/Lab	4
BIOB	160	Principles of Living Systems/Lab	4
BIOB	170	Principles of Biological Diversity/Lab	4
BIO	107	Fund of Human Biology/Lab	4
BIO	205	Personal Nutrition	3
CHMY	121*	Intro to General Chemistry and Lab	4
CHMY	141*	College Chemistry I/Lab	4
CHMY	143*	College Chemistry/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3
HSTA	255N	Montana History	3
PSYX	100	Introduction to Psychology	3
PSYX	230	Developmental Psychology	3
SOCI	101	Introduction to Sociology	3
SOCI	121	Introduction to Criminal Justice	3
PSCI	210	Intro to American Government	3

#### **DIVERSITY--3 CREDITS**

Course	No.	Title	Credits
ANT	101	Intro to Anthropology	3
BUS	249	Global Marketing	3
LIT	215N	Lit of the West	3
LIT	289N	Intro to Native American Lit	3
HUM	244	American Cultural Values	3
SIGN	101	Intro to American Sign Lang	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. Business Course Requirements - 38 credits

ACTG	101	Accounting Procedures I	3
ACTG	102*	Accounting Procedures II	3
ACTG	201*	Principles of Financial Accounting	3
ACTG	202*	Principles of Managerial Accounting	3
BUS	106	Introduction to Business	3
CAPP	120	Introduction to Computers	3
ECNS	201	Principles of Microeconomics	3
ECNS	202	Principles of Macroeconomics	3
WRIT	122**	Intro to Business Writing	3
M	171**	Calculus I	4
STAT	216**	Introduction to Statistics	4
STAT	217*	Intermediate Statistical Concepts	3

Note: Students may not use any of the Business Course Requirements to fulfill requirements in the Montana University System Core

#### **Total Program Credits - 69**

~Many students need preliminary math and Writing courses before enrolling in the program requirements. Students should review their math and writing placement before planning out their full program schedule.

#### This Program of Study is Designed For Students Planning to Apply to the MSU Northern – Business Administration Program

The Department of Business, MSU-Northern has recommended the following criteria and basic curriculum for the freshman and sophomore years of its Business Administration major with a Small Business Management minor for transfer:

THE INFORMATION ON ALL TRANSFER OPTIONS IS SUBJECT TO CHANGE. STUDENTS SHOULD CONTACT MSU-NORTHERN FOR

POTENTIAL CHANGES: Ligia Arango, 406-265-3789, ligia.arango@msun.edu

#### I. MONTANA UNIVERSITY SYSTEM CORE - 31 CREDITS

## COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND 1 of the following	
COMM	130	Public Speaking	3
COMM	135	Interpersonal Communication	3

#### **MATHEMATICS--3 CREDITS**

Course	No.	Title	Credits
M	121**	College Algebra	3
M	152**	Precalculus Algebra	4
M	153**	Precalculus Trigonometry	3
M	145**	Math for the Liberal Arts	3
M	116**	Mathematics for Health Careers	3
M	171**	Calculus I	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
LIT	291	Special Topics – Literature	3
ENGL	217	Creative Writing	3
HUM	242	Gender & Equality	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3
PHL	101	Introduction to Philosophy	3
PHL	110	Introduction to Ethics	3

#### NATURAL SCIENCE--7 CREDITS

(Must include 1 lab course)

Course	No.	Title Cre	<u>dits</u>
BIO	107**	Fund of Human Biology/Lab	4
BIO	205	Personal Nutrition	3
BIOB	101	Discover Biology/Lab	4
BIOB	160	Principles of Living Systems/Lab	4
BIOB	170	Principles of Biological Diversity/Lab	4
CHMY	121*	Intro to General Chemistry/Lab	4
CHMY	141*	College Chemistry I/Lab	4
CHMY	143*	College Chemistry II/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science/Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
ECNS	201	Principles of Microeconomics	3
		AND 1 of the following	
ECNS	202	Principles of Macroeconomics	3
HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3
HSTA	255N	Montana History	3
PSYX	100	Introduction to Psychology	3
PSYX	230	Developmental Psychology	3
SOCI	101	Introduction to Sociology	3
SOCI	121	Introduction to Criminal Justice	3
PSCI	210	Intro to American Government	3

#### **DIVERSITY--3 CREDITS**

Course	No.	Title	Credits
ANT	101	Intro to Anthropology	3
BUS	249	Global Marketing	3
LIT	215N	Lit of the West	3
LIT	289N	Intro to Native American Literatu	ire 3
HUM	244	American Cultural Values	3
SIGN	101	Intro to American Sign Lang	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. Business Course Requirements - 34 credits

,	ACTG	101	Accounting Procedures I	3
	ACTG	102*	Accounting Procedures II	3
	ACTG	201*	Principles of Financial Accounting	3
,	ACTG	202*	Principles of Managerial Accounting	3
	BUS	106	Introduction to Business	3
	BUS	230*	Management	3
	BUS	255*	Legal Environment	3
-	CAPP	120	Introduction to Computers	3
,	WRIT	122**	Intro to Business Writing	3
	STAT	216**	Introduction to Statistics	4
	STAT	217*	Intermediate Statistical Concepts	3

Note: Students may not use any of the Business Course Requirements to fulfill requirements in the Montana University System Core

#### **TOTAL PROGRAM CREDITS – 65**

~Many students need preliminary math and writing courses before enrolling in the program requirements. Students should review their math and writing placement before planning out their full program schedule.

#### This Program of Study is Designed For Students Planning to Apply to the MSU Northern – Computer Information Systems Program

The Department of Computer Science, MSU-Northern has recommended the following curriculum for transfer to a Bachelor of Science degree in Computer Information Systems:

THE INFORMATION ON ALL TRANSFER OPTIONS IS SUBJECT TO CHANGE. STUDENTS SHOULD CONTACT MSU-NORTHERN FOR POTENTIAL CHANGES: Ligia Arango, 406-265-3789, ligia.arango@msun.edu

#### I. MONTANA UNIVERSITY SYSTEM CORE - 31 CREDITS

### COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND 1 of the following	
COMM	130	Public Speaking	3
COMM	135	Interpersonal Communication	3

#### **MATHEMATICS--3 CREDITS**

Course	No.	Title	Credits
M	116**	Mathematics for Health Careers	3
M	121	College Algebra	3
M	145**	Math for the Liberal Arts	3
M	152**	Precalculus Algebra	4
M	153**	Precalculus Trigonometry	3
M	171**	Calculus I	4
STAT	216**	Basic Statistics	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
LIT	291	Special Topics – Literature	3
ENGL	217	Creative Writing	3
HUM	242	Gender & Equality	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3
PHL	101	Introduction to Philosophy	3
PHL	110	Introduction to Ethics	3

#### **NATURAL SCIENCE--7 CREDITS**

(Must include 1 lab course)

Course	No.	Title	Credits
BIO	107**	Fund of Human Biology/Lab	4
BIO	205	Personal Nutrition	3
BIOB	101	Discover Biology/Lab	4
BIOB	160	Principles of Living Systems/Lab	4
BIOB	170	Principles of Biological Diversity/	Lab 4
CHMY	121*	Intro to General Chemistry/Lab	4
CHMY	141*	College Chemistry I/Lab	4
CHMY	143*	College Chemistry II/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science/Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
ECNS	201	Principles of Microeconomics	3
ECNS	202	Principles of Macroeconomics	3
HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3
HSTA	255N	Montana History	3
PSYX	100	Introduction to Psychology	3
PSYX	230	Developmental Psychology	3
SOCI	101	Introduction to Sociology	3
SOCI	121	Introduction to Criminal Justice	3
PSCI	210	Intro to American Government	3

#### **DIVERSITY--3 CREDITS**

Course	No.	Title Cr	<u>edits</u>
ANT	101	Intro to Anthropology	3
BUS	249	Global Marketing	3
LIT	215N	Lit of the West	3
LIT	289N	Intro to Native American Literature	3
HUM	244	American Cultural Values	3
SIGN	101	Intro to American Sign Lang	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

## II. COMPUTER INFORMATION SYSTEMS CORE REQUIREMENTS – 15 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3
CAPP	156*	MS Excel	3†
CAPP	158*	MS Access	3†
CSCI	110*	Programming w/Visual Basic I	3†
CIT	229*	Web Page Construction	3†

### III. COMPUTER INFORMATION SYSTEMS ELECTIVES – 14 CREDITS

Students may choose from the following courses to complete their elective requirements for the program of study:

Course	No.	Title	Credits
CAPP	101	Short Courses: The Internet	2†
CAPP	154*	MS Word	3†
CIT	206*	Database Management II	3†
CIT	231*	Web Page Design	3†
ITS	150*	CCNA1: Exploration	3†
ITS	152*	CCNA 2: Exploration	3†
ITS	210*	Network OS - Desktop	4†
ITS	211*	Network OS – Server Admin/App	s 3†
ITS	215*	Network OS - Dir/Infrastructure	3†
ITS	250*	CCNA 3: Exploration	3†
ITS	252*	CCNA 4: Exploration	3
ITS	280*	Computer Repair & Maintenance	4†
ITS	298*	Internship/Cooperative Edu	3†

#### **TOTAL PROGRAM CREDITS - 60**

~Many students need preliminary math and writing courses before enrolling in the program requirements. Students should review their math and writing placement before planning out their full program schedule.

# This program of study is designed for students planning to apply to the UM Western – Associate of Applied Science Degree in Early Childhood Education

Students may begin pursuit of a baccalaureate degree from UM-Western by following the plan of study below. By completing the plan of study, students can be dually enrolled into UM-Western's Associate of Applied Science degree in Early Childhood Education program.

THE INFORMATION ON ALL TRANSFER PROGRAMS IS SUBJECT TO CHANGE. STUDENTS SHOULD CONTACT Dr. Julie Bullard, ECE Program Director, AT UM-WESTERN FOR POTENTIAL CHANGES: 406-683-7809, j\_bullard@umwestern.edu

#### **PROGRAM COURSE REQUIREMENTS:**

#### I. GENERAL EDUCATION COURSES - 15/16 CREDITS

#### FOUNDATIONS OF LANGUAGE -- 6 CREDITS

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
COMM	135	Interpersonal Communication	3

#### MATH -- 3-4 CREDITS

Course	No.	Title	Credits
M	121**	College Algebra	3
M	152**	Precalculus Algebra	4
M	153**	Precalculus Trigonometry	3
M	145**	Math for the Liberal Arts	3
M	171**	Calculus I	4

#### **BEHAVIORAL/SOCIAL SCIENCES -- 3 CREDITS**

Course	No.	Title	Credits
PSYX	100	Introduction to Psychology	3
SOCI	101	Introduction to Sociology	3

#### **INTRODUCTION TO COMPUTERS - 3 CREDITS**

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

#### II. EARLY CHILDHOOD CORE COURSES - 9 CREDITS

#### SAFETY, HEALTH AND/OR NUTRITION -- 3 CREDITS

Course	No.	Title	Credits
HHD	106	Drug & Health Issues for Ed	3

#### **CULTURAL COURSE--3 CREDITS**

Course	NO.	litie	Creaits
HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3

#### **CREATIVE ARTS -- 3 CREDITS**

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3

#### III. PROFESSIONAL ELECTIVES - 7-14 CREDITS

In consultation with UM Western's Early Childhood advisor

**TOTAL CREDITS - 36-39** 

## OUTLINE FOR COMPLETION OF ASSOCIATE OF APPLIED SCIENCE DEGREE IN EARLY CHILDHOOD WITH UM WESTERN

#### I. Early Childhood Core Courses

Course	No.	Title	Credits
ED	142	Intro/Early Childhood	1
ED	143	Intro/Early Childhood Lab	1
ED	144	Creat/Envt/Learning	2
ED	145	Creat/Envt/Learning Lab	1
ED	240	Pos Child Discipline	2
ED	241	Pos Child Discipline Lab	1
ED	242	Meet Needs/Families	2
ED	243	Meet Needs/Families Lab	1
ED	250	Child Growth/Development	3
ED	251	Child Growth/Development Lab	1
ED	320	Early Childhood Curr I	2
ED	321	Early Childhood Curr I Lab	1
ED	324	Early Childhood Curr II	2
ED	325	Early Childhood Curr II Lab	1
ED	344	Early Childhood Prof	2
ED	345	Early Childhood Prof Lab	1

**TOTAL CREDITS - 24** 

#### TOTAL PROGRAM CREDITS - 60-63~

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

## THIS PROGRAM OF STUDY IS DESIGNED FOR STUDENTS PLANNING TO APPLY TO THE UM WESTERN – BACHELOR OF SCIENCE IN EARLY CHILDHOOD EDUCATION

Students may begin pursuit of a baccalaureate degree from UM-Western by following the plan of study below. By completing the plan of study, students can be dually enrolled into UM-Western's Bachelor of Science in Early Childhood Education program.

THE INFORMATION ON ALL TRANSFER PROGRAMS IS SUBJECT TO CHANGE. STUDENTS SHOULD CONTACT Dr. Julie Bullard, ECE program director, AT UM-WESTERN FOR POTENTIAL CHANGES: 406-683-7809, j\_bullard@umwestern.edu

#### I. MONTANA UNIVERSITY SYSTEM CORE – 31/32 SEMESTER HOURS

#### **COMMUNICATION--6 CREDITS**

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
COMM	135	Interpersonal Communication	3

#### MATHEMATICS—3/4 CREDITS

Course	No.	Title	Credits
M	121**	College Algebra	3
M	152**	Precalculus Algebra	4
M	153**	Precalculus Trigonometry	3
M	145**	Math for the Liberal Arts	3
M	171**	Calculus I	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
MUSI	101	Enjoyment of Music OR	
MUSI	105	Music Theory I <b>OR</b>	
MUSI	203	American Popular Music OR	
MUSI	207	World Music OR	
ENGL	217	Creative Writing	3
		AND one of the following	
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
LIT	291	Special Topics – Literature	3
PHL	101	Introduction to Philosophy	3

#### NATURAL SCIENCE—7 CREDITS

(Must include 1 lab course)

Course	No.	Title	Credits
BIO	205	Personal Nutrition OR	
CHMY	101*	Chemistry for the Consumer	3
		AND one of the following	
BIO	107**	Fund of Human Biology/Lab	4
BIOB	101	Discover Biology/Lab	4
BIOB	160	Principles of Living Systems/Lab	4
BIOB	170	Principles of Biological Diversity/	Lab 4
CHMY	121*	Intro to General Chemistry/Lab	4
CHMY	141*	College Chemistry I/Lab	4
CHMY	143*	College Chemistry II/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science/Lab	4

#### SOCIAL SCIENCES/ HISTORY--6 CREDITS

Course	No.	Title	Credits
PSYX	100	Introduction to Psychology OR	
SOCI	101	Introduction to Sociology	3
		And one of the following	
HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3
HSTA	255	Montana History	3

#### **CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title	Credits
ANT	101	Intro to Anthropology	3
BUS	249	Global Marketing	3
LIT	215N	Literature of the West	3
LIT	289N	Intro to Native American Literatu	re 3
HUM	244	American Cultural Values	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3
SIGN	101	Intro to American Sign Lang	3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. COMPUTER LITERACY - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

#### III. Additional Coursework - 6 Credits

Course	No.	Title	Credits
ART	101	Intro to Visual Arts OR	
ART	114	Art Fundamentals OR	
ART	140	Drawing I	3
		And	
HHD	106	Drug & Health Issues for Ed	3

#### IV. AREA OF EMPHASIS COURSES - 12 CREDITS

In consultation with UM Western's Early Childhood advisor

#### V. ELECTIVE COURSES - 5-6 CREDITS

In consultation with UM Western's Early Childhood advisor

#### TOTAL PROGRAM CREDITS - 58~

~Many students need preliminary math and Writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

If you are interested in completing an Associate of Arts with MSU-Great Falls College of Technology, please contact your program advisor to determine the additional courses needed.

## OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE DEGREE IN EARLY CHILDHOOD

#### I. Early Childhood Core

Course	No.	Title	Credits
ED	142	Intro/Early Childhd	1
ED	143	Intro/Early Childhd Lab	1
ED	144	Creat/Envt/Learning	2
ED	145	Creat/Envt/Learning Lab	1
ED	240	Pos Child Discipline	2
ED	241	Pos Child Discipline Lab	1
ED	242	Meet Needs/Families	2
ED	243	Meet Needs/Families Lab	1
ED	250	Child Growth/Devel	3
ED	251	Child Growth/Devel Lab	1
ED	320	Early Childhd Curr I	2
ED	321	Early Childhd Curr I Lab	1
ED	324	Early Childhd Curr II	2
ED	325	Early Childhd Curr II Lab	1
ED	344	Early Childhd Prof	2
ED	345	Early Childhd Prof Lab	1

#### II. Early Childhood Specialty Courses

Course	No.	Title	Credits
ED	326	InfantToddler Dev/Grp Care	4
ED	341	Exceptional Learner	3
ED	346	Early Literacy	3
ED	348	Math/Sci/Early Childhd	3
ED	352	Enhanc Phys Skills/ Erly Chld	1
ED	354	Foster Soc Comp/Early Yrs	3
ED	421	Creatvty/Young Child: Explor	
		Reggio Emelia/Proj Approach	3
ED	422	Family/Comm/Culture	3
ED	424	Early Chld Assess/Outcms	3
ED	455	Child Dev Theories/Rsrch	3
ED	457	Coach/Mentor Adults	3
ED	496	Early Childhood Prac	6

**Total Credits - 62** 

Total Program Credits - 120~

#### THIS PROGRAM OF STUDY IS DESIGNED FOR STUDENTS PLANNING TO APPLY TO THE UM WESTERN – BUSINESS PROGRAM

Students may begin pursuit of a baccalaureate degree from UM-Western by following the articulated plan of study below. By completing the plan of study, students can move directly into UM-Western's Business program.

THE INFORMATION ON ALL TRANSFER PROGRAMS IS SUBJECT TO CHANGE. STUDENTS SHOULD CONTACT DENISE HOLLAND AT UM-WESTERN FOR POTENTIAL CHANGES: 406-683-7203, d\_holland@umwestern.edu

#### **PROGRAM COURSE REQUIREMENTS:**

#### I. MONTANA UNIVERSITY SYSTEM CORE - 32 CREDITS

### COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	<u>Credits</u>
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

#### **MATHEMATICS--4 CREDITS**

Course	No.	Title	Credits
STAT	216**	Introduction to Statistics	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
LIT	291	Special Topics – Literature	3
ENGL	217	Creative Writing	3
HUM	242	Gender & Equality	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3
PHL	101	Introduction to Philosophy	3
PHL	110	Introduction to Ethics	3

#### **NATURAL SCIENCE--7 CREDITS**

(Must include 1 lab course)

Course	No.	Title Cre	dits
BIO	107**	Fund of Human Biology/Lab	4
BIO	205	Personal Nutrition	3
BIOB	101	Discover Biology/Lab	4
BIOB	160	Principles of Living Systems/Lab	4
BIOB	170	Principles of Biological Diversity/Lab	4
CHMY	121*	Intro to General Chemistry/Lab	4
CHMY	141*	College Chemistry I/Lab	4
CHMY	143*	College Chemistry II/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science/Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3
HSTA	255N	Montana History	3
PSYX	100	Introduction to Psychology	3
PSYX	230	Developmental Psychology	3
SOCI	101	Introduction to Sociology	3
SOCI	121	Introduction to Criminal Justice	3
PSCI	210	Intro to American Government	3

#### **DIVERSITY--3 CREDITS**

Course	No.	Title Cre	edits
ANT	101	Intro to Anthropology	3
BUS	249	Global Marketing	3
LIT	215N	Lit of the West	3
LIT	289N	Intro to Native American Literature	3
HUM	244	American Cultural Values	3
SIGN	101	Intro to American Sign Lang	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. PROGRAM OF STUDY IN BUSINESS - 27 CREDITS

Course	No.	Title Cre	<u>edits</u>
ACTG	101	Accounting Procedures I	3
ACTG	102*	Accounting Procedures II	3
ACTG	201*	Principles of Financial Accounting	3
ACTG	202*	Principles of Managerial Accounting	3
BUS	106	Introduction to Business	3
BUS	255*	Legal Environment	3
CAPP	120	Introduction to Computers	3
ECNS	201	Principles of Microeconomics	3
ECNS	202	Principles of Macroeconomics	3
		Electives (any BUS or CIT Class)	2

#### TOTAL PROGRAM CREDITS - 59~

~Many students need preliminary math and English courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedule.



>Great Falls College MSU >Catalog

#### **Articulation Agreements**

MSU–Great Falls College of Technology has a number of articulation agreements with Montana public and private colleges and universities. These agreements make it possible for students to plan a program of study that begins with an associate degree at MSU–Great Falls College of Technology and leads to a four-year degree from a college or university. These agreements are designed to maximize the number of credits students will be able to transfer and to minimize students' time to degree. Areas of concern such as admissions, financial aid, course requirements, and contact information are clearly discussed.

Articulation agreements are made with specific programs at the four-year colleges and universities. Each agreement specifies how coursework in the associate degree program applies to the baccalaureate degree program at the four-year college or university. Each agreement outlines the appropriate and recommended courses to complete at MSU–Great Falls College of Technology and also specify courses that must be taken at the four-year college or university to complete the program. Any deviation from the articulation agreement will nullify the guarantee they provide.

Students interested in attending MSU–Great Falls College of Technology and utilizing an articulation agreement listed in the catalog are encouraged to indicate their interest in one of the articulation agreements to their First Semester Advising Team or Academic Advisor prior to or during their first term in attendance.

Great Falls College MSU | 2100 16th Ave. South | Great Falls, MT 59405
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# ASSOCIATE OF ARTS DEGREE WITH ACCOUNTING COURSEWORK TRANSFER TO THE UNIVERSITY OF GREAT FALLS

The Associate of Arts with articulated coursework in Accounting is designed for students interested in a baccalaureate degree in Accounting at the University of Great Falls.

#### I. MUS CORE - 32 SEMESTER HOURS

## COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

#### **MATHEMATICS--4 CREDITS**

Course	No.	Title	Credits
M	152**	Precalculus Algebra	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
PHL	110	Introduction to Ethics	3
		AND	
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3

#### NATURAL SCIENCE--7 CREDITS

(Must include 1 lab course)

Course	No.	Title (	Credits
BIO	205	Personal Nutrition	3
		AND	
BIOB	101	Discover Biology/Lab	4
BIO	107	Fund of Human Biology/Lab	4
CHMY	121*	Intro to General Chem/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	130	Fund Physical Science Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
HSTR	101	Western Civilization I AND	3
<b>HSTR</b>	102	Western Civilization	3
		OR	
<b>HSTA</b>	101N	American History I AND	3
<b>HSTA</b>	102N	American History II	3

#### **CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title	Credits
LIT	289N	Intro to Native	American Lit 3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

## III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS

Course	No.	Title	Credits
SOCI	101	Introduction to Sociology OR	
PSY X	100	Intro to Psychology	3
		AND	
WRIT	201**	Composition II	3
		AND	
<b>ECNS</b>	202	Principles of Macroeconomics O	R
<b>ECNS</b>	201	Principles of Microeconomics	3

## IV. ARTICULATION COURSEWORK – 16 CREDITS ANY OF THE FOLLOWING:

Course	No.	Title	Credits
CAPP	156*	MS Excel	3
ACTG	101	Accounting Procedures I	3
ACTG	102*	Accounting Procedures II	3
ACTG	201*	Principles of Fin Acct	3
ACTG	202*	Principles of Mang Acct	3
BUS	106	Introduction to Business	3
BUS	230*	Management	3
BUS	255*	Legal Environment	3

#### **TOTAL PROGRAM CREDITS - 60**

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

## OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE IN ACCOUNTING FROM THE UNIVERSITY OF GREAT FALLS

The Associate of Arts with articulated coursework in Accounting is designed for students interested in a baccalaureate degree in Accounting at the University of Great Falls.

#### I. UGF CORE - 6 CREDITS

## LIVING AND MAKING A LIVING (NEED 3 UPPER DIVISION WRITING CREDITS)

Course	No.	Title	Credi	ts
ENG	312*	Writing for Bu	s & Professions	3

#### **RELIGIOUS DIMENSION--3 CREDITS**

Course	No.	Title	Credits
TRL	200	Fund of Christian Theology	3
TRL	210	Catholicism	3
TRL	240	Reading the Old Testament	3
TRL	250	Reading the New Testament	3
TRL	303	Jesus the Christ	3

#### II. ACCOUNTING MAJOR

## \*\*CREDITS & COURSES DEPENDENT UPON ARTICULATION COURSES TAKEN AT MSUGF

Course	No.	Title Credi	its
ACC	201	Principles of Financial Acct	3
ACC	202	Principles of Managerial Acct	3
ACC	341	Fundamentals of Taxation	3
ACC	371	Intermediate Financial Acct I	4
ACC	372	Intermediate Financial Acct II	4
ACC	380	Principles of Cost Management	3
ACC	422	Principles of Attestation & Audit	3
ACC	425	Advanced Financial Acct I	3
ACC	442	Prin. of Fed. Taxation – Bus. Ent.	3
ACC	481	Adv. Cost Management	3
ACC	485	Seminar on Acc Issues	1
BUS	240	Management & Leadership	3
BUS	335	Commercial Law	3
BUS	306	Management Science	3
BUS	400	Financial Analysis	3
CPS	205	Spreadsheets	3
ECN	201	Macroeconomics OR	
ECN	202	Microeconomics	3
MTH	108	Elementary Statistics	3
		Approved Electives	6

## III. MINOR / CONCENTRATION FULFILLED WITH A.A. DEGREE FROM MSU-GF

#### IV. TOTAL CREDITS TOWARD DEGREE:

60 CREDITS (AA – MSUGF) 66 CREDITS (BS – UGF) 6 CREDITS (CORE – UGF)

#### **132 TOTAL CREDITS**

#### **UGF GRADUATION REQUIREMENTS:**

- 1. Complete a minimum of 128 credits
- 2. Maintain a cumulative UGF GPA of 2.0 or higher
- 3. Complete the UGF Core
- 4. Complete a major and one of the following: second major, associate's degree, minor, or a concentration in a field of study distinct from the major. All courses used to complete the requirements of a major, minor, or concentration must have a grade of C or better.
- Complete thirty of the last forty semester hours of coursework at UGF.
- Complete at least fifteen semester hours at UGF in the major or concentration, except for university studies.
- Complete at least thirty-two credits in upper division coursework (courses numbered 300 or higher), at least sixteen of which must be from UGF. (Students should complete at least twelve of these credits in coursework outside the student's major and minor or concentration).
- 8. Apply for graduation in accordance with the prescribed deadlines.
- Comply with all university policies, rules, and regulations.
- 10. Pay all indebtedness to the university.

#### ASSOCIATE OF ARTS DEGREE WITH BUSINESS COURSEWORK TRANSFER TO THE UNIVERSITY OF GREAT FALLS

The Associate of Arts with articulated coursework in Business is designed for students interested in a baccalaureate degree in Business Administration at the University of Great Falls.

#### I. MUS CORE - 32 SEMESTER HOURS

## COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

#### **MATHEMATICS--4 CREDITS**

Course	No.	Title	Credits
STAT	216**	Basic Statistics	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
PHL	110	Introduction to Ethics	3
		AND one of the following	
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3

#### **N**ATURAL **S**CIENCE--7 CREDITS

(Must include 1 lab course)

Course	No.	Title	Credits
BIO	205	Personal Nutrition	3
		AND one of the following	
BIOB	101	Discover Biology/Lab	4
BIO	107	Fund of Human Biology/Lab	4
CHMY	121*	Intro to General Chem/Lab	4
GEO	101	Intro to Physical Geology/La	ıb 4
PHYS	130	Fund Physical Science Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
HSTR	101	Western Civilization I AND	3
HSTR	102	Western Civilization II	3
		OR	
HSTA	101N	American History I AND	3
HSTA	102N	American History II	3

#### **CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title C	redits
LIT	289N	Intro to Native American Lit	3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

## III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS

Course	No.	Title Cı	edits
SOCI	101	Introduction to Sociology OR	
PSY X	100	Intro to Psychology	3
		AND	
WRIT	201	College Writing II	3
		AND	
<b>ECNS</b>	202	Principles of Macroeconomics	OR
<b>ECNS</b>	201	Principles of Microeconomics	3

## IV. ARTICULATION COURSEWORK – 16 CREDITS ANY OF THE FOLLOWING:

Course	No.	Title	Credits
ACTG	101	Accounting Procedures I	3
ACTG	102*	Accounting Procedures II	3
ACTG	201*	Principles of Fin Acct	3
ACTG	202*	Principles of Mang Acct	3
BUS	106	Introduction to Business	3
BUS	230*	Management	3
BUS	235*	Marketing	3
BUS	255*	Legal Environment	3
CAPP	156*	MS Excel	3
STAT	217*	Intermediate Stat Concepts	3

#### **TOTAL PROGRAM CREDITS - 60**

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

#### OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION FROM THE UNIVERSITY OF GREAT FALLS

The Associate of Arts with articulated coursework in Business is designed for students interested in a baccalaureate degree in Business Administration at the University of Great Falls.

#### I. UGF CORE - 6 CREDITS

## LIVING AND MAKING A LIVING (NEED 3 UPPER DIVISION WRITING CREDITS)

Course	No.	Title Cr	<u>edits</u>
ENG	312	Writing for Bus & Professions	3

#### **RELIGIOUS DIMENSION--3 CREDITS**

Course	No.	Title	Credits
TRL	200	Fund of Christian Theology	3
TRL	210	Catholicism	3
TRL	240	Reading the Old Testament	3
TRL	250	Reading the New Testament	3
TRL	303	Jesus the Christ	3

#### II. BUSINESS ADMINISTRATION MAJOR

## \*\*CREDITS & COURSES DEPENDENT UPON ARTICULATION COURSES TAKEN AT MSUGF

Course	No.	Title Cre	dits
BUS	201	The Art of Thinking	3
BUS	240	Management & Leadership	3
BUS	260	Marketing	3
BUS	335	Commercial Law	3
BUS	345	SIFE (3 terms/1 credit each)	3
BUS	400	Financial Analysis	3
BUS	401	The Art of Leadership	3
BUS	496	Commerce Integration	3
BUS	345	SIFE (3 terms of 1 credit)	3
BUS	497	Career Related Field Experience	3
COM	301	The Art of Communication	3
ECN	201	Macroeconomics <b>OR</b>	
ECN	202	Microeconomics	3
MTH	205	Elementary Prob & Stats <b>OR</b>	
SCS	312**	Social Research Methods	3
Business	Related Ap	proved Electives	6

<sup>\*\*</sup>This course is highly recommended although not required if student has completed STAT 217 at MSU-GF.

### III. MINOR / CONCENTRATION FULFILLED WITH A.A. DEGREE FROM MSU-GF

#### IV. TOTAL CREDITS TOWARD DEGREE:

60 CREDITS (AA – MSUGF)

48-49 CREDITS (BS – UGF)

6 CREDITS (CORE - UGF)

14-15 CREDITS (ELECTIVE)

#### **128 TOTAL CREDITS**

#### **UGF GRADUATION REQUIREMENTS:**

- **1.** Complete a minimum of 128 credits
- **2.** Maintain a cumulative UGF GPA of 2.0 or higher
- **3.** Complete the UGF Core
- **4.** Complete a major and one of the following: second major, associate's degree, minor, or a concentration in a field of study distinct from the major. All courses used to complete the requirements of a major, minor, or concentration must have a grade of C or better.
- **5.** Complete thirty of the last forty semester hours of coursework at UGF.
- **6.** Complete at least fifteen semester hours at UGF in the major or concentration, except for university studies.
- 7. Complete at least thirty-two credits in upper division coursework (courses numbered 300 or higher), at least sixteen of which must be from UGF. (Students should complete at least twelve of these credits in coursework outside the student's major and minor or concentration).
- **8.** Apply for graduation in accordance with the prescribed deadlines.
- **9.** Comply with all university policies, rules, and regulations.
- **10.** Pay all indebtedness to the university.

## MONTANA UNIVERSITY SYSTEM CORE TRANSFER TO THE UNIVERSITY OF GREAT FALLS – UNIVERSITY CORE

The MUS Core transfer is designed for students interested in completing the University Core curriculum at the University of Great Falls.

**NOTE:** Students should consult with the University of Great Falls to determine the additional core courses that are required to satisfy the University Core curriculum

## COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

#### **MATHEMATICS--4 CREDITS**

Course	No.	Title	Credits
M	152**	Precalculus Algebra	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
PHL	110	Introduction to Ethics	3
		AND one of the following	
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3

#### Natural Science--7 credits

(Must include 1 lab course)

Course	No.	Title Cred	<u>lits</u>
BIO	205	Personal Nutrition	3
		AND 1 of the following	
BIOB	101	Discover Biology/Lab	4
BIO	107	Fund of Human Biology/Lab	4
CHMY	121*	Intro to General Chem and Lab	3/1
GEO	101	Intro to Physical Geology and La	b 3/1
PHYS	130	Fund Physical Science Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
HSTR	101	Western Civilization I AND	3
<b>HSTR</b>	102	Western Civilization II	3
		OR	
<b>HSTA</b>	101N	American History I AND	3
<b>HSTA</b>	102N	American History II	3

#### **DIVERSITY--3 CREDITS**

Course	No.	Title Cr	edits
LIT	289N	Intro to Native American Lit	- 3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### **TOTAL CREDITS - 32**

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

## OUTLINE FOR COMPLETION OF THE UNIVERSITY CORE CURRICULUM FROM THE UNIVERSITY OF GREAT FALLS

The MUS Core transfer is designed for students interested in pursuing a baccalaureate degree at the University of Great Falls.

#### I. UGF CORE - 15 CREDITS

#### INTELLECTUAL INQUIRY - 3 CREDITS\*\*

\*\*COURSES DEPENDENT UPON ARTICULATION COURSES TAKEN AT MSUGF

Course	No.	Title	Credits
SOC	110	The Real World: Intro Soc.	3

#### LIVING AND MAKING A LIVING - 9 CREDITS

Course	No.	Title	<b>Credits</b>
ENG	117	Writing Essays	3
ENG	300-319	Upper level writing course	3
CPS	110	Conquering the Digital Divid	le 3

#### **RELIGIOUS DIMENSION – 3 CREDITS**

Course	No.	Title	Credits
TRL	200	Fund of Christian Theology	3
TRL	210	Catholicism	3
TRL	240	Reading the Old Testament	3
TRL	250	Reading the New Testament	3
TRL	303	Jesus the Christ	3

#### **UGF GRADUATION REQUIREMENTS:**

- **1.** Complete a minimum of 128 credits
- **2.** Maintain a cumulative UGF GPA of 2.0 or higher
- **3.** Complete the UGF Core
- **4.** Complete a major and one of the following: second major, associate's degree, minor, or a concentration in a field of study distinct from the major. All courses used to complete the requirements of a major, minor, or concentration must have a grade of C or better.
- **5.** Complete thirty of the last forty semester hours of coursework at UGF.
- **6.** Complete at least fifteen semester hours at UGF in the major or concentration, except for university studies.
- 7. Complete at least thirty-two credits in upper division coursework (courses numbered 300 or higher), at least sixteen of which must be from UGF. (Students should complete at least twelve of these credits in coursework outside the student's major and minor or concentration).
- **8.** Apply for graduation in accordance with the prescribed deadlines.
- **9.** Comply with all university policies, rules, and regulations.
- **10.** Pay all indebtedness to the university.

# ASSOCIATE OF ARTS DEGREE WITH EDUCATION COURSEWORK TRANSFER TO THE UNIVERSITY OF GREAT FALLS

The Associate of Arts with articulated coursework in Education is designed for students interested in a baccalaureate degree in Elementary Education at the University of Great Falls.

#### I. MUS CORE - 31 SEMESTER HOURS

## COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

#### **MATHEMATICS--3 CREDITS**

Course	No.	Title	Credits
M	121**	College Algebra	3

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
PHL	110	Introduction to Ethics	3
		AND one of the following	
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3

#### NATURAL SCIENCE--7 CREDITS

(Must include 1 lab course)

Course	No.	Title	Credits
BIOB	101	Discover Biology/Lab	4
		AND one of the following	
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science/Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
HSTA	101N	American History I	3
<b>HSTA</b>	102N	American History II	3

#### **CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title	Credits
LIT	289N	Intro to Native A	American Lit 3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

## III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS

Course	No.	Title Cred	lits
SOCI	101	Introduction to Sociology OR	
PSYX	100	Introduction to Psychology	3
		AND	
WRIT	201	College Writing II	3
		AND	
EDU	221	Ed Psych & Measurement	3

#### IV. ARTICULATION COURSEWORK - 17 CREDITS

Course	No.	Title Cred	its
EDU	200	Introduction to Education	3
EDU	270*	Instructional Technology	3
EDU	211	Multicultural Education	3
M	130	Math for Elementary Teachers I	3
M	131	Math for Elementary Teachers II	3
AH	150	Fitness for Life	2

#### TOTAL PROGRAM CREDITS - 60

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

## OUTLINE FOR COMPLETION OF BACHELOR OF ARTS IN ELEMENTARY EDUCATION FROM THE UNIVERSITY OF GREAT FALLS

The Associate of Arts with articulated coursework in Education is designed for students interested in a baccalaureate degree in Elementary Education at the University of Great Falls.

#### I. UGF CORE - 6 CREDITS

### LIVING AND MAKING A LIVING (NEED 3 UPPER DIVISION WRITING CREDITS)

Course	No.	Title	Credits
ENG	300-319	Upper level writing course	3

#### **RELIGIOUS DIMENSION--3 CREDITS**

Course	No.	Title	Credits
TRL	200	Fund of Christian Theology	3
TRL	210	Catholicism	3
TRL	240	Reading the Old Testament	3
TRL	250	Reading the New Testament	3
TRL	303	Jesus the Christ	3

#### II. ELEMENTARY EDUCATION MAJOR - 54 CREDITS

Course	No.	Title Cree	dits	
EDU	202	Intro to Gifted Education	2	
EDU	261	Intro to Exceptionalities	3	
EDU	315	Assessment of Learning	2	
EDU	341	Methods in Elem Science	2	
EDU	342	Methods in Elem Soc. Studies	2	
EDU	352	Methods in Elem Math	2	
EDU	353	Methods in Elem Art	2	
EDU	356	Methods in Comm Arts I	2	
EDU	357	Methods in Comm Arts II	3	
EDU	370	Children's Literature	3	
EDU	462	PPIE Elementary	2	
EDU	472	PPIE Middle School	2	
EDU	489	Elem/Sec Ed Internship	2	
EDU	490	Elementary Internship	10	
HPE	300	Strategies in Hlth Enhancement	3	
MUS	250	Elementary School Music	2	
Other required courses:				
GSC	158	History of Science	4	
HST	230	World and Regional Geography	3	
MTH	108	Elementary Statistics	3	

II. DUAL MAJOR IN SPECIAL EDUCATION OR CONCENTRATION NECESSARY FOR COMPLETION OF ELEMENTARY EDUCATION DEGREE FROM UGF

III. TOTAL CREDITS TOWARD DEGREE:
60 CREDITS (AA – MSUGF)
54 CREDITS (BS – UGF)
6 CREDITS (CORE – UGF)
REMAINING CREDITS (DUAL MAJOR AND
CONCENTRATION)

\_\_\_\_\_

128 TOTAL CREDITS NECESSARY FOR GRADUATION

ART MINOR, HPE MINOR, READING INSTRUCTION CONCENTRATION, OR SPECIAL EDUCATION MAJOR – WILL RECEIVE A K-12 ENDORSEMENT FOR THAT SUBJECT AREA AND THEREFORE MUST SUBSTITUTE EDU 482 FOR EDU 472, PPIE MIDDLE SCHOOL AND MUST ALSO TAKE THE FOLLOWING COURSES:

EDU 338 Teaching Reading in the Content Area 2 EDU 430 Secondary Teaching Procedures 2

ELEMENTARY EDUCATION MAJORS MUST TAKE AN APPROVED CONCENTRATION OR COMPLETE A SECOND MAJOR IN SPECIAL EDUCATION. THE FOLLOWING ARE AVAILABLE OPTIONS:

Art Concentration
Communication Arts Concentration
Gifted and Talented Education Concentration
Health and Physical Education Concentration
Mathematics Concentration
Reading Instruction Concentration
Science Concentration
Social Science Concentration
Special Education Concentration

# ASSOCIATE OF ARTS DEGREE WITH EDUCATION COURSEWORK TRANSFER TO THE UNIVERSITY OF GREAT FALLS

The Associate of Arts with articulated coursework in Secondary Education is designed for students interested in a baccalaureate degree in Secondary Education at the University of Great Falls.

#### I. MUS CORE - 32 SEMESTER HOURS

## COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

#### **MATHEMATICS--4 CREDITS**

Course	No.	Title	Credits
M	152**	Precalculus Algebra	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
PHL	110	Introduction to Ethics	3
		AND one of the following	
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3

#### **NATURAL SCIENCE--7 CREDITS**

(Must include 1 lab course)

Course	No.	Title	Credits
BIO	205	Personal Nutrition	3
		AND	
BIOB	101	Discover Biology/Lab	4
BIO	107	Fund of Human Biology/Lab	4
CHMY	121*	Intro to General Chem/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	130	Fund Physical Science/Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
HSTR	101	Western Civilization I	3
<b>HSTR</b>	102	Western Civilization II	3

#### **CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title (	<u>Credits</u>
LIT	289N	Intro to Native American Lit	3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

## III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS

Course	No.	Title Cro	edits
SOCI	101	Introduction to Sociology <b>OR</b>	
PSYX	100	Introduction to Psychology	3
		AND	
WRIT	201	College Writing II	3
		AND	
EDU	221	Ed Psych & Measurement	3

#### IV. ARTICULATION COURSEWORK - 16 CREDITS

Course	No.	Title	Credits
EDU	200	Introduction to Education	3
EDU	270*	Instructional Technology	3
EDU	211	Multicultural Education	3
Elective	S***		7

\*\*\*Please see your advisor in regard to elective credits that will transfer to an applicable major and/or minor at UGF

#### TOTAL PROGRAM CREDITS - 60

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

## OUTLINE FOR COMPLETION OF BACHELOR OF ARTS IN SECONDARY EDUCATION FROM THE UNIVERSITY OF GREAT FALLS

The Associate of Arts with articulated coursework in Education is designed for students interested in a baccalaureate degree in Secondary Education at the University of Great Falls.

#### I. UGF CORE - 6 CREDITS

## LIVING AND MAKING A LIVING (NEED 3 UPPER DIVISION WRITING CREDITS)

Course	No.	Title	Credits
ENG	300-319	Upper level writing course	3

#### **RELIGIOUS DIMENSION--3 CREDITS**

Course	No.	Title	Credits
TRL	200	Fund of Christian Theology	3
TRL	210	Catholicism	3
TRL	240	Reading the Old Testament	3
TRL	250	Reading the New Testament	3
TRL	303	Jesus the Christ	3

#### II. SECONDARY EDUCATION MAJOR - 25 CREDITS

Course	No.	Title Credits
EDU	261	Intro to Exceptionalities 3
EDU	315	Assessment of Learning 2
EDU	338	Teaching Reading – Content Area 2
EDU	430	Secondary Schl Teaching Proc 2
EDU	472	PPIE – Middle School 2
EDU	482	PPIE – High School 2
EDU	489	Elementary / Secondary Ed Intern 2
EDU	498	Secondary Internship 10
*EDU	462	Pre-Prof Integ Experience ES 2

<sup>\*</sup>Secondary education students majoring or minoring in Art, HPE, or Special Education or completing the Reading Instruction concentration will receive a K-12 endorsement for that subject area and must therefore complete EDU 462 PPIE Elementary in lieu of EDU 472 PPIE Middle School.

## II. DUAL MAJOR NECESSARY FOR OBTAINING SECONDARY EDUCATION DEGREE FROM UGF

## III. MINOR NECESSARY FOR COMPLETION OF SECONDARY EDUCATION DEGREE FROM UGF

# IV. TOTAL CREDITS TOWARD DEGREE: 60 CREDITS (AA – MSUGF) 25 CREDITS (BS – UGF) 6 CREDITS (CORE – UGF) REMAINING CREDITS (DUAL MAJOR AND MINOR)

#### 128 TOTAL CREDITS NECESSARY FOR GRADUATION

#### **UGF GRADUATION REQUIREMENTS:**

- 1. Complete a minimum of 128 credits.
- 2. Maintain a cumulative UGF GPA of 2.0 or higher
- 3. Complete the UGF Core.
- 4. Complete a major and one of the following: second major, associate's degree, minor, or a concentration in a field of study distinct from the major. All courses used to complete the requirements of a major, minor, or concentration must have a grade of C or better.
- 5. Complete thirty of the last forty semester hours of coursework at UGF.
- Complete at least fifteen semester hours at UGF in the major or concentration, except for university studies.
- Complete at least thirty-two credits in upper division coursework (courses numbered 300 or higher), at least sixteen of which must be from UGF. (Students should complete at least twelve of these credits in coursework outside the student's major and minor or concentration).
- 8. Apply for graduation in accordance with the prescribed deadlines.
- 9. Comply with all university policies, rules, and regulations.
- 10. Pay all indebtedness to the university.





# ARTICULATION AGREEMENT BETWEEN MSU-GREAT FALLS COLLEGE OF TECHNOLOGY AND MSU-NORTHERN

#### **OVERVIEW:**

This formal program articulation agreement is made and entered into by MSU-Great Falls College of Technology, hereinafter referred to as MSU-GF, and MSU-Northern. By this agreement MSU-GF and MSU-Northern express a shared commitment to increasing opportunities for student access to and success in 4-year institutions of higher education.

#### **PURPOSE**:

This agreement provides students who have earned an **Associate of Arts degree** the opportunity to complete a **Bachelor of Science** in Elementary Education at MSU-Northern. Any MSU-GF student who has earned an Associate of Arts degree with coursework that adheres to the guidelines within this agreement is guaranteed that MSU-Northern will accept designated major related credits and that all general education credits will apply to the Bachelor of Science in Elementary Education degree in a manner consistent with the treatment of resident MSU-Northern students.

#### **CONDITIONS OF TRANSFER:**

#### **Section I: Admissions and Matriculation**

MSU-GF students maintaining continuous enrollment under this agreement will be afforded the same treatment and protection as native MSU-Northern students enrolled under a specific catalog.

Criteria for acceptance into MSU-Northern will be the same for transfer as for native students.

MSU-GF, upon request of students, will provide verification of completed courses to MSU-Northern upon completion of a transcript request from the Office of Admissions and Records. The transcript of students transferring from MSU-GF will be evaluated by MSU-Northern.

Transfer students from MSU-GF will have access to financial aid, scholarships, and student services on the same basis as native students.

MSU-Northern will apply the same academic progress and graduation standards to MSU-GF transfer students as those applicable to resident students at MSU-Northern. All Elementary Education candidates at MSU-Northern must have a minimum 2.50 GPA and apply for Level I Admission to Teacher Education.

#### **Section II: Transfer of Credit**

A maximum of 60 semester hours will be accepted by MSU-Northern from MSU-GF to be applied to the Bachelor of Science in Elementary Education degree as outlined in this agreement.

#### Section III: Program Plan

While a course-by-course equivalence was used in the development of this plan, this agreement presumes that the general education core requirements at MSU-GF meet the general education requirements at

MSU-Northern. Students falling under this program articulation agreement will be responsible for successfully completing the prescribed requirements.

#### **TERMS OF AGREEMENT:**

This agreement is made and entered into in the academic year 2010-2011 and remains in force unless changed in writing by mutual agreement to both parties. The agreement may be amended at any time with the approval of both parties and is subject to regular review to assure currency with the respective degree requirements. Should either party desire to discontinue this agreement, advance notification of one year will be required.

#### **SIGNATURES:**

MSU-Great Falls College of Technology and MSU-Northern hereby enter into this program articulation agreement leading from the Associate of Arts degree with a concentration in Elementary Education to the Bachelor of Science degree in Elementary Education by the affixing of signatures of the chief academic officers of both institutions.

Joseph Schaffer	Date
CEO/Dean	
MSU-Great Falls College of Technology	
<i>c c,</i>	
Dr. Roselyn Templeton	Date
_	
Provost	

# ASSOCIATE OF ARTS DEGREE WITH ELEMENTARY EDUCATION TRANSFER TO MSU-NORTHERN – ELEMENTARY EDUCATION

The Associate of Arts with the Elementary Education Concentration is designed for students interested in a baccalaureate degree in Elementary Education at Montana State University-Northern. All Elementary Education candidates at MSU-Northern must have a minimum 2.50 GPA and apply for Level I Admission to Teacher Education. Students must provide proof of a current 1st Aid/CPR card prior to entering their junior year at MSU-Northern.

**NOTE:** Courses taken to fulfill one specific requirement, including courses in the Concentration or Elective blocks, may not be used to fulfill another specific requirement.

#### I. MUS CORE – 31-33 SEMESTER HOURS

#### **COMMUNICATION--6 CREDITS**

Course	No.	Title C	redits
WRIT	101**	College Writing I	3
COMM	135	Interpersonal Communicati	ion 3

#### **MATHEMATICS--3 CREDITS**

Course	No.	Title	<u>Credits</u>
M	121**	College Algebra	3
M	152**	Precalculus Algebra	4
M	153**	Precalculus Trigonometry	7 3
M	171**	Calculus I	4

#### **HUMANITIES/FINE ARTS--6 CREDITS**

Course	No.	Title	Credits
LIT	110	Intro to Literature	3
		AND 1 of the following	
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
LIT	231*	Ancient to Ren World Lit	t 3
LIT	232*	Modern World Lit	3
<b>ENGL</b>	217	Creative Writing	3
HUM	242	Gender & Equality	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3
PHL	101	Introduction to Philosoph	y 3
PHL	110	Introduction to Ethics	3

#### NATURAL SCIENCE--7 CREDITS

(Must include 1 lab course)

Course	No.	Title	Credits
BIOB	101	Discover Biology/Lab	4
		AND 1 of the following	
PHYS	110	Survey of Natural Science	3
PHYS	130	Fund of Phys Science/Lab	4

#### SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title Cre	<u>dıts</u>
<b>HSTA</b>	255N	Montana History	3
PSYX	230	Developmental Psychology	3

#### **CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title	<u>Credits</u>
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Tra-	d 3

CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title Cree	<u>dits</u>
CAPP	120	Introduction to Computers	3
*or any	CIT 3	credit hour course that has CIT 110 as a	
prerequi	isite		

#### III. ARTICULATION COURSEWORK – 18 CREDITS

Course	No.	Title Cred	<u>its</u>
EDU	200	Introduction to Education	3
EDU	270*	Instructional Technology	3
EDU	221	Educational Psych & Measurement	3
HHD	106	Drug & Health Issues for Ed	3
M	130*	Math for Elementary Teachers I	3
PSCI	210	Intro to American Government	3

#### IV. ELECTIVES - 8 CREDITS

Students may choose coursework numbered 100 or above from any discipline area to complete the required credits of electives. Students may not choose or may not count the following courses: M 111, M 090, M 095, M 108, WRIT 085, WRIT 090.

#### **Recommended Electives**

Course	No.	Title	Credits
EDU	211	Multicultural Education	3
Any ART or MUSI core course			3
See advisor for minor/concentration courses			3-4

### NO MORE THAN 5 CREDITS OF COURSES NUMBERED 116 MAY BE APPLIED TOWARD THE DEGREE.

#### **TOTAL PROGRAM CREDITS - 60**

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*\*</sup>Placement in course(s) is determined by placement assessment

#### **ELEMENTARY EDUCATION REQUIREMENTS FOR MSU-NORTHERN**

Course	No.	Title	Credits
EDPY	350	Educational Psychology of the Exceptional Child	3
EDUC	300	Introduction to Curriculum Planning and Practice	3
EDUC	351	Diversity and Technology	3
EDUC	353	Health Enhancement for Elementary Teachers	2
EDUC	376	Assessment in Education	3
EDUC	380	Classroom Environment and Management	3
EDUC	302	Methods of Teaching Elementary Mathematics	2
EDUC	304	Methods of Teaching Elementary Science	2
EDUC	306	Methods of Teaching Elementary Social Studies	2
EDUC	310	Methods of Teaching Integrated Creative Arts	2
EDUC	334	Methods of Teaching Integrated Language Arts	3
EDUC	336	Integrated Field Experience	1-3
EDUC	335	Fundamental and Corrective Strategies in Reading	3
EDUC	430	Integrating Contact Across the Curriculum	2
EDUC	455	Advanced Practicum in Education	3
EDUC	448	Reading Materials for the Elementary Child	2
EDUC	400	Elementary Teaching Practicum and Seminar	6 or 12
		OR	
EDUC	475	Elementary and Secondary Teaching Practicum and Seminar	
			38-46
MINORS/CONCENTRATIONS/ELECTIVES*			

<sup>\*</sup> Minors/Concentrations/Electives to be determined by the student in consultation with their advisor at MSU-Northern according to University's current catalog/program sheet. Students with additional prior coursework not strictly identified in this articulation agreement that they believe may apply towards the Minors/Concentrations/Electives must contact the Dean of the College of Arts & Sciences, Education and Nursing, or his/her designee, at MSU-Northern to ascertain the course(s) acceptability toward satisfying a portion of this requirement.





# ARTICULATION AGREEMENT BETWEEN MSU-GREAT FALLS COLLEGE OF TECHNOLOGY AND MSU-NORTHERN

#### **OVERVIEW:**

This formal program articulation agreement is made and entered into by MSU-Great Falls College of Technology, hereinafter referred to as MSU-GF, and MSU-Northern. By this agreement MSU-GF and MSU-Northern express a shared commitment to increasing opportunities for student access to and success in 4-year institutions of higher education.

#### **PURPOSE**:

This agreement provides students who have earned an **Associate of Applied Science Degree** in Microcomputer Support the opportunity to complete **Bachelor of Science** in Computer Information systems at MSU-Northern. Any MSU-GF student who has earned an Associate of Applied Science degree in Microcomputer Support and adheres to the guidelines within this agreement is guaranteed that MSU-Northern will accept designated major related credits and that all general education credits will apply to the Bachelor of Science in Computer Information Systems degree in a manner consistent with the treatment of native MSU-Northern students.

#### CONDITIONS OF TRANSFER:

#### **Section I: Admissions and Matriculation**

MSU-GF students maintaining continuous enrollment under this agreement will be afforded the same treatment and protection as native MSU-Northern students enrolled under a specific catalog.

Criteria for acceptance into MSU-Northern will be the same for transfer as for native students.

MSU-GF, upon request of students, will provide verification of completed courses to MSU-Northern upon completion of a transcript request from the Office of Admissions and Records. The transcript of students transferring from MSU-GF will be evaluated by MSU-Northern.

Transfer students from MSU-GF will have access to financial aid, scholarships, and student services on the same basis as native students.

MSU-Northern will apply the same academic progress and graduation standards to MSU-GF transfer students as those applicable to native students at MSU-Northern.

#### Section II: Transfer of Credit

A maximum of 61 semester hours will be accepted by MSU-Northern from MSU-GF to be applied to the Bachelor of Science in Computer Information Systems degree.

#### Section III: Program Plan

While a course-by-course equivalence was used in the development of this plan, this agreement presumes that the general education core requirements at MSU-GF meet the general education requirements at MSU-Northern. Students falling under this program articulation agreement will be responsible for successfully completing the prescribed requirements.

#### **TERMS of AGREEMENT:**

This agreement is made and entered into in the academic year 2010-2011 and remains in force unless changed in writing by mutual agreement to both parties. The agreement may be amended at any time with the approval of both parties and is subject to annual review to assure currency with the respective degree requirements. Should either party desire to discontinue this agreement, advance notification of one year will be required.

#### **SIGNATURES:**

by enter into this program articulation agreement inputer Support to the Bachelor of Science degree the chief academic officers of both institutions.
Date
Date

# ASSOCIATE OF APPLIED SCIENCE DEGREE IN MICROCOMPUTER SUPPORT TRANSFER TO MSU-NORTHERN – COMPUTER INFORMATION SYSTEMS

Completion of an Associate of Applied Science Degree in Microcomputer Support allows for students interested in a baccalaureate degree in Computer Information Systems to transfer to Montana State University-Northern.

Course	No.	Title	<u>Credits</u>
BUS	106	Introduction to Business	<b>3</b> †
CAPP	120	Intro to Computers	3†
CAPP	154*	MS Word	3†
CAPP	156*	MS Excel	3†
CAPP	158*	MS Access	3†
CSCI	110*	Programming w/Visual Basic I	3†
CIT	229*	Web Page Construction	3†
COMM	135	Interpersonal Communication	3†
ITS	150*	CCNA1: Exploration	3†
ITS	152*	CCNA 2: Exploration	3†
ITS	210*	Network OS - Desktop	4†
ITS	250*	CCNA 3: Exploration	3 <b>†</b>
ITS	252*	CCNA 4: Exploration	3†
ITS	280*	Computer Repair & Maintenance	4†
ITS	298*	Internship/Cooperative Edu	3†
M	121**	College Algebra <b>OR</b>	
M	152**	Precalculus Algebra <b>OR</b>	
M	171**	Calculus	3/4†
WRIT	101**	College Writing I <b>OR</b>	
WRIT	122*	Intro to Business Writing	3†
		Technical Electives	<u>7†</u>
			60-61 CREDITS

<sup>~</sup> Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>†</sup>A grade of "C-" or above required for graduation

<sup>\*</sup> Indicates prerequisites needed

<sup>\*\*</sup>Placement in course(s) is determined by placement assessment

# **COMPUTER INFORMATION SYSTEMS REQUIREMENTS FOR MSU-NORTHERN**

# 1. Technical Requirements – 27 credits

Course	No.	Title	Credits
ACCT	261	Principles of Accounting I	3
CIS	155	Java Programming	3
CIS	270	Systems Analysis and Design	3
WRIT	350	Technical Writing and Editing	3
ISET	300	Operating Systems Introduction	3
ISET	350	Advanced Java Programming	3
ISET	410	Enterprise Resources Planning	3
ISET	471	Information System Engineering	3
		Upper Division Elective (must be 300/400 level)	3

# II. Take two (2) of the following three areas – 24 credits

Hardware Cluster (12 credits) Networking Cluster (12 credits) Software Cluster (12 credits)

# III. General Education Requirements – 21 credits

Category III	Natural Sciences w/ lab: AG 204, BIOL, CHMY, GEO, GPHY 111, GSCI, NSCI, PHYS, TSCI 110, TSCI 230, TSCI 304, TSCI 320 (6 credits)
Category IV	Social Sciences/History: CMSV 101, ECNS 201, 202, 372, HIST 330, 374, HSTA 101,102, 255, HSTR 101, 102, PSCI 201, 250, 471, PSYX 100, 230, SOCI 101, 241, SOSC 201 (6 credits)
Category V	Cultural Diversity: NAS 105, 106, 220, 310, 330, 331, 350, 364, NURS 331, SOCI 315, SPNS 101, 102 <i>(3 credits)</i>
Category VI	Fine Arts/Humanities: ART 100. 115, 120, 150, 151, 204, 353, 361, 362, DRMA 109, ENGL 310, 311, HUM 201, GDSN 270, LIT 110, 210, 211, 223, 224, 230, 309, 327, 363, MUSI 101, 110, PHL 200, 210 <i>(6 credits)</i>

TOTAL TECHNICAL REQUIREMENTS	27
CLUSTER AREAS	24
TRANSFERRED BLOCK	60/61
GENERAL EDUCATION	<u>21</u>
	132/133

# ASSOCIATE OF ARTS DEGREE TRANSFER TO PARK UNIVERSITY

The Associate of Arts is designed for students interested in a Bachelor of Arts degree at Park University.

# I. MUS CORE - 31 SEMESTER HOURS

COMMUNICATION--6 CREDITS

(NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

# **MATHEMATICS -- 3 CREDITS**

Course	No.	Title	Credits
М	121**	College Algebra	3

# **HUMANITIES/FINE ARTS -- 6 CREDITS**

No.	Title	Credits
101	Intro to Visual Arts	3
114	Art Fundamentals	3
140	Drawing I	3
161	Introduction to Design	3
217	Creative Writing	3
110	Intro to Literature	3
231*	Ancient to Ren World Lit	3
232*	Modern World Lit	3
291	Special Topics – Literature	3
242	Gender & Equality	3
105	Music Theory I	3
101	Enjoyment of Music	3
203	American Popular Music	3
207	World Music	3
101	Introduction to Philosophy	3
110	Introduction to Ethics	3
	101 114 140 161 217 110 231* 232* 291 242 105 101 203 207 101	101 Intro to Visual Arts 114 Art Fundamentals 140 Drawing I 161 Introduction to Design 217 Creative Writing 110 Intro to Literature 231* Ancient to Ren World Lit 232* Modern World Lit 291 Special Topics – Literature 242 Gender & Equality 105 Music Theory I 101 Enjoyment of Music 203 American Popular Music 207 World Music 101 Introduction to Philosophy

# **NATURAL SCIENCE -- 7 CREDITS**

(Must include 1 lab course)

Course	No.	Title	<u>Credits</u>
BIOB	101	Discover Biology/Lab	4
BIO	107	Fund of Human Biology/Lab	4
BIO	151*	Molecular & Cell Biology/Lab	4
BIO	152*	Organismal Biology/Lab	4
BIO	205	Personal Nutrition	3
CHMY	121/122*	Into to General Chemistry/La	b 4
CHMY	141/142*	College Chemistry I/Lab	4
CHMY	143/144*	College Chemistry II/Lab	4
GEO	101/102	Intro to Physical Geology/Lak	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science w/Lab	4

# SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title Cre	dits
<b>ECNS</b>	201	Principles of Microeconomics	3
PSYX	230	Developmental Psychology	3

#### **CULTURAL DIVERSITY -- 3 CREDITS**

Course	No.	Title Cree	<u>dits</u>
LIT	215N	Literature of the West	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

**CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS** 

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

# II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

# III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS

Course	No.	Title	Credits	
WRIT	201*	College Writing II	3	
<b>ECNS</b>	202	Principles of Macroeconomic	cs 3	
		AND		
Any one course from ART, COMM, HUM, MUSI,				
SIGN, or PHL (100 level or above)				

# IV. ARTICULATION COURSEWORK - 17 CREDITS

Course	No.	Title	Credits
Transfer	rable cr	redit for specific deg	ree plans may be located on
the cour	se equi	valency guide on the	e Registrar's web page at:
http://w	ww.pai	rk.edu/registrar/Equ	uivalency/MSU-GF.aspx

Students may choose coursework numbered 100 or above from any discipline area to complete the required 17 credits of electives. Students may not choose or may not count the following courses: MATH 100, MATH 101, MATH 103, MATH 104, MATH 108, ENGL 118, ENGL 119, ENGL 120

### TOTAL PROGRAM CREDITS – 60

~Many students need preliminary math and Writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and Writing placement before planning out their full program schedule.

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

# OUTLINE FOR COMPLETION OF BACHELOR OF ARTS DEGREE FROM PARK UNIVERSITY

# I. General Education

Writing Competency Test P
EN 306 Professional Writing in Discipline 3
Modern Language (2 course, same language)
OR completion of 2<sup>nd</sup> 4 credit
elementary level modern language
OR 3 credit intermediate course 3-8
LE 300 Integrative/Interdisciplinary
Learning Capstone 3

# **II. Core Requirements**

Core Courses for selected major and General Electives to fulfill BA 48-53

# **Total Credits** 122

# **Bachelor of Arts Degrees offered online:**

http://www.park.edu/online/ Psychology Sociology

# ASSOCIATE OF ARTS DEGREE TRANSFER TO PARK UNIVERSITY

The Associate of Arts is designed for students interested in a Bachelor of Science degree at Park University.

# I. MUS CORE - 31 SEMESTER HOURS

# **COMMUNICATION--6 CREDITS**

# (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

# **MATHEMATICS -- 3 CREDITS**

Course	No.	Title	Credits
M	121**	College Algebra	3

# **HUMANITIES/FINE ARTS -- 6 CREDITS**

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
ENGL	217	Creative Writing	3
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
LIT	291	Special Topics – Literature	3
HUM	242	Gender & Equality	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3
PHL	101	Introduction to Philosophy	3
PHL	110	Introduction to Ethics	3

# NATURAL SCIENCE -- 7 CREDITS

(Must include 1 lab course)

(			
Course	No.	Title Cre	dits
BIOB	101	Discover Biology/Lab	4
BIO	107	Fund of Human Biology/Lab	4
BIO	151*	Molecular & Cell Biology/Lab	4
BIO	152*	Organismal Biology/Lab	4
BIO	205	Personal Nutrition	3
CHMY	121*	Into to General Chemistry/Lab	4
CHMY	141*	College Chemistry I/Lab	4
CHMY	143*	College Chemistry II/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science w/Lab	4

# SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title Cre	<u>dits</u>
ECNS	201	Principles of Microeconomics	3
PSYX	230	Developmental Psychology	3

#### **CULTURAL DIVERSITY -- 3 CREDITS**

Course	No.	Title Cree	lits
LIT	215N	Literature of the West	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

# CULTURAL HERITAGE OF AMERICAN INDIANS-3 CREDITS

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

# II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

# III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS

Course	No.	Title	Credits
WRIT	201*	College Writing II	3
<b>ECNS</b>	202	Principles of Macroeconomic	cs 3
		AND	
Any one	course from	n ART, COMM, HUM, MUSI,	
SIGN, or	PHL (100 le	vel or above)	3

# IV. ARTICULATION COURSEWORK - 17 CREDITS

Transferrable credit for specific degree plans may be located on the course equivalency guide on the Registrar's web page at: <a href="http://www.park.edu/registrar/Equivalency/MSU-GF.aspx">http://www.park.edu/registrar/Equivalency/MSU-GF.aspx</a>

Students may choose coursework numbered 100 or above from any discipline area to complete the required 17 credits of electives. Students may not choose or may not count the following courses: MATH 100, MATH 101, MATH 103, MATH 104, MATH 108, ENGL 118, ENGL 119, ENGL 120

# Total Program Credits - 60

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

# **OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE DEGREE**

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

# FROM PARK UNIVERSITY

I. General Education		
Writing Competency Test	Р	Bachelor of Science Degrees offered online:
EN 306 Professional Writing in Discipline	3	http://www.park.edu/online/
LE 300 Integrative/Interdisciplinary		Management
Learning Capstone	3	Management/Computer Information Systems
		Management/Marketing
II. Core Requirements		Management/Human Resources
Core Courses for selected major and		Management/Health Care
General Electives to fulfill BA 54		Management/Logistics
		Social Psychology
		Criminal Justice Administration
Total Credits	120	
Bachelor o Science degrees offered at		
Malmstrom AFB:		
http://www.park.edu/malm		
Criminal Justice Administration-Correction	ıs	
Criminal Justice Administration-Law		
Enforcement		
Criminal Justice Administration-Security		
Information & Computer Science-Computer	er	
Science		
Information & Computer Science-Data		
Management		
Information & Computer Science-Network	<b>.</b> &	
Security		
Information & Computer Science-Software	9	
Engineering		
Management		
Management-Accounting		
Management-Computer Information Syste	ems	
Management-Finance		
Management-Health Care		
Management-Human Resources		

Management-Marketing Social Psychology-Basic

Institutional

Social Psychology-Clinical and Abnormal

Social Psychology-Human Development

Social Psychology-Cultural, Organizational and

Social Psychology-Theories and Methodologies

# ASSOCIATE OF SCIENCE DEGREE TRANSFER TO PARK UNIVERSITY

The Associate of Science degree is designed for students interested in a Bachelor of Arts degree at Park University.

3

# I. MUS CORE – 31 SEMESTER HOURS COMMUNICATION--6 CREDITS (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	

**Public Speaking** 

#### **MATHEMATICS -- 3 CREDITS**

COMM 130

Course	No.	Title	Credits
M	121**	College Algebra	3

# **HUMANITIES/FINE ARTS -- 6 CREDITS**

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
ENGL	217	Creative Writing	3
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
LIT	291	Special Topics – Literature	3
HUM	242	Gender & Equality	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3
PHL	101	Introduction to Philosophy	3
PHL	110	Introduction to Ethics	3

# NATURAL SCIENCE -- 7 CREDITS

(Must include 1 lab course)

Course	No.	Title C	redits
BIOB	101	Discover Biology/Lab	4
BIO	107	Fund of Human Biology/Lab	4
BIO	151*	Molecular & Cell Biology/Lab	4
BIO	152*	Organismal Biology/Lab	4
BIO	205	Personal Nutrition	3
CHMY	121*	Into to General Chemistry/Lab	4
CHMY	141*	College Chemistry I/Lab	4
CHMY	143*	College Chemistry II/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science w/Lab	4

# SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title	Credits
ECNS	201	Principles of Microeconomics	3
ECNS	202	Principles of Macroeconomics	3
HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3
HSTA	255N	Montana History	3

100	Introduction to Psychology	3
230	Developmental Psychology	3
101	Introduction to Sociology	3
121	Introduction to Criminal Justice	3
210	Intro to American Government	3
	230 101 121	<ul> <li>Developmental Psychology</li> <li>Introduction to Sociology</li> <li>Introduction to Criminal Justice</li> </ul>

# **CULTURAL DIVERSITY -- 3 CREDITS**

Course	No.	<u>Title</u> <u>Cred</u>	<u>lits</u>
LIT	215N	Literature of the West	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

# CULTURAL HERITAGE OF AMERICAN INDIANS-3 CREDITS

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

#### II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

# III. CONCENTRATION IN MATH AND SCIENCE – 9 CREDITS

Students may choose coursework numbered 100 or above from any of the following discipline areas to complete the required 9 credits of electives: (BIO) (BIOB) (BIOM) Biology, (CHMY) Chemistry, (GEO) Geology, (M) Math\*\* (except 090, 095, 096, 108, or 111), (PHYS) Physical Science

# IV. ARTICULATION COURSEWORK - 17 CREDITS

Course	No.	Title	Credits
Flectives			17

Transferrable credit for specific degree plans may be located on the course equivalency guide on the Registrar's web page at: <a href="http://www.park.edu/registrar/Equivalency/MSU-GF.aspx">http://www.park.edu/registrar/Equivalency/MSU-GF.aspx</a>

Students may choose coursework numbered 100 or above from any discipline area to complete the required 17 credits of electives. Students may not choose or may not count the following courses: MATH 100, MATH 101, MATH 103, MATH 104, MATH 108, ENGL 118, ENGL 119, ENGL 120

# **TOTAL PROGRAM CREDITS - 60**

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

# OUTLINE FOR COMPLETION OF BACHELOR OF ARTS DEGREE FROM PARK UNIVERSITY

# I. General Education

EN 106 First year Writing Seminar II	3
Writing Competency Test	Р
EN 306 Professional Writing in Discipline	3
Modern Language (2 course, same language)	
<b>OR</b> completion of 2 <sup>nd</sup> 4 credit	
elementary level modern language	
<b>OR</b> 3 credit intermediate course	3-8
LE 300 Integrative/Interdisciplinary	
Learning Capstone	3

# **II. Core Requirements**

Core Courses for selected major and General Electives to fulfill BA 45-50

# **Total Credits** 122

# **Bachelor of Arts Degrees offered online:**

http://www.park.edu/online/
Psychology
Sociology

# ASSOCIATE OF SCIENCE DEGREE TRANSFER TO PARK UNIVERSITY

The Associate of Science degree is designed for students interested in a Bachelor of Science degree at Park University.

# I. MUS CORE – 31 SEMESTER HOURS COMMUNICATION--6 CREDITS

# (NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3
		AND	
COMM	130	Public Speaking	3

#### **MATHEMATICS -- 3 CREDITS**

Course	No.	Title	Credits
M	121**	College Algebra	3

# **HUMANITIES/FINE ARTS -- 6 CREDITS**

Course	No.	Title	Credits
ART	101	Intro to Visual Arts	3
ART	114	Art Fundamentals	3
ART	140	Drawing I	3
DE	161	Introduction to Design	3
ENGL	217	Creative Writing	3
LIT	110	Intro to Literature	3
LIT	231*	Ancient to Ren World Lit	3
LIT	232*	Modern World Lit	3
LIT	291	Special Topics – Literature	3
HUM	242	Gender & Equality	3
MUSI	105	Music Theory I	3
MUSI	101	Enjoyment of Music	3
MUSI	203	American Popular Music	3
MUSI	207	World Music	3
PHL	101	Introduction to Philosophy	3
PHL	110	Introduction to Ethics	3

# NATURAL SCIENCE -- 7 CREDITS

(Must include 1 lab course)

Course	No.	Title C	<u>redits</u>
BIOB	101	Discover Biology/Lab	4
BIO	107	Fund of Human Biology/Lab	4
BIO	151*	Molecular & Cell Biology/Lab	4
BIO	152*	Organismal Biology/Lab	4
BIO	205	Personal Nutrition	3
CHMY	121*	Into to General Chemistry/Lab	4
CHMY	141*	College Chemistry I/Lab	4
CHMY	143*	College Chemistry II/Lab	4
GEO	101	Intro to Physical Geology/Lab	4
PHYS	110	Survey of Natural Sciences	3
PHYS	130	Fund Physical Science w/Lab	4

# SOCIAL SCIENCES/ HISTORY -- 6 CREDITS

Course	No.	Title Cre	dits
<b>ECNS</b>	201	Principles of Microeconomics	3
ECNS	202	Principles of Macroeconomics	3
HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3

HSTA	255N	Montana History	3
PSYX	100	Introduction to Psychology	3
PSYX	230	Developmental Psychology	3
SOCI	101	Introduction to Sociology	3
SOCI	121	Introduction to Criminal Justice	3
PSCI	210	Intro to American Government	3

(ECNS 201 and ECNS 202 should be taken to transfer into Park Management degrees)

#### **CULTURAL DIVERSITY -- 3 CREDITS**

Course	No.	Title Cred	dits
LIT	215N	Literature of the West	3
NAS	201N	Montana's American Indians	3
NAS	215N	Native American Religious Trad	3

#### **CULTURAL HERITAGE OF AMERICAN INDIANS--3 CREDITS**

Courses with an "N" behind the course title will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

# II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3

#### III. CONCENTRATION IN MATH AND SCIENCE - 9 CREDITS

Students may choose coursework numbered 100 or above from any of the following discipline areas to complete the required 9 credits of electives: (BIO) (BIOB) (BIOM) Biology, (CHMY) Chemistry, (GEO) Geology, (M) Math\*\* (except 090, 095, 096, 108, or 111), (PHYS) Physical Science

### IV. ARTICULATION COURSEWORK - 17 CREDITS

Course	No.	Title	Credits
STAT	216	Introduction to Statistics	4
Elective			1./

(BUS 255 and BUS 235 should be taken as electives for transfer into Park Management degrees)

Transferrable credit for specific degree plans may be located on the course equivalency guide on the Registrar's web page at: <a href="http://www.park.edu/registrar/Equivalency/MSU-GF.aspx">http://www.park.edu/registrar/Equivalency/MSU-GF.aspx</a>

Students may choose coursework numbered 100 or above from any discipline area to complete the required 17 credits of electives. Students may not choose or may not count the following courses: MATH 100, MATH 101, MATH 103, MATH 104, MATH 108, ENGL 118, ENGL 119, ENGL 120

# **TOTAL PROGRAM CREDITS - 60**

~Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup>Indicates prerequisite(s) needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

# OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE DEGREE FROM PARK UNIVERSITY

Ρ

EN 306 Professional Writing in Discipline	3
LE 300 Integrative/Interdisciplinary	
Learning Capstone	3
II. Core Requirements	
Core Courses for selected major and	
General Electives to fulfill BA 54	
Total Credits	
120	
Bachelor o Science degrees off at Malmstrom AFB:	erec
http://www.park.edu/malm	
Criminal Justice Administration-Correction	c
Criminal Justice Administration Correction	3
Enforcement	
Criminal Justice Administration-Security	
Information & Computer Science-Computer	<u>e</u> r
Science	
Information & Computer Science-Data	
Management	
Information & Computer Science-Network	. &
Security	
Information & Computer Science-Software	į
Engineering	
Management	
Management-Accounting	
Management-Computer Information Syste	ems
Management-Finance	
Management-Health Care	
Management-Human Resources	
Management-Marketing	
Social Psychology-Basic	

I. General Education

**Writing Competency Test** 

Social Psychology-Clinical and Abnormal
Social Psychology-Cultural, Organizational and
Institutional
Social Psychology-Human Development
Social Psychology-Theories and Methodologies

# Bachelor of Science Degrees offered online:

http://www.park.edu/online/
Management
Management/Computer Information Systems
Management/Marketing
Management/Human Resources
Management/Health Care
Management/Logistics
Social Psychology
Criminal Justice Administration

# ASSOCIATE OF APPLIED SCIENCE DEGREE IN ACCOUNTING TRANSFER TO PARK UNIVERSITY – MANAGEMENT/ACCOUNTING

Completion of an Associate of Applied Science Degree in Accounting allows for students interested in a baccalaureate degree in Management/Accounting to transfer to Park University.

Course	No.	Title	Credits
ACTG	101	Accounting Procedures I	3
ACTG	102*	Accounting Procedures II	3
ACTG	180*	Payroll Accounting	3
ACTG	201*	Principles of Fin Acct	3
ACTG	202*	Principles of Mang Acct	3
ACTG	205*	Computerized Accounting	3
ACTG	211*	Income Tax Fundamentals	3
BUS	106	Introduction to Business	3
BUS	255*	Legal Environment	3
CAPP	105*	Short Courses: Computer Comput	alc 1***
CAPP	120	Introduction to Computers	3
CAPP	154*	MS Word	3
CAPP	156*	MS Excel	3
CAPP	158*	MS Access	3
COMM	135	Interpersonal Communication	on 3
M	108**	<b>Business Mathematics</b>	4
M	121	College Algebra	3
STAT	216*	Introduction to Statistics	4
WRIT	101**	College Writing I	3
WRIT	122**	Intro to Business Writing	3

# **TOTAL PROGRAM CREDITS – 60**

~ Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup> Indicates prerequisites needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

<sup>\*\*\*</sup>Indicates a non-transferrable course

# MANAGEMENT/ACCOUNTING REQUIREMENTS FOR PARK UNIVERSITY

Cours	<u>se No.    </u>	Title	Credits
		Writing Competency Test	Р
EN	106	First Year Writing Seminar II	3
EN	306	Professional Writing in Discipline	3
		Science course with a lab	4
LE	300	Integrative/Interdisciplinary Learning Capstone	3
Core	Courses		
Cour	se No.	Title	Credits
AC	312	Business Income Tax	3
AC	315	Cost Accounting	3
AC	320	Intermediate Accounting I	3
AC	325	Intermediate Accounting II	3
AC	420	Advanced Accounting I	3
AC	425	Advanced Accounting II	3
AC	430	Auditing	3
EC	141	Principles of Macroeconomics	3
EC	142	Principles of Microeconomics	3
EC	315	Intermediate Statistical Analysis	3
FI	360	Financial Management	3
MG	261	Business Law II	3
MG	352	Principles of Management	3
MG	365	Organizational Behavior	3
MG	375	Production/Operations Management	3
MG	495	Business Policy	3
MK	351	Principles of Marketing	<u>3</u>
			64

# **TOTAL PROGRAM CREDITS - 124**

# ASSOCIATE OF APPLIED SCIENCE DEGREE IN BUSINESS ADMNISTRATION - MANAGEMENT TRANSFER TO PARK UNIVERSITY - MANAGEMENT

Completion of an Associate of Applied Science Degree in Business Administration - Management allows for students interested in a baccalaureate degree in Management to transfer to Park University.

Course	No.	Title Cre	<u>dits</u>
ACTG	101	Accounting Procedures I	3
ACTG	102*	Accounting Procedures II	3
ACTG	180*	Payroll Accounting	3
ACTG	201*	Principles of Fin Acct	3
ACTG	202*	Principles of Mang Acct	3
BUS	106	Introduction to Business	3
BUS	230*	Management	3
BUS	235*	Marketing	3
BUS	238	Human Resource Management	3
BUS	255*	Legal Environment	3
BUS	275*	Strategic Management	3
CAPP	120	Introduction to Computers	3
CAPP	154*	MS Word	3
CAPP	156*	MS Excel	3
COMM	135	Interpersonal Communication	3
M	108**	<b>Business Mathematics</b>	4
M	145	Math for Liberal Arts OR	
M	121	College Algebra	3
PSYX	100	Intro to Psychology	3
WRIT	101**	College Writing I	3
WRIT	122**	Intro to Business Writing	3

# **TOTAL PROGRAM CREDITS - 61~**

<sup>~</sup> Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedule.

<sup>\*</sup> Indicates prerequisites needed

<sup>\*\*</sup>Placement in course(s) is determined by admissions assessment

# BUSINESS ADMINISTRATION & SMALL BUSINESS MANAGEMENT REQUIREMENTS FOR PARK UNIVERSITY

Course No.		Title	Credits
		Writing Competency Test	Р
EN	106	First Year Writing Seminar II	3
EN	306	Professional Writing in Discipline	3
		Science course with a lab	4
LE	300	Integrative/Interdisciplinary Learning Capstone	3
		Upper Division electives	6
		General Electives	4

# **Core Courses**

<u>Cours</u>	<u>se No.</u>	Title	<u>Credits</u>
EC	141	Principles of Macroeconomics	3
EC	142	Principles of Microeconomics	3
EC	301	Intermediate Macroeconomics	3
EC	315	Intermediate Macroeconomics	3
FI	360	Financial Management	3
FI	363	Financial Institutions/Management	3
MA	120	Basic Concepts of Statistics	3
MG	261	Business Law II	3
MG	365	Organizational Behavior	3
MG	375	Production/Operations Management	3
MG	420	Labor Relations	3
MG	495	Business Policy	<u>3</u>
			59

**TOTAL PROGRAM CREDITS – 120** 



# Course Descriptions - English (ENGL)

### **ENGL 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **ENGL 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

### **ENGL 217 CREATIVE WRITING**

Credits: 3

Term: (Based on Sufficient Demand)

This course provides the student an opportunity to develop creative writing skills in the context of poetry and short fiction. Students will respond to the works of published authors, including selections by and about minorities and women. Conducted in a workshop atmosphere, students will write, revise, and respond and review their original work, and then submit a final portfolio containing three revised poems and a revised short story.

#### **ENGL 218 CREATIVE WRITING WORKSHOP**

Credits: 1

Term: (Based on Sufficient Demand)

Prerequisite: ENGL 217 or instructor approval

This course is a 3-day pass/fail residency workshop with emphasis on poetry and short fiction. Students will explore imaginative writing during the day and critical appraisal and revision techniques in evening sessions. Students will gain experience, also, in the oral presentation of original written works.





# Course Descriptions - Engineering Technology - Civil & Construction (ETCC)

# **ETCC 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **ETCC 173 ARCHITECTURAL CONSTRUCTION AND MATERIALS**

Credits: 3 Term: (F)

This course is an introduction to construction materials and methods, building systems and construction details. Emphasis is placed on selection of materials and methods. Laboratory section includes site investigations observing materials and their properties

# **ETCC 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

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# Course Descriptions - Fire & Rescue Technology (FRS)

# FRS 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### FRS 101 FIREFIGHTER I

Credits: 5

Term: (Contact Fire Training School)

This course requires the student to perform basic firefighter skills within the context of the fireground. Integration of skills is validated through successful completion of the State Certification Examination for Firefighter I.

# FRS 102 FIREFIGHTER II

Credits: 5

Term: (Contact Fire Training School)

This course requires the student to perform advanced firefighter skills within the context of the fireground. Integration of skills is validated through successful completion of the State Certification Examination for Firefighter II.

# FRS 107 AIRCRAFT FIRE AND RESCUE

Credits: 3

Term: (Contact Fire Training School)

Provides basic knowledge of aircraft types and systems, rescue equipment, airfield characteristics, and aircraft rescue and firefighting procedures (ARFF). Must meet the requirements of the class offered through the Helena College of Technology or equivalent.

# FRS 112 FIRE INSPECTION AND INVESTIGATION

Credits: 3

Term: (Contact Fire Training School)

This course provides the student an overview of fire prevention activities including code enforcement, recognition of common fire hazards, and the basic techniques and procedures of fire investigation. Integration of knowledge is validated through completion of an approved project that applies to an actual situation or problem.

# **FRS 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide

students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### FRS 241 FIRE DEPARTMENT INTERNSHIP

Credits: 3

Term: (Contact Fire Training School and Program Advisor)

This 45 hour internship is designed to give the student experience in various aspects of fire department operations. The student, with approval from the fire chief and program advisor will develop a plan, goals and objectives for the internship.

# FRS 245 FIRE SERVICE TRAINING & SAFETY EDUCATION

Credits: 3

Term: (Contact Fire Training School)

This course will introduce the student to adult education using contextual methodology, the basics of public fire safety education, and how education, enforcement, and prevention interact to mitigate community hazards. Students will apply their learning toward completion of an approved project.

# FRS 250 BUILDING CONSTRUCTION

Credits: 2

Term: (Contact Fire Training School)

This course provides an introduction to the special characteristics of non-combustible, fire resistive, frame, and ordinary construction as they apply to fire services. The primary emphasis is on improving the fire officer's ability to ensure firefighter safety by recognizing common causes and indicators of structural collapse, component failure or other hazards related to building construction.

# FRS 265 INCIDENT MANAGEMENT AND SAFETY

Credits: 3

Term: (Contact Fire Training School)

This course provides the student with an overview of the structure, function and expandability of an Incident Management System (IMS) as well as the command skills necessary to effectively utilize an IMS, guidelines and practice in applying an IMS, resources for implementation of a departmental IMS, and techniques and approaches related to firefighter safety and survival. Students will complete an approved project to demonstrate integration of learning.

# FRS 270 TACTICAL OPERATIONS & COMPANY MANAGEMENT

Credits: 5

Term: (Contact Fire Training School)

NFPA 1021 Fire Officer 1: This intensive 80 hour course teaches the skills required to succeed at the first level of fire service supervision (NFPA 1021, level 1). Success in the course and testing results in certification as a Fire Officer 1. Simulations are used for both incident management and human relations skills.

# FRS 285 HAZARDOUS MATERIALS

Credits: 5

Term: (Contact Fire Training School)

NFPA 472 Hazardous Materials Technician: This intensive 80 hour class teaches the skills required to perform at the hazardous materials technician level (NFPA 472).

# FRS 290 WILDLAND FIRE PROTECTION

Credits: 3

Term: (Contact Fire Training School)

All classes offered through Montana DNRC. Refer to MT DNRC for course descriptions.

# FRS 291 HYDRAULICS AND WATER SUPPLIES

Credits: 3

Term: (Contact Fire Training School)

Covers the scope of water supply operations in the fire service. Includes pre-planning operations, water supply requirements, source options, delivery systems and options, and hydraulic calculations.





# Course Descriptions - Graphic Design (GDSN)

### **GDSN 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### GDSN 100 INTRO TO GRAPHIC DESIGN SEMINAR

Credits: 1 Term: (F)

This course is designed to introduce students to the career field of graphic design. Through exploratory activities focused on the different occupational fields graphic designers work in, students will gain an insight into the field of graphic design. Field trips to companies employing graphic designers will be incorporated into class.

# **GDSN 109 DIGITAL PHOTOGRAPHY**

Credits: 4 Term: (S)

Prerequisite: CAPP 120 or permission of instructor

This course will instruct the student in fundamental concepts and techniques of photography, including aesthetics and technical aspects as a basis for creating a photographic image. The student will learn to use the camera, digital processing, and composition. Students will be introduced to the techniques of digital photography and computer imaging. Students will learn how to use photography as a creative tool for self-expression, social exploration, and still documentation.

# **GDSN 130 TYPOGRAPHY**

Credits: 3 Term: (S)

Prerequisite: CAPP 120 or permission of instructor

The eye is trained to appreciate the sensibilities and subtleties of typographic conventions such as kerning, leading, style, and practice. Students will gain a full understanding of vocabulary surrounding letter forms and the design of text. Symbolic communication inherent in different typefaces is also explored. Typographic relationships with other graphic elements are investigated through brochures, posters and other two-dimensional projects.

#### **GDSN 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS)

degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **GDSN 217 DIGITAL DESIGN**

Credits: 3 Term: (F)

Prerequisite: CAPP 120

Graphic design is a form of visual communication that sends a specific message to a specific audience. This course takes a thorough look into brainstorming, strategies/ techniques with graphics and layout, and the tools/equipment used to accomplish the design/concept at hand. The overall objective of the course will be a thorough examination and use of Adobe Photoshop to assemble strategies/processes and a firm understanding of the role of graphic design in print and web presentation.

# **GDSN 220 DIGITAL ILLUSTRATION & PACKAGING**

Credits: 3 Term: (F)

Co-requisite: GDSN 217

This is an intensive examination of materials and processes as they relate to the manipulation of forms for packaging. Through an understanding of the qualities inherent in various packaging materials, students produce a variety of packaging solutions dealing with shape, form and volume. Skills are sharpened by through a thorough examination and use of the drawing capabilities of Adobe Illustrator, which will aid in the creation of packaging projects.

# **GDSN 221 PUBLISHING & PRE-PRESS**

Credits: 3 Term: (S)

Prerequisite: GDSN 217

This course provides a technical background to the Designer. The course covers material related to the actual production of design materials that are often overlooked during education and usually learned by experience. Press-checks, color specifications and proofing, pre-press art, file preparation, paper selections, and characteristics will all be addressed. Field trips will be included.

# GDSN 222 CAPSTONE PORTFOLIO/INTERNSHIP

Credits: 3 Term: (S)

Prerequisite: GDSN 217

A senior-level course dealing with the dynamics involved in the preparation of a highly professional and competitive portfolio for interviewing purposes. Discussion and analysis of student work under consideration for portfolio inclusion is emphasized. Interviewing techniques include preparation of an appropriate resume, personal letterhead, appropriate methods used for contacting potential employers, personal dress, and attitudes relating to the interview presentation process.





# Course Descriptions - Geology (GEO)

# **GEO 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### GEO 101 INTRODUCTION TO PHYSICAL GEOLOGY/LAB

Credits: 4 (3 lecture, 1 lab)

Terms: (F,S)

This course is an introduction to geologic principles, with an emphasis upon geologic processes (plate tectonics, mountain building, and weathering); rock types (igneous, sedimentary, and metamorphic); and geologic hazards (volcanoes and earthquakes). Some time will be spent discussing geologic time; water and mineral resources; landforms; 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 dealing with topics covered in lecture. In order to have the greatest success in this course, it is highly recommended that students possess strong algebra skills.

# **GEO 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

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# Course Descriptions - Health & Human Development (HHD)

### **HHD 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **HHD 106 DRUG & HEALTH ISSUES FOR EDUCATORS**

Credits: 3

Terms: (F, S, SU)

This course is a survey of drug education and health concerns for educators of school-aged children, including topics required by Montana's Board of Public Education for health-related teacher education.

# **HHD 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.



# Course Descriptions - Healthcare Informatics (HCI)

### **HCI 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **HCI 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

### **HCI 1016 Introduction to Health Care Informatics**

Credits: 3

Terms: (F, S, SU)

Introduce the discipline of health care informatics. An overview of the subject including the history, basic knowledge of health care informatics and tools as applied in support of health care delivery. Students will understand an introductory level about the complexities of health care and how informatics fits within the US Health Care System. This course covers the different sectors of health care delivery in the United States today. The student will learn about the various aspects of the US delivery system and how the system functions on different levels from an industry and economic perspective.

# **HCI 2156 Health Care Facility Procedures**

Credits: 3

Terms: (F, S, SU)

Pre Req or Co-Req: HCI 1016

This course introduces the student to common procedures and practices found in health care settings and the information systems that support such procedures/practices. This course focuses on the major functional areas of the acute care setting, providing an overview of how individual departments operate and interact.







# Course Descriptions - History (HSTA & HSTR)

#### **HSTA 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **HSTA 101 AMERICAN HISTORY I**

Credits: 3 Term: (F)

This course surveys the history of the United States from the era of discovery to the Colonial Period and through the Civil War. Topics include the political, social, economic, cultural, and diplomatic developments that contributed to the formation of the North American civilization and to the position of the United States in the world's community of nations.

#### HSTA 102 AMERICAN HISTORY II

Credits: 3 Term: (S)

This course is a survey of American history since the Civil War. The focus of the course will be on why events happened and what meaning they had for today's United States. The role of individuals and groups will be as important as the functioning of the more depersonalized economic and political forces of history. Themes of urbanization, industrialization and ethnicity will be emphasized. This course will stress social history as well as traditional political history.

# **HSTA 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# **HSTA 235 CIVIL WAR AND RECONSTRUCTION**

Credits: 3

Term: (S based on sufficient demand)

This course analyzes the causes of the Civil War, traces the military and civilian events of the war itself and considers the war's aftermath as embodied by Reconstruction, the incorporation of the American west and social climate of the Gilded Age.

# **HSTA 255 MONTANA HISTORY**

Credits: 3

Terms: (F, S, SU)

This course is a study of the major political, social, cultural and economic developments that

have contributed to the formation of Montana and to Montana's place within the region, the nation, and the world, from prehistoric times to the present.

#### HSTR 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **HSTR 101 WESTERN CIVILIZATION I**

Credits: 3 Term: (F)

This course examines the major political, economic, and cultural developments of western civilization from its inception in the Fertile Crescent in the fourth millennium B.C. through the era of the Renaissance and Reformation in the 16th Century.

#### **HSTR 102 WESTERN CIVILIZATION II**

Credits: 3 Term: (S)

This course examines the major political, economic, and cultural developments of western civilization from the 17th century to the present.

#### **HSTR 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

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# Course Descriptions - Humanities (HUM)

# **HUM 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **HUM 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# **HUM 242 GENDER AND EQUALITY**

Credits: 3

Terms: (S, SU based on sufficient demand)

The human cultural role of gender is examined in relation to historical perspectives, business, social and familial organizations, world views, technology, and perception of self.

# **HUM 244 AMERICAN CULTURAL VALUES**

Credits: 3 Term: (F)

This course surveys change and continuity in American cultural traditions, values, and beliefs from the perspectives of familial, social, and economic organizations. Explores how values and beliefs have been shaped and modified in America's rise as a world power in the context of shifting demographics, class relations, and world economies.

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# Course Descriptions - Information Technology Systems (ITS)

# **ITS 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# ITS 125 FUNDAMENTALS OF VOICE AND DATA CABLING

Credits: 3 Term: (F)

Fundamentals of Voice and Data Cabling is a lecture and hands on course which focuses on industry standards and techniques for the design and implementation of structured cabling systems. Students will demonstrate competency in the installation and termination of both copper and fiber optic cabling including the proper use of tools and test equipment. Course assessments are used to show the student's understanding of the course content. This course is designed around the hybrid learning model. All lab experiences will be on campus.

#### **ITS 150 CCNA 1: EXPLORATION**

Credits: 3 Term: (F)

Pre- or Co-requisites: CAPP 120 or instructor approval

Networking basics is the first of the four courses leading to the Cisco Certified Network Associate (CCNA) certification. Networking basics is a lecture and hands-on course which introduces Cisco Networking Academy Program students to the networking field. The course focuses on network terminology and protocols, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. This course utilizes the hybrid model for student learning.

# **ITS 152 CCNA 2: EXPLORATION**

Credits: 3 Term: (F)

Pre- or Co-requisite: ITS 150

Routers and Routing Basics is the second of four CCNA courses leading to the Cisco Certified Network Associate (CCNA) Certification. Routers and Routing Basics is a lecture and hands-on course which focuses on initial router configuration, Cisco IOS Software management, routing protocol configuration, and TCP/IP. Students will develop skills on how to configure a router, manage Cisco IOS Software, and configure routing protocols. This class includes a number of hands-on activities using state-of-the-art routing equipment and Packet Tracer software. Students will also have access to the school's Online NetLab in order to complete lab assignments. This is a hybrid course.

# **ITS 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# **ITS 210 NETWORK OPERATING SYSTEMS - DESKTOP**

Credits: 4 Term: (S)

Prerequisite: CAPP 120

This course examines the role of operating system software and various user interfaces. The primary focus will be on using a command line interface for file management tasks as well as creating and troubleshooting batch files. File management, troubleshooting, application, Internet and administrative functions in a graphical interface will also be examined. This course maps to the MCSE/MCSA Exam 70-270 certification.

# ITS 215 NETWORK OPERATING SYSTEMS: DIRECTORY/INFRASTRUCTURE

Credits: 4 Term: (F)

Pre or Co-requisites: CAPP 120, ITS 210

This course provides students with the knowledge and skills that are required to manage accounts and resources, maintain server resources, monitor server performance, and safeguard data in a Microsoft Windows Server 2003 environment. This course will help the student prepare for the following Microsoft Certified Professional exam: 70-290: Managing and Maintaining a Microsoft Windows Servers 2003 Environment. This course will help the student prepare for two of the Microsoft Certified Professional exams.

# ITS 217 NETWORK OPERATING SYSTEMS - SERVER ADMIN/APPS

Credits: 4 Term: (S)

Pre- or Co-requisites: CAPP 120, ITS 210, ITS 215

This course provides students with the knowledge and skills to implement, manage, and maintain a Microsoft Windows Server 2003 network infrastructure. The course is intended for systems administrator and systems engineer candidates who are responsible for implementing, managing, and maintaining server networking technologies. These tasks include implementing routing; implementing, managing, and maintaining Dynamic Host Configurations Protocol (DHCP), Domain Name System (DNS), and Windows Internet Name Service (WINS); securing Internet Protocol (IP) traffic with Internet Protocol security (IPSec) and certificates; implementing a network access infrastructure by configuring the connections for remote access clients; and managing and monitoring network access. This course will help the student prepare Microsoft Certified Professional exams.

# **ITS 218 NETWORK SECURITY**

Credits: 3 Term: (Summer) Prerequisites: ITS 252

CCNA Security aims to develop an in-depth understanding of network security principles as well as the tools and configurations available. The course covers the following concepts:

- Protocol sniffers/analyzers
- TCP/IP and common desktop utilities
- Cisco IOS® Software
- Cisco VPN client
- Packet Tracer
- Web-based resources

Various types of hands-on labs provide practical experience, including procedural and troubleshooting labs, skills integration challenges, and model building. The curriculum also includes Packet Tracer-based skills integration challenges that build throughout the course and lead to an "exam-like" culminating activity in the last chapter.

# **ITS 220 FUNDAMENTALS OF WIRELESS LANS**

Credits: 3

Term: (Based on sufficient demand)
Prerequisite: ITS 152 or CCNA 2 Techprep

The Fundamentals of Wireless LANs is an introductory course which focuses on the design, installation, configuration, operation, and troubleshooting of 802.11a, 802.11b, and 802.11g Wireless LANs. This course is a comprehensive overview of wireless technologies, devices, security, design, and best practices with a particular emphasis on real work applications and skills. Students will be doing a number of hands-on activities using Cisco wireless access points, NICs, and bridges.

# **ITS 224 INTRODUCTION TO LINUX**

Credits: 4

Term: (Based on sufficient demand)
Prerequisite: CAPP 120, ITS 210

This course will help the student understand the many complex topics of Linux/Unix based systems and help students master Linux network administration. Students will use various learning tools, hands on projects and case projects to allow students to implement the practices they will be learning. This course will help prepare students to successfully complete the CompTIA Linus + exam.

# **ITS 250 CCNA 3: EXPLORATION**

Credits: 3 Term: (S)

Prerequisite: CIT 126

This is a course in LAN based switching and wireless. Students will perform and verify initial switch configuration tasks including remote access management. Configure, verify, and troubleshoot VLANs, interVLAN routing, VTP, trunking on Cisco switches, and RSTP operation, and manage IOS configuration files. Students will identify the basic parameters to configure a wireless network and common implementation issues. This course utilizes a hybrid delivery model.

### **ITS 252 CCNA 4: EXPLORATION**

Credits: 3 Term: (S)

Prerequisite: ITS 150, ITS 152, and ITS 250

WAN Technologies is the last of four courses leading to the Cisco certified Network Associate (CCNA) certification. This course is a lecture and hands-on course which focuses on configuration and implementation issues of Wide Area Networks (WANs). Students will learn about the impact of applications (Voice Over IP and Video Over IP) on a network. They will configure, verify, and troubleshoot DHCP and DNS operation on a router along with verifying, monitoring, and troubleshooting ACLs in a network environment. Students will configure and verify a basic WAN serial connection, a PPP connection between Cisco routers, and Frame Relay including configuring and verifying a PPP connection between Cisco routers, and Frame Relay on Cisco routers. This course utilizes a hybrid delivery model.

# **ITS 255 IP TELEPHONY**

Credits: 3

Term: (Based on sufficient demand)

Prerequisite: ITS 252 or instructor approval

IP Telephony is an introductory course into the technology and equipment used to provide telephone services by using LAN and WAN based technologies. Students in this highly handson course will develop voice over IP (VoIP) networks using the application software, protocols and equipment used in implementing IP telephony in both small and large businesses.

# ITS 260 CCNP 1: Routing (equiv to 362)

Credits: 4 Term: (F)

Prerequisites: ITS 252, CCNA TechPrep or CCNA certification

Advanced Routing is the first of four courses leading to the Cisco Certified Network Professional (CCNP) certification. Advanced Routing is a lecture and hands-on course which teaches students how to design, configure, maintain, and scale routed networks. Students learn to use VLSMs, private addressing, and NAT to enable more efficient use of IP

addresses. This course teaches students how to implement routing protocols such as RIP v2, EIGRP, OSPF, IS-IS, and BGP. In addition, this course details the important techniques used for route filtering and route redistribution. After the completion of this class, students are encouraged to take the CCNP Routing (BSCI) certification exam which is one of the certification exams leading to the CCNP certification.

# ITS 264 CCNP 3: Switching (equiv to 364)

Credits: 4 Term: (S)

Prerequisite: ITS 252, CCNA TechPrep or CCNA certification

Multilayer Switching is the third of four courses leading to the Cisco Certified Network Professional (CCNP) certification. Multilayer Switching is a lecture and hands-on course which introduces students about the deployment of the state-of-the-art campus LANs. This course focuses on the selection and implementation of the appropriate Cisco IOS services to build reliable scalable multilayer-switched LANs. Students will develop skills with VLANs, VTP, STP, inter-VLAN routing, redundancy, Cisco AVVID, QOS issues, campus LAN security, and transparent LAN services. After the completion of this class, students are encouraged to take the CCNP Switching certification exam (BCMSN) which is one of the certification exams leading to the CCNP certification.

# ITS 280 COMPUTER REPAIR AND MAINTENANCE

Credits: 4 Term: (S)

Pre or Co-requisite: CAPP 120 or instructor approval

The primary purpose of this course is to prepare students to troubleshoot and repair microcomputer systems. This goal is achieved through a three-part effort: (1) theory presentation with regular assessment; (2) hands-on operation and exploration in lab experiments; and (3) troubleshooting applications in the lab. Hands-on training includes servicing microcomputers, identification, installation, and configuration of microprocessors, memory, system boards, power supplies, and floppy and disk drives. The emphasis of this course is both the hardware and operating systems for the CompTia A+ Essentials and IT Technician Certification tests.

# **ITS 291 CURRENT TOPICS**

Credits: Variable

Term: (Based on sufficient demand)

Prerequisites: ITS 150, ITS 215, ITS 217 or instructor approval

This course provides students with supporting knowledge and advanced skills required to set up, configure, use, and support network operating systems. This course also helps prepare the student to meet requirements to become a certified professional. Topics vary and will be determined by industry changes, technological advances, and student interest.

# ITS 298 Internship/Cooperative Education

Credits: 3 Term: (S)

Prerequisites: ITS 210, ITS 280, COMM 135 or instructor approval

This course provides students with experience in training and supporting end users, techniques for developing and delivering training modules, and strategies for providing ongoing technical support. Emphasis is on problem solving, such as debugging, troubleshooting and interaction with users. An internship in the second half of the semester will give students firsthand experience with typical problems in the field.

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# Course Descriptions - Interior Design (DE)

### **DE 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **DE 161 INTRODUCTION TO DESIGN**

Credits: 3 Terms: (F, S)

This course introduces design as it relates to interior design, architecture and related professions, through the study of the elements and principles of design and the ways in which humans interact with designed environments and elements.

# **DE 162 INTERIOR DESIGN GRAPHICS**

Credits: 3 Term: (F)

Interior Design Graphics provides interior design students with a basic knowledge of building structures, construction techniques and building materials. It introduces the technical skills needed to read and produce drawings used in the practice of interior design, including floor plans, interior elevations, reflected ceiling plans and detail drawings.

# **DE 163 PRESENTATION DRAWING**

Credits: 3 Term: (S)

Prerequisite: DE 162 or equivalent

This course presents the elements of two- and three-dimensional design as related to interior representational drawings. Emphasis is on one- and two-point perspective drawings. Addition of color to drawings by use of marker and colored pencil is introduced.

# **DE 164 HISTORIC INTERIORS**

(GF: Online; BZ: on campus)

Credits: 3 Term: (F)

This course offers exposure to stylistic variations found in interior design of the ancient world and traditional Europe. Students will become aware of how these styles have been the impetus for pre-1900 architecture and decorative arts in America.

# **DE 165 CONTEMPORARY INTERIORS**

(GF: Online; BZ: on campus)

Credits: 3 Term: (S)

This course is a continuation of the study of the development of the interior environment from the 19th century to the present. The difference in the basic philosophy between 19th and

21st century

design is emphasized.

#### DE 166 TEXTILES AND INTERIOR FINISHES

Credits: 3 Term: (F)

This course includes the study of textiles and interior finishes used by interior designers. Students will gain familiarity with a wide range of textile products used in both residential and commercial interiors

including fiber content and yarn type, application and labeling, performance and maintenance. Students will also study the range and application of wall, ceiling and floor finish materials commonly used in interior design.

# **DE 168 SPACE PLANNING**

Credits: 3 Term: (S)

This course explores the physical and psychological concepts pertaining to interior spaces. Students work with commercial design programs, schematic planning tools, commercial furniture, and

universal design concepts to create functional space plans that meet program criteria. Students will explore space planning in relationship to plumbing and mechanical systems and apply NKBA kitchen and bath space planning guidelines. The basic space planning skills and terminology learned are applicable to the NCIDQ exam.

# **DE 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# **DE 261 FIELD STUDY**

Credits: 3-5 Term: (SU)

This course is a variable credit class which gives the student 90 or 160 hours of experience in the daily operation of an interior design firm or a related business. It provides monitored experience in dealing with clients, customers and other business persons. The student will encounter opportunities to utilize skills and knowledge acquired in previous interior design courses. The discussion and reporting component of this class will be managed online. Students will be expected to give a brief presentation describing their experience when they return to school fall semester.

# DE 262 STUDIO I

Credits: 4
Term: `(F)

Prerequisite: Completion of all 100-level technical courses

This course is a laboratory experience with real-life & hypothetical design projects. The focus of Studio I is primarily residential. Students will develop 2 or 3 complete presentations including but not limited to floor plans, interior elevations, interior perspectives, color board, room finish schedule, and a budget. Students will make oral presentations using the

presentation boards to illustrate their design solutions.

### DE 263 STUDIO II

Credits: 4 Term: (S)

Prerequisite: Completion of all 100-level DE courses, DE 264 and DE 267/DE 273

Studio II is an advanced laboratory class which focuses on commercial design projects, some for actual clients. Advanced space planning, utilization of appropriate codes and specification writing will be covered. Students will develop 2-3 complete presentations including but not limited to floor plans, interior elevations, interior perspectives, color boards, and specification schedules. Students will make oral presentations using the presentation boards and CAD drawings to illustrate their design solutions.

# DE 264 LIGHT, COLOR, AND LIGHTING SYSTEMS

Credits: 3 Term: (S)

Prerequisite: DE 161, DE 162

This course is a continuation of previous experience in color and lighting systems. Students will explore color theory, human response to color, and the properties of light and color. Students will also gain knowledge in lighting systems and specification of lamps and fixtures. The student will learn practical methods for applying these elements of design and demonstrate competency in color usage and lighting systems by designing projects including reflected ceiling plans, lighting and color specification.

#### **DE 265 PROFESSIONAL PRACTICES**

Credits: 3 Term: (S)

Prerequisite: Completion of all 100-level technical courses, DE 262

This course is an introduction to business principles and practices related to the interior design profession. Topics include business procedures, methods of charging, and steps involved in business formation. Use of contracts and specifications to achieve desired objectives is covered, as is marketing of professional services and promotion of the firm. A portfolio, resume and cover letter will be completed during this class.

# **DE 270 KITCHEN AND BATH I**

Credits: 3 Term: (F)

Prerequisite: Completion of all 100-level technical courses.

Using the National Kitchen and Bath Association guidelines, students will learn the fundamentals of kitchen and bath design, using NKBA's drawing and presentation standards. Analysis of client needs, specifying products, creating design solutions, residential plumbing and mechanical systems, project drawing and documentation will also be covered.

#### DE 271 KITCHEN AND BATH II

Credits: 3 Term: (S)

Prerequisite: DE 270

This studio course is a continuation of Kitchen and Bath I, with a special emphasis on baths. There will be further exploration into products, and more advanced design solutions.

# **DE 273 CAD FOR INTERIOR DESIGN**

Credits: 4 Term: (S)

The interior design student will learn basic commands in AutoCAD, and then apply these

applications to the creation of residential and commercial construction drawings, furniture plans and 3D rendering using AutoCAD. Topics covered include drawing set-up, creation, 2D and 3D color rendering, and plotting.





# **Course Descriptions - Literature (LIT)**

#### LIT 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### LIT 110 INTRO TO LITERATURE

Credits: 3 Terms: (F,S)

This course provides the student an opportunity to study the three major literary forms – fiction, poetry, and drama including examples of works from several time periods. Selections will include works by and about minorities and women.

## **LIT 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### LIT 231 ANCIENT TO RENAISSANCE WORLD LITERATURE

Credits: 3

Term: (Based on Sufficient Demand)

Prerequisite: WRIT 101 or instructor approval

World Literature, through its survey of literature, presents a chronological and critical study of western world literature in translation, within the historical milieu of ancient times through the Renaissance. The course also introduces students to the idea that literature is both enjoyable and useful in shaping perceptions and responses in daily life. Emphasis is placed on critical thinking and reading skills using analysis of elements such as plot, setting/tone, character, language/figures of speech, symbolism, and theme. Competence in basic reading and writing skills is assumed.

## LIT 232 MODERN WORLD LITERATURE

Credits: 3

Term: (Based on Sufficient Demand)

Prerequisite: WRIT 101 or instructor approval

World Literature, through its survey of literature, presents a chronological and critical study of western world literature in translation, within the historical milieu of the enlightenment through the Twentieth Century. The course also introduces students to the idea that

literature is both enjoyable and useful in shaping perceptions and responses in daily life. Emphasis is placed on critical thinking and reading skills, using analysis of element such as plot, setting/tone, character, language/figures of speech, symbolism, and theme. Competence in basic reading and writing skills is assumed.

#### LIT 237 INTRODUCTION TO NATURE LITERATURE

Credits: 3

Term: (Based on Sufficient Demand)

This course will survey nature literature, covering key writers and ideas of this distinctive literary form. Writers of both prose and poetry who explore the natural world and create awareness of our place within it will be featured. The concluding focus on Montana nature writers will provide a local and personal link to the genre. Student projects will expand coverage to include particular writers not covered in class readings.

#### LIT 289 INTRO TO NATIVE AMERICAN LITERATURE

Credits: 3 Term: (S)

This course will explore Native American Literature, especially the poetry, novels and fiction written in the late nineteenth and twentieth centuries. Myths, legends, and songs from the oral tradition will be examined where relevant. Students will also learn the rudiments of a literary vocabulary.

#### LIT 291 SPECIAL TOPICS - LITERATURE

Credits: 3 Term: (F)

This course provides the student an opportunity to study major literary forms including fiction, poetry, memoir, creative non-fiction, and drama ranging from a variety of literary movements and time periods. Selections may include works focused on a specific author, genre, theme, country, or historical period, e.g. science fiction, Irish literature, Western literature, short fiction, etc.

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# Course Descriptions - Mathematics (M)

## M 065 PRE-ALGEBRA

Credits: 4 Term: (F,S, SU) Pass/Fail Basis

Basic concepts relating to fractions, decimals, ratios, proportions, percent, simple equations, topics of signed numbers, and 1-variable linear equations are offered as a review and/or preparation for further studies in mathematics.

#### M 090 INTRODUCTORY ALGEBRA

Credits: 4 Term: (F,S, SU)

Prerequisite: Qualifying placement assessment score within the past 3 years or instructor

approval, M 065

Introductory Algebra initiates development in students' ability toorganize thought processes and systematically solve problems whilepreparing students for studies in other courses. Course emphasis includes manipulation of variables, exponential applications, introduction to and factoring of polynomials, solving equations, systems of equations, and radicals. This course is intended for students who have not studied algebra but have a firm background in basic mathematics or who wish it as a review.

### M 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### M 095 INTERMEDIATE ALGEBRA

Credits: 4 Terms: (F,S)

Prerequisite: M 090 or qualifying placement assessment score within the past 3 years

This course offers a review of elementary algebra with further emphasis on systems of equations, determinants, systems of inequalities, rational expressions, radical expressions, complex numbers, quadratic equations, and exponential and logarithmic functions.

## M 096 SURVEY OF ALGEBRA

THIS CLASS ONLY OFFERED AT THE COT IN BOZEMAN

Credits: 4

Terms: (F,S, SU)

Prerequisite: Qualifying placement assessment score within the past 3 years or instructor

approval, M 065

Introductory Algebra initiates development in students' ability to organize thought processes and systematically solve problems while preparing students for studies in other courses.

Course emphasis includes manipulation of variables, exponential applications, introduction to and factoring of polynomials, solving equations, systems of equations, and radicals. This course is intended for students who have not studied algebra but have a firm background in basic mathematics or who wish it as a review.

#### M 108 BUSINESS MATHEMATICS

Credits: 4 Terms: (F,S,SU)

Prerequisite: Qualifying admission assessment score within the past 3 years or consent of

faculty, M 065 or M 090

Students in this course will examine the mathematics of business ownership and will demonstrate an understanding of business decisions. Concepts include marketing, payroll, cash flow, simple and compound interest, credit, promissory notes, insurance, financial statements, ratio analysis, depreciation, annuities, and inventory valuation.

#### M 111 TECHNICAL MATHEMATICS

Credits: 3 Terms: (F,S)

This course presents basic mathematical topics as they are applied in a trades program. Topics covered include: use of measuring tools, measurement systems, dimensional arithmetic, percent, proportion, applied geometry, basic trigonometry. NOTE: This course is intended for specific programs and does NOT provide sufficient Pre-Algebra material to serve as a prerequisite for students wanting to take additional mathematics.

#### M 116 MATH FOR HEALTH CAREERS

Credits: 3 Terms: (F,S)

Prerequisite: M 090 with a grade of "B-" or higher, M 095 with a grade of "C-" or higher, or qualifying placement assessment score within the past 3 years

This course prepares health science students for the mathematics required in their profession. Topics investigated include: inductive reasoning; logic; mathematical number systems; linear, quadratic, exponential, and logarithmic functions; graphing; probability; statistics; English, Apothecary and Metric systems and conversions; dosage calculations; and dimensional analysis. Utilizing these areas, the course also provides students with clinical applications.

# M 121 COLLEGE ALGEBRA

Credits: 3 Term: (S)

Prerequisite: M 095 with a "C-" or higher or qualifying placement assessment score within

the past 3 years.

This course presents concepts, principles and methods of college-level algebra. Topics to be covered include polynomial, rational, radical, exponential, and logarithmic functions and their graphs, and real and complex numbers.

### M 130 MATH FOR ELEMENTARY TEACHERS I

Credits: 3

Terms: (F, S based on Sufficent Demand)

Prerequisite: M 090 or qualifying placement assessment score within the past 3 years

This course is an introduction to problem solving, sets, functions, logic, numerations systems as a mathematical structure, introductory number theory, rational and irrational numbers and probability for prospective elementary school teachers.

# M 131 MATH FOR ELEMENTARY TEACHERS II

Credits: 3

Term: (S)

Prerequisite: M 130

Introductory geometry, constructions, congruence and similarity, concepts of measurement, coordinate geometry, problem-solving are revisited, and computer applications for prospective elementary school teachers are reviewed.

### M 145 MATH FOR LIBERAL ARTS

Credits: 3 Term: (F,S)

Prerequisite: M 090 with a grade of "B-" or higher, M 095 with a grade of "C-" or higher, or qualifying placement assessment score within the past 3 years

This course exposes students to topics in applied and pure mathematics directly connected to modern society. Topics include: Polya's techniques for problem solving, number theory, logic, algebraic models, optimization, linear programming, set theory, probability and statistics.

#### M 152 PRECALCULUS ALGEBRA

Credits: 4 Terms: (F,S)

Prerequisite: M 095 with a grade of "B-" or higher, M 121 with a grade of "C-" or higher, or qualifying placement assessment score within the past 3 years.

An extended study of algebra preparing students for further work in mathematics in particular, Calculus. Course topics include the fundamental properties of real and complex numbers, functions

(polynomial, rational, radical, exponential and logarithmic), conics, matrices, determinants, sequences, series and the binomial theorem.

# M 153 PRECALCULUS TRIGONOMETRY

Credits: 3 Term: (S)

Prerequisite: M 095 with a grade of "B-" or higher, M 121 with a grade of "C-" or higher, or qualifying placement assessment score within the past 3 years.

An extensive look at trigonometric functions and identities, Law of Sines and Cosines, polar coordinates, inverse functions, vectors, and parametric equations is the basis of this course.

# M 171 CALCULUS I

Credits: 4 Term: (F)

Prerequisites: M 152 and M 153 or qualifying placement assessment score within the past 3

years

Functions, elementary transcendental functions, limits and continuity, differentiation, applications of the derivative, and curve sketching studied.

# M 172 CALCULUS II

Credits: 4 Term: (S)

Prerequisite: M 171

Integration theory, methods of integration, applications of the integral, Taylor's theorem, infinite sequences, and series are studied.

# M 194 PCE TOPIC

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS)

degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.





# Course Descriptions - Manufacturing (MFGT)

# **MFGT 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **MFGT 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### MFGT 205 MANUFACTURING PROCESSES AND MATERIALS

Credits 3 Term: (F)

The fundamentals of manufacturing are introduced in this course. Capabilities, typical applications, advantages, and limitations of material and process selection for manufacturing are topics covered.

# Course Descriptions - Microbiology (BIOM)

## **BIOM 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

# **BIOM 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

## **BIOM 250 MICROBIOLOGY FOR HEALTH SCIENCES/LAB**

Credits: 4 (3 lecture, 1 lab)

Terms: (F,S)

Prerequisites: CHMY 121 or BIOH 104

Aspects of microbial life are examined in relation to growth requirements, reproduction, and disease-producing capabilities. Topics include basic biochemistry, prokaryotic, and eukaryotic morphology, microbial metabolism, genetics, and classification. In addition to the previous topics, mechanisms of infection, epidemiology, immune response and the major microbial pathogens of the human body will be explored. Emphasis will be placed on the control and spread of microorganisms and disease prevention. This course includes a required lab component.

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# Course Descriptions - Music (MUSI)

### **MUSI 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### MUSI 101 ENJOYMENT OF MUSIC

Credits: 3 Term: (F)

This course is a comprehensive introduction to the theory, history, and literature of music of Western Civilization. The course examines musical styles through several time periods and is designed to develop the students' aural acuity as well as their intellectual understanding of music as an important contribution to Western culture.

## **MUSI 105 MUSIC THEORY I**

Credits: 3 Term: (F)

Designed for the student with little or no musical background, this course introduces the fundamental elements of music reading and notation. It includes note and rhythmic reading, scales, intervals, and chords.

### **MUSI 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

### **MUSI 203 AMERICAN POPULAR MUSIC**

Credits: 3

Terms: (S, SU based on sufficient demand)

This course will survey musical idioms, styles and trends developed in the United States from 1492 to the present. Included are folk, sacred, country and western, blues, pop, rock and roll, jazz, and fine art music.

### **MUSI 207 WORLD MUSIC**

Credits: 3

Music (MUSI) | Great Falls College MSU 2010-2011 Catalog

Terms: (F, S)

World Music introduces the music of varied cultures of the world by presenting the music within its historical and societal contexts. The course includes topics and musical surveys from Asia, Africa, the Americas and Europe.





# **Course Descriptions - Native American Studies (NAS)**

#### NAS 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **NAS 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# NAS 201 MONTANA'S AMERICAN INDIANS

Credits: 3

Terms: (F, S, SU)

This course focuses on the interactions of Montana's American Indians in socioeconomic structures based on historical and current perspectives including cultural world views, religion, reservations, treaties, vested rights, sovereignty, contemporary tribal governments, and socioeconomic problems.

# NAS 215 NATIVE AMERICAN RELIGIOUS TRADITIONS

Credits: 3

Term: (F based on sufficient demand)

This course will examine, explore, and describe selected Native American Religious systems focusing on origins, world views, religious beliefs, traditions and ceremonies, sacred songs and dance, and the way they have been affected by western civilization. A major focus will be on the Northern Plains People.

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# Course Descriptions - Nursing (NRSG)

#### NRSG 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

## NRSG 100 INTRODUCTION TO NURSING

Credits: 1 (15 Hours Lecture)

Terms: (F,S,SU)

The purpose of this course is to initiate the student to the roles/functions/expectations of the nurse. The course will explore nursing history, current views of nursing, different types of nursing occupations, and educational requirements. The course will expose the students to issues surrounding the profession of nursing.

#### NRSG 130 FUNDAMENTALS OF NURSING

Credits: 7 (60 Hours Lecture / 90 Hours Lab)

Term: (F)

This course introduces students to the clinical skills essential for the nursing role. Also includes complex concepts and behaviors of nursing roles within the context of the nursing process, holistic care and health care. The course emphasizes the theoretical and practical concepts of nursing skills required to meet the needs of patients in a variety of clinical settings. Students will be given the opportunity, in a lab setting, to practice these nursing skills.

### NRSG 135 NURSING PHARMACOLOGY

Credits: 3 (45 Hours Lecture)

Term: (F)

This course introduces the principles of pharmacology, including drug classifications and their effects on the body. The course reflects general principles, theories, and facts about drugs and their administration. Principles of action, uses, side effects, and patient education are taught to facilitate the student's learning in the clinical setting. Specific drug information is discussed in relation to assessment, nursing diagnosis, patient monitoring, interventions, patient education and evaluation of safe and effective drug therapy. Emphasis is placed on utilizing the nursing process related to pharmacology and the nurse's ability to think critically.

## NRSG 138 GERONTOLOGY FOR NURSING

Credits: 2 (15 Hours Lecture / 45 Hours Clinical)

Term: (F)

This course will focus on the nursing management of the older adult. Theories of gerontology and aging will be emphasized. The course will examine the principles of gerontology, challenges of aging, nutrition, pharmacology, pain, elder mistreatment, dying, and

physiological basis of practice. The course will emphasize a holistic approach necessary to provide care for the older adult in diverse care settings. Ethical issues related to the care of the older adult will be explored. In the clinical component of this course, students will be able to safely deliver essential basic skills and show knowledge and concern to patients in the geriatric setting

NRSG 140 CORE CONCEPTS OF ADULT NURSING

Credits: 7 (60 Hours Lecture / 135 Hours Clinical)

Term: (S)

This course prepares the student to care for patients experiencing common, well-defined health variations in settings where stable patients are anticipated. Students are introduced to standardized nursing procedures and customary nursing and collaborative therapeutic modalities. The course guides the student through the nursing process when planning nursing care for the common diseases of the following systems: urinary, endocrine, Integumentary, neurological, sensory, gastrointestinal, respiratory, cardiovascular, blood disorders, cancer, sensory, and musculoskeletal. The clinical component provides advancement from in-depth to complex nursing skills, knowledge, and attitudes necessary to care for the acutely ill patient.

NRSG 142 CORE CONCEPTS OF MATERNAL/CHILD

Credits: 3 (30 Hours Lecture / 45 Hours Clinical)

Term: (S)

Emphasizing caring, communication, professionalism, and critical thinking, the course provides information about fetal development, prenatal and postnatal care of the mother and newborn. Role of the nurse in meeting the needs of the family is emphasized. Clinical application of caring for the mother and newborn will allow the student to demonstrate acquired knowledge. The course also includes growth and development patterns as well as care of the well and sick child.

NRSG 144 CORE CONCEPTS OF MENTAL HEALTH

Credits: 2 (30 Hours Lecture)

Term: (S)

This course will explore physiological, psychological, sociocultural, spiritual and environmental factors, associated with Mental Health/Illness. Focus will be placed on psychotherapeutic management in the continuum of care, milieu management and special populations with emphasis on individuals, families and communities.

### NRSG 148 LEADERSHIP ISSUES

Credits: 2 (15 Hours Lecture / 45 Hours Clinical)

Term: (SU)

This capstone course provides the Practical Nursing student information regarding the current status of practical nursing. This course assists the nursing student to bridge the role between student and employee. Leadership/management skills, continuing educational needs, licensure requirements, job applications, advanced educational programs and charge nurse responsibilities are included. Students will take the National League of Nursing (NLN) test and receive an application for the State Board of Nursing Examination. There is a forty-five hour clinical to provide the student the experience of organizing the care for a small group of patients (5) in an extended care setting as a patient manager.

# **NRSG 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.





# Course Descriptions - Nutrition & Dietetics (NUTR)

#### **NUTR 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### NUTR 125 INTRODUCTION TO PROFESSIONS IN NUTRITION AND DIETETICS

Credits: 1

Terms: S FIRST CLASS TO BE OFFERED SPRING OF 2012

Role of dietetic technician in relation to other dietetic and health professions. Other topics include history, current practice, and future trends. Professional ethics, standards of practice, education requirements, and areas of practice for dietetic technicians is addressed. The integration of nutrition and dietetics within health care systems and public policy is discussed.

### **NUTR 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

### **NUTR 221 BASIC HUMAN NUTRITION**

Credits: 3 Terms: F, S

The purpose of this course is to understand the science of human nutrition and apply nutrition and food concepts to the individual during critical stages of the life cycle. To demonstrate the consumer skills needed to achieve optimal nutritional status.

# **NUTR 222 INTRODUCTION TO NUTRITION SERVICES MANAGEMENT**

Credits: 3

Terms: F FIRST CLASS TO BE OFFERED FALL OF 2012

Focus on the management practice in dietetics and foodservice from conceptual to application.

## **NUTR 225 BASIC LIFE CYCLE NUTRITION**

Credits: 3

Terms: S FIRST CLASS TO BE OFFERED SPRING OF 2013

Prerequisites: NUTR 221

Nutritional needs and health concerns during different stages of life preconception, pregnancy, lactation, infancy, preschool years, middle childhood, preadolescence, adolescence, adulthood and late maturity.

**NUTR 226 FOOD FUNDAMENTALS** 

Credits: 3

Terms: F FIRST CLASS TO BE OFFERED FALL OF 2012

Prerequisites: NUTR 221

To develop an understanding of the principles of food composition, preparation, selection, food safety and storage with special reference to physical and chemical changes which occur during normal food preparation.

### **NUTR 230 NUTRITION COUNSELING**

Credits: 3

Terms: F FIRST CLASS TO BE OFFERED FALL OF 2012

Prerequisites: NUTR 221

Principles and the application of counseling skills are emphasized as it relates to dietetics.

# NUTR 245 INTRODUCTION TO MEDICAL NUTRITION THERAPY

Credits: 3

Terms: F FIRST CLASS TO BE OFFERED FALL OF 2012

Prerequisites: NUTR 221

Medical abbreviations and terminology. Interviewing, counseling and education principles applied to normal and therapeutic nutrition. Diabetic exchanges and calorie counts. Researching medical nutrition topics and the use of computer as applied to nutrition.

### **NUTR 251 COMMUNITY NUTRITION**

Credits: 2

Terms: S FIRST CLASS TO BE OFFERED SPRING OF 2012

Prerequisites: NUTR 221

Develop an understanding of factors in the community that influence nutritional status with emphasis on understanding impact of culture on nutrition and health.

### **NUTR 252 COMMUNITY NUTRITION LABORATORY**

Credits: 3

Terms: F FIRST CLASS TO BE OFFERED FALL OF 2012

Prerequisites: NUTR 221 and NUTR 251

For DT Program Students only.

#### **NUTR 260 FOOD SERVICE MANAGEMENT**

Credits: 3

Terms: S FIRST CLASS TO BE OFFERED SPRING OF 2013

Prerequisites: NUTR 221, CULA 105, NUTR 226

Principles of quantity food procurement, production, and presentation. Food safety and sanitation. A major focus on nutrition food service management.

# **NUTR 261 FOOD SERVICE MANAGEMENT LABORATORY**

Credits: 3

Terms: S FIRST CLASS TO BE OFFERED SPRING OF 2013

Prerequisites: NUTR 221, CULA 105, NUTR 226

Co-Requisites: NUTR 260

Engagement in a week.	ariety of food service lab experiences. Work approximately 10 hours per
For DT Program S	udents only.
Credits: 3	TION MEDICAL THERAPY  LASS TO BE OFFERED SPRING OF 2013
Prerequisites: NU	R 221, NUTR 230, NUTR 245
	ring modified diets. Medical nutrition therapy for various diseases, heart disease, cancer, AIDS, gastrointestinal disorders, renal disease and
Credits: 3	TION MEDICAL THERAPY LABORATORY
Credits: 3 Terms: S FIRST	LASS TO BE OFFERED SPRING OF 2013 R 221, NUTR 230, NUTR 245
Credits: 3 Terms: S FIRST Prerequisites: NU Co-Requisites: N	LASS TO BE OFFERED SPRING OF 2013 R 221, NUTR 230, NUTR 245
Credits: 3 Terms: S FIRST Prerequisites: NU Co-Requisites: N Engagement in a	LASS TO BE OFFERED SPRING OF 2013 R 221, NUTR 230, NUTR 245 TR 270 ariety of medical nutrition lab experiences. Work approximately 10 hours
Credits: 3 Terms: S FIRST Prerequisites: NU Co-Requisites: N Engagement in a per week.	LASS TO BE OFFERED SPRING OF 2013 R 221, NUTR 230, NUTR 245 TR 270 ariety of medical nutrition lab experiences. Work approximately 10 hours



# Course Descriptions - Office Technology (OO)

#### OO 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **OO 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **OO 220 PREPARING RESUMES**

Credits: 1 Term: (S)

Prerequisite: Recommended course be taken during students final semester of attendance

Students will study the components of a "winning" resume and go through the steps in preparing a resume. They will identify critical differences among traditional, scannable, and electronic resumes. Personal strengths will be identified and focused to improve marketability in targeted career areas.

#### **OO 221 INTERVIEWING FOR JOBS**

Credits: 1 Term: (S)

Prerequisite: Recommended course be taken during students final semester of attendance

This course will help the student master the art of interviews, develop strategies to market themselves, acquire successful interview techniques, navigate interview questions and answers, and utilize good follow-up moves.

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# Course Descriptions - Pharmacy Technician (PHA)

## **PHA 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### PHA 194 INTRO TO PHARMACY PRACTICE, LAW, & CALCULATIONS

Credits: 4

Terms: (S or based on sufficient demand)

This course will be an introduction to the practice of pharmacy and, more specifically, a technician's role in pharmacy and as a career. A brief history of pharmaceutical services will be covered including differing pharmacy personnel and their roles. Students will be introduced to basic concepts of pharmacy practice, service, and design and learn to develop the necessary skills needed for a technician to communicate effectively as a representative of pharmacy and the profession as well as an intermediary between patients, pharmacists, technicians, and other health care professionals.

#### PHA 194 HOSPITAL & COMMUNITY PHARMACY PRACTICE

Credits: 2

Terms: (S or based on sufficient demand)

Observational training and practice in both acute and ambulatory care pharmacy settings all while under the supervision of a pharmacist. Students will experience dispensing, unit-dose systems, IV admixtures, bulk and sterile compounding, purchasing, control of inventory, order entry, patient profiles and effective communication skills.

O



# Course Descriptions - Philosophy (PHL)

#### PHL 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### PHL 101 INTRODUCTION TO PHILOSOPHY

Credits: 3

Terms: (F, S, SU based on sufficient demand)

An introduction to philosophy through examination of the thought of selected great philosophers or of traditional positions on classical philosophical problems.

### PHL 194 PCE TOPIC

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

### PHL 110 INTRODUCTION TO ETHICS

Credits: 3

Terms: (F, S, SU based on sufficient demand)

This course introduces ethical theory through an examination of the major schools and the fundamentals of decision-making. It examines general moral theory and applies this theory to moral problems of historical and current interest.

# PHL 221 INTRODUCTION TO PHILOSOPHY & BIOMEDICAL ETHICS

Credits: 3 Terms: (F, S)

This course provides a broad overview of the field of biomedical ethics. Topics discussed will include issues such as death and dying, human and animal experimentation, abortion, confidentiality, AIDS, the allocation of medical resources, as well as an examination of the codes of ethics of various health professions.

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# Course Descriptions - Physical Science (PHYS)

#### PHYS 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### PHYS 110 SURVEY OF NATURAL SCIENCES

Credits: 3 (3 lecture)

Terms: (F, S)

A course designed to introduce some of the basic aspects of the Biological, Physical, and Earth Sciences. The biology component will emphasize the structural and functional features of organisms, their classification, and their importance in the environment. The physical science component will present a non-mathematical approach to understanding some of the basic concepts in chemistry and physics. The earth science studies will focus upon the interrelationships between geology, paleontology, astronomy, meteorology and oceanography.

#### PHYS 130 FUNDAMENTALS OF PHYSICAL SCIENCE W/ LAB

Credits: 4 (3 lecture, 1 lab)

Terms: (F, S)

This course is an introduction to the fundamental behavior of energy and matter. It is divided into two sections: physics and chemistry. Topics discussed in the physics portion include: scientific measurement; motion; work and energy; heat and temperature; and waves (including sound and light). Topics discussed in the chemistry portion include: atomic structure; the periodic table of elements; chemical bonding and nomenclature; chemical formulas and equations; and solutions. Several lab experiments relating to some of these topics will be performed. No prior work in

physics or chemistry is assumed for this course, although in order to have the greatest success in this course, it is highly recommended that students possess strong algebra skills.

## **PHYS 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.







# Course Descriptions - Physical Therapist Assistant (PTA)

#### PTA 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

### PTA 101 PHYSICAL THERAPIST ASSISTING I / LAB

Credits: 5 (3 Lecture, 2 Lab - 45 Lecture Hours/60 Lab Hours)

Term: (F)

Prerequisites: Acceptance Into PTA Prgoram Co requisites: PTA 205, 206, 210 and 218

This is the first of two sequential skills and procedures courses in the PTA program. The following topics are covered: basic principles and procedures of physical therapy; basic care skills and application techniques; use of assistive devices; architectural and environment barriers; introduction to range of motion (ROM); introduction to pain theories, conditions, and assessment; and physiological principles, indications/contraindications, and application of physical agents discussed in lecture.

## PTA 105 INTRODUCTION TO PHYSICAL THERAPIST ASSISTING

Credits: 3 (45 Lecture Hours)

Terms: (F,S,SU)

This course is designed to give the student an overview of the Physical Therapy profession by providing a historical perspective, as well as, an understanding of its philosophy in relation to the professional organization; an overview of the roles of the Physical Therapy staff members in the clinical setting, as well as, members of the health care team in various delivery systems; development of interpersonal communication skills relating to the profession; and an understanding of the commitment of the graduate to continued personal and professional development. This course provides an overview of ethical, legal, and psychosocial issues relating to the role of the PTA in health care delivery. It includes such topics as the implications of chronic illness; the aging process and death/dying; client's role in health management; financing of physical therapy; regulations governing PTAs; code of ethics; scope of PT and PTA practice; and the PTA's role in departmental administration.

# PTA 194 PCE TOPIC

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

### PTA 201 PHYSICAL THERAPIST ASSISTING II / LAB

Credits: 5 (3 Lecture, 2 Lab - 45 Lecture Hours/60 Lab Hours)

Term: (S)

Prerequisites: PTA 101, PTA 205, PTA 206 and PTA 218 all with a grade of "76%" or higher

and PTA 210 with a grade of "Pass" Co requisites: PTA 213, 215, and 220

This is the second of the two sequential skills and procedures courses in the PTA program. The following topics are covered: theoretical principles and application of chest physical therapy, biofeedback, topical applications, electrotherapy, ultrasound; procedure and application of cervical and lumbar traction; gait analysis and training; prosthetic/orthotic application, theory and application of massage; measurements and principles of cardiopulmonary rehabilitation.

### PTA 205 ANATOMY AND KINESIOLOGY FOR THE PTA

Credits: 6 (4 Lecture, 2 Lab - 45 Lecture Hours/60 Lab Hours)

Term: (F)

Prerequisites: Acceptance into PTA program Co requisites: PTA 101, 206, 207, 210, and 218

This course is designed to provide the student with an understanding of: the human musculoskeletal system relative in the biomechanical elements of normal and abnormal human motion; osteology and arthrology in relation to muscle action and joint mechanics. The study and skills of goniometry and manual muscle testing will also be covered.

### PTA 206 PATHOPHYSIOLOGY FOR THE PHYSICAL THERAPIST ASSISTANT

Credits: 3 Lecture Hours - 45 Lecture Hours

Term: (F)

Prerequisites: Acceptance into the PTA Program Co requisites: PTA 101, 205, 207, and 210

This course introduces the student to the pathophysiology, etiology, clinical signs and symptoms, and management of selected pathological and injury-related disorders treated in physical therapy. Other pathologies discussed include: diabetes mellitus, immune system disorders, neoplasms, and disorders related to pregnancy. The course includes studentpresentations on disorders pertinent to physical therapy. The course also includes the pathology and treatment of vestibular disorders.

## PTA 210 CLINICAL EXPERIENCE I

Credits: 3 (160 Clinical Hours - 4 weeks)

Term: (F)

Prerequisites: Acceptance into the PTA program Co requisites: PTA 101, 205, 206, and 218

The purpose of this clinical affiliation is to provide the student with an opportunity to apply skills and techniques learned in PTA 101, 105, 205, 206 and 218 under the appropriate supervision of the clinical instructor. This course will include a four-week clinical rotation at an approved site.

### PTA 213 NEUROREHABILITATION FOR THE PTA

Credits: 6 (4 Lecture Hour, 2 Lab - 60 Lecture Hours/60 Lab hours

Term: (S)

Prerequisites: PTA 101, PTA 205, PTA 206, and PTA 218 with a grade of "76%" or higher with a grade of "C-" or higher and PTA 210 with a grade of "Pass"

a grade of C- of higher and PTA 210 with a grade of Pas

Co requisites: PTA 201, 215, and 220

This course is an introduction to neuroanatomy and neurophysiology in relationship to neurological pathologies of the brain and spinal cord commonly treated by physical therapy. Through this course the student is also introduced to neurological development: normal vs. abnormal - birth through adult; disease processes and outcomes; and neurophysiological routines used for treatment. Principles and treatment of specific disabilities are also presented.

#### PTA 215 INTRODUCTION TO ORTHOPEDICS

Credits: 4 (3 Lecture, 1 Lab - 45 Lecture Hours and 30 Lab Hours)

Term: (S)

Prerequisites: PTA 101, 205, 206, and 207 with a grade of "C-" or higher and PTA 218 with a

grade of "76%" or higher and PTA 210 with a grade of "Pass"

Co requisites: PTA 201, 213, 220

This course introduces students to pediatric and adult musculoskeletal pathologies and management of orthopedic and surgical problems commonly seen by physical therapy. Course content will include:

- 1. Basic biomechanics and mechanisms of orthopedic injuries and diseases
- 2. Survey of surgical repair with emphasis on rehabilitation
- 3. Evaluation techniques and treatments used by physical therapists
- 4. Theoretical application of therapeutic exercise programs and equipment commonly used for treatment of various orthopedic conditions and surgical procedures, and
- 5. Orthopedic pediatric treatment routines.

#### PTA 218 THERAPEUTIC EXERCISE FOR THE PTA

Credits: 2 (30 Lecture Hours)

Term: (F)

Prerequisites: Acceptance into the PTA Program Co requisites: PTA 101, 205, 206, and 210

This course introduces the physical therapist assistant student to topics such as exercise prescription tailored to the individual, general therapeutic exercises, aquatic therapy, relaxation techniques, and setting up a home exercise program. Current health practices and theory will be addressed in relation to nutrition/wellness within special populations emphasizing preventative practice.

# PTA 220 CLINICAL EXPERIENCE II

Credits: 3 (160 Clinical Hours, 4 weeks in length)

Term: (S)

Prerequisites: PTA 101, 205, 206, 207 with a grade of "C-" or higher and PTA 218 with a

grade of "76%" or higher and PTA 210 with a grade of "Pass"

Co requisite: PTA 201, 213, 215

The students will continue to build on their clinical experiences from PTA 210 previous coursework. This will consist of a four-week clinical rotation at an approved site.

## PTA 225 SEMINAR AND PROJECT IN PHYSICAL THERAPIST ASSISTING

Credits: 3 Term: (SU)

Prerequisites: PTA 101, 201, 205, 206, 213, 215, 218 with a grade of "76%" or higher and

PTA 210, 220 with a grade of "Pass"

Co requisite: PTA 230

This concentrated course is designed to integrate skills and techniques from previous clinical experiences and from the course work presented throughout the PTA program. It focuses on presentation of comprehensive treatment plans utilizing all treatment skills and techniques learned during the previous semesters. The students will be expected to provide written reports including complete patient information and treatment plans and then present this information in the form of a case study/project. Research and current issues are discussed and presented. Students will be required to relate sociological, physical, and psychological aspects of illness and injury to their projects. A cumulative exam of the PTA curriculum, as well, as preparation for the state's licensure exam is covered in this course. A cumulative practice exam of the PTA curriculum, as well, as preparation for the national and state's licensure exams are covered in this course. Students are required to develop and present on their program portfolios. Student questions and concerns are also addressed.

### PTA 230 CLINICAL EXPERIENCE III

Credits: 5 (320 Clinical Hours, 8 weeks in length)

Term: (SU)

Prerequisites: PTA 101, 201, 205, 206, 213, 215, 218 with a grade of "76%" or higher and

PTA 210, 220 with a grade of "Pass"

Co requisite: PTA 225

This is the third of three full-time affiliations/clinical experiences during which the student develops proficiency in physical therapy procedures, understanding of clinical responsibilities and supervisory relationships with a minimum competence necessary to graduate as an entry level physical therapist assistant and become an active participant of the health care team. This course will include an eight-week clinical rotation at an approved site.





# **Course Descriptions - Political Science (PSCI)**

#### **PSCI 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **PSCI 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### **PSCI 210 INTRODUCTION TO AMERICAN GOVERNMENT**

Credits: 3 Terms: (F, S)

This course examines the major institutions of national government and politics. Special emphasis is placed on the Constitution and other political rules of the game as shapers of public consciousness and government policy.



# Course Descriptions - Psychology (PSYX)

#### **PSYX 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

### **PSYX 100 INTRO TO PSYCHOLOGY**

Credits: 3 Terms: (F,S,SU)

This course is an introduction to the nature and scope of the field of psychology as a scientific and human endeavor. Major topics include: historic development of the field; biological and developmental processes; consciousness and perceptions; learning, remembering, and thinking; motivation and emotion; personality and individuality; social behavior; normal stress and coping; and abnormal psychology and treatment methods.

#### **PSYX 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# **PSYX 230 DEVELOPMENT PSYCHOLOGY**

Credits: 3 Terms: (F,S,SU)

This course presents the study of human development throughout the lifespan. Study will include: the three domains of development (physical, cognitive and psychosocial); major theories; the influence of genetics; and prenatal development. The overall framework of the course is

chronological dividing the lifespan into seven parts: infancy; early childhood; middle childhood; adolescence; early adulthood; middle adulthood; and late adulthood. This organization emphasizes the whole person and assists students to appreciate the ways in which the three domains of development continuously interact.

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# Course Descriptions - Public Safety Communications (PSC)

NOTE: This program is in moratorium and will not be accepting new students in 2011-2012. Please contact the Health Sciences department at 406-771-4350 for more information.

### **PSC 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### PSC 194 PUBLIC SAFETY TERMINOLOGY AND REPORT WRITING

Credits: 1 Terms:

This course will cover aspects of report writing and specific terminology used by those in Public Safety Communications. The term "Excited Delirium" will be covered.

### PSC 194 LEGAL RESPONSIBILITY, CRIMINAL AND CIVIL LAW FOR PSC

Credits: 3 Terms:

This course will provide a basic introduction and a general overview of liability issues that relate specifically to Telecommunicators, and provide a basic introduction to Telecommunicator liability, and some methods to reduce the potential exposure.

## PSC 194 PSC - STRESS AND CRISIS INTERVENTION FOR PSC

Credits: 1 Terms:

This course will cover various aspects of the stressors faced by those in the Public Safety Communications field as well as an overview of crisis intervention. This course will inform the student of the problems that can occur as they relate to stress, including signs and symptoms of stress and what steps can be taken to assist in controlling it.

### PSC 194 PSC - CLINICAL FOR PUBLIC SAFETY COMMUNICATIONS

Credits: 1 Terms:

Prerequisites: Students completing this course need to have successfully completed PSC 194: Public Safety Communications Skills with a grade of C or better and students must undergo a criminal background check that meets the requirements for PSC professionals and/or the agency at which they will be observing. This course provides clinical experience to students entering into the field of Public Safety Communications.

### PSC 194 PUBLIC SAFETY COMMUNICATIONS AND SKILLS

Credits: 1 Terms:

Through online instruction, this course provides an overview of the Public Safety Communications field and discusses the communication devices, skills, and knowledge required to professionally and effectively communicate with individuals and information on dealing with a victim in order to promote a positive, respectful and safe atmosphere for both victim and responder.

## PSC 194 INTRO TO PHARMACY PRACTICE, LAW, & CALCULATIONS

Credits: 4 Terms:

Through online instruction, this course provides an overview of the Public Safety Communications field and discusses the communication devices, skills, and knowledge required to professionally and effectively communicate with individuals and information on dealing with a victim in order to promote a positive, respectful and safe atmosphere for both victim and responder.

#### PSC 194 INTRO TO PHARMACY PRACTICE, LAW, & CALCULATIONS

Credits: 2 Terms:

Observational training and practice in both acute and ambulatory care pharmacy settings all while under the supervision of a pharmacist. Students will experience dispensing, unit-dose systems, IV admixtures, bulk and sterile compounding, purchasing, control of inventory, order entry, patient profiles, and effective communication skills.

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# Course Descriptions - Radiologic Technology (AHXR)

## **AHXR 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### **AHXR 101 PATIENT CARE IN RADIOLOGY**

Credits: 2 Term: (S)

Prerequisite: Successful completion of the first semester RAD Program

This course is designed to introduce the student to techniques and procedures utilized to provide care to the patient in the Radiology Department. It will provide instruction in the areas of infection control, vital signs, venipuncture, and patient communication. This instruction is necessary to meet some of the General Patient Care requirements of the American Registry of Radiologic Technologists. The course concludes with a study of interactions between radiation and the body atoms.

#### AHXR 105 INTRODUCTION TO RADIOLOGIC TECHNOLOGY

Credits: 2 Term: (F)

Prerequisite: Acceptance into RAD program

This course will introduce the student to the field of radiography and its various imaging modalities to prepare the student for what they will see and experience during their clinical rotations. It includes instruction in the areas of medical ethics and medico-legal aspects of radiographic imaging that will increase the awareness of the student to the legal responsibilities associated with radiographic imaging and an overview of pharmacology including contrast media, reactions to contrast media and electrical safety to aid the student in their clinical experience for those procedures that require the use of contrast media.

# AHXR 130 RADIOGRAPHIC POSITIONING/PROCEDURES I

Credits: 2 Term: (F)

Prerequisite: Acceptance into RAD Program

In this course the student is introduced to the principles of radiographic positioning including the terminology involved, bone classifications, bone anatomy, bone pathology, and arthrology. Positioning, pathology, and radiographic procedures related to the abdomen and chest are also covered. Instruction will include lecture, audio/visual media and positioning demonstrations in a radiographic room.

## AHXR 131 RADIOGRAPHIC POSITIONING/PROCEDURES II

Credits: 3 Term: (S)

Prerequisite: AHXR 130

This unit of instruction provides the student with the opportunity to learn the radiographic procedures associated with examinations of the upper extremity, lower extremity, and vertebral column. Modification of routine positioning to accommodate traumatized patients is also presented. Methods of instruction include lecture, audio/visual media, and positioning demonstrations in a radiographic room.

#### **AHXR 132 ELEMENTS OF IMAGING I**

Credits: 3 Term: (F)

Prerequisite: Acceptance into RAD Program

This course begins with a study of film and film processing procedures. It then takes the student through the analysis of a radiographic image from a quality standpoint and the various factors that influence the quality of the final radiographic image. Image evaluation and knowing how to correct poor images is essential in the performance of the radiologic technologist. Instruction methods will include lecture, audio/visual media, and the review of radiographic images to reinforce the information presented during the lectures.

#### **AHXR 133 ELEMENTS OF IMAGING II**

Credits: 3 Term: (S)

Prerequisite: AHXR 132

This course begins with basic principles of physics to prepare the student for instruction related to x-ray circuitry. As a technologist an understanding of x-ray circuitry helps to realize when machine failures occur and what can be done to reduce the likelihood of machine failure. Having a basic knowledge of x-ray circuitry can aid the technologist in describing machine problems to repair personnel so that repairs may be made more efficiently. Instruction methods will include lecture and audio/visual media.

### **AHXR 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# **AHXR 195A RADIOGRAPHIC CLINICAL I**

Credits: 7 (300 Clinical Hours)

Term: (F)

Prerequisite: Acceptance into RAD Program

This aspect of the curriculum will involve time spent at the clinical education sites assisting with the performance of radiographic examinations on patients. Students will be given clinical rotations at each clinical site and attendance is mandatory. Students will be required to demonstrate competency in the operation and manipulation of the various types of radiographic equipment found at each clinical site during this time. Students will begin to document competencies on radiographic procedures during this time as well to meet the clinical competency requirements of the ARRT and the COT program.

#### AHXR 195B RADIOGRAPHIC CLINICAL II

Credits: 8 (360 Clinical Hours)

Term: (S)

Prerequisite: AHXR 195

The student will continue assisting in the performance of radiographic examinations on patients at the clinical sites. Students are expected to continue to improve clinical skills and to demonstrate competency in additional radiographic procedures involving the chest,

abdomen including digestive and urinary systems, upper extremities, lower extremities, and vertebral column to meet the clinical competency requirements of the ARRT and the COT program. Students will be given clinical rotations at each clinical site and attendance is mandatory.

#### AHXR 225 RADIOBIOLOGY / RADIATION PROTECTION

Credits: 3 Term: (F)

Prerequisite: Acceptance into RAD Program

This course will introduce the student to the concepts of radiation, sources of radiation, and the production of x-rays that are used for imaging areas of the body. The effects of radiation exposure on living tissues and the risks to both the exposed individual and the individual's offspring are also included. Methods utilized to reduce exposures to patients and personnel are also covered. Instruction methods will include both lectures and audio/visual presentations.

### AHXR 230 RADIOGRAPHIC POSITIONING/PROCEDURES III

Credits: 4 Term: (F)

Prerequisite: AHXR 131

This unit of instruction will provide the student with positioning and procedures involving the cerebral cranium, visceral cranium, urinary system, digestive system, biliary tract, and mammography. Methods of instruction include lecture, audio/visual media, and positioning demonstrations in a radiographic room.

#### AHXR 231 RADIOGRAPHIC POSITIONING/PROCEDURES IV

Credits: 2 Term: (S)

Prerequisite: AHXR 230

This course introduces the student to angiographic imaging and includes instruction on angiographic procedures and the equipment necessary to perform angiography. It will include common pathologic conditions that require angiographic studies and the radiographic appearance of these pathologic conditions. Several therapeutic procedures performed through angiographic methods are also included.

### **AHXR 233 ELEMENTS OF IMAGING III**

Credits: 2 Term: (F)

Prerequisite: AHXR 133

This course will include instruction covering computer applications in radiology including computer terminology applicable to radiology systems, and an introduction to quality assurance testing that is performed within the radiology department to insure quality imaging can be provided. Instruction methods will include lecture and audio/visual media.

## **AHXR 270 RADIOGRAPHIC REGISTRY REVIEW**

Credits: 2 Term: (S)

This course will begin the review process to prepare the student for the certification examination provided by the American Registry of Radiologic Technologists (A.R.R.T.) which is taken after graduation from the clinical portion of the program. It will involve review testing to identify those areas of the didactic curriculum in which the students have their greatest weaknesses followed by classroom discussion. This allows the review to be more focused to the needs of the students. Computerized testing is also utilized to prepare the student for the testing format utilized by the A.R.R.T.

## **AHXR 295A RADIOGRAPHIC CLINICAL III**

Credits: 8 (360 Clinical Hours)

Term: (F)

Prerequisite: AHXR 298

This course is a continuation of AHXR 298 and provides the student with the opportunity to improve clinical skills learned during their first year and to demonstrate clinical competency in more advanced radiographic procedures. In addition to previous clinical assignments, the student will be scheduled for clinical observations in areas of specialized imaging including CT, MRI, and ultrasonography. The student will be required to continue to demonstrate competency in new radiographic procedures to meet the clinical competency requirements of the ARRT and the COT program.

#### **AHXR 295B RADIOGRAPHIC CLINICAL IV**

Credits: 10 (480 Clinical Hours)

Term: (S)

Prerequisite: AHXR 295

This is the final clinical rotation period for the student. During this time the student is expected to finish the clinical competency requirements of the ARRT and COT program.

# **AHXR 298 RADIOGRAPHIC INTERNSHIP**

Credits: 8 (320 Clinical Hours)

Term: (SU)

Prerequisite: AHXR 195

This course is to provide the student with the opportunity to practice in an internship setting. The internship will be for ten weeks at 40 hours per week. The student will be required to continue to demonstrate competency in new radiographic procedures to meet the clinical competency requirements of the ARRT and the COT program. Attendance is mandatory and will be monitored with the use of a time clock and time cards. Radiation monitoring devices must be worn at all times while in clinical education and possession of the device may be checked on site by the staff. During the session, the student will experience clinical rotations in areas of specialized imaging including CT, MRI, ultrasoundography, nuclear medicine, and angiography. A rotation in radiation therapy is also included.

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# **Course Descriptions - Respiratory Care (RC)**

#### **RC 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### RC 140 RESPIRATORY CARE CLINIC I

Credits: 3 Term: (S)

Prerequisite: Completion of 1st semester of RT program

Students will gain knowledge through supervised experiences in hospital patient care, techniques, and equipment. Emphasis is on patient contact, medical gases, hyperinflation, equipment, percussion, humidity and aerosol therapy, airway management, and secretion management. Safety and environmental awareness will be covered in all clinical courses.

### RC 141 RESPIRATORY CARE CLINIC II

Credits: 4 Term: (SU)

Prerequisite: Completion of 2nd semester of RT program

Students will have supervised experiences in hospital patient care, techniques, and equipment. The previous clinical techniques will be expanded with emphasis on IPPB, artificial airway suctioning, chest physiotherapy, medication nebulization, EKGs, chest assessment, and continuous mechanical ventilation.

### **RC 150 RESPIRATORY CARE**

Credits: 3 Term: (F)

Prerequisite: Acceptance into RT program

Respiratory Care introduces new respiratory therapist students to the field of respiratory care. Course content includes respiratory care organizations, physical principles in respiratory care, medical terminology, respiratory drugs, medical ethics, and patient communications.

#### **RC 155 RESPIRATORY PHYSIOLOGY**

Credits: 3 Term: (F)

Prerequisite: Acceptance into RT program

Respiratory Physiology covers anatomy and physiology of the cardio-pulmonary systems. Topics studied are blood, the heart, vessels, respiratory structure, the physics of gas pressure, ventilation, regulation of ventilation, O2 and CO2 transport, ventilation and perfusion balance, acid-base balance, and interpretation of arterial blood gases.

#### RC 170 RESPIRATORY CARE TECHNIQUES & PROCEDURES I

Credits: 5 Term: (F)

Prerequisite: Acceptance into RT program

Knowledge and skills taught will provide students with the theories, principles, and laboratory experience in the areas of medical gas therapy and aerosol and humidification therapy in the use of hyperinflation devices and chest physical therapy. An introduction to infection control, body mechanics, gas analyzers, artificial airways, manual resuscitators, secretion removal, and safety and environmental awareness will be studied.

#### RC 171 RESPIRATORY CARE TECHNIQUES & PROCEDURES II

Credits: 5 Term: (S)

Prerequisite: Completion of the 1st semester of the RT program

Knowledge and skills taught will provide students with the theories, principles, and laboratory experience in the areas of mechanical ventilation. Ventilators including but not limited to: Nellcor Puritan Bennett 7200ae and 840, Siemens Servo 900C and 300a, Sensormedics 3100A High Freq. Oscillator, Repironics BiPaP Vision, and the Infrasonics Infant Star 500. Other areas such as arterial blood gas techniques, transcutaneous gas monitoring, hyperbaric oxygen therapy, mixed gas therapy, mechanical ventilator waveforms, troubleshooting, weaning and high frequency ventilation will also be investigated.

#### RC 180 VENTILATOR MANAGEMENT

Credits: 2 Term: (S)

Prerequisite: Completion of the 1st semster of the RT program

Ventilator Management prepares Respiratory Therapist students to care for the respiratory needs of adult patients in the intensive care setting. Content includes: relating physiologic measurements to patients' ventilation and oxygenation status, establishing the need for mechanical ventilation, selecting initial ventilator parameters and settings, assessing and modifying ventilator parameters and settings, monitoring mechanically ventilated patients, physiologic effects and complications of mechanical ventilation, weaning from ventilators.

# **RC 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

# RC 240 RESPIRATORY CARE CLINIC III

Credits: 4 Term: (F)

Prerequisite: Completion of the 3rd semster of the RT program

Students will be supervised in in-hospital practice of advanced therapeutic and diagnostic respiratory care procedures including pulmonary function testing, arterial blood gases, intubation, continuing education, pulmonary rehabilitation, newborn and adult intensive care, and supervisory management. This course with RC 241 extend through two semesters.

# RC 241 RESPIRATORY CARE CLINIC IV

Credits: 5 Term: (S)

Prerequisite: Completion of the 4th semster of the RT program

Students will be supervised in in-hospital practice of advanced therapeutic and diagnostic respiratory care procedures including pulmonary function testing, arterial blood gases, intubation, continuing education, pulmonary rehabilitation, newborn and adult intensive care, and supervisory management. This course with RC 240 extend through two semesters.

#### RC 245 RESPIRATORY CARE CLINICAL SEMINAR I

Credits: 1 Term: (F)

Prerequisite: Completion of the 3rd semster of the RT program

Co-requisite: RC 240

The purpose for this course is to provide students with an opportunity to share significant clinical experiences, to present clinical problems, to practice communication skills, and the presentation of student in-services. The student will learn to take the National Boards clinical simulation exams. Complete job seeking skills will be taught.

#### RC 246 RESPIRATORY CARE CLINICAL SEMINAR II

Credits: 1 Term: (S)

Prerequisite: Completion of the 4th semster of the RT program

Co-requisite: RC 241

The purpose for this course is to provide students with an opportunity to share significant clinical experiences, to present clinical problems, to practice communication skills, and the presentation of student in-services. The student will learn to take the National Boards clinical simulation exams. Complete job seeking skills will be taught.

#### RC 250 HEMODYNAMIC MONITORING

Credits: 4 Term: (F)

Prerequisite: Completion of the 3rd semester of the RT program

Hemodynamic Monitoring presents to Respiratory Therapist students the information about circulatory system necessary to work in adult intensive care settings. Course content includes: cardiac dysrhythmia identification, management of the circulatory system based of central venous, right atrial, pulmonary artery and wedge, intra-arterial pressure and cardiac output monitoring.

## **RC 255 PULMONARY ASSESSMENT**

Credits: 3 Term: (S)

Prerequisite: Completion of the 1st semester of the RT program

This course covers diagnostic techniques and procedures including interview and history taking, chest assessment, chest radiology, laboratory tests, arterial blood gases and an introduction to pulmonary function testing. This information is used to investigate pulmonary diseases.

# RC 260 NEONATAL RESPIRATORY CARE

Credits: 3 Term: (SU)

Prerequisite: Completion of the 2nd semester of the RT program

Neonatal Respiratory Care is an infant intensive care course. The student will study fetal to neonatal transition, assessment of the newborn, cardiopulmonary disorders of the newborn and respiratory therapeutic procedures for the newborn.

#### RC 265 RESPIRATORY CARE IN ALTERNATIVE SITES

Credits: 1 Term: (S) Prerequisite: Completion of the 4th semester of the RT program

Rehabilitation for the chronic lung disease patient is stressed in this course. Areas discussed include selection of candidates, assessing pulmonary dysfunctions, rehabilitation techniques, biofeedback, home oxygen therapy, psychological factors, patient education, starting a pulmonary rehabilitation program, home care, and patient nutrition.

**RC 273 PULMONARY FUNCTION TESTING** 

# Credits: 1

Term: (S)

Prerequisite: Completion of the 4th semester of the RT program

Pulmonary Function Testing is a study of pulmonary diagnostic testing. Course content includes pulmonary function normal values, lung volume tests, ventilation and ventilatory control tests, spirometry, gas distribution tests, diffusion tests, pulmonary function equipment, and quality assurance in the pulmonary function lab.

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#### **RC 275 PULMONARY DISEASES**

Credits: 2 Term: (F)

Prerequisite: Completion of the 1st semester of the RT program

Pulmonary Diseases surveys etiology, epidemiology, diagnosis, pathology, treatment, and prognosis of diseases of the lungs and diseases which affect the lungs. Diseases studied include pneumonia, tuberculosis, neuromuscular diseases, asthma, RDS, COPD, sleep apnea, pulmonary embolus, cystic fibrosis, and lung cancer.

#### RC 280 SUPERVISORY MANAGEMENT

Credits: 2 Term: (S)

Prerequisite: Completion of the 4th semester of the RT program

This is a basic management course with an emphasis on the supervisory level in healthcare delivery system. The course focuses on the essential management functions of planning, organizing, staffing, influencing, and controlling. It also includes decision making, communications and legal.

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# Course Descriptions - Sign Language (SIGN)

#### SIGN 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcripted on the student's continuing education transcript.

## SIGN 101 Intro to American Sign Lang

Credits: 3 Terms: (F)

In this course, the student will have an opportunity to develop a basic syntactic knowledge of American Sign Language (ASL), basic vocabulary and basic conversational skills. Vital aspects of deaf culture and community will be incorporated. The direct experience method, using ASL, will be used to enhance the learning process.

# **SIGN 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcripted on the student's undergraduate transcript.

# SIGN 201 Intermediate Am Sign Lang

Credits: 3

Prerequisite: SIGN 101

Intermediate Am Sign Lang continues the skill development started in SIGN 101. This course will cover instructions in the grammatical features of ASL, vocabulary development, conversational skills, and exposure to the culture of the deaf community.

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# Course Descriptions - Sociology (SOCI)

## **SOCI 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcripted on the student's continuing education transcript.

#### SOCI 101 INTRODUCTION TO SOCIOLOGY

Credits: 3
Terms: (F,S,SU)

This course offers exposure to fundamentals, perspectives, and terminology of sociology. It includes the study of society and human interaction as it is shaped by social structure and culture. Students also survey the interdependence of social institutions including family, religions, economics, politics, education and occupation, as well as population changes, social differentiation, inequality, deviance, conformity, modernization, social order, and social changes.

## SOCI 121 INTRODUCTION TO CRIMINAL JUSTICE

Credits: 3

Term: (F based on sufficient demand)

This course offers exposure to the fundamental perspectives and terminology of the criminal justice system in the United States. It includes the study of the interaction of the individual with the criminal justice system. Students will also examine the causes of criminal behavior and the history, influences, and related fields of knowledge that are connected to the criminal justice system. Topics will include responsibilities of agencies, roles of personnel, and the inter-relationships of criminal justice to political agencies and other factors that influence the criminal justice system.

# **SOCI 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcripted on the student's undergraduate transcript.

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# Course Descriptions - Statistics (STAT)

#### **STAT 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcripted on the student's continuing education transcript.

#### **STAT 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcripted on the student's undergraduate transcript.

#### STAT 216 INTRODUCTION TO STATISTICS

Credits: 4
Terms: (F,S)

Prerequisite: M 095 or M 116 with a grade of "C-" or higher, or qualifying placement

assessment score within the past 3 years

This course presents concepts, principles, and methods of statistics from two perspectives: descriptive and inferential. Statistical topics include organizing data, sampling, and measures of central tendency, probability, correlation, random variables, hypothesis testing, confidence intervals, and inference.

# STAT 217 INTERMEDIATE STATISTICAL CONCEPTS

Credits: 3 Term: (S)

Prerequisite: STAT 216

This course studies binomial distributions, simple and multiple linear regression, confidence intervals, F tests, and one-way analysis of variance. Statistical analyses are performed using computer software packages.

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# Course Descriptions - Surgical Technician (AHST)

#### **AHST 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### AHST 101 INTRODUCTION TO SURGICAL TECHNOLOGY

Credits: 3 Term: (S)

Prerequisite: Acceptance into Surg Tech Program

Co-requisites: AHST 115; AHST 154

This course introduces the career field by discussing the history and development of surgical technology, surgical patients, standards of conduct, hospital administration and organization, communication and teamwork, the operating room environment, safety standards, and biomedical science as it relates to surgical technology. The course provides an orientation to the scrub and circulatory roles of the surgical technologist in the preoperative, intraoperative and postoperative periods. Entry level skills and theories are emphasized.

## **AHST 115 SURGICAL LAB I**

Credits: 3 Term: (S)

Co-requisite: AHST 101, AHST 154

Prerequisite: Acceptance into Surgical Technology Program

This course is designed to go hand-in-hand with the AHST 101 course. This course will present entry level responsibilities and competencies of the surgical technologist and related nursing procedures in both the scrub an circulator roles. This course will include lecture, as well as hands-on, problem solving sessions and clinical observations.

# **AHST 154 SURGICAL PHARMACOLOGY**

Credits: 3 Term: (S)

Prerequisite: Formal acceptance into Surg Tech Program

Co-requisites: AHST 101, AHST 115

This course will provide the student with general pharmacological information of medications commonly used in a surgical setting, what laws pertain to them, how medications are measured, the use, dosages, routes, actions, adverse reactions, how they are labeled, and other considerations of administration. This course is an on-line internet course. This course is to be taken concurrently with Surgical Lab I where the hands-on skills will be presented.

## **AHST 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcribed on the student's undergraduate transcript.

#### AHST 200 OPERATING ROOM TECHNIQUES

Credits: 5 Term: (F)

Prerequisites: AHST 101, AHST 115, AHST 154

Corequisite: AHST 201, AHST 250

This course builds on the introductory foundational surgical technology knowledge and presents more complex knowledge and associated competencies of the surgical technologist. The course provides a continuation of the responsibilities of the surgical technologist in the scrub and circulatory roles in the preoperative, intraoperative, and postoperative periods. This course provides the knowledge base that correlates with Surgical Lab II.

#### **AHST 201 SURGICAL PROCEDURES I**

Credits: 4 Term: (F)

Prerequisites: AHST 101, AHST 115, AHST 154 Corequisites: AHST 200, AHST 215, AHST 250

This course familiarizes students with the surgical technologist's role during surgical procedures in the preoperative, intraoperative, and postoperative phases of diagnostic, general obstetrical/ gynecological, genitourinary, orthopedic and plastic procedures. This course will be an intergration of face-to-face lecture and on-line presentations.

# **AHST 202 SURGICAL PROCEDURES II**

Credits: 5 Term: (S)

Prerequisites: AHST 200, AHST 201, AHST 215, AHST 250

Corequisites: AHST 251, AHST 298

This course familiarizes students with the surgical technologist's role during surgical procedures in the preoperative, intraoperative, and postoperative phases of Otorhinolaryngologic, Oral/Maxillofacial, Opthalmic, Cardiothoracic, Peripheral Vascular, and Neurosurgical procedures. This course will be an integration of face-to-face lecture and online-presentations.

# **AHST 215 SURGICAL LAB II**

Credits: 3 Term: (F)

Prerequisites: AHST 101, AHST 115, and AHST 154 Co-requisite: AHST 250, AHST 200, AHST 201

This course is designed to go hand-in-hand with the AHST 200 course. This course will present entry level responsibilities and competencies of the surgical technologist and related nursing procedures in both the scrub an circulator roles. This course will include lecture, as well as hands-on, problem solving sessions and clinical observation experiences.

# **AHST 250 SURGICAL CLINICAL I**

Credits: 4 (168 Contact Hours)

Term: (F)

Prerequisites: AHST 101, AHST 115, AHST 154

This course will provide a supervised clinical experience in surgical settings providing scrub, assisting, and circulating experience on surgical procedures level I and level II. Each student will be assigned a specific surgical facility, and then assigned a specific preceptor who will become their daily on-site clinical mentor. In addition to the clinical experience, student will have a weekly debriefing facilitated by the instructor in order to share clinical experiences and learn from each other.

#### **AHST 251 SURGICAL CLINICAL II**

Credits: 5 (216 Contact Hours)

Term: (S)

Prerequisites: AHST 200, AHST 201, AHST 215, AHST 250

Corequisites: AHST 205

This course will provide a supervised clinical experience in surgical settings providing scrub, assisting, and circulating experience on surgical procedures level I and level II as in Clinical I. However, a greater degree of proficiency and independence will be expected from the student. Each student will be assigned a specific surgical facility, and then assigned a specific preceptor who will become their daily on-site clinical mentor.

#### **AHST 298 SURGICAL INTERNSHIP**

Credits: 5 (240 Contact Hours)

Term: (S)

Prerequisites: AHST 200, AHST 201, AHST 215, AHST 250

Corequisites: AHST 202, AHST 251

This course will provide a minimally supervised clinical experience in surgical settings providing scrub, assisting and circulating experience on surgical procedures level I - III. However, a greater degree of proficiency and independence will be expected from the student. The internship develops the student's competencies as a first scrub on surgical procedures, and acquaints them with the professional expectations of surgical technologists as a capstone experience preparing them for initial employment. The course provides the student with the actual experience in surgical procedures, team work, flexibility, organization and efficiency. In addition, the student will learn how to prepare all supplies and equipment used in the operating room in preparation for surgical procedures.

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# Course Descriptions - Sustainable Energy Technician (SET)

#### **SET 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcribed on the student's continuing education transcript.

#### SET 101 INTRODUCTION TO SUSTAINABLE ENERGY

Credits: 3 Terms: (F)

This course provides an overview of sustainable energies including solar, wind, hydro, biomass, and geothermal. Students will learn the basic principles of each technology. Students will also investigate renewable resources and their associated technologies.

# SET 102 INDUSTRIAL SAFETY AND RIGGING

Credits: 3 Terms: (F)

This course provides an overview of safe industrial practices and basic rigging techniques.

# SET 103 FUNDAMENTALS OF MECHANICAL SYSTEMS

Credits: 3 Terms: (F)

This course covers energy industry mechanical systems at the component level. Topics covered include repairing a basic mechanical system, familiarity with basic tooling, and understanding gears and rotational relationships.

# SET 104 FUNDAMENTALS OF HYDRAULIC/PNEUMATIC SYSTEMS

Credits: 3 Terms: (S)

This course introduces basic hydraulic concepts, formulas, and applications of hydraulic components used for directional, flow and pressure control of circuits. Students will identify and explain safety rules, precautions, test procedures, common components, and operating principles for hydraulic and pneumatic systems commonly found in the energy industry.

#### **SET 202 WIND TURBINE EQUIPMENT**

Credits: 3
Terms: (F)

Prerequisites: SET 102

This course introduces common wind turbine components and equipment. The mechanical systems that make up the subsystems of wind turbines will be covered in addition to

structural characteristics and aerodynamic principles.

SET 203 WIND TURBINE OPERATIONS AND MAINTENANCE

Credits: 3 Terms: (S)

Prerequisites: SET 102

This course exposes students to real-world scenarios that may be encountered in the workplace. Practice of installation, operation, maintenance, troubleshooting, and repair of wind turbing closure mechanical systems are all included in this course.

wind turbine electro-mechanical systems are all included in this course.

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# **Course Descriptions - Technical Administrative Skills (TASK)**

#### TASK 090 INTRODUCTORY KEYBOARDING

Credits: 3 Term: (F, S)

This course is an introduction of microcomputer keyboarding techniques using the touch system. Lessons cover the keyboard, basic skills, and an introduction to common business formats.

#### **TASK 094 PCE TOPIC**

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcripted on the student's continuing education transcript.

#### **TASK 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcripted on the student's undergraduate transcript.

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# Course Descriptions - Welding Technology (WLDG)

#### WLDG 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcripted on the student's continuing education transcript.

#### WLDG 103 WELDING FUNDAMENTALS FOR CONSTRUCTION TRADES

Credits: 2 Term: (F)

Prerequisites: CSTN 135, CSTN 145, CSTN 161, CSTN 171

Corequisites: CSTN 230, CSTN 260

This course is specifically designed to teach students the basic welding methods that a carpenter might face (i.e. steel studs). Students will cover basic welding processes used in the trade applications.

#### WLDG 106 WELDING FABRICATION METHODS

Credits: 3 Term: (S)

Prerequisites: WLDG 110, WLDG 111, WLDG 121, WLDG 205

Corequisites: WLDG 120, WLDG 122

This course provides an introduction to basic fabrication of structural steel in accordance with industry standards.

#### WLDG 110 WELDING THEORY I

Credits: 2 Term: (F)

This course covers welding safety, oxy-fuel and shielded metal arc welding (SMAW), definitions covering joining common metals, joint and weld classifications, welding positions, power source selection, plus manual and semiautomatic cutting principles, and terminology.

## WLDG 111 WELDING THEORY I PRACTICAL

Credits: 3 Term: (F)

Corequisite: WLDG 110

Oxy-fuel practical work will involve fusion welding, brazing, and cutting. Shielded metal arc welding (SMAW) practical work will involve flat and horizontal welding skills using a variety of electrodes.

#### WLDG 117 BLUEPRINT READING & WELDING SYMBOLS

Credits: 2 Term: (F)

This course will introduce blueprints and emphasize reading and interpreting welding symbols. Topics covered include basic blueprint reading for welders; basic lines, basic views, title block information, dimensions, structural shapes, auxiliary views, section views, detail prints, welding symbols and other various blueprint information.

#### WLDG 120 WELDING THEORY II

Credits: 1 Term: (S)

Corequisite: WLDG 122

Prerequisites: WLDG 110, WLDG 111, WLDG 121

This course will concentrate on the processes which use inert and/or inert and active gas mixtures for shielding during welding. Gas metal arc welding (GMAW) or MIG, gas tungsten arc welding (GTAW) or TIG, and plasma welding and cutting (PAW/PAC) operations will be thoroughly covered. Process selection and use for welding ferrous and nonferrous metals will be covered.

#### WLDG 121 WELDING THEORY II PRACTICAL

Credits: 3 Term: (F)

Corequisite: WLDG 110, WLDG 111

Practical work involves the application of GMAW and GTAW as it is used in industry today. Use of the various modes of metal transfer, joint styles, welding positions, welding of carbon and stainless steels, and aluminum alloys on various joint styles and in various welding positions, and manipulation techniques will be emphasized.

#### WLDG 122 WELDING THEORY III PRACTICAL

Credits: 3 Term: (S)

Corequisite: WLDG 120

Prerequisites: WLDG 110, WLDG 111, WLDG 121

This course continues skill development from WLDG 121. Practical work involves the application of GMAW and GTAW as it is used in industry today. Use of the various modes of metal transfer, joint styles, welding positions, welding of carbon and stainless steels, and aluminum alloys on various joint styles and in various welding positions, ad manipulation techniques will be emphasized.

## WLDG 130 INTRODUCTION TO STRUCTURAL WELDING

Credits: 3 Term: (S)

Prerequisites: WLDG 110, WLDG 111, WLDG 121, WLDG 205

Corequisites: WLDG 120, WLDG 122

This course covers Gas Metal Arc Welding (GMAW), Shielded Metal Arc Welding (SMAW)), and Flux Core Arc Welding (FCAW) of structural steel and stresses certification code welding on plate and structural steel in all positions. Course instruction and related information will include gas metal and flux core arc welding equipment and welding variables, shielding gases, troubleshooting equipment and weld defects, welder certification and welding codes.

## WLDG 141 WELDING SHEET METAL

Credits: 1 Term: (F)

Corequisites: TB 121. TB 122, TB 123

Covers the basic methods and techniques used when Metal Inert Gas (MIG) welding sheet metal. This class focuses on the thinner gauge metals used on today's automobiles.

#### WLDG 145 FABRICATION BASICS

Credits: 3 Term: (S)

Prerequisites: WLDG 110, WLDG 111, WLDG 121, WLDG 205

Corequisites: WLDG 120, WLDG 122

The introduction to basic fabrication of structural steel in accordance with industry standards.

#### WLDG 185 WELDING QUALIFICATION TEST PREPARATION

Credits: 2 Term: (S)

Prerequisites: WLDG 110, WLDG 111, WLDG 121, WLDG 205

Corequisites: WLDG 120, WLDG 122

This is an advanced course in Gas Metal Arc Welding (GMAW), Shielded Metal Arc Welding (SMAW)), and Flux Core Arc Welding (FCAW) procedures to prepare for industrial certification. This includes welding single vee groove weld-but joints with backing strips in the flat, horizontal, vertical, and overhead position following the American Welding Society (AWS) and the American Society of Mechanical Engineers (ASME) code specifications.

#### **WLDG 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcripted on the student's undergraduate transcript.

#### WLDG 205 APPLIED METALLURGY

Credits: 2 Term: (F)

This course covers basic metallurgical principles and their relationship to the following processes: welding, machining, forming, heat treating, and finishing of ferrous and nonferrous metals. Includes applied metallurgy lab testing exercises.

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# Course Descriptions - Writing (WRIT)

## WRIT 080 BUILDING BASIC WRITING SKILLS

Credits: 4 Terms: (F, S)

Prerequisite: Qualifying placement assessment score

Building Basic Writing Skills prepares students for paragraph and short essay writing in WRIT 095. The course introduces students to critical reading practices by focusing on analysis of non-fiction writing and to writing for academic purposes through the development of the paragraph. The course also provides, in the context of the writing, a review and reinforcement of principles of English grammar and punctuation. The goal of this course is to develop confidence and ability to write clear and effective sentences and paragraphs, in addition to reading level-appropriate texts.

#### WRIT 094 PCE TOPIC

Non-credit professional and continuing education (PCE) courses offered to provide condensed coursework to meet the needs of working students and professionals. These courses are eligible for Continuing Education Units (CEU's) and OPI Renewal Units and are transcripted on the student's continuing education transcript.

## WRIT 095 DEVELOPMENTAL WRITING

Credits: 4

Terms: (F, S, SU)

Prerequisite: Qualifying placement assessment score

Developmental Writing prepares students for college-level reading and composition in WRIT 101. The course introduces students to critical reading practices within thematic non-fiction, fosters student critical thinking based on textual analysis, and encourages questioning and exploration. Writing paragraphs and short essays provides a review and reinforcement of principles of English grammar and punctuation associated with successful college-level writing. Confidence and ability to write clear and effective sentences are assumed.

# WRIT 101 COLLEGE WRITING I

Credits: 3 Terms: (F,S,SU)

Prerequisite: WRIT 095 with a grade of "C-" or higher or qualifying placement assessment

score

College Writing I is designed for transfer-level students or for those who want to develop competence in college level reading and composition. In this course, students read, analyze, discuss, think critically, and write essays within a variety of patterns of writing, including narration, description, example, comparison and contrast, process analysis, causal analysis, and argument. The goal of the course is effective, logical, and precise expression of ideas in writing. Emphasis is placed on pre-writing skills, organizational techniques, development of ideas, narrowing and expanding topics as appropriate, and research and referential skills. Competence in basic sentence structure and writing skills at the paragraph and short essay

level is assumed.

#### WRIT 104 WORKPLACE COMMUNICATIONS

Credits: 2 Term: (S)

This course reviews the basic elements of grammar and language arts skills in business writing. Emphasis is placed on writing business letters, memos, emails, and reports for a variety of business applications as well as giving oral presentations. Letters of application and resumes are also covered.

# WRIT 122 INTRO TO BUSINESS WRITING

Credits: 3 Terms: (F,S)

Prerequisite: WRIT 095 with a grade of "C-" or higher, qualifying placement assessment

score, or instructor approval

Students of this course develop the skills to generate clear, concise documents for the world of work. Emphasis is placed on format, tone, style, and organization of business letters, memos, and reports. Appropriate conventions for business style, punctuation, and handling of electronic communications are included. Course is taught by computer-assisted instruction.

## **WRIT 194 PCE TOPIC**

Credits: VARIES (Sufficient Demand)

Credit-bearing professional and continuing education (PCE) courses offered to provide students and professionals condensed courses for skills upgrades, Professional Certification requirements, and as electives for the Associate of Arts (AA) or Associate of Science (AS) degrees. These courses may be eligible for financial aid for students pursuing the AA or AS degrees and are transcripted on the student's undergraduate transcript.

## WRIT 201 COLLEGE WRITING II

Credits: 3 Terms: (S)

Prerequisite: WRIT 101

College Writing II, a continuation of WRIT 101: College Writing I, is designed for transfer students or for those who want to continue to develop critical reading and composition skills. In this course, students read advanced-level texts and discuss, think critically, and write analytical, argumentative, and persuasive essays about them. This class requires a research paper. Emphasis is placed on persuasive techniques, library research methods, and documentation. The ability to write short essays is assumed.

#### WRIT 220 BUSINESS & PROFESSIONAL WRITING

Credits: 3 Terms: (F,S)

Prerequisite: WRIT 095

Students will develop work-related skills producing both business communications and technical documents. Business letters and memos address a variety of business contexts. Instructions, technical descriptions, proposals, feasibility studies, and management plans reflect working documents that emphasize structure, format, and tone for a variety of professional audiences. This high-level course is taught by computer-assisted instruction. Entrepreneurship students should register for both BUS 260 and WRIT 220 in their last semester. On-campus offering of WRIT 220 is recommended for Entrepreneurship students.

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# **Faculty & Administrative Staff**

# ABCDEFGHIJKLMNOPQRSTUVWXYZ

Α		
Sandra I. Allen, CST	Surgical Technology	A.S., Miami Dade Community College
Cheryll Alt	Practical Nursing Program Director	M.S.N., Nebraska Methodist College B.S.N., California State University, San Diego
В		
Leonard Bates	Respiratory Care	M.Ed., Montana State University – Northern B.A., State University of New York, Albany A.S., San Antonio College
Mary Ellen Baukol	Associate Dean for Administration/Finance	M.B.A., University of Montana B.S., Montana State University Billings
Brad Bechard	Physical Therapy Assistant Program Director	M.S. University of Mary B.S. Montana State University
Marilyn Besich	Business Management/ Entrepreneurship	Ed.D., Montana State University M.A.S. & B.A., University of Montana
Ed Binkley	Controller	M.B.A., Illinois State University B.A., Millikin University
Richard Blevins	Medical Director, Respiratory Care	M.D., University of Colorado B.S., Montana State University
Mary Kay Bonilla	Executive Director, Human Resources	B.S., University of Montana
Jeff Brown	Business, Technology, & Trades Division Director	Doctoral Candidate, Montana State University M.B.A., Pacific Lutheran University B.S., U.S. Military Academy, West Poin
С		
Jana Carter	English	M.A., Arizona State University B.A., Western Washington University A.A., Yakima Valley Community College
Brian Cayko	Respiratory Care	M.B.A. University of Mary B.S. Montana State University A.A.S MSU - Great Falls

Pamela Christianson	Medical Assistant Program Director	M.S. National American University B.S. St. Cloud State University A.S. Cambridge Community College
Susan Cooper	Health Sciences	M.S., University of Arizona B.A., University of Missouri – St. Louis
E		
Donna Eakman	Office Technology	M.S., University of Montana B.S., Montana State University
Robert Ewen	Collision & Refinishing Technology	Great Falls College MSU
F		
Thomas Figarelle	Development Office	B.S., University of Montana
Hildee Fike	Mathematics	M.S., Montana State University B.S., Montana State University – Northern
Tamatha Filliater	Biology / Chemistry	M.S., University of Dayton B.S., University of South Carolina, Columbia
Teri M. Ford Dwyer	Business Management/ Entrepreneurship	M.B.A. & B.A., University of Montana
Dana Freshly	Director of Admissions & Advising	M.Ed. & M.S., Montana State University – Northern B.S., University of Great Falls
G		
Kyle Gillespie	Welding	Certificate, Millstream Career & Technical Center
Bruce Gottwig	Computer Information Technology	M. Ed., Lesley University B.S., Montana State University Billings
Debra Gunter	Budget & Purchasing Officer	B.S., A.A., Montana Tech of the University of Montana
н		
Leah Habel	Financial Aid Director	B.A., Carroll College
Keely Hall, LPN	Surgical Technology	A.A.S Great Falls College MSU
Jason Harding	Sustainable Energy Technology	A.A.S., Wyoming Technical Institute
Judy Hay	Assistant Dean of Student Services	M.Ed. & B.S., Montana State University
Colleen Hazen	English	M.A., Western Illinois University B.A., Washington State University
Joel Henderson	Emergency Medical Services	A.A.S., Montana State University – Great Falls COT
J		
Rebecca Johnson	Mathematics	M.S., Montana State University A.S. & B.S., Montana Tech / University of Montana
Courtney Johnsrud	Director of Retention,	M.Ed., Montana State University –

Transfer, & Career

Northern

	Transfer, & Career Services	Northern M.A., John Jay College B.A., Beloit College
K		
J. Scott Karaffa	Director of Facilities Services	B.S., Montana State University
Jill Schaefer Keil	Mathematics	M.A.T., University of Montana B.S., University of Great Falls
Patti Kercher	Practical Nursing	M.S.N., Nebraska Methodist College B.S.N. & A.D.N., Montana State University – Northern
Lanni Klasner	Marketing & Recruitment Manager	B.S., Montana State University Billings
L		
Thomas Liston, RT	Radiologic Technology	Montana State Licensed RT
М		
Charlene Marshall	Physical Therapist Assistant	B.S., University of Minnesota A.A.S., Northeast Wisconsin Technical College
Cherie McKeever	Biology	D.V.M., University of Illinois B.S., University of Illinois College of Veterinary Medicine
Linda McNeill	Director, Customized Business Programs	B.S., Minot State College
Katherine Meier	Director of Disability and Learning Services	M.Ed. & B.A., University of Great Falls
Julie Myers	Interior Design	B.A., Montana State University
N		
Deborah Newton	Medical Billing & Coding	Ph.D., New Mexico State University M.A. & B.S., New Mexico State University
Jon Nitschke	Accounting	M.Ed., Montana State University – Northern B.S., University of Montana
0		
Thomas Oakberg	Mathematics	M.S. & B.S., Montana State University
Р		
Heather Palermo	Executive Assistant to the Dean	B.A. San Diego State University
Pamela Parsons	Executive Director of College Relations & Advancement	M.S., Montana State University – Billings B.S., Montana State University
Heidi Pasek	Associate Dean of Instruction, Assessment and General Education	Ed. D., Montana State University M.P.C., University of Great Falls B.S., Utah State University
Tim Paul (Post-Retirement)	Computer Information Technology	B.A., University of Michigan

Gregory Paulauskis	Health Sciences Division Director; Radiologic Technology - Program Director; Respiratory Care	Ph.D., Berne University M.Ed., Montana State University – Northern B.S., Loma Linda University A.A., Pacific Union College A.S., Butte College
Roger Peffer	Biology	M.S., Eastern Washington University B.S. & B.A., Evergreen State College A.A., Green River Community College
Carmen Perry	Dental Assisting	M.Ed., Montana State University B.S. & A.A., University of Great Falls
Kathryn Peterson	Electronic Health Records Program Director	B.S. Eastern Montana College A.A.S. Great Falls College MSU
Mark Plante	Mathematics	M.S., Montana State University B.A., University of Minnesota A.A., Lakewood Community College
Jeri Pullum	Grant Writer	M.S., Nova Southeastern University B.A., University of Montana
R		
S		
Joseph Schaffer	Dean/CEO	M.S., Montana Tech of the University of Montana B.S., University of Montana A.A., Bemidji State University– Minnesota
Patrick Schoenen	Carpentry	B.S. University of Montana-Western
Kim Schrenk	Director of Adjunct & Instruction	M.S., Walden University B.S., Montana State University
Ryan Schrenk	Division Director of Extended Learning	M.A., George Washington University B.S., Montana State University
Cynthia Schultz	Practical Nursing	B.S., Montana State University – Northern
David Simpson, D.O., FACOEP	Medical Director, Emergency Services	D.O., Kirksville College B.A., Idaho State University
Gail Staples	Dental Hygiene	B.A., Carroll College
V		
Lawrence J. Vaccard Jr.	o, Communication	M.Ed., Montana State University – Northern M.A., University of Northern Colorado M.S., Air Force Institute of Technology B.A.A.S., Southwest Texas State University
Dennis Veleber	Sociology	M.S. & B.A., University of Montana
W		
Dena Wagner-Fosse	n Registrar	B.A., Wittenberg University B.S., University of Montana-Western
Shannon Walden	Biology	M.S. Montana State University B.S. Montana State University
Lynn Ward	Health Information	M.B.A., Stephens College

	Technology	B.S., Southern New Hampshire University
Kenneth Wardinsky	Chief Technologyl Officer	M.S.M., Colorado Technical University B.A.S., Montana State University – Northern A.A.S., Montana State University – Great Falls
Adam Wenz	Chemistry	M.S. & B.S., Montana Tech of the University of Montana
Robin Williams	Dental Assisting	M.S. & B.S., Montana State University
Linda Wing	Dental Hygiene	B.S., University of South Dakota A.A.S., University of South Dakota
Kim Woloszyn	Dental Hygiene - Program Director	B.A., Carroll College
Mandy Wright	English	M.Ed., Montana State University M.A., Montana State University B.A., Carroll College





# **Support Personnel**

- Lisa Albert Human Resources
- David Bonilla Computer Support
- Courtney Brooks Bookstore
- Sandy Brown Cafeteria
- Kirsten Bryson Library
- Pamela Buckheit Business, Tech & Trades Dept
- Marie Cherry Accounting
- Delisa Clampitt Learning Center
- Dwight Cook Maintenance
- Beth Cooper Library
- Thomas Degel Registrar's Office
- Gerald Eberl Maintenance
- Cheril Edam Student Accounts
- Lee Anne Gills Arts & Sciences Dept
- Julie Freshly Student Central
- Kathleen Haggart Payroll
- Steven Halsted Bookstore
- Melanie Houge Admissions
- Tabby Jagger COT in Bozeman
- Lorene Jaynes Associate Deans Offices
- Rhonda Kueffler Webmaster/Graphic Designer
- Jack Logozzo Maintenance
- Quincie Lords Arts & Sciences

- Craig Lucas Maintenance
- Loretta Marquis Cafeteria
- Shiloh Mattingly Maintenance
- Megann McDonald Health Sciences
- Cheryl McGee Maintenance
- Willie McGee Computer Support
- Lee Ann Myllymaki Student Accounts/Student Central
- Natalie Nefzger Recruiter
- Leslie Olson Dental Clinic
- · Kirsten Rantz Accounting
- Dustin Ratliff Bookstore
- Chad Rebo Arts & Sciences
- Deborah Richerson Outreach
- Julie Rummel Financial Aid
- Cortney See Student Central
- Eugene Stewart -Autobody/Maintenance
- EJ Suek Computer Support
- James Sweat Print Center
- Susan Thomas Facility Coordinator
- Barbara Towne Bookstore
- Benjamin Truman Library
- Karen Vosen Distance Learning
- Brian Wergin Construction Trades
- Ronald Wynegar Maintenance

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# **Credentials: Regional Accreditation**

MSU–Great Falls College of Technology is regionally accredited by Northwest Commission on Colleges and Universities (NWCCU). NWCCU is an independent, not-profit membership organization recognized by the U.S. Department of Education and the Council for Higher Education Accreditation (CHEA) as the regional authority on education, quality, and institutional effectiveness of higher education institutions in the seven-state Northwest region of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington. It fulfills its mission by establishing accreditation criteria and evaluation procedures by which institutions are reviewed.

Northwest Commission on Colleges and Universities 8060 165th Avenue N.E. Suite 100 Redmond, WA 98052 Tel (425) 558 4224

# **Program Accreditation**

# **Practical Nurse Program**

Approved by the Montana State Board of Nursing 301 South Park, Room 430 PO Box 200513 Helena, MT 59620-0513 Tel (406) 841-2300 Receptionist

#### **Dental Assisting**

Accredited by the American Dental Association Council on Dental Education 211 East Chicago Avenue Chicago, Illinois 60611 Tel (312) 440-4653

#### **Dental Hygiene**

Accredited by the American Dental Association Commission on Dental Accreditation 211 East Chicago Avenue Chicago, Illinois 60611 Tel (312) 440-4653

# **Health Information Coding Specialist**

This program is approved by: American Health Information Management Association (AHIMA) Assembly on Education 233 N. Michigan Avenue, Suite 2150 Chicago, IL 60601-5800

# **Physical Therapist Assistant**

Commission on Accreditation in Physical Therapy Education (CAPTE) American Physical Therapy Association 1111 North Fairfax Street Alexandria, VA 22314 accreditation@apta.org Tel (703) 684-2782 or (703) 706-3245

#### **Respiratory Care**

Commission on Accreditation of Allied Health Education Programs (CAAHEP) 1361 Park Street Clearwater, FL 33756 Tel (727) 210-2350

Committee on Accreditation for Respiratory Care (CoARC) 1248 Harwood Road Bedford, TX 76021-4244 Tel (817) 283-2835

#### Surgical Technology

Commission on Accreditation of Allied Health Education Programs (CAAHEP) 1361 Park Street Clearwater, FL 33756 Tel (727) 210-2350 Tel (312) 233-1100

**Health Information Technology** 

Commission on Accreditation for Health Informatics & Information Management Education (CAHIIM) Accreditation Services c/o AHIMA 233 N. Michigan Ave, Suite 2150 Chicago, IL 60601-5800 Accreditation Review Committee on Education in Surgical Technology (ARC-ST) 6 West Dry Creek Circle Suite 210 Littleton, CO 80120 Tel (800) 637-7433 or (303) 694-9130





>Great Falls College MSU

# Great Falls College MSU Catalog for 2010-2011

This catalog contains general information about the campus and specific information about degree programs. If you have questions or comments, please contact admissions@gfcmsu.edu.

- \* Addendum to Catalog
- + College of Technology in Bozeman Transitioning to MSU-Bozeman's Gallatin College **Programs**

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>Great Falls College MSU >Catalog >Admissions

# **Admissions - Admission Requirements**

Application [PDF] Re-Admit [PDF] Other Forms

Please note that any documents submitted to the College during the admissions process become the property of MSU–GF COT, and must remain as part of the student's admission and/or conduct file.

- 1. Complete and Submit Application for Admission: Applications for admission may be obtained from Admissions & Records at the College or on the College's website at www.gfcmsu.edu. Prospective students are encouraged to consult with the Recruiter for information about selection of a program and financial aid before submitting their applications. Call 406-771-4414 or 1-800-446-2698 (in Montana) to arrange for an appointment with the Recruiter. Per Montana Board of Regents of Higher Education Policy 940.2, "Each campus of the Montana University System shall charge a non-refundable application fee of \$30 to each applicant for admission to a graduate or undergraduate program."
- 2. Furnish High School and College Transcripts: Applicants to any program must submit copies of high school transcripts, high school diploma, or GED scores to Admissions & Records. These records must be final and include the completion/graduation date. High schools must be accredited by the appropriate state office of public instruction. In order to receive transfer credit, official college transcripts must be sent directly to the College from each regionally accredited college or university attended. College transcripts submitted from other institutions cannot be released or duplicated, as they remain the property of the institution.
- 3. **Furnish Immunization Records:** In order to be in compliance with Administrative Rules of Montana, updated June 2007, students born after January 1, 1957, taking seven (7) or more credits OR enrolled in a certificate/degree/transfer program must submit proof of TWO vaccinations against measles (rubeola) AND TWO against rubella (German measles). Immunizations must have been after 12 months of age, the second no earlier than 28 days after administration of the first dose. No measles vaccination given before 1967 is valid and no rubella vaccination given before 1969 is valid. Immunizations must be documented by a physician, registered nurse, or school official; or submit blood draw (titer test) results proving immunity for BOTH measles and rubella; or Submit documentation of having contracted measles and rubella. Documentation by a physician is required including dates of illness; or documentation of a file for a medical or religious exemption; or show proof of age, if born prior to January 1, 1957. Such evidence must be submitted before students will be permitted to register for courses. For more information about the Administrative Rules of Montana regarding immunizations, visit the link below:

www.mtrules.org/gateway/ruleno.asp?RN=37%2E114%2E709

# **Admission Types**

# **Admission Requirements for Non-Degree Seeking Students**

Non-degree seeking students must complete and submit the Application for Admission. For students taking courses with prerequisite requirements, an appropriate placement exam score, a challenge exam, or official transcripts demonstrating successful completion of prerequisite courses will be required. A one-time \$30 application fee must accompany the

Application for Admission. Please note that non-degree seeking students are not eligible for financial aid.

#### Readmission to the College

Students who have previously attended Montana State University—Great Falls College of Technology must reapply when they have been absent for one semester, excluding summer. Readmit applications are available in Student Central or on the College's website <a href="http://www.gfcmsu.edu/admissions\_records/forms2.html">http://www.gfcmsu.edu/admissions\_records/forms2.html</a>. Readmitted students will have to furnish all required application materials if they have not already done so.

Readmitted students must follow the graduation requirements for the catalog under which they are readmitted. Previously earned credits will be evaluated on the basis of the current degree or certificate requirements. Credits earned 5 or more calendar years earlier will be reviewed by the appropriate department chair, lead faculty, and/or Registrar, who may require repetition of any course in which the content has substantially changed. Readmitted students will go back through the STAR process with an advisor in Student Central.

Those students applying for readmission after serving at least one term of academic suspension must complete an Admissions Academic Progress Appeal Form along with the Application for Readmission. Such appeals will be reviewed by the Registrar's Appeal Committee before the student is informed in writing of the readmission decision.

#### **Ability to Benefit**

Students who graduate from home school programs or private/religious schools not accredited by the state may take the COMPASS assessment to prove their "Ability to Benefit" from higher education. The student must meet the minimum scores to determine college readiness and to qualify for Financial Aid.

For more information about approved Ability to Benefit scores

## **Early Admission**

High school students may be admitted and allowed to register for college-level courses provided they are academically prepared. This process shall be confined to students who present evidence of the ability and maturity to do college work. This admission requires that the high school principal or counselor approve participation of a student in the college level courses. High school students may earn college-level credit to be applied to a degree at Great Falls College MSU or to transfer to another college or university once they graduate from high school. Course records for students will be entered and maintained on an MSU–Great Falls College of Technology transcript. Early admission students will also have to furnish all required application materials if they have not already done so.

# **Home School Admission**

Home school students must submit the admissions application and application fee, a notarized copy of the home school curriculum, two letters of recommendation from people other than family members, a parental approval form if the student is under 18 and immunization records if the student is degree seeking and taking more than six credits. Home school students must complete the ACT, SAT, or COMPASS test prior to enrolling at the College. Home school students will also have to furnish all required application materials if they have not already done so.

#### **Nonimmigrant Foreign Students**

Great Falls College MSU is authorized under federal law to enroll nonimmigrant foreign students. Each nonimmigrant foreign student is required to furnish the following documents in order to be considered for admission:

- Completed Application for Admission accompanied by a \$30 non-refundable application fee:
- TOEFL (Test of English as a Foreign Language) scores from an accredited testing service. A minimum score of 500 is the acceptable standard on the paper-based test, 173 on the computer-based test and 61 on the internet-based test. More information

about TOEFL may be obtained from the Education Testing Service, Princeton, NJ 08540 or on the featuring websites, <a href="https://www.ets.org">www.ets.org</a> and <a href="https://www.toefl.org">www.toefl.org</a>;

- Proof of completion of the equivalent of an American high school education with satisfactory grades. Transcripts must be evaluated by a credential evaluation service to make this determination. Please contact Admissions & Records for a list of credential evaluation services;
- 4. A Declaration of Finances or other present evidence of funds necessary to pay all living expenses and travel to and from the college;
- 5. All nonimmigrant foreign students must show a physician-validated immunization record for measles, rubella, diphtheria, tetanus, and skin testing for tuberculosis. The evidence must be presented before a student will be permitted to register;
- 6. Evidence of an accident and sickness insurance policy or one of equal coverage for each semester in attendance at the College.

After a nonimmigrant foreign student has completed all of the above items and returned the required forms, his/her admission file will be reviewed and a letter will be sent indicating either acceptance or denial of admission. Upon acceptance, the College will issue an I-20 Certificate of Eligibility for non-immigrant F-1 student status.





>Great Falls College MSU >Catalog >Admissions

# Admissions - Advising

As students are admitted or readmitted to the College, they are advised by advisors in Student Central. These advisors assist students in understanding college policies and procedures, choosing a program of study, choosing first semester classes, and understanding College resources. Students continuing on to their second and subsequent semesters are assigned to a faculty advisor. Faculty advisors act as mentors, helping to guide students through the curriculum in their program to graduation or transfer. A faculty advisor will be a student's main contact for academic and program advice. However, they may refer a student to advisors in Student Central at times for specific assistance.



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# Admissions - Applicants

As an open admission institution, Montana State University—Great Falls College of Technology will attempt to admit all persons who complete admission requirements. The College reserves the right to deny or conditionally admit, readmit, or cancel the enrollment of any individual, who in the judgment of the College presents an unreasonable risk to the safety and welfare of the College community, or who has failed to maintain satisfactory academic progress. Applicants/current students may be asked to complete either a Safety and Security Questionnaire or an Admissions Academic Appeal form before an admission decision is made or changed.

Notification of an admission decision will be mailed to the applicant. Admission to the College does not guarantee admission to a specific program. Students must contact the program advisor for individual program admission requirements. Admission decisions may be appealed, in writing, to the Dean of the College. Students who choose to apply for financial aid may be required to provide additional documentation.

In the case of programs with limited enrollment, acceptance of individuals will be based on the criteria described in the program's information packet or timely completion of the admission requirements for each program. Students should check with the program advisor for specific criteria.

All applicants will be considered without regard to race, color, religion, national origin, marital status, age, gender, disability, or disadvantage in accordance with the following guidelines:

# **Degree Seeking**

A degree seeking applicant is one who possesses a high school diploma or its equivalent and will enroll in a specific program to earn a certificate or degree.

# Non-Degree Seeking

A non-degree seeking applicant is one who will not enroll in a specific program to earn a certificate or degree. If status changes at a future date to degree seeking, additional admission requirements will have to be met. Non-degree seeking applicants are not eligible for financial aid.

#### **Full-Time Student**

A full time student is one who is enrolled in 12 or more credit hours per term. Students who do not meet the criterion for full-time classification are part-time students.

# **Program Requirements**

MSU—Great Falls College of Technology has several programs that are limited enrollment programs, accepting a limited number of students each year. Interested students are urged to contact the specific program advisors as well as the Admissions Office for information specific to admission requirements and criteria for program acceptance. This process is separate from the general Application for Admission submitted to the Admissions Office.

Some licensing or certification boards have varied restrictions, which may affect persons with a history of felony conviction. The College assumes no responsibility for the denial of licensure or certification by such boards. Prospective students are responsible for contacting the appropriate boards concerning any questions regarding their eligibility for licensure or certification.

Program directors may deny admission to a specific program based upon individual program admission criteria. In addition, program directors may dismiss a student from a specific program and withdraw that student from applicable courses in the case of student misconduct as defined by program and/or standards outlined in the program handbook.





>Great Falls College MSU >Catalog >Admissions

# Admissions - Cancellation, Refund & Grading Policy for Courses Numbered 194 and 094

All students wishing to drop from credit or non-credit-bearing PCE courses are required to fill out a Drop Form. These forms are available at the Outreach & Workforce Development office or online. If a class is dropped at least 3 working days prior to the first day of class, the full amount of tuition and fees will be refunded. For credit-bearing courses, the \$30 semester registration and \$30 one-time application fee will NOT be refunded.

If a class is not dropped at least 3 working days prior to the first day of class or the student enrolls and does not attend, the full amount of tuition and fees will be assessed. In certain instances exceptions to this policy may occur for drops occurring less than 3 working days prior to the first day of class. To be considered for an exception, an appeal stating the justification for this exception must be made in writing to the Registrar's Office.

If the Division of Outreach & Workforce Development Department decides to cancel a class, students will receive a 100% refund on all tuition and fees for non-credit courses and a refund on all but the \$30 semester registration and one-time \$30 application fees for credit-bearing courses. All PCE courses are graded and will show on the student's transcript. Considering that many PCE courses are short in length and therefore intense in content, attendance plays an integral part in the grading process. If you do not attend all of the class dates and times, you may receive a lowered grade for poor attendance. Grade appeals are considered academic complaints, procedures for which are outlined in the current course catalog and are administered by the Assistant Dean of Student Services.

# Changes in Credit Load After Payment of Fees

Students adding courses after payment of fees are required to pay additional fees created by the change in credit load.

Students dropping classes (but not withdrawing) will receive a 100 percent refund on courses dropped before the end of the 15th class day. Refunds will not be made after the 15th class day. This schedule applies only to fall and spring semesters. For the summer withdrawal schedule, please see the academic calendar for that term.

Refunds are processed approximately three weeks after the start of a

semester. All refund checks will be mailed to the student's permanent mailing address as shown in the Banner system. It is the student's responsibility to maintain a current mailing address with the College.

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# **Students Owing Debts**

The College reserves the right to deny registration access to a student who has an overdue debt to any Montana State University unit. Students whose tuition and fees remain unpaid may have their registration for classes cancelled for the current semester. Transcripts, certificates, and degrees will be withheld from any student owing tuition, fees, or charges to a Montana State University unit. In the event a student has not returned books and/or materials belonging to this college or any other Montana University System unit, transcripts, certificates, and degrees may be withheld. The MSU–Great Falls College of Technology may refer past due student accounts to the Montana Department of Revenue and/or commercial collection agency for collection action. Collection costs, attorney fees and court costs incurred in the collection of past due accounts will be added to the account and become part of the total amount due.





## Admissions - Credit by Examination

College credit earned by currently enrolled students who successfully complete approved advanced placement examinations, CLEP and DANTES examinations, and CTE College Credit articulations will have credits recorded on their academic records without an additional fee. Credit will not be awarded for courses that are prerequisites to subsequent courses that have been completed, or for courses that have been failed or previously audited.

## College Advanced Placement (High School Students)

Applicants who have taken advanced placement courses in high school should request that the official scores be sent to Admissions & Records. Grades of 3, 4, or 5 on an advanced placement examination will be granted college credit for the appropriate courses.

#### **Experiential Learning**

MSU-Great Falls College of Technology (MSUGF) recognizes that learning occurs outside of the college setting. The outcome of this learning is often the acquisition of skills and/or knowledge which may be equivalent to learning at MSUGF and other institutions of higher education. MSUGF may award credit for this learning through the MSUGF Experiential Learning Policy. This policy is based on the Northwest Commission on Colleges and Universities (NWCCU) Policy 2.3., and can be found at the following link:

http://www.gfcmsu.edu/about/PoliciesProcedures/300/306.1\_ExperientialLearning\_Updated.pdf

## College Level Examination Program (CLEP) and DSST

Montana State University–Great Falls College of Technology awards credit toward graduation for successful performance in certain subject examinations of the CLEP and DSSTprograms. Students may arrange to take these examinations at designated centers. Passing grades and the awarding of credit is determined by the American Council on Education (ACE) credit recommendations.

MSU–Great Falls College of Technology Test identification numbers:

- CLEP 7691
- DSST 9472
- ACT 2432
- SAT 4482

## **CTE College Credit**

Tech Prep in Montana has undergone great changes and is now called CTE College Credit. High school faculty across the state are working with the Office of the Commissioner of Higher Education (OCHE) to create statewide course articulations. Any questions about a particular class should be directed to high school faculty and counselors or OCHE.

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## **Admissions - New Student Registration and Orientation**

All degree seeking students will be required to attend or complete a STAR (STudent Advising and Registration) session with an advisor in Student Central prior to registration for their first semester of courses with MSU–Great Falls. STAR sessions are scheduled at various times for the student's convenience. Students completing a program that is online can complete a STAR session online with a follow up phone appointment with an advisor in Student Central.

Students must apply for Admission to MSU–Great Falls, complete their Admissions file, and submit placement testing (ACT/SAT or COMPASS) results or transfer credit in math and writing before attending their STAR session. Students will receive a letter with their College acceptance letter directing them to call Student Central to schedule their STAR session. If a student has not previously taken a placement test or does not have prior college coursework in math and writing, they may call Student Central to schedule a COMPASS test on campus. There is a testing fee that must be paid prior to testing.

A New Student Orientation Day will be held prior to each fall and spring semester. Additional information about this day will be given to the student during their STAR session.

#### Student Identification Card

Each student should obtain a nontransferable identification card. The identification card may be necessary when purchasing books, cashing checks in the bookstore and using the library. This ID is available in Student Central. In addition, students can replace a lost identification card in Student Central for \$5.



# **Admissions - Registration**

Registration for students is available via Banner Web/My Info on the Internet. Students will need to obtain their advising number/alternate PIN before registering for classes. Continuing students will get this number from their faculty advisor. New students will receive this number when they complete their STAR session. Continuing students are defined as students who have been continuously enrolled (excluding summer) at MSU–GF College of Technology. New, transfer or readmit students must contact Student Central to speak to an Advisor before registering for theirs classes; this generally happens during the STAR process.

Registration information and dates for new and continuing students are available on the Academic Calendar posted on the College website.

Attendance must be confirmed at the time tuition and fee payment is made. Confirmation is a separate process from either registration or payment. Attendance can be confirmed from the payment screen at:

## Banner Web/My Info:

https://atlas.montana.edu:9001/pls/gfagent/twbkwbis.P\_GenMenu? name=homepage in the secure area, under Billing and Payment.

Financial aid, class schedules, term registration, billing information, and payment options are accessible through Banner Web/My Info. Students experiencing any problems accessing or using Banner Web/MyInfo should contact Student Central.



# **Admissions - Registration Requirements**

The following requirements must be satisfied prior to registration for courses at Great Falls College MSU:

- Completed Admission File (see Admission requirements: http://www.gfcmsu.edu/catalog/Admissions/AdmissionRequirements.html)
- Complete Placement Assessment:

All applicants will be required to complete placement testing or submit college transfer work in math and writing prior to enrolling in their first semester of classes. Students may take the COMPASS placement test or submit their American College Test (ACT) or Scholastic Aptitude Test (SAT) scores. Test scores are only valid at MSU–Great Falls for three years. The COMPASS is a standardized test that measures an applicant's proficiency in writing, reading and mathematics. The results are used to determine placement in courses. Special arrangements can be made for those applicants who have a documented or temporary disability. Arrangements for taking the COMPASS can be made by contacting Student Central at 406-771-4414 or 1-800-446-2698. There is a fee for the COMPASS test.

Students may choose to have their ACT or SAT scores sent to the College to determine placement. Please have scores sent to Admissions & Records directly from ACT or SAT. The College's ACT code is 2432, and the SAT code is 4482. The addresses and telephone numbers for ACT and SAT are:

ACT Records P.O. Box 451 Iowa City, IA 52243-0451 319-337-1313 www.act.org

SAT Program Princeton, NJ 08541 866-756-7346 <u>www.collegeboard.com</u>

For persons wishing to attend a postsecondary institution other than Montana State University—Great Falls College of Technology, Student Central will provide, for an additional \$10 fee, monitoring for placement assessments. Individuals must arrange for the assessment materials to be sent to the College and for an assessment date through the Student Central staff. A forwarding address to the appropriate institution must also be provided.

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## **Admissions - Residency Requirements**

#### Tuition and Fee Schedule

Under policies established by the Board of Regents, in accordance with Montana statutes regarding residency, all applicants for admission and all students at the units of the Montana University System shall be classified as in-state or out-of-state for fee purposes.

In-State vs. Out-of-State: A person may be classified as in-state following a 12-month continuous period of domicile in Montana with a documented and dated intent to become a resident of Montana as outlined in the Montana University System Guide to Montana's Residency Policy, provided that the person is not registered for more than one-half of a full-time credit load at any post-secondary institution during the 12-month waiting period. Applicants may request a copy of the Student Guide to Montana Residency Policy from Student Central. Members of the United States Armed Forces assigned to active duty in Montana, their spouses, and dependent children during the member's tour of duty may be granted in-state residency for fee purposes.

In-State Completely Online: A person classified as in-state, who does not live in the following counties – Glacier, Toole, Liberty, Hill, Pondera, Teton, Choteau, Lewis and Clark, Cascade, Judith Basin, Meagher, or Fergus – and is ONLY enrolling in online courses is able to receive adjusted tuition and mandatory fees.

**Out-of-State Completely Online:** A person classified as out-of-state and taking ONLY online courses is able to receive adjusted tuition and mandatory fees.

Western Undergraduate Exchange (WUE): The Western Undergraduate Exchange (WUE) is a program of the Western Interstate Commission for Higher Education (WICHE). Through WUE, students in western states may enroll in many two-year and four-year college institutions at a reduced tuition level: 150 percent of the institution's regular resident tuition. Visit the WICHE website at: <a href="http://www.wiche.edu">http://www.wiche.edu</a> or visit <a href="http://www.wiche.edu">http://www.wiche.edu</a> for more specific WUE information. MSU-GF COT has a limited number of WUE positions available per year. Please contact Admissions for requirements and application materials.

Questions regarding residency status should be addressed to the Admissions Office in Student Central.

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## Admissions - Transfer From Other Institutions

Credits from other regionally accredited postsecondary institutions may be accepted as they apply to the established course requirements of Montana State University–Great Falls College of Technology under the following guidelines:

The transferring student must initiate the request for evaluation of credit during the
admission procedure by furnishing an official transcript from the transferring
institution(s) and the necessary materials, including copies of the appropriate catalog
descriptions or course syllabi, to Admissions & Records. Official transcripts must be
sent directly by the issuing institution to the following address:

Admissions and Records MSU-Great Falls College of Technology 2100 16th Ave S Great Falls, MT 59405

- Grades less than a "C-" for previous course work will not be considered for transfer credit. Course work taken more than 5 years prior to transfer request may not be accepted. If transfer credit cannot be granted, the student has the option of challenging a course or courses through the Experiential Learning policy.
- Transfer credit will be accepted only as it applies to the student's declared program of study.
- Students will be awarded a certificate/degree upon satisfactory completion of all program requirements, provided 25% of the credits required in the degree related program has been completed at MSU–Great Falls College of Technology.
- Transfer credit will be posted on the transcript for accepted transferred course work.
- Transfer grades are not figured in the grade point average (GPA).
- Students who wish to appeal a decision regarding acceptance of transfer credit should contact Admissions & Records to receive information on the appeal process. Students may be asked to provide course descriptions and/or syllabi for an appeal.

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## **Admissions - Transfer To Other Institutions**

Great Falls College MSU is accredited by Northwest Commission on Colleges and Universities. For more information regarding the transferability of courses to other institutions, students should contact the institution they are planning to attend.

For transfer to another Montana school, a student may complete a Request for Transmittal of Application Materials form in order to have the contents of his/her admission file forwarded to the transfer school. There is an \$8 fee for this service.

The College offers a number of transfer options including the Montana University System Transferable Core and the Associate of Science and Associate of Arts degrees. In addition, students may transfer under one of the articulation agreements MSU–Great Falls College of Technology has with specific colleges and universities.



# Admissions - Tuition & Fees Policy

Tuition and fees are to be paid each semester prior to the posted fee payment deadline unless prior arrangements have been made with Student Accounts. Acceptable payment arrangements include financial aid and the deferred payment plan (explained below). The College accepts credit cards (Visa, MasterCard, and Discover) in addition to cash and checks. Payment must be in U.S. funds only.

## **Deferred Payment Plan**

The deferred payment plan is an interest-free installment loan available for qualified applicants who are unable to make full payment of current semester tuition, fees, and other charges on the regular fee payment day. This plan is available to all qualifying students through Student Accounts. Installment payments and the applicable \$30 fee are collected and processed by Student Accounts. The Student Accounts office is located in Student Central.

## **Late Fee**

A \$40 late registration fee will be assessed if registration for classes is not accomplished prior to 12:01 AM on the first day of class each semester.

## **Fee Refunds**

## ~ Withdrawal from the College

Per Montana Board of Regents of Higher Education Policy 940.7: Unless otherwise required by the Higher Education Act of 1965, as amended, refunds of fees in the event of withdrawal from school are authorized according to the following procedures. The registration and application fees are non-refundable.

Students withdrawing from Montana State University—Great Falls College of Technology are refunded the tuition and fees paid in accordance with the following schedule established by the Board of Regents. In order for a student to receive a refund under the Board of Regents policy, an official withdrawal form must be on file in the Registrar's Office:

Fall & Spring Semester:

Days of Instruction*	Percent Refunded
Prior to first day of class	100
1-5	90
6-10	75
11-15	50
16-on	0

These dates are pro-rated for the summer term(s)

The Registration Fee and Application Fees are Nonrefundable per Montana Board of Regents of Higher Education Policies 940.2 and 940.7

<sup>\*</sup> Days of instruction begin with the first day of classes for a term and conclude on the 15th day, which is the deadline to drop/delete courses.

# **Academic Information - Academic Progress**

Academic progress standards are as follows:

- All students enrolled in credit bearing courses at Great Falls College MSU are required to maintain a 2.0 cumulative grade point average (CGPA). Students with less than a 2.0 CGPA at the end of any academic term will be notified by the Registrar that they have been placed on academic probation for the following academic term. If, at the end of a subsequent term, they meet the required 2.0 CGPA, they are removed from academic probation. Academic probation serves to notify students that the quality of their work is below an acceptable level and that the continuation of unsatisfactory work during their next semester of enrollment will result in academic suspension. Students on probation will be limited to 13 credits during the probationary period.
- All students enrolled in credit bearing courses who receive less than a 2.0 GPA and have a CPGA below a 2.0 for the second consecutive academic term will be suspended from the College. Students on academic probation who earn at least a 2.0 grade average for the semester without raising their cumulative grade average to the required minimum will remain on academic probation.
- Following suspension, students will not be considered for reinstatement until at least
  one semester (excluding summer) has passed. Readmission must be initiated through
  Admissions & Records by completing the Application for Readmission and the
  Admission Academic Progress Appeal Form. If the appeal for readmission is approved,
  students will be readmitted on probationary status, limited to 13 credits in the fall and
  spring terms and seven credits in the summer term, and will be re-enrolled under the
  current catalog requirements for graduation.
- If a student is suspended at another school they will have to complete the Academic Appeal process to be considered for admission.
- Transfer applicants may be admitted on academic probation based upon their academic standing at previous institutions.
- Readmitted applicants may be admitted on academic probation based upon their cumulative grade point average (CGPA) and/or academic standing when last in attendance.
- Students who have been placed on academic probation or suspension may appeal in writing to the Registrar for review of circumstances.

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# Academic Information - Adding and Dropping Courses

Students may add courses on Banner Web/My Info up to the end of the fifth day of fall and spring semesters. After the fifth day faculty must approve any add requests if the course has started.

Students may drop one or more courses on Banner Web/My Info with no grade up to the end of the 15th day of fall and spring semesters. However, students may not drop all of their courses online, the student must contact Student Central to drop or withdraw from all courses for the term. Although no refund will be given, students may continue to drop one or more courses with faculty approval with a grade of "W" prior to the end of the published deadline. See the tuition and fees section of the catalog for further information.

These deadlines are pro-rated for the summer term(s). In all courses for which a student fails to complete all requirements and for which no formal drop (withdrawal) has been filed in Admissions & Records, the final grade will be the grade the student has earned at the end of the course.

The following steps must be completed in order to add a course after the fifth day of the term or drop a course after the 15th day of the term.

- Obtain an official drop or add card from Student Central or online at http://www.gfcmsu.edu/admissions\_records/forms2.html
- Complete the card and secure the necessary faculty signature(s)
- Return the card to Admissions/Records in Student Central



## **Academic Information - Attendance**

Absences are exclusively within the purview of the faculty. When a student enrolls in a course, he/she enters into a contractual agreement with faculty for the duration of the course. Both the student and the faculty are expected to honor the specified terms of that agreement. It is important, therefore, for the student to understand the particular attendance requirements in each course. Generally, faculty communicate these requirements to students through the course syllabus and/or verbally during the first or second class meeting.

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## **Academic Information - Common Course Numbering**

The Montana University System is moving to common numbering for all undergraduate courses for public colleges and universities in Montana to assist with the transferability of courses among the State's institutions of higher education.

#### What this means:

- Most current MSU-Great Falls subject abbreviations and numbers have or will change
  as implementation moves forward. The link below will list the subject areas and specific
  courses by year of implementation. The second link is to the Office of the
  Commissioner of Higher Education for all courses in the Montana University System.
- All public colleges and universities in Montana will use the same subject abbreviations (the letter codes that indicate the course subject), numbers, and title for courses taught on more than one campus.
- If students transfer to another campus in the Montana University System, any common course numbered classes also taught at the new campus will automatically transfer as equivalent. All other courses will continue to transfer at the discretion of the Registrar's Office and the faculty at the receiving institution.
- Many familiar titles will change.
- Some courses will change level (e.g., from the 100-level to the 200 level). Course content is not affected by this process.
- During the transition period, which is likely to last several years, Program Advising Sheets and the Catalog will be updated yearly to reflect the changes.

www.gfcmsu.edu/advising\_planning/AdvisingDocumnets/CNS/index.html musdw.msu.montana.edu:7777/ochedw/owa/musxfer.p\_ccn\_main

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# **Academic Information - Course Numbering System**

Courses numbered below the 100 level cannot be used to satisfy core requirements or general elective requirements and do not count toward graduation requirements, except when required in certificate programs. These courses do count as credits required to meet financial aid satisfactory academic progress requirements if enrollment is required based on placement test scores.

A unit of credit at MSU–Great Falls College of Technology is defined as three hours of student work per week for a 15 week semester, or an equivalent number of work hours in an instructionally related activity, and/or student study time. Academic credit is awarded based upon this definition, which is consistent with the glossary definition of a credit unit as defined by the Northwest Commission on Colleges and Universities.



# Academic Information - Course Substitution and/or Course Waiver

Students may request a substitution for a course if they have previously completed a college course in which the subject matter closely parallels that of the course for which they request the substitution. The Division Director, student's advisor and the Registrar must approve all substitutions. In no instance will a reduction be made in the number of credits required for completion of a program.

A course may be waived if the student has previously completed equivalent work. All waivers must be approved by the student's advisor, Division Director, and the Registrar. College credit will not be given for a waiver. In no instance will a reduction be made in the number of credits required for completion of a program.



# **Academic Information - Degrees Offered**

#### Certificate of Applied Science (CAS)

The Certificate of Applied Science (CAS) recognizes a short program of study designed to prepare the student for entry-level employment in a specific technical field. The Certificate of Applied Science is comprised of 30 - 45 credits; with rare exceptions. Students should be able to complete the Certificate program in one calendar year or less if they are academically prepared in math and writing. The general education course work in a Certificate of Applied Science often has an applied, rather than an academic focus.

#### Associate of Applied Science (AAS)

The Associate of Applied Science (AAS) degree is awarded in specific technical career fields. This degree is designed to prepare students for immediate entry into employment but may be fully or partially transferable to programs at selected four-year institutions.

The Associate of Applied Science degrees must be comprised of at least 60 but no more than 72 credits. For students entering these degrees prepared for the math and writing required, the Associate of Applied Science degree requires at least two academic years to complete. A main difference between this degree and the Certificate of Applied Science is the additional general education course work required.

Montana State University–Great Falls College of Technology offers AAS degrees in both the Business/Technology and Health Science areas. Specific requirements for each program are listed in the program sections of this catalog.

## Associate of Arts (AA)

The Associate of Arts degree is a general transfer degree indicating that the student has completed a course of study equivalent to the first two years of a bachelor's degree. This degree does not officially include a major or minor course of study. For example, a student who plans to emphasize history receives the Associate of Arts degree, not an Associate of Arts in History.

#### Associate of Science (AS)

The Associate of Science degree is a general transfer degree indicating that the student has completed a course of study equivalent to the first two years of a bachelor's degree. This degree does not officially include a major or minor course of study. For example, a student who plans to emphasize mathematics receives the Associate of Science degree, not an Associate of Science in Mathematics.

Baccalaureate requirements vary considerably among and within institutions. It is strongly recommended that students pursuing a general program of study for their Associate of Science or Associate of Art degrees carefully select courses that will meet specific institution program requirements for a baccalaureate degree. A current catalog of the selected institution should be consulted. Students should work closely with an academic advisor at the transfer institution.



## **Academic Information - Student Evaluation of Courses**

Students are provided the opportunity to evaluate each of the courses they complete at the College during the final four weeks of each course.

Students are asked to approach the serious task of course evaluation professionally and positively. All faculty look forward to input from students in their courses. Faculty utilize the input from their students to improve or modify courses.



# **Academic Information - Grading**

The following table outlines the grading system used at Montana State University–Great Falls College of Technology:

Grades	Quality of Work	Grade Points for Each Credit
Α	Excellent	4.0
Α-	-	3.7
B+	-	3.3
В	Above Average	3.0
B-	-	2.7
C+	-	2.3
С	Average	2.0
C-	-	1.7
D+	-	1.3
D	Passing	1.0
F	Failing	0.0
Р	Pass	0.0
AU	Audit	0.0
CR	Credit	0.0
W	Withdrawal	0.0
I	Incomplete	0.0
NC	No Credit	0.0
NR	Not Recorded	0.0

#### **Audit**

Registered students may, with the permission of faculty, enroll in a course as an auditor for no credit. A student must decide to audit a course by the Add deadline of the term. Auditors pay the same fees as students enrolled for credit and are expected to follow the attendance guidelines set forth in the course. If attendance guidelines are not followed, the student may be issued a failing grade. If attendance guidelines are followed, the student will receive a grade of AU.

### Incomplete

An Incomplete (I) grade is issued at instructor discretion when student course work has been satisfactory up until the final few weeks of a semester, but unavoidable mitigating circumstances have prevented the student from completing the course. After consulting with the instructor of the course, a student must make a formal request for an Incomplete grade by completing the Request for an Incomplete Grade form, stating what unavoidable mitigating circumstance(s) prevented completion of the work and proposing the conditions under which the work will be completed. If a request form does not accompany the final grade, the student will be issued a Not Recorded (NR) grade until the proper paperwork is completed and submitted to the Registrar. If the instructor approves the request, the student will have until the end of the following semester to make up the Incomplete. If a student fails to make up an Incomplete within the allotted time, the Incomplete grade will be converted to an "F". The Division Director will approve all Requests for Incomplete Grades before they are submitted to the Registrar for posting. The Division Director must be given all information necessary to do final grading for the student as backup for the instructor in case he/she is not available to do the grading at the appropriate time. The Request for an Incomplete Grade Form can be obtained from the Registrar's Office or online at

http://www.gfcmsu.edu/admissions\_records/forms2.html

#### Pass/Fail Policy

As a general policy, courses at Great Falls College MSU are graded with the letter grades A, A-, B+, B, B-, C+, C, C-, D+, D, D- and F. However, certain courses, as indicated in the catalog, are offered only on a pass/fail basis for ALL students registered in the course. A passing (P) grade is equivalent to a grade of "C-" or better. Students receiving "P" grades may not request a change to a letter grade.

#### Course Repeat

Courses may be repeated to increase one's knowledge and/or grade point average. The original grade, as well as subsequent grade(s) in the course, is reflected on the academic transcript. However, the grade and grade point value for the repeated course will replace the earlier grade and grade point value in the cumulative totals. The grade and accompanying information for a repeated course will be posted on the student's academic transcript for the semester during which the repeated course was completed.

#### Grade Point Average (GPA)

A student's level of academic performance is determined by the grade point average (GPA). To calculate the GPA the total number of grade points is divided by the total number of completed credits.

#### **Grade Reports**

Mid-term grades are available on Banner Web/My Info after the half way point of spring and fall semesters. Final grades are available on Banner Web/My Info one week after the end of the term.

#### **Academic Records Appeals**

Appeals regarding academic records must be addressed within three years of course enrollment. Any appeals filed more than three years after the date of last attendance will not be considered. Note: This policy applies to appeals for retroactive withdrawals and tuition refunds only. For policy on academic performance appeals, please see the Academic Complaints section of this catalog. The form for Academic Records Appeals may be found at: http://www.gfcmsu.edu/admissions\_records/pdf/SpecialConsideration.pdf

### Change of Grade

A change of grade may be submitted to the Registrar for a variety of reasons. All grade changes must come from the instructor or department/division chair. If, after consulting with the instructor, questions still remain about the changing of a grade, please refer to the Academic Complaint Procedure.



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## Academic Information - Graduation

#### Graduation Packet

Great Falls College MSU students follow the catalog in effect when they began their enrollment at the College as long as that enrollment has been consecutive or may elect to follow any subsequent catalog. If a student is absent for one or more semesters excluding summer, the catalog in effect at the time of readmission governs the student's graduation requirements. Students must pass all required courses and have an overall grade point average of 2.0 to graduate from Great Falls College MSU.

Each program in the Health Science Department has specific requirements for matriculation and graduation. Students are informed of other specific program policies and requirements both at the time of their program orientation and throughout their educational experience.

Identified programs in the Business Technology and Trades Department have specific requirements for matriculation and graduation. Courses that require a grade of "C-" or above are designated for each program in the program section of this catalog.

A student must submit a formal application for graduation by the published term deadline. Applications can be obtained from Student Central or online at <a href="http://www.gfcmsu.edu/admissions\_records/forms2.html">http://www.gfcmsu.edu/admissions\_records/forms2.html</a>. A \$25 non-refundable graduation fee is due upon submission of the application to Student Accounts. Application deadlines are published in this catalog and on the Academic Calendar located on the College's website. Students who fail to submit an application for graduation will not receive a certificate/degree. Students completing more than one certificate or degree must submit an application and \$25 fee for each degree and certificate.

Students will be awarded a certificate/degree upon satisfactory completion of all program requirements, provided that 25% of the course work required in the degree program has been completed at MSU–Great Falls College of Technology.

The commencement ceremony is held each May, at the conclusion of the spring semester. Caps and gowns can be purchased through the Bookstore for a fee. Courtesy of the Associated Students of Great Falls College MSU gown recycling program, some gowns are available for purchase at a lower rate than the new ones. Graduation announcements are also available for purchase through the Bookstore.

Lost diplomas can be replaced at the request of the student. The cost of replacing a certificate, diploma, and/or cover is \$10.

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## **Academic Information - Honors**

Great Falls College MSU recognizes students' academic achievements according to the following standards:

#### Dean's List

To be eligible for the Dean's List, a student must earn 12 or more credits in Non-Pass/Fail courses in one term, have a semester grade point average of 3.5 or above, and not have any incomplete grades. If incomplete grades changed to passing grades affect Dean's List eligibility, the student may request a letter noting Dean's List recognition.

### Phi Theta Kappa

A chapter of Phi Theta Kappa, an international honor society for two-year colleges, was chartered at MSU–Great Falls College of Technology in 1998. Membership is based primarily on academic achievement. Students who meet the criteria are invited to join each semester. To be eligible, students may be full-time or part time, must have completed 12 semester credits, and must have a cumulative grade point average of 3.5.

Membership in Phi Theta Kappa offers much more than a mere certificate of membership. The organization offers opportunities for scholarships, intellectual enrichment, and personal development through programs based on the four hallmarks of Scholarship, Leadership, Service, and Fellowship. For further information, contact the chapter advisor: <a href="mailto:Brian Cayko">Brian Cayko</a>

#### **Graduation Honors**

Upon successful completion of program requirements, a graduating student with a cumulative GPA of 3.75 or higher will receive High Honors, and a graduating student with a cumulative GPA between 3.5 and 3.749 will receive Honors. Graduation Honors are notes on the student's transcript.

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## **Academic Information - Transcript of Record**

Walk-in requests for transcripts should be turned in to Student Accounts in Student Central. If the student requesting a transcript has an unpaid financial obligation to any Montana State University campus, the request will not be processed until the bill has been paid and the student has notified Admissions & Records of payment.

During most of the year, requests for transcripts will be processed within three to five working days after being received by the Records Office. Requests received during the last week of a semester will be held until final grades are processed.

Transcripts are sent only at the written request of the student. The request must include a signature, and can be paid with cash, check, money order, or credit card. Requests should be addressed to:

Records - Transcripts MSU-Great Falls College of Technology 2100 16th Ave S Great Falls, MT 59405

The first request for an official transcript will be processed without a fee; thereafter the processing fee for each transcript is \$3.00.

Transcripts/records submitted from other institutions/agencies cannot be released or duplicated, as they remain the property of the institution/agency.

Students attending Montana State University–Great Falls College of Technology after 1987 can access an unofficial transcript at our website: <a href="www.gfcmsu.edu">www.gfcmsu.edu</a> by clicking "Banner Web/My Info" and logging into the secure area.

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# Academic Information - Withdrawal from the College

Students planning to withdraw from all courses must consult with Student Central. Student Central will provide important information regarding the way a withdrawal will affect financial aid eligibility, tuition refunds, readmission to the College and grade point average. Courses the student is enrolled in at the time of withdrawal from the College will be entered on the student's transcript in accordance with the grading policy in effect at that time.

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## **Financial Aid - Application Process**

Students seeking federal financial aid (which includes grants and loans) must complete the Free Application for Federal Student Aid (FAFSA) which is available online at www.fafsa.ed.gov. If the applicant wishes to complete the paper form, he/she should contact the Financial Aid staff for instructions. If the applicant submits an electronic FAFSA, a signature page must be mailed or the application must be signed electronically with a PIN number. Parent signatures are also required for dependent students. A pin number from the Department of Education for financial aid purposes may be obtained by going to this website: www.pin.ed.gov. As a result of completing a FAFSA, an applicant will receive a federal Student Aid Report (SAR) in the mail or online. An electronic version of the SAR is automatically sent to the schools listed on the FAFSA.

Students receiving financial aid must also submit copies of the proper federal income tax forms and any other information requested by the Financial Aid Office.



# Financial Aid - Assistance in Applying

Assistance is available to prospective students applying for financial aid. In addition, financial aid counseling for new students is an integral part of the admissions and orientation process. Once enrolled, students may receive counseling and assistance as needed. For assistance, please call 406-771-4334 or 1-800-446-2698 (in Montana), or write Financial Aid, Great Falls College MSU College of Technology, 2100 16th Avenue South, Great Falls, MT 59405, or email finaid@gfcmsu.edu

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## Financial Aid - Attendance

Attendance is mandatory to receive financial aid. Students must attend classes on a regular basis and complete them to continue to receive financial aid. If a student stops attending part or all of their classes, they may have to repay part or all of the financial aid they have received



# Financial Aid - Changes to Financial Aid Policies

Exceptions or amendments to any of the specific provisions regarding financial aid policies or requirements may be made at any time, without publication, due to changes in federal, state, and/or institutional regulations and policies.





# Financial Aid - Disability Disclosure Statement

The Financial Aid Office may not award financial assistance in the form of loans, grants, scholarships, special funds, subsidies, compensation for work, or prizes to students on the basis of race, color, national origin, sex, or handicap, except to overcome the effects of past discrimination. The Financial Aid Office may administer sex restricted financial assistance where the assistance and restriction are established by will, trust, bequest, or any similar legal instrument, if the overall effect of all financial assistance awarded does not discriminate on the basis of sex. Materials and information used to notify students of opportunities for financial assistance may not contain language or examples that would lead applicants to believe the assistance is provided on a discriminatory basis. If the Financial Aid Office's service area contains a community of national origin minority persons with limited English language skills, such information must be disseminated to that community in its language.





## **Financial Aid - Electronic Notification**

The Financial Aid Office at Montana State University–Great Falls College of Technology will use electronic notification for any official correspondence to financial aid applicants. All applicants must check their official email address frequently for financial aid correspondence. Students may view financial aid status at any time by logging on to Banner Web/MyInfo.



# Financial Aid - Eligibility Requirements

All recipients of federal financial aid at MSU–Great Falls College of Technology must meet the following general eligibility requirements:

- Have financial need as determined by a need analysis formula provided through information on the Free Application for Federal Student Aid (FAFSA);
- Be a U.S. citizen or an eligible noncitizen;
- Have a high school diploma or GED. Home school students must contact the Financial Aid Office;
- Be enrolled as a regular student in courses leading to a financial aid eligible certificate
  or degree program generally at least half time (some professional certifications and
  certain one credit seminars and workshops are not eligible for financial aid);
- Maintain Satisfactory Academic Progress in accordance with the policy of the Financial Aid Office;
- Not owe a refund on a federal grant or be in default on any Title IV loan;
- Register with Selective Service, if required;
- Agree to use any federal student aid received solely for educational purposes;
- Comply with the requirements of the Anti-Drug Abuse Act.





# Financial Aid - Federal Family Education Loan Program (FFELP)

FEDERAL SUBSIDIZED STAFFORD/FEDERAL UNSUBSIDIZED STAFFORD/FEDERAL PLUS

The Free Application for Federal Student Aid (FAFSA) must be completed to determine eligibility for all FFELP loans. The FFELP loans offer assistance from a participating lending institution of the borrower's choice.

All borrowers must maintain satisfactory academic progress in accordance with the policy of the Financial Aid Office and be enrolled at least half-time to qualify for any FFELP loans. Deferments for Peace Corps or volunteer services may be available.

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# Financial Aid - Federal Direct Loan Program

FEDERAL DIRECT SUBSIDIZED STAFFORD/FEDERAL DIRECT UNSUBSIDIZED STAFFORD/FEDERAL DIRECT PLUS

The Free Application for Federal Student Aid (FAFSA) must be completed to determine eligibility for all Direct loans. Students borrowing Direct loans receive funding directly from the federal government instead of from a bank or credit union.

All borrowers must maintain satisfactory academic progress in accordance with the policy of the Financial Aid Office and be enrolled at least half-time to qualify for any Direct loans.

Deferment and/or forbearance provisions for a variety of situations may be available.

\*Effective the Summer 2010 semester, MSU – Great Falls will begin transitioning to the William D. Ford Federal Direct Loan Program, in which students with federal Stafford and Parent PLUS loans will borrow their funds from the federal government instead of from banks and credit unions. Some students may have a combination of both FFELP and Direct Loans for the Summer 2010 semester. Effective Fall 2010, all federal student loans at Great Falls College MSU will be through the Direct Loan Program.



## **Financial Aid - Tuition Waivers**

Waivers are administered by the Financial Aid Office. For all students, inquiries should be directed to the Financial Aid Office. All waivers are based on financial need as a criterion whenever possible, except for honor scholarships for National Merit Scholarship semifinalists, high school honor scholarships, and faculty and staff fee waivers. Waivers do not require repayment. Waivers are state funded and require Montana residency status with the exception of the faculty/staff fee waiver.

#### **Honorably Discharged Veteran Waiver**

#### ■ <u>Download Wavier</u>

Tuition shall be waived for certain honorably discharged persons who served with the United States Armed Forces in specified time periods and are currently residents of the State of Montana according to the Board of Regents residency policy. A provision of this policy states that the fee waiver shall not apply to persons who qualify under federal laws granting educational benefits to veterans. Application forms are available from the Financial Aid Office. Recipients of this fee waiver are subject to satisfactory academic progress requirements. Fee waivers are available for War Orphans and dependents of prisoners of war. Direct inquiries to the Financial Aid Office.

#### Indian Student Waiver

#### ■ Download Waiver

This waives tuition each semester and is awarded by the Financial Aid Office to students who submit documentation that they are at least 1/4 American Indian, complete an affidavit stating that they have been bona fide residents of the State of Montana for at least one year prior to enrollment in the Montana University System, and demonstrate financial need by completing the FAFSA. Applicants for this fee waiver must file a FAFSA, complete their financial aid file, and complete the fee waiver application available in the Financial Aid Office. Recipients of this fee waiver are subject to satisfactory academic progress requirements.

#### Montana Senior Citizen Waiver

## ■ Download Waiver

Tuition shall be waived for students classified as in-state residents for fee purposes and who are at least 65 years of age at time of registration. To apply, students must submit a copy of their driver's license or state ID card to the Financial Aid Office, along with the Senior Citizen Fee Waiver application.

#### Surviving Dependents of Montana Firefighters/Peace Officers Waiver

Tuition shall be waived for the surviving spouse or child of any Montana firefighter or peace officer killed in the course and scope of employment. This waiver shall not apply to the extent that any person is eligible for educational benefits from any governmental or private benefits program that provides comparable benefits. To apply, please contact the Financial

Aid Office. Recipients of this fee waiver are subject to satisfactory academic progress requirements.

#### **Faculty and Staff Waiver**

■ Download Waiver

Tuition and some fees shall be waived for a maximum of 6 credits per term for permanent Montana University System employees who are employed at least ¾ time during the entire period of enrollment. Registration, building, program, required course fees, and other non-mandatory fees shall not be waived and remain the responsibility of the employee. Application forms are available from the Financial Aid Office.

#### **Dependent Waiver**

■ Download Waiver

All employees who have been employed at least ¾ time for at least five years without a break in service are eligible for a dependent waiver benefit. The employee must remain employed for the entire time during which the tuition waiver is utilized. Eligible jointly employed spouses may utilize the dependent tuition waiver benefit for two children at one time but any one child may not receive more than a 50% tuition waiver under the dependent tuition waiver policy. Applications for the dependent tuition waiver benefit are to be initiated by the employee or the employee's dependent. Employees who do not submit a timely application for a dependent tuition waiver may be denied the dependent tuition waiver benefit.

Employees will be required to sign a statement verifying

- 1. that they are not utilizing the tuition waiver for themselves, and
- the child utilizing the tuition waiver is claimed as a dependent for federal tax purposes, is unmarried and has not reached age 25 as of the first day of the semester for which the tuition waiver is granted; or
- 3. the employee is married to the spouse utilizing the tuition waiver. Documentation that a dependent has been claimed in the tax year the benefit is used may be required for audit purposes or in cases of suspected misuse. False certification of dependent eligibility for the tuition waiver is cause for discharge and the employee shall be required to repay the cost of the tuition waiver.

The dependent tuition waiver benefit is a 50% reduction in the cost of residential tuition. This benefit is not taxable. In no case may registration, course fees, or any other mandatory fee be waived. There is no limitation on the number of credits that may be taken per semester under the tuition waiver benefit. Contact the Financial Aid Office for additional information.

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# Financial Aid - Programs

The following federal and state programs are available at Montana State University–Great Falls College of Technology. Students apply for each of these through the FAFSA application unless otherwise noted.

## Federal Academic Competitiveness Grant (ACG)

A federal ACG grant is a form of gift aid for full time, Pell grant eligible students enrolled in an eligible program of study who have completed a rigorous program of study in high school (as determined by the Department of Education). Eligible students must have graduated from high school after 1/1/05 and must submit a complete high school transcript to the Registrar. The amount of the grant is determined by grade level and available funding.

## **Federal Pell Grant**

A Federal Pell Grant is a form of gift aid for students enrolled in an eligible program of study, who do not already have a bachelor's degree. The amount of the Federal Pell Grant is determined by the Estimated Family Contribution on the federal Student Aid Report, the number of credits in which the student is enrolled, and the student's educational budget for the award year. Federal Pell Grant disbursements are made after the drop/add period for each term. A student's enrollment status for Federal Pell Grant eligibility is based on credits carried at the end of the drop/add period for the term.

#### Federal Supplemental Education Opportunity Grants (FSEOG)

Federal Supplemental Educational Opportunity Grants are a form of gift aid. Student eligibility is determined by completing the FAFSA. Preference for the FSEOG is given to students who have Federal Pell Grant eligibility and who are early applicants. Funding is limited and is awarded on a first-come, first-served basis.

## Federal Work-Study

The Federal Work-Study Program offers part-time employment for eligible students. Students seeking eligibility under this program must complete the FAFSA. A student's earnings are limited to the amount awarded through the Financial Aid Office. Federal Work-Study students are paid every other week according to the State of Montana payroll schedule. Federal Work-Study jobs may be on campus or in an off campus community service organization. Funding is limited and is awarded on a first-come, first-served basis.

## Governor's Postsecondary Scholarship - Need Based

Governor's Postsecondary Need Based Scholarships are available to entering freshmen who demonstrate unmet need as determined by the FAFSA, are Montana residents, and are degree seeking. The amount of the award is \$1000 and may be renewable for up to two years. Funding is limited and recipients are selected by the Financial Aid Office based on annual funding levels.

#### Montana Baker Grant (MTAP)

The Montana Baker Grant is available to Montana students who have enrolled full time and earned a predetermined amount of income the previous year. Receipt of other aid may affect eligibility. Grants are between \$100-\$1000 depending on an individual's eligibility. Funding is limited and is awarded on a first-come, first-served basis.

## Montana Higher Education Grant (MTHEG)

Montana Higher Education Grants are a federal and state form of gift aid. Students must have financial need and be a Montana resident. Student eligibility is determined by submitting the FAFSA. Students with Federal Pell Grant eligibility and who apply early have preference. Funding is limited and is awarded on a first-come, first-served basis.

### State Work-Study

The state Work-Study Program offers part-time employment for eligible students who are Montana residents. Students seeking eligibility under this program must complete the Free Application for Federal Student Aid (FAFSA). A student's earnings are limited to the amount awarded through the Financial Aid Office. State Work-Study students are paid every other week according to the State of Montana payroll schedule. State Work-Study positions are all located on campus. Funding is limited and is awarded on a first-come, first-served basis.

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# Financial Aid - Priority Deadlines

Priority deadlines are set to inform students when they need to apply for financial aid each year. REMEMBER: Every student must re-apply for financial aid each academic year.

New students beginning their attendance in the fall semester should apply for financial aid by July 1. New students beginning their attendance in the spring semester should apply for financial aid by November 1. All students attending the summer semester should apply by March 1.

Although the deadlines for fall, spring and summer are set in July, November, and March, some of the federal and state financial aid programs with limited funding may already be fully expended for the award year. An applicant should apply by the March 1 priority date to ensure consideration for all federal funding available for the award year.

Students may apply after these deadline dates; however, they may not have their financial aid awarded in time for the beginning of that semester. If a student's aid process is not complete when institutional charges are due, the student must pay his/her institutional charges and be reimbursed with his/her financial aid eligibility once the financial aid process has been completed and aid is received.

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## Financial Aid - Return of Title IV Funds

This policy applies to students who officially or unofficially withdraw from the College. Refunds are determined according to the following policy:

- 1. The term "Title IV Funds" refers to the federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes the following programs: subsidized FFELP loans, unsubsidized FFELP loans, FFELP PLUS loans, Federal Pell Grants, federal ACG Grants, and federal SEOG. The state fund that may be affected is the MTAP grant.
- 2. A student withdrawal date is:
  - The date the student began the institution's withdrawal process or officially notified the institution of intent to withdraw, or
  - The midpoint of the period for a student who leaves without notifying the institution; or
  - The student's last date of attendance at a documented academically related activity.
- 3. Return of fund calculations:
  - For the purpose of billing and calculating return of funds, the summer sessions are part of one summer term.
  - In accordance with federal regulations, when financial aid is involved, return of funds are allocated in the following order: unsubsidized FFELP loans, subsidized FFELP loans, FFELP Plus loans, federal Pell Grants, federal SEOG, other Title IV assistance.
  - Copies of this calculation can be requested from the Financial Aid Office.
- 4. Institutional and student responsibilities with regard to the return of the Title IV funds.

MSU–Great Falls College of Technology's responsibilities with regard to the return of Title IV funds include:

- Providing each student with the information given in this policy;
- Identifying students who are affected by this policy and completing the Return of Title IV calculation for those students within 45 days of the withdrawal date;
- Returning any Title IV funds that are due to the Title IV programs.

The student's responsibility with regard to the return of the Title IV funds include:

 Repaying to the Title IV programs any funds that were disbursed directly to the student and which the student was determined to be ineligible for through the Return of Title IV funds calculation Examples of this calculation can be obtained from the MSU–Great Falls College of Technology Financial Aid Office.

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# Financial Aid - Scholarships

#### **Institutional Scholarships**

MSU–Great Falls College of Technology has an institutional scholarship application for most institutional scholarships. The deadline for this application is the beginning of February for the next academic year. Contact the Financial Aid Office for this application.

#### Montana University System Honor Scholarship

Recipients of the Honor Scholarship are selected by the Office of the Commissioner of Higher Education and will receive a waiver of tuition for fall and spring semester. Recipients must submit to the Financial Aid Office a copy of their Honor Scholarship notification from the Commissioner's Office upon receipt.

### Honor Scholarship for National Merit Scholarship Semifinalists

Tuition shall be waived for National Merit Scholarship semifinalists from Montana. This scholarship tuition will be valid through the first two semesters of enrollment exclusive of any credits earned prior to high school graduation.

## **Scholarship Searches**

Graduating seniors should talk with their high school counselors. Many high schools offer good scholarship services for little or no charge. All students should periodically check the <u>Financial Aid website</u>. The Financial Aid Office posts scholarship information and deadlines on the Financial Aid website as information becomes available. There are many FREE scholarship searches available on-line as well.

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# Financial Aid - Satisfactory Academic Progress Requirements

Appeal Form [PDF]

Federal and state financial aid regulations require that all financial aid recipients maintain satisfactory academic progress in their programs of study. Failure to maintain satisfactory academic progress will result in either financial aid probation or suspension. Students on financial aid probation may continue to receive financial aid. Students on financial aid suspension will not receive financial aid. Below is a brief outline of the standards to achieve satisfactory progress for financial aid recipients at Montana State University—Great Falls College of Technology. For a complete copy of the policy contact the Financial Aid Office.

- Students are required to maintain a minimum 2.0 cumulative grade-point average (C average). Students with less than a 2.0 CGPA, but at least a 1.50 CGPA, at the end of each academic term will be placed on financial aid probation for the next academic term and placed on financial aid suspension at the end of the probation term if the CGPA is not 2.0 or above. If at any time a student's CGPA is less than a 1.50, and/or the completion ratio is less than 67%, the student will be placed on financial aid suspension;
- Students must complete 67 percent (rounded) of the number of attempted credits as of the end of the add/drop period each term. Students with a completion ratio of less than 67 percent at the end of each term will be placed on financial aid suspension;
- Students have a maximum time frame in which to receive financial aid, which is generally 150 percent of the number of required credits specified for each program of study;
- Students who have been placed on financial aid suspension and bring themselves into good standing may be reinstated for the payment period following the semester in which they regained satisfactory progress status. Students must submit a written request for reinstatement;
- Students will receive written notice when they are placed on financial aid probation or suspension; however, it is the student's responsibility to know if they are maintaining satisfactory academic progress for financial aid recipients.

Students who have been placed on financial aid suspension because of failure to meet the satisfactory academic progress requirements may appeal in writing to the Financial Aid Office for review of circumstances. Forms to appeal are <u>available online</u> or in the Financial Aid Office. Current federal regulations allow only for mitigating circumstances and occurrences beyond the student's control to constitute an eligible appeal. All appeals must contain documentation to verify the mitigating circumstances listed in the appeal.

Contact the Financial Aid Office for a complete satisfactory academic progress policy for financial aid recipients.

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# Financial Aid - State and Local Services

Montana Social and Rehabilitative Services Division, Montana Workforce Services, Bureau of Indian Affairs, Project Challenge, and Rural Employment Opportunities offer assistance to students who qualify for their programs. For information regarding eligibility requirements, contact the specific program. The Financial Aid Office must be notified by the student if any assistance is received from an outside agency.





## Financial Aid - Veterans' Benefits

Students who are veterans of military services or active members of the guard or reserve may be eligible for Veterans' Educational Benefits. Application for benefits should be submitted to the regional Veterans Administration Office at least 30 days in advance of the start of the academic term. Dependents or spouses of veterans disabled or deceased as a result of a service related injury may be eligible for dependents educational benefit. Other educational benefits are extended to veterans using vocational rehabilitation. Once enrolled, recipients must request the Financial Aid Office verify their enrollment with the Veterans Administration to commence benefits.

Students using Veterans' Educational benefits at MSU–Great Falls College of Technology must maintain a 2.0 cumulative GPA. If the student falls below a 2.0 cumulative GPA, he/she will have one semester to raise the GPA to 2.0. If the student is unable to do this, he/she will be placed on suspension and will have to sit out a term before utilizing the veterans' educational benefit again. Appeals may be granted for extenuating circumstances.

For additional information or to apply for Veterans' Educational Benefits, visit <a href="www.gibill.va.gov">www.gibill.va.gov</a> or contact the Financial Aid Office at 406-771-4334 or the Veterans' Administration at 1-888-GIBILL1.

Active members of the guard or reserve should contact their unit concerning eligibility for federal tuition assistance or Montana guard scholarships.



# Financial Aid - Withdrawals / Changes in Enrollment

Students receiving financial aid are expected to complete a designated percentage of the credits for which they are funded each academic term. The Financial Aid Office must be notified by the student of any increase or decrease in number of credits. Students may be suspended from financial aid for not completing the designated percentage of credits.

Those students who are receiving financial aid and completely withdraw from the college may owe the Department of Education a prorated amount of aid received based on class days attended in the term. Students who owe repayment will be ineligible for further federal financial aid as long as a repayment is outstanding.

Students who do not officially withdraw but stop attending classes and receive failing grades will be considered unofficial withdrawals. The institution will determine the last date of attendance. Based on this date, students may owe a repayment of aid received.

Appeals regarding retroactive withdrawals and tuition refunds must be addressed within three years of the student's course enrollment. Any appeals filed beyond this three year window will not be considered.



# Student Information - Academic Integrity Policy

As an institution of higher education, Great Falls College MSU College of Technology requires its students to adhere to high standards for academic integrity. It is a violation of academic integrity to present the ideas, designs, or work of another person as one's own effort or to permit another person to do so. Please see the link below for more information and the entire policy.

http://www.gfcmsu.edu/facstaff/Adjuncts/pdfs/301.1 AcademicIntergrityJan08.pdf



# Student Information - Change of Program

In order to change their academic program, a student must complete the Change of Program form, which must be signed by the new advisor and returned to Admission & Records. Completion of this process ensures that the student is assigned an appropriate program advisor. The Change of Program form is available in Student Central or online.





# **Student Information - Complaint Procedures**

A student who believes that a policy of the college has been violated may make a complaint following the procedures outlined in this section. When possible, a student should attempt to resolve the complaint informally, by bringing it to the attention of the individual(s) directly involved. However, when informal methods fail, the College will assist in the resolution of complaints through the formal procedures outlined on the following pages.

**Types of Complaints:** The college has established procedures for each of the following types of complaints. The procedures for each type of complaint are provided in this section.

## ~ Student Equal Opportunity Complaints

The College's policies on equal opportunity and sexual harassment are provided in the catalog and are administered by the College's Assistant Dean of Student Services, 2100 16th Avenue South, Great Falls, MT 59405. (Telephone: 771-4300). If a student believes that his/her right to equal opportunity has been violated, he/she should take the following steps:

- 1. Discuss the situation with the individual(s) immediately involved. If unable or unwilling to discuss the matter with this individual, discuss it with an advisor or the supervisory staff most closely associated with the individual directly involved (e.g., the teacher of the class if the individual is another student, or the department chair if the individual is a faculty member, etc.).
- 2. If an acceptable resolution cannot be reached informally, or if such a discussion is not possible, the student may take her/his complaint to the Assistant Dean of Student Services, who will discuss the nature of the complaint with the student and direct the complaint to the appropriate official. Generally, the Assistant Dean of Student Services tries first to facilitate a resolution to the complaint through informal methods. However, this step may be bypassed at the discretion of the Assistant Dean of Student Services or at the request of the student.
- 3. If all informal processes fail to produce a satisfactory resolution, the student may choose to submit a formal complaint. To expedite an accurate investigation and a fair resolution of the problem at this level, the complaint should be stated in writing and should be brought to the Assistant Dean of Student Services as quickly as possible. The written complaint should describe the specific act(s) alleged to be in violation of the College's EEO policies, the student's attempts, if any, to resolve the grievance informally, the names of all individuals involved in or witness to the alleged act(s), and the precise remedy sought by the student. Students may use their own format for written complaints, or they may obtain a Formal Complaint Form from the Assistant Dean of Student Services.
- 4. All communication with the Assistant Dean of Student Services will be held in confidence to the extent possible; however, the Assistant Dean of Student Services may, in certain cases, assign the investigation of the complaint to another appropriately qualified individual and provide that individual with access to all documents and witnesses, with the understanding that all communication with the investigator will be held in confidence. All reasonable attempts will be made to complete the investigation within 15 working days of the submission of the complaint. However, extensions of this time frame may be necessary in certain cases.
- 5. Once an investigation has been authorized, the College is obligated to see it through to

completion. Only the Dean of the College and the Assistant Dean of Student Services has the authority to halt an investigation. When the investigation has been completed, the Assistant Dean of Student Services will evaluate the evidence gathered and submit a Report of Findings to the Dean of the College within 10 working days of receipt of the Investigation Report, unless extenuating circumstances require an extension of that deadline.

- 6. Either party may appeal the Assistant Dean of Student Services findings from the investigation by submitting a written request for review to the Dean of the College. The request for review must be submitted within ten (10) working days after the student is notified of the findings of the Assistant Dean of Student Services. The Dean will receive and review all evidence and render a written decision with recommendations as to resolution within ten (10) working days of receipt of the request for review, unless extenuating circumstances require an extension of this time frame.
- 7. At any time prior to, during, or following the completion of the internal investigation process, complainants are entitled to contact and/or submit complaints to external civil rights organizations.

#### ~ Academic Complaints

Students who disagree with an academic decision made by an instructor or administrator, including the assignment of grades or decisions about program or degree requirements or eligibility, may file an academic complaint. The academic complaint procedures are administered by the Associate Dean of Instruction, Assessment and General Education or Associate Dean of Workforce Programs. These procedures are designed to be used when a specific action or decision of a College instructor or administrator had a specific adverse effect on the academic performance or academic record of a student or students. Complaints about the general quality of the performance of an instructor or other College employee are to be addressed through the personnel evaluation processes in place at the College. The academic action or decision, including the assignment of a grade, will be considered unfair if the decision is made:

- on some basis other than performance in the course and/or compliance with course/College requirements;
- by more exacting or demanding standards than were applied to other students in the same section or circumstances;
- by a substantial departure from the instructor's, department's, or College's announced standards as articulated in the course syllabus, catalog descriptions, policies, and/or other written materials.

A student who wishes to make an academic complaint must follow these steps and may request assistance through the Assistant Dean of Student Services:

- 1. Informal Meeting. The student should attempt to resolve the matter directly with the instructor or administrator through a personal conference as soon as possible after the academic decision is known.
- 2. Department Chair/Director Review. If the student and instructor/administrator cannot reach a mutually satisfactory resolution to the problem, the student may file a formal grievance. The grievance must be presented in writing to the instructor's/administrator's Department Chair within ten (10) working days after the student became aware of the academic action/decision. In the case of adjunct faculty, the Director of Instruction should be included. The student must describe the grievance by explaining the specific adverse effect of a specific act(s) or decision of the instructor/administrator, why the student believes the act/decision was unfair, the student's attempts to resolve the grievance informally, and the precise relief sought by the student. The student may attach copies of any relevant documents to the formal grievance.
- 3. If a student requests assistance, the Assistant Dean of Student Services Department will assist with any remaining steps of the formal procedure that the student considers.
- 4. The student will send a copy of the grievance to the instructor/administrator, who will have ten (10) working days to respond after receipt of the grievance.
- 5. The Department Chair will receive and review all evidence, interview each party, if possible, and render a written decision to the student, instructor, and Assistant Dean of Student Services with recommendations as to resolution within ten (10) working days

of receipt of the instructor's response. If the grievance is not concluded within this time, the student may carry it forward to the appropriate Associate Dean.

6. Associate Dean's Review. Either party may appeal the department chair's/Director's decision in writing to the Associate Dean, with copies to the instructor, student, department chair/director, and the Assistant Dean of Student Services. Such appeal will be filed within five (5) working days of receipt of the department chair's determination. The Associate Dean will submit a written decision to the student, instructor, Department Chair, and the Assistant Dean of Student Services within ten (10) working days of receipt of the appeal. The decision of the Associate Dean may be appealed to the Dean/CEO of the College.

## ~ Student Conduct Complaint Procedures

Below is an abbreviated version of MSU–Great Falls College of Technology's Student Conduct Complaint Procedures, including the Student Conduct Code and how to file a complaint. For a complete copy of the procedures, please see the office of the Assistant Dean of Student Services (771-5133).

### 1. Student Conduct Code

Montana State University–Great Falls College of Technology expects all students to conduct themselves as honest, responsible, and law-abiding members of the academic community and to respect the rights of other students, members of the faculty and staff, and the public to use the College's facilities and participate in the College's programs. Student conduct that disrupts, invades, or violates the personal, educational, or property rights of others is prohibited and may be subject to disciplinary action, including dismissal and/or referral for prosecution.

#### 2. Jurisdiction of Student Conduct Complaints

Conduct violations which occur on College property or at college-sponsored events are subject to the College's disciplinary jurisdiction. The College may also apply this code to student conduct, regardless of where it occurs, which adversely impacts or affects the overall mission, programs, and functions of the College or the health and safety of members of the college community.

Students who commit offenses against the laws of the city, state or United States are subject to prosecution by those authorities and may be subject to disciplinary action under this code if the offenses are also violations of this code. The College's disciplinary proceedings may precede, follow, or take place simultaneously with criminal proceedings and will not be subject to challenge on the ground that criminal charges involving the same incident have been dismissed or reduced.

The College's Student Conduct Review Board responds to cases involving alleged violations of the Student Conduct Code. The Board is a standing committee presided over by the Assistant Dean of Student Services. Its members are appointed annually by the Dean and include at least two professional staff, three faculty, two classified/support staff, and two students.

## 3. Student Conduct Complaint Procedures

If informal attempts to resolve a student conduct complaint fail, any student, faculty, or staff member of the College may file a formal complaint through the Assistant Dean of Student Services. The formal complaint must be in writing and must contain at least the following information:

- the name and address (if known) of the student alleged to have violated the Student Conduct Code;
- the date(s) the incident(s) occurred;
- the location where the incident(s) occurred;
- a description of the incident which sets forth sufficient details to establish a possible violation of the Student Conduct Code.

The Assistant Dean of Student Services will complete an initial investigation to determine what, if any, sanctions are warranted. If all parties involved – the Assistant Dean of Student Services, the complainant and the student against whom the complaint has been filed – agree on an appropriate course of action, the process is complete. If any of the parties are not in agreement, the process moves into a hearing phase. A Hearing Committee is selected

from the Student Conduct Review Board, and the Hearing Procedures delineated in the Student Conduct Complaint Procedures are followed. The decision made by the Hearing Committee may be appealed to the Dean of the College. A final appeal within the Montana University System may be made to the President of MSU–Bozeman.

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# Student Information - Disability Services for Students

All students attending Montana State University–Great Falls College of Technology are entitled to equal access to academic programs, services, student activities, and campus events. Students with disabilities have a right to reasonable accommodations in order to fully participate in the student experience. Students with disabilities are encouraged to advocate for themselves to the extent possible. Disability Services provides support and assistance in determining what accommodations are best suited to each individual.

MSU-Great Falls College of Technology uses the definition of disability set forth by Section 504 of the Rehabilitation Act of 1973, which states that a disabled person is anyone who:

- Has a physical or mental impairment which substantially limits one or more major life activities;
- Has a record of such an impairment;
- Is regarded as having such an impairment.

Students needing accommodations must apply for services through Disability Services, located near the Learning Center, and be determined eligible by meeting all of the following criteria:

- Have a permanent or long-term (≥ 6 mos.) medical or psychological condition which significantly impairs the student's ability to function in an academic setting;
- Provide Disability Services with current documentation of disability from a qualified professional; this documentation will be kept confidential in accordance with the Disability Services Confidentiality Policy;
- Be "otherwise qualified" for the chosen course of study and able to meet the behavioral standards set forth in the College's Student Conduct Code.

Unlike high school, educational accommodations at the postsecondary level are student initiated. Each student who chooses to seek accommodations must meet with the Disability Services Director. Together they will determine what accommodations to request based on student's limitations and the demands of the course. The medical, psychiatric and/or psychological documentation provided by students is kept in confidential files in Disability Services. A complete copy of the Eligibility Criteria and the Confidentiality Policy can be obtained from the Director or found online. Depending on the student, available accommodations may include, but are not limited to:

- Extended test time
- Distraction-reduced testing environment
- Various other test accommodations
- · Adaptive computer equipment and software
- Notetakers
- Tutors
- Interpreter services
- Ergonomic equipment
- Preferential classroom seating
- Tape recording lectures
- Materials in alternate format

Students with disabilities are encouraged to contact Disability Services upon enrollment and

should visit with the Director each semester to determine accommodation needs for each class.

Building accessibility includes designated parking, curb cuts, automatic doors at the north, south and east entrances, ramp and elevator access to the second floor, accessible restrooms, Braille signage, and ramp access to theatre-style classrooms.

For more information, please contact Disability Services at (406) 771-4311 (voice)/(TTY).





# Student Information - Family Educational Rights and Privacy Act (FERPA)

■ More Information on FERPA ■ FERPA Online Quiz

The Family Educational Rights and Privacy Act of 1974 grants certain rights, privileges, and protections related to students' educational records maintained by the College. Students' educational records (with the exception of directory information) will not be released to third parties outside of the College, except with the written consent of the student. Students have the right to inspect their own educational records, except for those to which students have expressly waived this right (e.g. Career Services placement). Students have the right to request amendment of their records. If they are found to be inaccurate, misleading or otherwise in violation of the student's privacy or other rights the student may request that their records be corrected. Such requests should be made as soon as the student becomes aware of the inaccuracy or any other problem.

Any student may file a complaint with the U.S. Department of Education concerning any alleged failure on the part of the College to comply with the requirements of the Family Educational Rights and Privacy Act.

Directory Information: The Family Educational Rights and Privacy Act permits the release of information designated as directory information to third parties outside the College without the written consent of the student. MSU–Great Falls College of Technology has designated the following items as Directory Information: student name, address, e-mail address, telephone number, major field of study, participation in officially recognized activities, dates of attendance, degrees and awards received, and most recent previous school attended. The College may disclose any of those items without prior written consent.

Currently registered students have the right to request that information designated as directory information be withheld from release by the College. Any student wishing to exercise this right must inform the Registrar in writing no later than the tenth (10th) class day of the academic term.

Any questions regarding educational records should be directed to the Registrar or the Assistant Dean of Student Services. A detailed guide of the Family Educational Rights and Privacy Act may be obtained from Student Services.

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# **Student Information - Learning Center**

The Learning Center provides free tutoring services to students enrolled in classes at MSU–Great Falls College of Technology and is a hub for academic assistance and collaboration. It is the Learning Center's mission to assist students in becoming independent learners as the tutors provide help in subject content and study skills. Learning Center staff will assist students in setting up study groups, and are active supporters of all students' efforts to be successful in their academic programs at MSU–Great Falls College of Technology.

The Learning Center is located in R263 at the top of the ramp. Appointments are encouraged, but walk in help is also available. To schedule an appointment or to gain a copy of the tutoring schedule, call 771-5127.

## Study Skills Assistance

The tutors in the Learning Center assist students in the foundational skills required to be successful in college. Some of these skills include:

- · Textbook Reading
- Note Taking
- Time Management
- Organization
- Dealing with Testing and Math Anxiety
- Test Preparation

Workshops are held throughout the semester on various study skills topics.

#### **Content Tutoring**

Content tutoring is available in the following areas:

- Biology
- Chemistry
- Writing
- Accounting
- Computers
- Math

#### **Online Tutoring**

Tutoring is also available online for students enrolled in distance courses or if they are not able to come to campus during business hours. No additional software is required for the student to participate. A web cam and microphone is suggested, but there are alternatives available if the student does not have access to them.

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# Student Information - Library

The new Weaver Library at Montana State University—Great Falls is located just off the atrium next to the Help Desk. The Library's collection supports all curricular areas; the collection includes books, videos, and periodicals as well as a rich array of electronic resources including full-text periodicals and newspapers, periodical indexes, reference materials, and the catalogs of other libraries. Access to Library holdings is through a Web-based catalog and the Library's website. Electronic resources can be accessed 24/7 from off-campus. The Library provides computers for research and space to study, including group study rooms. Also housed in the Library is the campus computer lab with the software needed for coursework. The Library supports instruction and student learning by providing open access to information and knowledge. Library services include reference, individual and group instruction, interlibrary loan, and reserves. A knowledgeable staff is available to help patrons with information needs. For more information, call the Weaver Library at (406) 771-4398 or visit the Library's web site at: library.gfcmsu.edu.