



>MSU-GF

## MSU-Great Falls Catalog for 2012-2013

This catalog contains general information about the campus and specific information about degree programs. If you have questions or comments, please contact [admissions@msugf.edu](mailto:admissions@msugf.edu).

\* Indicates Catalog Update      GEPI = Gainful Employment Programs Information

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- Veterinary Technology **COMING SOON!**
- Welding Technology | [Application Packet](#) | [GEPI](#)

- **Programs of Study**

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- UM Western Early Childhood AAS
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- UGF Core

- **Transfer Curricula**

- Articulation Agreement
- Associate of Arts to MSU-Billings BSBA Accounting
- Associate of Arts to MSU-Billings BSBA Business
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- Associate of Arts to UGF Accounting
- Associate of Arts to UGF Business
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- Associate of Arts to UGF Secondary Education
- Associate of Science to MSU-Northern CIS
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- AAS Bus Admin Entrep to MSU-Northern BADM
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- Faculty & Administrative Staff
- Support Personnel
- Accreditation

BADM



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## LATEST NEWS

### 2012 Great Falls Youth Job Fair (for ages 16-21)

Posted Date: 05/02/2012

### Commencement 2012

Posted Date: 04/30/2012

### Pacific Steel & Recycling Provides Closing Gift to Establish Child Development Center at MSU – Great Falls

Posted Date: 04/25/2012

### Poetry Tree in the Weaver Library

Posted Date: 04/25/2012

## ALL NEWS

- **CEO/DEAN SEARCH**
- OUTREACH + WORKFORCE DEVELOPMENT
- MSU-GF ONLINE
- CAMPUS CALENDAR
- CAMPUS NEWS SIGN-UP | CURRENT & PAST ISSUES
- MSUGF ALERT
- NET PRICE CALCULATOR
- WANT TO HOST AN EVENT AT MSUGF?



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# MONTANA STATE UNIVERSITY • GREAT FALLS

## COLLEGE OF TECHNOLOGY

CURRENTLY ONLINE

### LATEST NEWS

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## Dean's Welcome

<http://www.msugf.edu/about/Dean/DeansWelcome.html>



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## Tagline

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Changing Lives – Achieving Dreams

## Vision

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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

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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

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- **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

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At MSU-Great Falls 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:

1. **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

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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**:

1. **Communication:** The ability to utilize oral, written and listening skills to effectively interact with others.
2. **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.
5. **Diversity:** The ability to understand and articulate the importance and influence of diversity within and among cultures and societies.
6. **Technical Literacy:** The ability to use technology and understand its value and purpose in the workplace.
7. **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

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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.





# MONTANA STATE UNIVERSITY • GREAT FALLS

## COLLEGE OF TECHNOLOGY

CURRENTLY ONLINE

### ACADEMICS: Academic Calendars

#### 2012

- Spring 2012
- Summer 2012 - 8 week
- Summer 2012 - 10 week
- Fall 2012

#### 2011

- Spring 2011
- Summer 2011 - 8 week
- Summer 2011 - 10 week
- Fall 2011

#### Final Exam Schedules

- Spring 2012



#### QUICK LINKS

- [Academic Calendars](#)
- [Campus Calendar](#)
- [Catalog \[Archives\]](#)
- [Find a Program](#)
- [More Information](#)
- [Transfer Options](#)

#### OTHER OPPORTUNITIES

- [Outreach + Workforce Dev.](#)
- [MSU-GF Online](#)

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## General Information

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### **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**

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Montana State University – Great Falls College of Technology 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**

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Montana State University – Great Falls College of Technology 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**

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#### **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.

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### **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.

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### **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 [www.msugf.edu](http://www.msugf.edu)

### **Academic/Transfer Advisor and Student Support Coordinator (MSU-Northern Programs)**

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The Academic/Transfer Advisor and Student Support Coordinator (MSUNorthern Programs) is responsible for assisting MSU-Great Falls meet its transfer mission by working closely with students as they navigate to and through programs at the College that will then connect with degree programs offered through Montana State University-Northern in Great Falls.

The Advisor also supports and assists faculty in advising students currently enrolled in applied programs but who are interested in opportunities through MSUN to complete a bachelor's degree. This office (Rm R220) is located in the Advising and Career Center. Please call 406.771.5100 to make an appointment.

### **Disability Services**

<http://www.msugf.edu/students/DisabilityServices/index.html>

### **Advising and Career Center**

<http://www.msugf.edu/AdvisingCareerC/index.html>

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### **Student Central**

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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:

- Admissions
- Financial Aid
- Recruitment
- Registrar/Records
- Student Accounts
- Student Assistance Foundation Outreach Office
- TRIO/Educational Opportunity Representative
- Veteran's Services





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## Student Central - Admissions

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## Student Central - Academic Information

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- [Student Evaluation of Courses](#)
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- [Graduation](#)
- [Honors](#)
- [Transcript of Record](#)
- [Withdrawal from the College](#)



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## 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@msugf.edu](mailto:finaid@msugf.edu)

**Mailing Address**

MSU Great Falls, 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](#)
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## Student Central - Student Information

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- [Family Educational Rights and Privacy Act \(FERPA\)](#)
- [Learning Center](#)
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## Community Relations / Outreach

An integral and growing part of the College's outreach mission are those activities termed "professional and continuing education" and "community enrichment," 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, part of the Community Relations Division, 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 and non-credit bearing courses. A variety of non-credit courses and certification programs numbered (094) are offered on and off campus as well as 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 non-credit professional and continuing education or community enrichment courses. The non-credit PCE courses are typically offered to meet the needs of professionals in need of skills upgrades and other professional certification needs (e.g. OPI Renewal Units for Montana K-12 Teacher Certification). These courses are transcribed as Continuing Education Units (CEU's) on the student continuing education transcript and are eligible for Montana OPI Renewal Units. PCE includes the non-credit online courses and certification programs offered through Ed2go and Gatlin. The new community enrichment courses, formerly Nitecap through Great Falls Public Schools, offer affordable, fast, fun and stress-free lifelong learning opportunities for the greater Great Falls area.

### 194 COURSES

Courses assigned a course number of 194 are considered credit-bearing professional and continuing education courses providing participants with the latest in technology, business, health and human development and other topics meeting current educational trends and demands. They are typically offered to provide condensed coursework to meet the needs of working students, 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 may be eligible for financial aid for students using them as electives in degree and certificate programs where authorized. Students should consult their advisors to identify whether 194 courses will apply toward their program requirements. 194 courses are transcribed on the student's undergraduate transcript.

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 or join our mailing list by logging on to <http://outreach.msugf.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 courses offered through the Outreach Department are transcribed 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, these courses 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.

### **CONTRACT TRAINING**

MSU – Great Falls' Outreach helps meet the needs of workforce training in the greater Great Falls area in the form of customized training assistance to businesses and individuals, including those located in rural communities, to maximize their ability to make a profit. By developing customized training programs matched to individual and business needs, instructors and people are brought together to exchange knowledge and provide specialized, effective training for all areas of business including computer, supervision and management, customer service and more.

Contract training provides the highest quality customized training options for area businesses and individuals. We invite you to join other local companies and programs that have taken advantage of this great service including-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**





>MSU-GF >Catalog

## eLearning

The College offers online courses which are an extension of the on-campus course offerings. Over 100 online and hybrid 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 MSU-GF College of Technology, 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**
  - Health Information Coding Specialist
  - Medical Billing Specialist
  - Medical Transcription
- **Transfer Degree Options**
  - Montana University System Core for Transfer
  - Associate of Arts Degree
  - Associate of Science Degree
- **Professional Certificate Option**
  - Healthcare Informatics Tech
  - Pharmacy Technician – (on-site clinical required)

Additional information, including detailed course descriptions, is available on the web at [distance.msugf.edu](http://distance.msugf.edu).

### **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 eLearning Department to deliver effective online instruction. The majority of online courses are delivered using the Desire2Learn (D2L) learning management system. Online students follow the same registration procedures as campus-based students. Online students have full access to MSU – Great Falls College of Technology library resources, online tutoring through the Learning Center, and have the opportunity to order textbooks online through the COTtage Bookstore ([www.thecottagebookstore.com](http://www.thecottagebookstore.com)). The College plans elearning opportunities, coordinates their delivery with academic departments, and provides student and faculty support services. Please contact the eLearning 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 the College learning management system and other technologies to connect with students, faculty, and the eLearning Department.
- Beware of procrastination—online courses follow the same calendar as on-campus classes. Students enrolled in online courses should plan to log-in and check the course updates on a daily basis.
- 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 to campus to take exams for your online course(s), especially Mathematics, Accounting, and Computer Application courses.

For answers to questions about eLearning opportunities, please visit our website or call the eLearning Department at 406-771-4440 or 800-254-2815. The eLearning Department is located on campus in A120 and provides orientations, trainings, and technical support for online learning.



## 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	\$	3,077
Application Fee	\$	30
Lab Fees	\$	110
Books	\$	1763
<b>TOTAL:</b>	<b>\$</b>	<b>4,980</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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†	_____
NUTR	221	Basic Human Nutrition	3†	_____
PHYS	110	Survey of Natural Sciences	3†	_____
PHYS	130	Fund Physical Science w/Lab	4†	_____

**MONTANA UNIVERSITY SYSTEM CORE COURSES**

OFFERED ONLINE AND ON CAMPUS.

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

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

**MATHEMATICS--3 CREDITS**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
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/SEM
ARTH	160	Global Visual Culture	3† _____
ARTZ	101	Art Fundamentals	3† _____
ARTZ	105	Visual Language - Drawing	3† _____
IDSN	101	Intro to Interior Design	3† _____
ENGL	217	Creative Writing	3† _____
LIT	110	Intro to Literature	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/SEM
BIOB	101**	Discover Biology	4† _____
BIOH	104**	Basic Human Biology/Lab	4† _____
BIOB	160**	Principles of Living Systems/Lab	4† _____
BIOB	170**	Principles of Biological Diversity/Lab	4† _____

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

COURSE NO.	TITLE	CREDITS	GRADE/SEM
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/SEM
ANTY	101	Anthropology and the Human Experience	3† _____
BMKT	242	Introduction to Global Markets	3† _____
NASX	240N	Native American Literature (equiv to 390)	3+ _____
HUM	244	American Cultural Values	3† _____
NASX	232N	Montana Indians: Cultures, Hist, & Issues	3† _____
NASX	204N	Intro to Native American Beliefs & Phil	3† _____
SIGN	101	Intro to American Sign Lang	3† _____

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

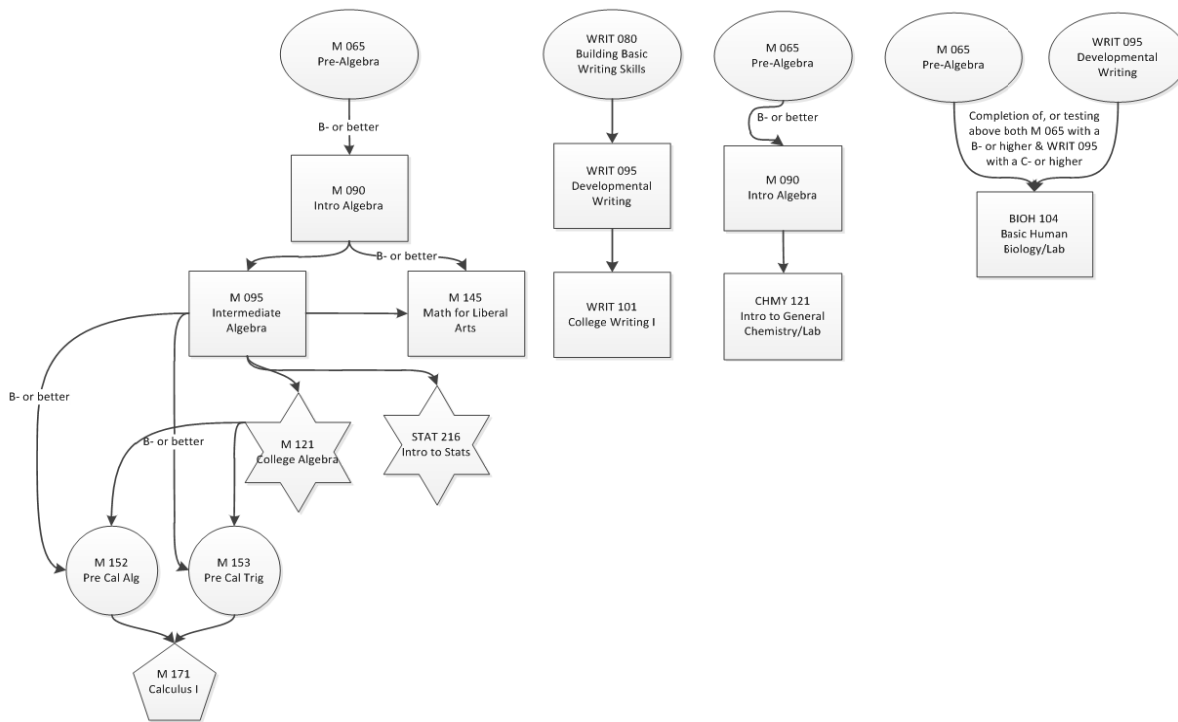
Courses with an "N" behind the course title or with the subject NASX will fulfill the Cultural Heritage of American Indians requirement as well as a designated core area requirement.

**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 transcribed is available in Student Central and on the web site at [http://www.msugf.edu/admissions\\_records/forms.html](http://www.msugf.edu/admissions_records/forms.html). 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	\$	7,693
Application Fee	\$	30
Lab Fees	\$	110
Books/Supplies	\$	1964
<b>TOTAL:</b>	<b>\$</b>	<b>9797</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**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/SEM
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	GRADE/SEM
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/SEM
ARTH	160	Global Visual Culture	3†	_____
ARTZ	101	Art Fundamentals	3†	_____
ARTZ	105	Visual Language - Drawing	3†	_____
IDSN	101	Introduction to Interior Design	3†	_____
ENGL	217	Creative Writing	3†	_____
LIT	110	Intro to Literature	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/SEM
BIOB	101**	Discover Biology	4†	_____
BIOH	104**	Basic Human Biology/Lab	4†	_____
BIOB	160**	Principles of Living Systems/Lab	4†	_____
BIOB	170**	Principles of Biological Diversity/Lab	4†	_____
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†	_____
NUTR	221	Basic Human Nutrition	3†	_____
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/SEM
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 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†	_____

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**CULTURAL DIVERSITY--3 CREDITS**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
ANTY 101	Anthropology and the Human Experience	3†	_____
BMKT 242	Introduction to Global Markets	3†	_____
NASX 240N	Native American Literature (equiv to 390)	3+	_____
HUM 244	American Cultural Values	3†	_____
NASX 232N	Montana Indians: Cultures, Hist, & Issues	3†	_____
NASX 204N	Intro to Native American Beliefs & Phil	3+	_____
SIGN 101	Intro to American Sign Lang	3†	_____

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

Courses with an “N” behind the course title or with the subject NASX 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/SEM
CAPP 120	Introduction to Computers	3†	_____

OR any CIT, CSCI, ITS, or CAPP 3 credit hour course that has CAPP 120 as a prerequisite site

**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, ARTH, ARTZ) Art, (ANTH) Anthropology, (BGEN) Business Genera; (BMGT) Business Management; (BMKT) Business Marketing , (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, (NASX) Native American Studies, (PHL) Philosophy, (PSCI) Political Science, (PSYX) Psychology, (SIGN) American Sign Languages, (SOCL) 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, 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	\$	7,693
Application Fee	\$	30
Lab Fees	\$	110
Books	\$	1964
<b>TOTAL:</b>	<b>\$</b>	<b>9797</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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

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

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

**MATHEMATICS--3 CREDITS**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
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**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
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ARTH	160	Global Visual Culture	3†	_____
ARTZ	101	Art Fundamentals	3†	_____
ARTZ	105	Visual Language - Drawing	3†	_____
IDSN	101	Introduction to Interior Design	3†	_____
ENGL	217	Creative Writing	3†	_____
LIT	110	Intro to Literature	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)**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
BIOB	101**	Discover Biology	4†	_____
BIOH	104**	Basic Human Biology/Lab	4†	_____
BIOB	160**	Principles of Living Systems/Lab	4†	_____
BIOB	170**	Principles of Biological Diversity/Lab	4†	_____
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†	_____
NUTR	221	Basic Human Nutrition	3†	_____
PHYS	110	Survey of Natural Sciences	3†	_____
PHYS	130	Fund Physical Science w/Lab	4†	_____

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

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
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 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**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
ANTY	101	Anthropology and the Human Experience	3†	_____
BMKT	242	Intro to Global Markets	3†	_____
NASX	240N	Native American Literature (equiv to 390)	3+	_____
HUM	244	American Cultural Values	3†	_____
NASX	232N	Montana Indians: Cultures, Hist, & Issues	3†	_____
NASX	204N	Intro to Native American Beliefs & Phil	3†	_____
SIGN	101	Intro to American Sign Lang	3†	_____

CONTINUED ON NEXT PAGE...

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

Courses with an “N” behind the course title or with the subject NASX 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/SEM
CAPP	120	Introduction to Computers	3†	_____

or any CIT, CSCI, ITS, or CAPP 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 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. (BIOB) (BIOH) (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

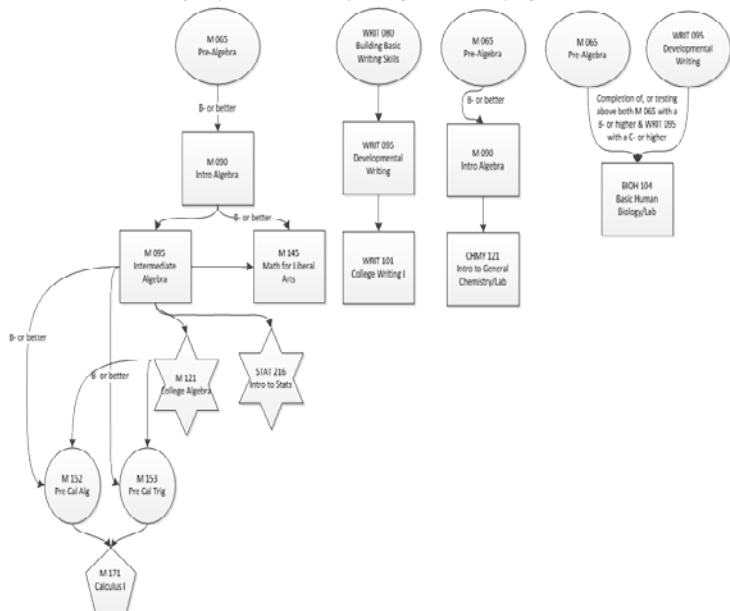
**COURSES NUMBERED 194 WILL NOT BE APPLIED TO THE CONCENTRATION AREA.**

**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

**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.



ACCOUNTING

ASSOCIATE OF APPLIED SCIENCE DEGREE

Program Director: Kerry Dolan

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	\$	6154
Application Fee	\$	30
Books/Supplies	\$	3077
<b>TOTAL</b>	<b>\$</b>	<b>9,261</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
ACTG	201*	Principles of Financial Accounting	3+	_____
ACTG	205*	Computerized Accounting	3+	_____
CAPP	158*	MS Access	3+	_____
		Electives	<u>4</u>	_____
		Subtotal	13	_____

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
ACTG	202*	Principles of Managerial Accounting	3+	_____
ACTG	211*	Income Tax Fundamentals	3+	_____
BGEN	235*	Business Law	3+	_____
CAPP	154*	MS Word	3+	_____
WRIT	122**	Introduction to Business Writing	3+	_____
CAPP	105*	Short Courses: Computer Calculators	<u>1+</u>	_____
		Subtotal	16	_____

**SUGGESTED ELECTIVES**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
BMGT	235*	Management	3	_____
BMKT	242	Intro to Global Markets	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 other courses with advisor approval

**TOTAL PROGRAM CREDITS – 60~**

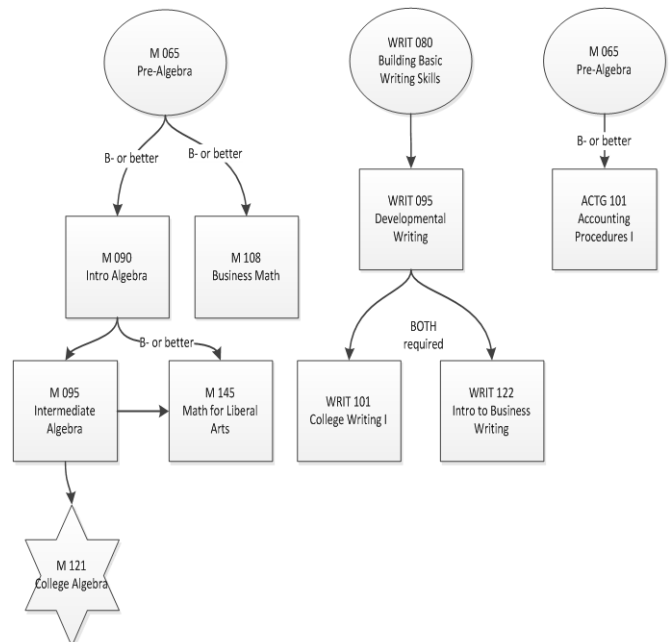
~ Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

**FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
ACTG	101**	Accounting Procedures I	3+	_____
CAPP	120	Introduction to Computers	3+	_____
BGEN	105	Introduction to Business	3+	_____
WRIT	101**	College Writing I	3+	_____
M	108**	Business Mathematics	<u>4+</u>	_____
		Subtotal	16	_____

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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	_____



**BUSINESS ADMINISTRATION –  
ENTREPRENEURSHIP**

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: Marilyn Besich**

**Program Faculty: Teri Dwyer**

**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.

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.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6154
Application Fee	\$	30
Books/Supplies	\$	2920
<b>TOTAL</b>	<b>\$</b>	<b>9,104</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**FALL SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
ACTG 101**	Accounting Procedures I	3+	_____
BGEN 105	Introduction to Business	3+	_____
CAPP 120	Introduction to Computers	3+	_____
M 108**	Business Mathematics	4+	_____
WRIT 101**	College Writing I	<u>3+</u>	_____
	Subtotal	16	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
ACTG 102*	Accounting Procedures II	3+	_____
ACTG 180*	Payroll Accounting	3+	_____
BMGT 235*	Management	3+	_____
COMM 135	Interpersonal Communication	3+	_____
PSYX 100	Intro to Psychology	<u>3+</u>	_____
	Subtotal	15	

**FALL SEMESTER**

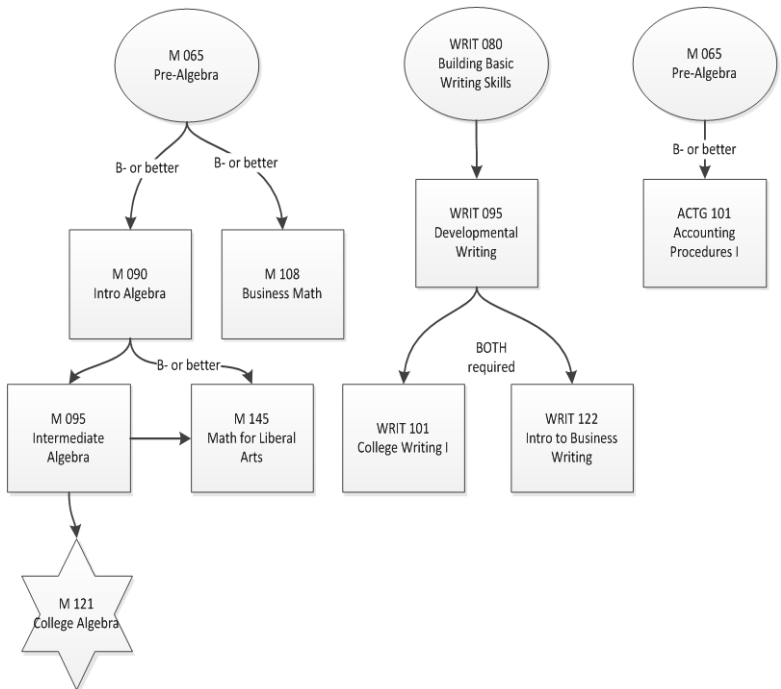
COURSE NO.	TITLE	CREDITS	GRADE/SEM
ACTG 201*	Principles of Financial Accounting	3+	_____
BMKT 225*	Marketing	3+	_____
BMGT 215*	Human Resource Management	3+	_____
CAPP 156*	MS Excel	3+	_____
M 145**	Math for Liberal Arts <b>OR</b>		
M 121**	College Algebra	<u>3+</u>	_____
	Subtotal	15	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
ACTG 202*	Principles of Managerial Accounting	3+	_____
BMKT 240*	Advertising	3+	_____
BMGT 210*	Small Business Entrepreneurship	3+	_____
BGEN 235*	Business Law	3+	_____
WRIT 122**	Intro to Business Writing	<u>3+</u>	_____
	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

**Program Director: Marilyn Besich**

**Program Faculty: 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	\$	6154
Application Fee	\$	30
Books/Supplies	\$	2956
<b>TOTAL</b>	<b>\$</b>	<b>9,140</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
ACTG 101**	Accounting Procedures I	3†	_____
CAPP 120	Introduction to Computers	3†	_____
BGEN 105	Introduction to Business	3†	_____
WRIT 101**	College Writing I	3†	_____
M 108**	Business Mathematics	4†	_____
	Subtotal	16	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
ACTG 102*	Accounting Procedures II	3†	_____
ACTG 180*	Payroll Accounting	3†	_____
BMGT 235*	Management	3†	_____
COMM 135	Interpersonal Communication	3†	_____
PSYX 100	Introduction to Psychology	3†	_____
	Subtotal	15	

**FALL SEMESTER**

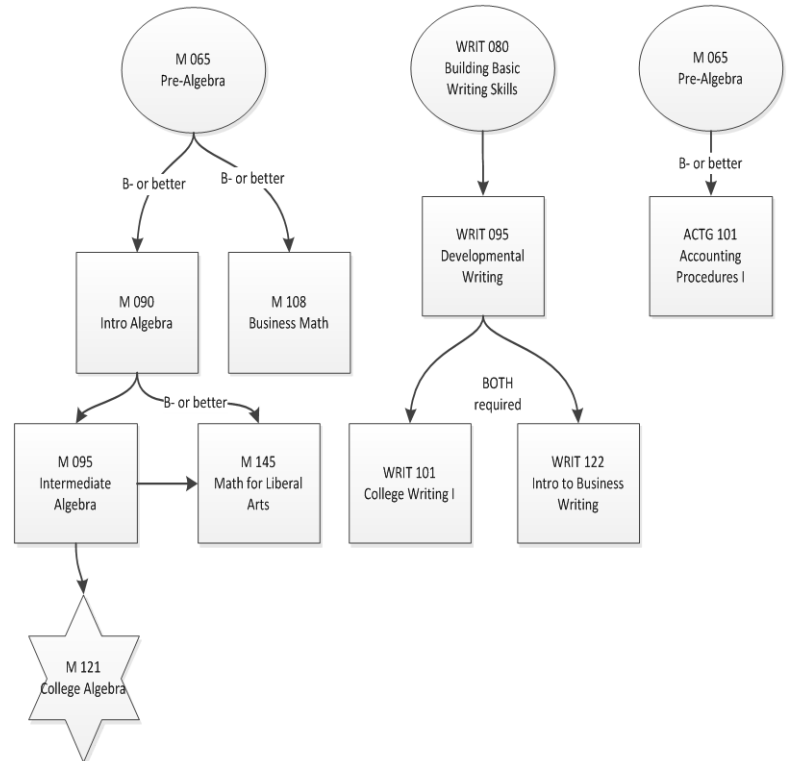
COURSE NO.	TITLE	CREDITS	GRADE/SEM
ACTG 201*	Principles of Financial Accounting	3†	_____
BMKT 225*	Marketing	3†	_____
BMGT 215*	Human Resource Management	3†	_____
CAPP 156*	MS Excel	3†	_____
M 145**	Math for Liberal Arts <b>OR</b>		
M 121**	College Algebra	3†	_____
	Subtotal	15	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
ACTG 202*	Principles of Managerial Accounting	3†	_____
BGEN 235*	Business Law	3†	_____
BMGT 277*	Principles of Strategic Management	3†	_____
CAPP 154*	MS Word	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 FUNDAMENTALS**

CERTIFICATE OF APPLIED SCIENCE DEGREE

**Program Director: Marilyn Besich**

**Program Faculty: 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:**

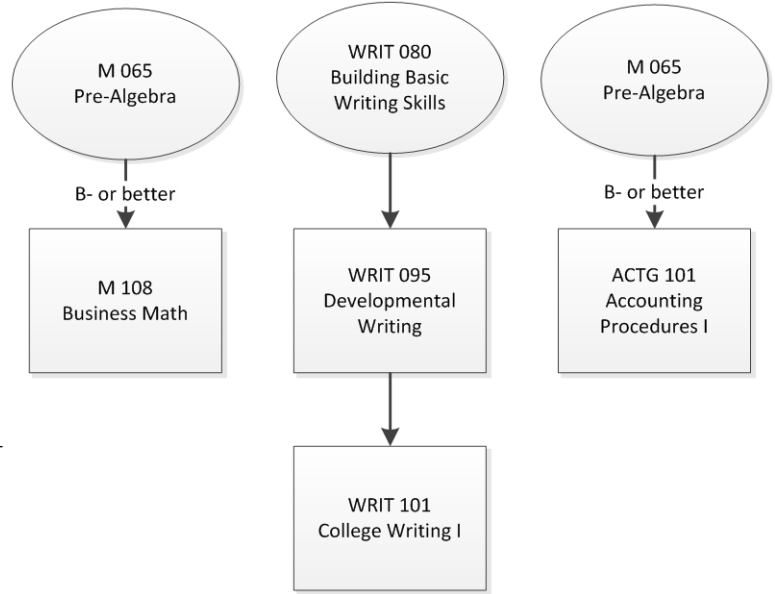
- Maintain accounting records;
- Meet the public;
- Manage office functions; and
- Assist with marketing efforts

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

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	3077
Application Fee	\$	30
Books/Supplies	\$	1468
<b>TOTAL</b>	<b>\$</b>	<b>4,575</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.



**FIRST SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
ACTG	101**	Accounting Procedures I	3†	_____
CAPP	120	Introduction to Computers	3†	_____
BGEN	105	Introduction to Business	3†	_____
WRIT	101**	College Writing I	3†	_____
M	108**	Business Mathematics	4†	_____
		Subtotal	16	

**SECOND SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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	1†	_____
		Subtotal	16	

**TOTAL PROGRAM 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 English placement before planning out their full program schedules.



## Business Fundamentals Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[General and Operations Managers 11-1021.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,096.00	\$1,485.00		n/a	\$4,581.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses		EMPLOYMENT				Continuing Education & Employed		Continuing Education #
				Employed				In Field	Out of Field	
		#	%	In Field	Out of Field	Seeking	Not			
Business Fundamentals	0									

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

## CARPENTRY

ASSOCIATE OF APPLIED SCIENCE DEGREE

Advisor: Patrick Schoenen

**NOTE: This program is in moratorium and will not be accepting new students.; 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	\$	6,915
Application Fee	\$	30
Lab Fee	\$	-
Program Fee	\$	1,000
Books/Supplies	\$	924
<b>TOTAL</b>	<b>\$</b>	<b>8,869</b>

\*MUS Student Health Insurance Premium approx. \$851/semester if needed. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER 1**

<u>COURSE NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE</u>	
M	111	Technical Mathematics	3†	_____
	CNST	100*Fundamentals of Construction Technology		3† _____
CNST	115*	Construction Calculators & Estimating	1†	_____
CARP	120*	Carpentry Basics & Rough-in Framing	6†	_____
CARP	150*	Beginning Carpentry Practicum (90 hrs)	3‡	_____
		Subtotal	16	

**SPRING SEMESTER 1**

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

**SUMMER SEMESTER**

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

**FALL SEMESTER 2**

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

**SPRING SEMESTER 2**

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

**Program Director: Patrick Schoenen**

The Carpentry Program provides the opportunity to learn valuable skills in the construction trades. These skills prepare the student for an entry level job in the construction trade, giving them an advantage over unskilled labor. Students learn in three different environments: The classroom - where information is conveyed, a lab environment - where skills are practiced, and on “real world” projects which include a site-built residential home. Students are evaluated by written test, performance test, and demonstration of employability skills. The carpentry cohort learns specific carpentry skills in a module format.

**OUTCOMES: GRADUATES ARE PREPARED TO:**

- Communicate effectively in a construction site environment.
- Demonstrate a working knowledge of construction materials.
- Demonstrate a working knowledge of construction site safety, hand and power tools safety that is reinforced with an OSHA 10 Certification.
- Perform entry level carpentry skills involved in rough framing. Rough framing includes floors, walls, trusses, vaulted roofs and dormers.
- Perform entry level carpentry skills involved in exterior finishes
- Perform entry level carpentry skills involved in the installation of insulation and moisture barriers
- Perform entry level carpentry skills involved in metal stud construction
- Perform entry level carpentry skills involved in basic stair construction
- Perform entry level carpentry skills involved in the installation of exterior doors and windows
- Demonstrate a basic knowledge in concrete and site layout protocol.
- Estimate materials necessary in the completion of the phases of construction being taught.
- Perform entry level interior finish carpentry skills which include cabinet installation, countertop installation, molding applications, interior door installation, and simple cabinet construction.

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. Students are also required to provide his or her basic hand tools and framing style tool belts. A “kit” with all of these items is available to purchase in the bookstore at the beginning of the fall semester. A list of these tools can be provided by the Program Director upon request.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	3077
Application Fee	\$	30
Program Fee	\$	400
Books/Supplies	\$	581
<b>TOTAL</b>	<b>\$</b>	<b>4,088</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
M	111**	Technical Mathematics	3†	_____
CSTN	100*	Fundamentals of Construction Technology	3†	_____
CSTN	115*	Construction Calculators & Estimating	1†	_____
CSTN	120*	Carpentry Basics & Rough-in Framing	5†	_____
CSTN	160*	Beginning Carpentry Practicum	<u>3†</u>	_____
		Subtotal	15	

**SPRING SEMESTER**

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

**TOTAL PROGRAM CREDITS – 30~**

~ 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.



## Construction Technology - Carpentry Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site [Carpenters 47-2031.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,499.00	\$605.00	\$0.00	n/a	\$4,104.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses		EMPLOYMENT				Continuing Education & Employed		Continuing Education #
				Employed				In Field	Out of Field	
	#	#	%	In Field	Out of Field	Seeking	Not			
Construction Technology - Carpentry	1	1	100	-	-	-	-	-	-	1

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

**COLLISION AND REFENISHING TECHNOLOGY**

**CERTIFICATE OF APPLIED SCIENCE DEGREE**

Advisor: Bob Ewen

**NOTE: This program is in moratorium and will not be accepting new students. 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 .....	\$3,069
Application Fee.....	30
Clothing .....	100
Program Fees .....	190
Tools.....	1600
Books/Supplies .....	585
TOTAL.....	\$5,574

**FALL SEMESTER 1**

<b>Course No.</b>	<b>Title</b>	<b>Credits</b>	<b>Grade</b>
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**FALL SEMESTER**

<b>COURSE NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE</b>
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	3‡	_____
	Subtotal	15	

**SPRING SEMESTER 1**

<b>Course No.</b>	<b>Title</b>	<b>Credits</b>	<b>Grade</b>
TB 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	1+	_____
	Subtotal	16	

**TOTAL PROGRAM CREDITS - 32~**

~ 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 & Refinishing Technology Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational

Classification (SOC) code and link from U.S.

Department of Labor's O\*NET Web site

[Automotive Body and Related Repairers#9-3021.00](#)

### On-Time Graduation Rate

84.62%

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,232.00	\$644.00	\$1,600.00	n/a	\$5,476.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses		EMPLOYMENT				Continuing Education & Employed		Continuing Education #
				Employed				In Field	Out of Field	
		#	%	In Field	Out of Field	Seeking	Not			In Field
Collision & Refinishing Technology	13	1	8	1	-	-	-	-	-	-

### Median Loan Debt

Federal	\$	3,448.00
Private	\$	-
Institutional	\$	-

### Other Information

n/a

COMPUTER ASSISTANT

CERTIFICATE OF APPLIED SCIENCE DEGREE

Program Director: 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	\$	3077
Application Fee	\$	30
Lab Fees	\$	35
Books/Supplies	\$	1500
<b>TOTAL</b>	<b>\$</b>	<b>4,642</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FIRST SEMESTER**

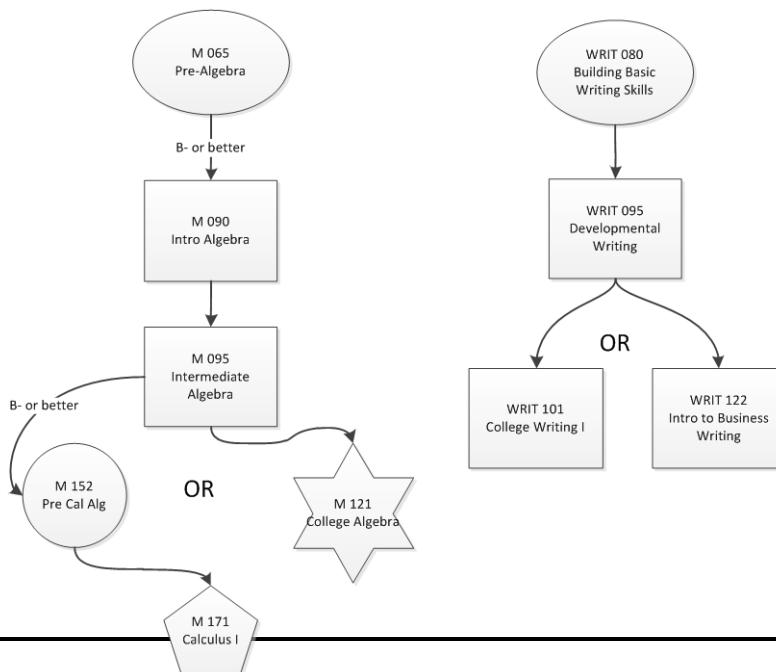
COURSE NO.	TITLE	CREDITS	GRADE/SEM
CAPP 120	Introduction to Computers	3+	_____
CIT 229*	Web Page Construction	4+	_____
COMM 135	Interpersonal Communication	3†	_____
WRIT 101**	College Writing <b>OR</b>		
WRIT 122**	Intro to Business Writing	3†	_____
M 095**	Intermediate Algebra <b>OR</b>		
M 121**	College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

**SECOND SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
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 Assistant Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site [Computer Operators#3.9011.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,134.00	\$1,155.00		n/a	\$4,289.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
		#	%	In Field	Out of Field	Seeking	Not	In Field	Out of Field	
Computer Assistant	0									

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a



COMPUTER INFORMATION TECHNOLOGY  
MICROCOMPUTER SUPPORT

ASSOCIATE OF APPLIED SCIENCE DEGREE

Program Director: Bruce Gottwig

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 Java 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 7 as preparation for the examination to attain the Windows 7 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 on-going technical support.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6154
Application Fee	\$	30
Lab Fees	\$	175
Books/Supplies	\$	2105
<b>TOTAL</b>	<b>\$</b>	<b>8,465</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER**

<b>COURSE NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
CAPP 120	Introduction to Computers	3+	_____
M 095**	Intermediate Algebra <b>OR</b>		
M 121**	College Algebra <b>OR</b>		
M 152**	Precalculus Algebra <b>OR</b>		
M 171**	Calculus I	3-4+	_____
WRIT 101**	College Writing I <b>OR</b>		
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**

<b>COURSE NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
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	<u>3+</u>	_____
	Subtotal	15	

**FALL SEMESTER**

<b>COURSE NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
CSCI 111*	Programming with Java	3†	_____
CAPP 154*	MS Word	3+	_____
BGEN 105	Introduction to Business	3+	_____
CIT 229*	Web Page Construction	4+	_____
	Technical Electives***	<u>2</u>	_____
	Subtotal	15	

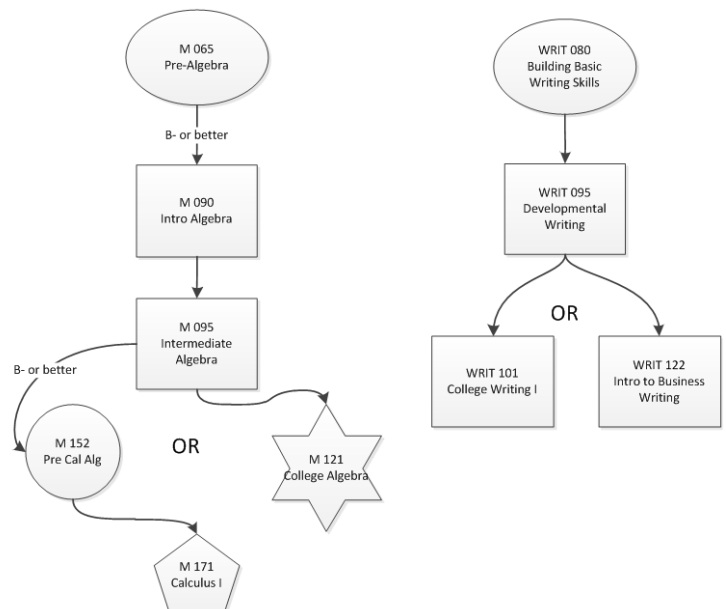
**SPRING SEMESTER**

<b>COURSE NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
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	

\*\*\* Technical electives must be approved by program director

**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 INFORMATION TECHNOLOGY  
NETWORK SUPPORT

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: 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	\$	6154
Application Fee	\$	30
Lab Fees	\$	210
Books/Supplies	\$	2150
<b>TOTAL</b>	<b>\$</b>	<b>8,544</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
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	<u>3/4+</u>	_____
		Subtotal	15/16	

**SPRING SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
ITS	210*	Network Operating Systems - Desktop	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**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
COMM	135	Interpersonal Communication	3+	_____
ITS	215*	Network Operating Systems – Dir Infrast.	4†	_____
ITS	261*	CCNP: Routing	4+	_____
		Technical Electives***	<u>4</u>	_____
		Subtotal	15	

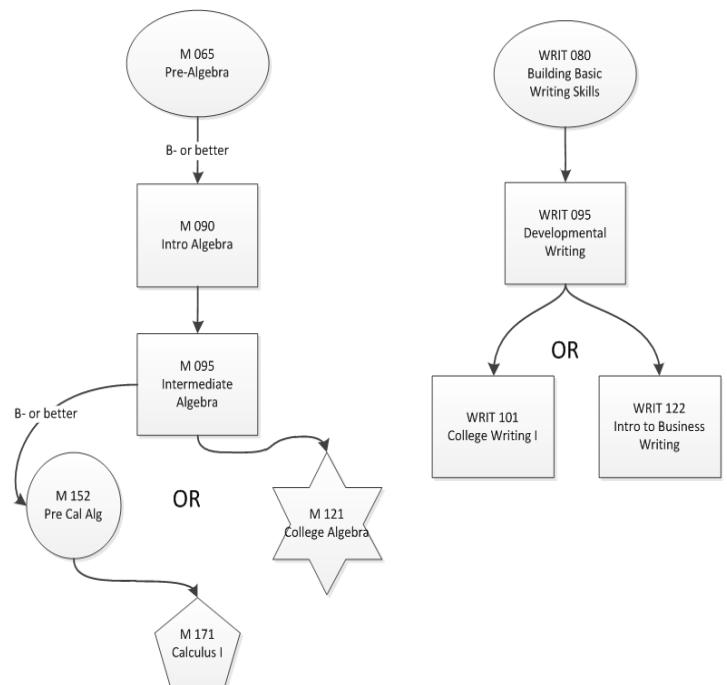
**SPRING SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
ITS	298*	Internship/Cooperative Education	3†	_____
ITS	217*	Network Operating System – Admin/Apps	4+	_____
ITS	263*	CCNP: Switching	4†	_____
		Technical Electives***	<u>4</u>	_____
		Subtotal	14	

\*\*\* Technical electives must be approved by program director

**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 INFORMATION TECHNOLOGY

WEB DESIGN

ASSOCIATE OF APPLIED SCIENCE DEGREE

Program Director: Rhonda Kueffler

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	\$	6154
Application Fee	\$	30
Lab Fees	\$	90
Books/Supplies	\$	1915
<b>TOTAL</b>	<b>\$</b>	<b>8,189</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
GDSN	101*	Design Topics and Principles	3†	_____
BGEN	105	Introduction to Business	3†	_____
CAPP	120	Introduction to Computers	3+	_____
WRIT	101**	College Writing I <b>OR</b>		
WRIT	122**	Intro to Business Writing	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	<u>3-4†</u>	_____
		Subtotal	15-16	

**SPRING SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
ITS	280*	Computer Repair and Maintenance	4†	_____
ITS	210*	Network Operating Systems - Desktop	3†	_____
CIT	229*	Web Page Construction	4†	_____
COMM	135	Interpersonal Communication	3†	_____
GDSN	130*	Typography	<u>3†</u>	_____
		Subtotal	17	

**FALL SEMESTER**

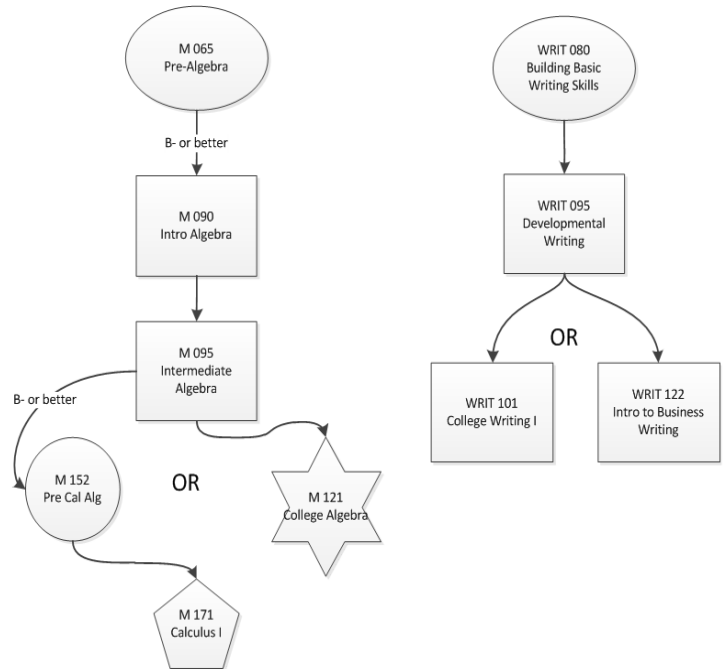
<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
ITS	150*	CCNA 1: Exploration	3†	_____
CSCI	111*	Programming with JAVA I	3†	_____
CAPP	158*	MS Access	3+	_____
GDSN	217*	Digital Design	3†	_____
CIT	231*	Web Page Design	<u>3†</u>	_____
		Subtotal	15	

**SPRING SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
GDSN	109*	Digital Photography	4†	_____
CSCI	210*	Web Programming	3†	_____
CIT	280*	Desktop Publishing	3†	_____
ITS	299*	Capstone: Internship	<u>3†</u>	_____
		Subtotal	13	

**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

Program Director: **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	\$	3077
Application Fee	\$	30
Lab Fees	\$	210
Books/Supplies	\$	1472
<b>TOTAL</b>	<b>\$</b>	<b>4,789</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER**

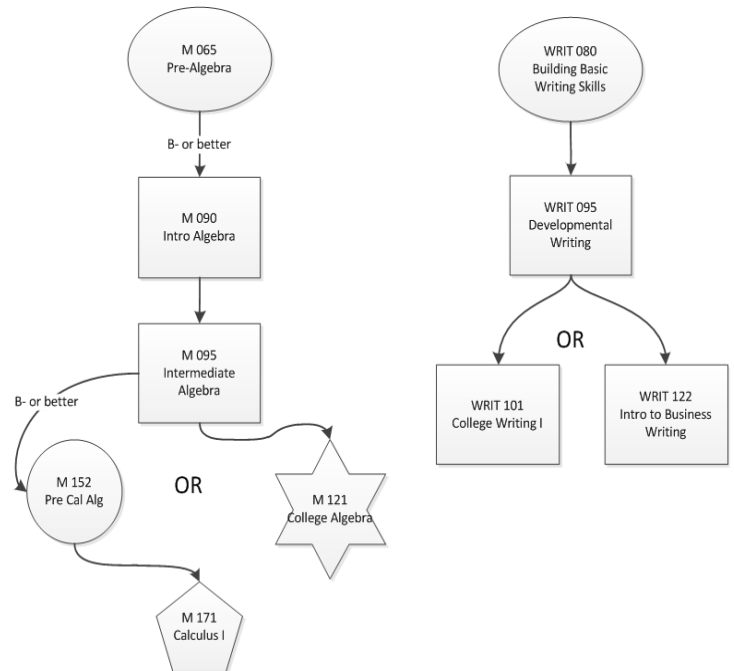
COURSE NO.	TITLE	CREDITS	GRADE/SEM
CAPP 120	Introduction to Computers	3+	_____
ITS 150*	CCNA 1: Exploration	3+	_____
ITS 152*	CCNA 2: Exploration	3+	_____
ITS 125	Fund of Voice and Data Cabling	3+	_____
M 095**	Intermediate Algebra <b>OR</b>		
M 121**	College Algebra <b>OR</b>		
M 152**	Pre-calculus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

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
WRIT 122**	Intro to Business Writing <b>OR</b>		
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	<u>3+</u>	_____
	Subtotal	16	

**TOTAL PROGRAM CREDITS - 31-32~**

~ 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 English placement before planning out their full program schedules. Computer Server Administration



## Computer Network Infrastructure Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Computer Systems Engineers/Architects 15-1099.02](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,309.00	\$1,155.00		n/a	\$4,464.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses		EMPLOYMENT				Continuing Education & Employed		Continuing Education	
				Employed				In Field	Out of Field	#	
	#	#	%	In Field	Out of Field	Seeking	Not				In Field
Computer Network Infrastructure	0										

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

# COMPUTER SERVER ADMINISTRATION

CERTIFICATE OF APPLIED SCIENCE DEGREE

Program Director: **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	\$	3077
Application Fee	\$	30
Lab Fees	\$	70
Books/Supplies	\$	2099
<b>TOTAL</b>	<b>\$</b>	<b>5,276</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER**

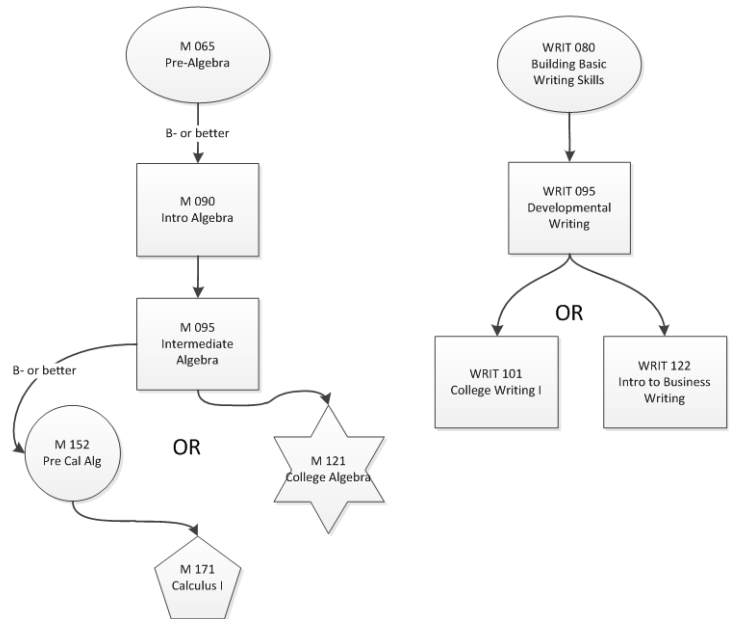
COURSE NO.	TITLE	CREDITS	GRADE/SEM
CAPP 120	Introduction to Computers	3+	_____
M 095**	Intermediate Algebra <b>OR</b>		
M 121**	College Algebra <b>OR</b>		
M 152**	Pre-calculus Algebra <b>OR</b>		
M 171**	Calculus I	3/4+	_____
ITS 215*	Network Operating Systems – Dir/Infrast.	4+	_____
ITS 150*	CCNA 1: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

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
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 <b>OR</b>		
WRIT 101**	College Writing I	3+	_____
COMM 135	Interpersonal Communication	<u>3†</u>	_____
	Subtotal	17	

**TOTAL PROGRAM CREDITS – 33-34~**

~ 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.



## Computer Server Administrator Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Network and Computer Systems Administrators 15-1071.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,169.00	\$1,513.00		n/a	\$4,682.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
				In Field	Out of Field	Seeking	Not	In Field	Out of Field	
Computer Server Administrator	1	1	100	1	-	-	-	-	-	-

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

# DENTAL ASSISTANT

CERTIFICATE OF APPLIED SCIENCE DEGREE

**Program Director: Robin Williams**

**Program Faculty: Carmen Perry**

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 achieves 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 computer technology associated with the profession of dentistry including but not limited to digital radiography, intraoral cameras, and dental-specific software for the operation of a dental practice.
- Integrate concepts in the dental sciences, prevention and oral health promotion to a variety of treatment situations in the dental setting
- 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.

The MSU – Great Falls Dental Assistant program is a one-year (11 month) limited enrollment certificate of applied science 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 095 Developmental Writing OR their equivalents OR are currently at the competency level for the program-required math and writing courses. Applicants must be in good academic standing for program entry.

Student Information and Application Packet:

<http://www.msugf.edu/webs/DA%20Program%20app%20packet%2012.pdf>

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	\$	4616
Application Fee	\$	30
Insurance	\$	23
Uniforms	\$	250
Program Fee	\$	396
Books/Supplies	\$	858
<b>TOTAL</b>	<b>\$</b>	<b>6,172</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**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, i.e.: 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**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
DENT 110	Theory of Infection Control and Dis. Prev	1†	_____
DENT 115	Head, Neck, & Oral Anatomy	4†	_____
DENT 116	Dental Office Management	2†	_____
DENT 120	Oral Radiology/Radiography I	3†	_____
DENT 123	Chairside Theory and Practice I	4†	_____
WRIT 095**	Developmental Writing or higher	<u>3-4†</u>	_____
	Subtotal	17-18	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
DENT 121*	Oral Radiology/Radiography II	2†	_____
DENT 124*	Chairside Theory and Practice II	4†	_____
DENT 140*	Dental Sciences/Preventive Dentistry	4†	_____
DENT 145*	Dental Specialties	3†	_____
M 090**	Introductory Algebra <b>OR</b> higher	<u>3-4†</u>	_____
	Subtotal	16-17	

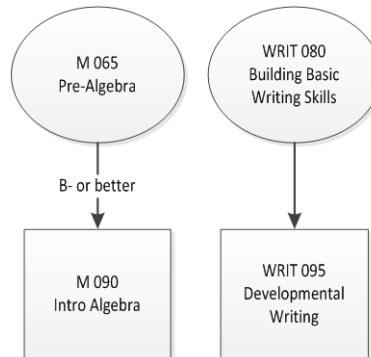
**SUMMER TERM**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
COMM 135	Interpersonal Communication <b>OR</b>		
PSYX 100	Intro to Psychology	3†	_____
DENT 195*	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, which may be taken during the summer term.

**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.





# Montana State University-Great Falls COT Dental Assistant Program



## Student Information and Application Packet Fall 2012



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- Application Packet Cover Sheet and Check off Sheet**
- Student Immunization and Verification form**
- Job Shadow Experience Verification form**
- Job Shadow Confidentiality Statement**

Dear Prospective Dental Assistant student,

I am pleased by your interest in the Dental Assistant program here at Montana State University-Great Falls College of Technology. I graduated from this Dental Assistant program in 1987 and have found dental assisting to be a very rewarding career. In the coming years the demand for skilled dental assistants is expected to rise significantly. In fact, according to the U.S. Bureau of Labor Statistics; job openings for Dental Assistants are expected to increase by 30% in the next few years.

MSU-Great Falls College of Technology's Dental Assistant program is accredited through the American Dental Association and upon graduation from the program; students are eligible to sit for the Dental Assisting National Board certification exam to become a Certified Dental Assistant (CDA.) Graduates are qualified to perform the expanded functions allowed by the Montana Board of Dentistry rule, including (but not limited to) taking and processing oral radiographs, coronal polishing, placing dental sealants, providing oral hygiene instruction, and fabricating temporary crowns.

The Dental Assistant program has a limited enrollment capacity. **Eighteen new 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. The Dental Assistant program selects students on a first come, first served basis from the pool of completed applications received by the application priority deadline.

Information regarding the profession, the program, and application materials for fall 2011 entry are enclosed in this packet. **Please read the materials carefully.** For additional information, answers to specific questions, or to set up an appointment please contact Student Central at (406)771-4414 or Robin Williams, CDA, MS, Dental Assistant Program Director at (406) 771-4351. Please don't hesitate to contact me.

Sincerely,

Robin R. Williams, CDA, MS  
Dental Assistant Program Director  
Montana State University—Great Falls College of Technology  
2100-16<sup>th</sup> Ave S  
Great Falls, MT 59405  
(406)771-4351

**MONTANA STATE UNIVERSITY-GREAT FALLS  
COLLEGE OF TECHNOLOGY  
DENTAL ASSISTANT  
ONE-YEAR CERTIFICATE OF APPLIED SCIENCE PROGRAM**

**Job description and occupational outlook**

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. The Dental Assistant performs a wide variety of tasks requiring both interpersonal and technical skill. Most of the time, Dental Assistants work clinically with the dentist delivering patient care, although at times, they may also work independently or in the business aspect of the dental office.

The dental assisting profession provides a rewarding career in service to the public. It calls for individuals who are flexible, responsible, intelligent, and caring. General dentists or dental specialists employ most Dental Assistants, however other opportunities for employment exist in public health settings, insurance or supply companies, and educational institutions. Because dentists often employ two or three Dental Assistants, employment opportunities are excellent. The approximate average hourly wage for most entry-level Dental Assistant graduates in Montana is currently \$11.00 - \$15.00 with various benefits, depending on location and demand factors.

The American Dental Association Commission on Dental Accreditation accredits the Dental Assistant program at MSU-Great Falls College of Technology. Upon graduation, students sit for the national certification examination administered by the Dental Assisting National Board to become Certified Dental Assistants. They are also qualified to perform expanded functions approved by the Montana Board of Dentistry. Students must be currently certified in healthcare provider CPR (American Red Cross and American Heart Association are two of several instruction providers) and be current on all immunizations including the Hepatitis B series. Students are also encouraged to become student members of the American Dental Assistants Association.

The MSU – Great Falls Dental Assistant program is a one year (11 month) limited enrollment program accepting up to 18 students each year. Interested students must complete a current application to the program (**separate from the institution application**) for acceptance and are urged to contact Student Central or program advisors for student advising specific to program admission requirements.

Following acceptance to the program, the Dental Assistant program is three semesters in length concluding summer semester with the students being enrolled in clinical practice. Dental Assistant program students will receive their training through a variety of methods including classroom lecture, practice in mock procedures, and actual clinical experience in our on-site Dental Clinic (which is open to the public.) All Dental Assistant program coursework must be completed with a “C-” or better to continue in and/or graduate from the program. All Dental Assistant program coursework must be successfully completed prior to enrollment in DA 190, Clinical Practice and Seminar. Students will also be required to purchase uniform attire, pay for their certification examination, and provide own transportation and lodging costs (if necessary) during clinical office practice.

## **Dental Assistant program admissions process**

The Dental Assistant program admissions committee reviews submitted application packets. Although not required, it is recommended that students complete most, if not all general education core coursework prior to entry to the Dental Assistant program. The **postmarked date** of submission of a complete application packet will be the decisive factor for accepting up to 18 students to the program. Only students in Good Academic Standing will be eligible for program acceptance. The earliest postmarks will be given the highest priority and only complete applications will be accepted for evaluation purposes.

The **complete** Dental Assistant program application must be submitted via mail to:

Robin R. Williams, CDA, MS  
Dental Assistant Program Director  
2100-16<sup>th</sup> Ave S  
Great Falls, MT 59405

by **June 1, 2012** for priority selection to the program.

Priority applicants will be notified of their admission acceptance by June 25, 2012 for Fall 2012 semester entry to the program. The Dental Assistant program admissions committee will consider applications received after the priority deadline of June 1, 2012 only if any of 18 admission positions remain open. Again, the earliest postmarks on complete applications will determine admission for any of these remaining openings.

### **Dental Assistant program characteristics/expectations**

Students can expect to commit to a full week at MSU – Great Falls College of Technology each week. Most dental courses include assignments that require the students to commit time (outside the scheduled class time) to program duties, responsibilities, and community-based activities. Duties include clinical cleaning and maintenance as well as restorative clinic rotations. These assignments are considered a part of the dental curriculum, so personal activities will need to be scheduled around these responsibilities.

There are a variety of learning activities within the program which make for an exciting and challenging student experience. Students should read assigned material and complete any other assignments prior to class attendance. A good rule of thumb is that for every class hour, a student will spend **at least** 2 hours outside of class in preparation for class and/or completion of assignments.

### **Student Health Insurance**

Program students entering the clinic setting are strongly advised to carry their own medical health insurance. Students will be financially responsible for their health care if they become ill or injured in the clinical setting. All students enrolled for 4 or more credits are required to have health insurance. For students without coverage, MSU-GF College of Technology offers a program developed especially for students by Blue Cross & Blue Shield of Montana (BCBSMT). This plan provides coverage for injuries and illnesses on or off campus. Coverage includes hospitalization, maternity, prescription drugs, surgical services, emergency room charges, and immunizations among others. Please contact Student Central for further information.

Student Central  
MSU – Great Falls College of Technology  
Phone – 406-771-4414  
Fax – 406-771-4329

## Program course requirements

Students that apply to the Dental Assistant program must have already successfully completed (C- or better ) M 090—Introductory Algebra, and WRIT 095—Developmental Writing (or their equivalent courses) **OR** be currently at the competency level for the program-required math and writing courses. Students may also complete any or all of the general education coursework (non-DA) prior to entry to the Dental Assistant program. Again, if you have any questions, please contact the DA Program Director. The program course sequence is as follows:

### Fall Semester 2012

<b>Course</b>	<b>Title</b>	<b>Credits</b>
DENT 110	Theory of Infection Control & Disease Prevention	1
DENT 115	Head, Neck, & Oral Anatomy	4
DENT 116	Dental Office Management	2
DENT 120	Oral Radiology I	3
DENT 123	Chairside Theory and Practice I	4
WRIT 095**	Developmental Writing	4
<b>TOTAL SEMESTER CREDITS</b>		18

### Spring Semester 2013

<b>Course</b>	<b>Title</b>	<b>Credits</b>
DENT 121*	Oral Radiology II	2
DENT 124*	Chairside Theory and Practice II	4
DENT 140*	Dental Science/Preventive Dentistry	4
DENT 145*	Dental Specialties	3
M 090**	Introductory Algebra or higher	4
<b>TOTAL SEMESTER CREDITS</b>		17

### Summer Semester 2013

<b>Course</b>	<b>Title</b>	<b>Credits</b>
DENT 195*	Clinical Practice and Seminar	7
COMM 135	Interpersonal Communications OR	
PSYX 100	Introduction to Psychology	3
<b>TOTAL SEMESTER CREDITS</b>		10

**Total program credits (including general education coursework)      45 credits**

\* Indicates program prerequisite needed (see catalog for details)

\*\* WRIT & M courses listed are the minimum program requirements. Students who test into higher level WRIT & M courses should take the appropriate level course to fulfill the program's WRIT & M requirements.

## **Information regarding transferable courses**

General education coursework taken at other educational institutions may be designated as equivalent courses for MSU – Great Falls College of Technology. For current listing of approved equivalent courses, visit the Transfer Guide under Student Information at:

[https://atlas.montana.edu:9001/pls/gfagent/hwzkxfer.p\\_selstate](https://atlas.montana.edu:9001/pls/gfagent/hwzkxfer.p_selstate)

If you have additional questions about transferability of courses, send a written request for evaluation to the Registrar at MSU – Great Falls College of Technology. Please include appropriate course descriptions and official transcripts from former colleges with your request for evaluation.

## **Dental Assistant program expenses**

The Dental Assistant program is a relatively expensive program. Students should begin planning early for financial aid or other arrangements to meet their educational needs. The College offers the students a variety of opportunities to participate in fundraising efforts; however it is recommended that a student not rely on these funds to meet educational expenses. Beyond tuition and fees, students will be required to purchase the following:

- Books and classroom & clinic supplies (approx. \$1330)
- Two professional uniforms (approx. \$250)
- Comfortable, professional shoes
- Graduation fees (approx. \$50)
- Certification examination fee (approx. \$375)
- Student medical insurance (approx. \$1600)
- Transportation and lodging at distant clinical experience or service learning sites, if applicable

**MSU–Great Falls College of Technology  
Dental Assistant Program**

**APPLICATION PACKET COVER & CHECK-OFF SHEET**

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ST \_\_\_\_\_ Zip Code \_\_\_\_\_

TELEPHONE (Home) \_\_\_\_\_ (Other) \_\_\_\_\_

E-Mail ADDRESS \_\_\_\_\_

STUDENT IDENTIFICATION NUMBER: \_\_\_\_\_

**Check-off List**

√	Item
	<b>Application Packet Cover &amp; Check-off sheet</b> ( <i>personal information must be complete and legible</i> )
	<b>Complete application and documentation for admission to MSU-GF College of Technology.</b> New students, please include a photocopy of acceptance letter. <i>Continuing students do not need to include a copy of their acceptance letter.</i>
	<b>Student Immunization and Verification form</b>
	<b>Photocopy of current CPR certification card</b> (must be <i>Healthcare Provider CPR</i> or equivalent)
	<b>Job Shadow Experience Verification Form</b>
	<b>Official Transcripts for all post-secondary education completed outside of MSU-Great Falls</b> (send transcripts to Registrar- <i>No need to include in packet</i> )





# MSU – GREAT FALLS COLLEGE OF TECHNOLOGY

## Student Immunization and Verification Form

Name \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_ Date of Birth \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

Program of Study \_\_\_\_\_ Phone # \_\_\_\_\_

Email Address: \_\_\_\_\_

### IMMUNIZATIONS: PLEASE LIST DATES....

Measles, Mumps, Rubella \_\_\_\_\_ Diphtheria \_\_\_\_\_ Tetanus (within last 7-10 years) \_\_\_\_\_

Hepatitis B Series (proof of test results required) 1) \_\_\_\_\_ 2) \_\_\_\_\_ 3) \_\_\_\_\_

Titer \_\_\_\_\_ (STRONGLY recommended by OSHA, CDC, and MSU – Great Falls College of Technology)

TB (proof of test results required) \_\_\_\_\_ positive \_\_\_\_\_ negative \_\_\_\_\_

PPD Date completed \_\_\_\_\_ Two-step TB test required Date completed \_\_\_\_\_

Varicella (Proof of Chicken Pox or Vaccination date) \_\_\_\_\_

### VERIFY THE FOLLOWING....

	YES	NO	Initials
<b>CPR for Health Care Providers verification, completed and current upon admission: Online courses not accepted.</b> (Photocopy of certification card, both sides, showing expiration and instructor's signature).			
<b>I have read the Technical Standards Sheet for the program of application.</b>			
<b>I have provided proof of all immunizations or test results required.</b>			

# JOB SHADOW INSTRUCTIONS

In order to insure that you are aware of what is involved in the job of a dental assistant, we require that you complete a mandatory job shadow experience. This experience may be carried out at the dental office/clinic of your choice. You should select a facility large enough to provide you with a full range of dental procedures. You are required to complete a minimum of four (4) hours of observation time. You are encouraged to ask the individuals you shadow pertinent questions related to dentistry and observe as many procedures as possible. It is essential that you become aware of what you will be participating in if you are selected for the clinical portion of the program. Fill out the attached confidentiality statement prior to your job shadow and provide it to the facility personnel when you arrive for your job shadow. After you have completed your job shadow have the technologist(s) that you observed complete and sign the attached form. Include the completed form in your application packet for the Dental Assistant program at MSU-Great Falls College of Technology.

Dress is professional/casual. NO blue jeans, low-cut tops or open toe shoes. Chewing gum is not acceptable while on duty. No jewelry should be worn with the exception of watch, wedding set, and small earrings for pierced ears only.



**MSU Great Falls College of Technology  
Dental Assistant Program  
JOB SHADOW VERIFICATION**

The individual who is providing this form is in the process of making an application to the Dental Assistant program at MSU-Great Falls College of Technology. We feel that it is essential that this individual become aware of what is involved in the job performance of a dental assistant. We request that you have this individual observe as many different procedures as possible in your department and then document on this form which procedures they were able to observe. If you have any questions regarding this request or the form please feel free to call either of the individuals listed below. We thank you for your assistance in providing this opportunity for this applicant. **Please return the completed form to the individual.**

Dress is professional/casual. **NO** blue jeans, low-cut tops or open toe shoes. Chewing gum is not acceptable while on site. No jewelry allowed with the exception of watch, wedding set, and small earrings for pierced ears only.

**APPLICANT NAME:** \_\_\_\_\_

**DATE OF OBSERVATION:** \_\_\_\_\_

**TIME OF OBSERVATION:** \_\_\_\_\_ a.m. / p.m. to \_\_\_\_\_ a.m. / p.m.

**Dental Office/Clinic OBSERVED:** \_\_\_\_\_

Please print name(s) of the dental practitioner(s) observed:

\_\_\_\_\_  
**PROCEDURES OBSERVED:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Dentist/Dental Assistant SIGNATURE:** \_\_\_\_\_

For questions please call: Robin Williams 771-4351



**MSU Great Falls College of Technology**  
**Dental Assistant Program**  
**JOB SHADOW**  
**Confidentiality Statement**

I thank you for this opportunity to job shadow in your facility. I realize that everything that I observe during this time **must be kept confidential** to protect patient privacy and by signing below, I agree to keep this information confidential while at your facility and afterward.

Healthcare Observer: \_\_\_\_\_  
Please Print Name

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Dental Assistant Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Dental Assistants 31-9091.00](#)

### On-Time Graduation Rate

100%

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$5,058.00	\$1,708.00		n/a	\$6,766.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
				In Field	Out of Field	Seeking	Not	In Field	Out of Field	
Dental Assistant	16	11	69	7	1	-	1	1	-	1

### Median Loan Debt

Federal \$ 5,449.00  
 Private \$ -  
 Institutional \$ -

### Other Information

n/a

## DENTAL HYGIENE

## ASSOCIATE OF APPLIED SCIENCE DEGREE

Program Director: Kim Woloszyn

Program Faculty: Gail Staples &amp; Jocelyn Juelfs

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 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 dental hygiene care plans that include accurate, consistent and complete documentation for assessment, diagnosis, planning, implementation, and evaluation that are dental client centered and based on current scientific evidence based treatment.
- 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 with all individuals and groups from various populations.
- Demonstrate leadership skills and provide service to the community through health promotion activities and oral health prevention education while respecting their values and beliefs.
- Apply the concepts of oral health prevention and promotion to improve overall wellness by understanding the link between oral and systemic health.
- Provide safe and competent dental hygiene services to all individuals who seek treatment regardless of age, physical status, or intellectual ability with an individualized approach that is humane, empathetic, and caring.
- Demonstrate appropriate cultural, legal, ethical and professional values at all times while practicing within the standards established by the professions code of ethics and identify parameters of accountability.
- Determine when the collaboration with other healthcare professionals is required to ensure safe appropriate comprehensive dental hygiene care is provided.
- Demonstrate the ability to develop goals based on continuous self-assessment to ensure lifelong learning and professional growth.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	9231
Application Fee	\$	30
Insurance	\$	38
Lab Fees	\$	210
Program Fee	\$	1265
Books/Supplies/Instruments	\$	3279
<b>TOTAL</b>	<b>\$</b>	<b>14,053</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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 Advising & Career Center Advisors for student advising specific to admission requirements and criteria for program acceptance.

**PREREQUISITE COURSES**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
BIOH	201**	Human Anatomy & Physiology I/Lab	4†	_____
BIOH	211*	Human Anatomy & Physiology II/Lab	4†	_____
BIOM	250*	Microbiology for Health Sciences/Lab	4†	_____
WRIT	101**	College Writing I	3†	_____
M	121**	College Algebra <b>OR</b> Any math course in the MUS Core	3-4†	_____
CHMY	121*	Intro to General Chemistry/Lab <b>OR BOTH</b>		
CHMY	141*	College Chemistry I/Lab <b>AND</b>		
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/SEM
DENT	101	Intro to Dental Hyg/Preclinic	2†	_____
DENT	102	Intro to Dental Hyg/Preclinic Lab	2†	_____
DENT	110	Theory of Infect Control & Dis. Prevention	1†	_____
DENT	118	Oral Anatomy for Hygienists	3†	_____
DENT	122	Oral Radiology /Lab	3†	_____
		Subtotal	11	

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
AH	140*	Pharmacology	2†	_____
DENT	150*	Clinical Dent Hyg Theory I	2†	_____
DENT	151*	Clinical Dent Hyg Practice I	4†	_____
DENT	160*	Periodontology I	3†	_____
DENT	165*	Oral Histology & Embryology	2†	_____
DENT	125*	Radiographic Interpretation	1†	_____
DENT	240*	Local Anesthesia/ Nitrous Oxide Theory & Lab	2†	_____
		Subtotal	16	

**SUMMER SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
DENT	220*	Dental Nutrition Health	3†	_____
DENT	260*	Periodontology II	2†	_____
DENT	223*	Clinical Dent Hyg Theory II	2†	_____
DENT	251*	Clinical Dent Hyg Practice II	4†	_____
		Subtotal	11	

**FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
COMM	130	Public Speaking <b>OR</b>		
COMM	135	Interpersonal Communication	3†	_____
DENT	130*	Dental Materials	2†	_____
DENT	263*	General and Oral Pathology	3†	_____
DENT	237*	Gerontology & Special Needs Patients	2†	_____
DENT	250*	Clinical Dent Hyg Theory III	2†	_____
DENT	252*	Clinical Dent Hyg Practice III	5†	_____
		Subtotal	17	

(CONTINUED ON NEXT PAGE)

DENTAL HYGIENE

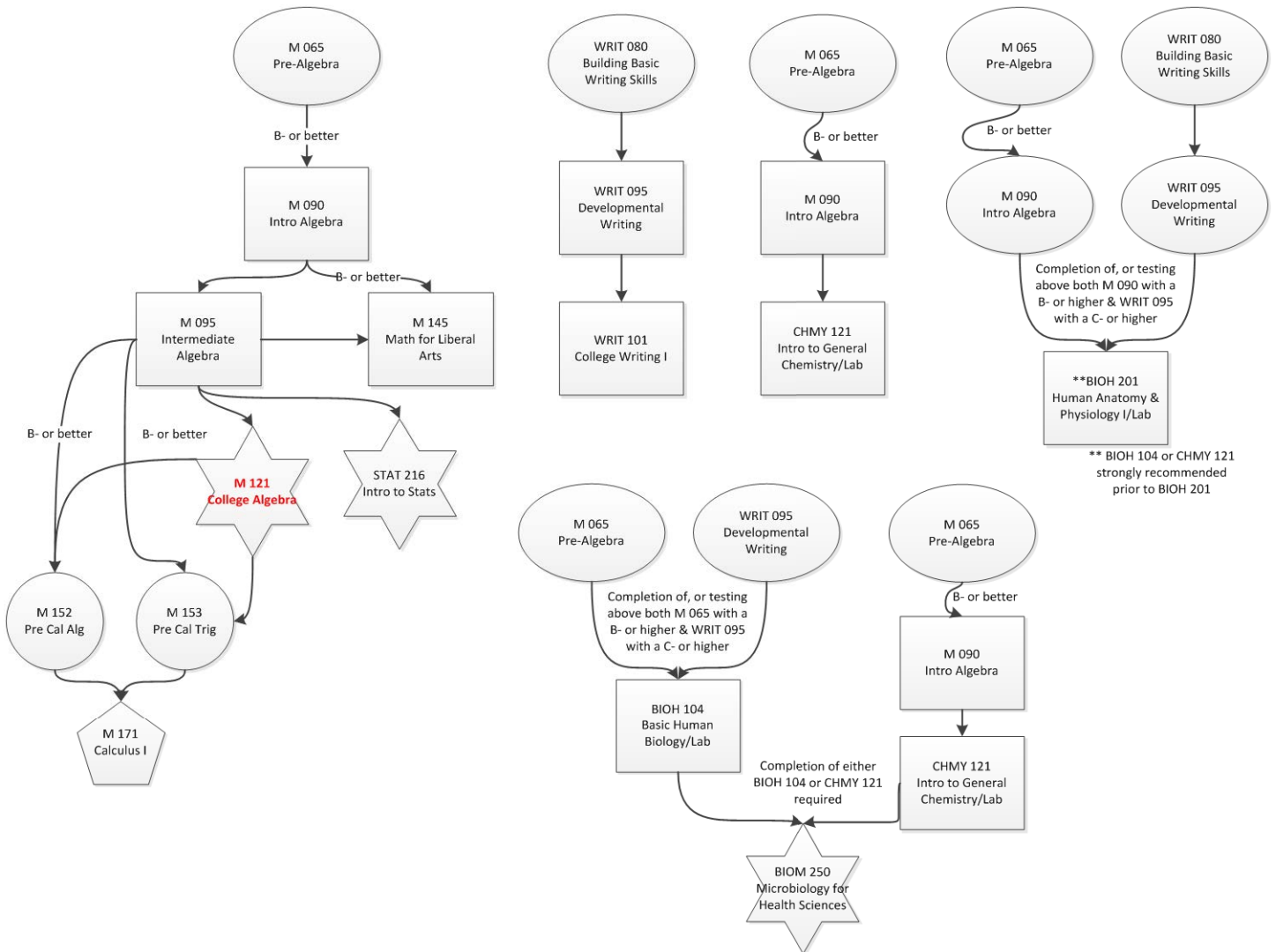
ASSOCIATE OF APPLIED SCIENCE DEGREE

SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
DENT	232*	Community Dental Health and Education	2†	_____
DENT	235*	Prof. Issues & Ethics in Dental Practice	2†	_____
DENT	280*	Clinical Dent Hyg Theory IV	1†	_____
DENT	281*	Clinical Dent Hyg Practice IV	5†	_____
PSYX	100	Intro to Psychology <b>OR</b>		
PSYX	230	Developmental Psychology	3†	_____
SOCI	101	Introduction to Sociology	<u>3†</u>	_____
		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.





# DENTAL HYGIENE



[Prospective Students](#)

[Current Students](#)

[Dental Community](#)

[On-Site Dental Clinic](#)

[HOME](#)



## Welcome

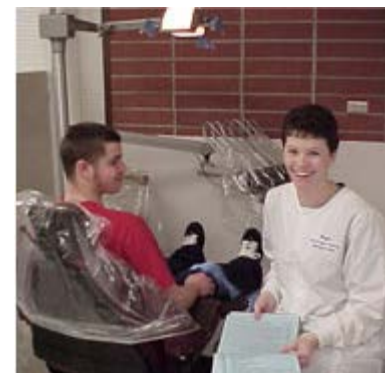
Welcome to the MSU-Great Falls College of Technology's Dental Hygiene program's website. We are very proud of this program and thank you for your interest; hopefully the following information will enlighten you about our program and the profession.

MSU-COT dental hygiene program has been in existence since 2002. Fall 2009 will be the start of our 7th year, with 77 students graduated from our program. There are currently 16 seniors and 16 juniors enrolled in the Dental Hygiene Program. Each fall the program accepts 16 students so our program is fairly small. The smallness is advantageous to our students, allowing more individualized attention and a greater amount of hands on experience. Of course, with all advantages there are disadvantages; limited enrollment lends itself to a competitive student selection process.

With an increase in population growth and a greater retention of natural teeth, the access to dental care is more important than ever. Making a commitment to becoming a dental health care professional will not prove to be just a job but a lifelong fulfilling career. Thank you for your interest in our dental hygiene program.

[Posting Form for Policy on Third Party Comments Commission on Dental Accreditation \(CODA\)](#)

- [Mission Statement](#)
- [Program Goals](#)
- [What's New](#)
- [Course Work](#)
- [Meet our Faculty/Staff](#)
- [Program Outcomes](#)
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## DIETETIC TECHNICIAN

## ASSOCIATE OF APPLIED SCIENCE

Program Director: 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.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6154
Application Fee	\$	30
Insurance	\$	23
Lab Fees	\$	330
Books/Supplies	\$	1682
<b>TOTAL</b>	<b>\$</b>	<b>8,218</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**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. If students plan to have prerequisite work completed by August 15, 2013, their application will be considered for acceptance. However, students with prerequisite coursework completed by May 31, 2013, will be considered first.

**FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
WRIT	101**	College Writing I	3†	_____
NUTR	221	Basic Human Nutrition	3†	_____
BIOH	104**	Basic Human Biology & Lab <b>OR BOTH</b>	4†	_____
BIOH	201**	Human Anatomy and Physiology I <sup>^</sup> <b>AND</b>	4†	_____
BIOH	211*	Human Anatomy and Physiology II <sup>^</sup>	4†	_____
CHMY	121**	Introduction to General Chemistry/Lab <b>OR</b>		_____
CHMY	141**	College Chemistry I/Lab <sup>^</sup>	4†	_____
		Subtotal	14-18	

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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 Dietetics	1†	_____
NUTR	251*	Community Nutrition	2†	_____
		Required Elective <sup>^^</sup>	3†	_____
		Subtotal	18	

<sup>^</sup>These courses are recommended if the student is considering seeking a bachelor's degree in dietetics.

<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).

**PROGRAM COURSE REQUIREMENTS AFTER FORMAL ACCEPTANCE****FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
NUTR	230*	Nutrition Counseling	3†	_____
FON	100	Cert in Food Service Safety and San.	1†	_____
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	3†	_____
		Subtotal	16	

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
NUTR	225*	Basic Life Cycle Nutrition	3†	_____
NUTR	260*	Food Service Management	3†	_____
NUTR	270*	Nutrition Medical Therapy	3†	_____
NUTR	271*	Nutrition Medical Therapy Laboratory	3†	_____
NUTR	261*	Food Service Management Laboratory	3†	_____
		Subtotal	15	

(CONTINUED ON NEXT PAGE)

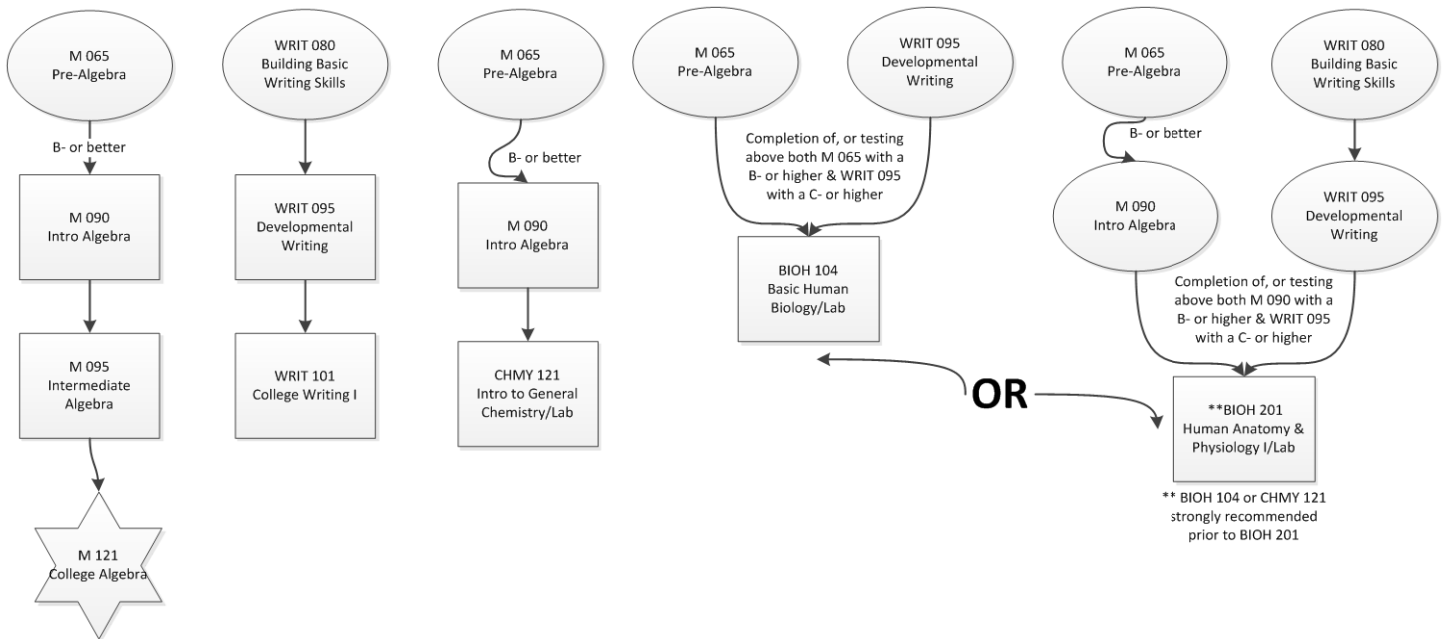
DIETETIC TECHNICIAN

ASSOCIATE OF APPLIED SCIENCE

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.





## DIETETIC TECHNICIAN

### Associate of Applied Science Degree

Welcome to the Montana State University Great Falls, College of Technology's Dietetic Technician Program website. We are very excited about offering students this new program and career opportunity.

With input from the dietetic community, MSU-COT has created a dietetic technician program. Dietetic technicians are employed in a number of settings including clinical, foodservice, community programs, fitness and wellness centers, and food companies. They are trained to conduct nutrition screenings, manage food service operations, develop and teach nutrition classes, and develop recipes and menus.

"According to the Academy of Nutrition and Dietetics 2007 Dietetic Compensation and Benefits Survey, half of all DTRs in the U.S., who have been working in the field full-time for four years or less earn between \$30,000 and \$40,000 per year...According to the U.S. Bureau of Labor and Statistics, employment is expected to grow about as fast as the average for all occupations through the year 2014."

For more career information, please contact the [Academy of Nutrition and Dietetics](#).



#### CONTACT INFORMATION:

**Susan Cooper, MS, RD**  
 Dietetic Technician  
 Program Director  
 406-771-4357  
[scooper@msugf.edu](mailto:scooper@msugf.edu)

**Megann McDonald**  
 Administrative Associate  
 406-771-4350  
[megann.mcdonald@msugf.edu](mailto:megann.mcdonald@msugf.edu)

#### PROGRAM INFORMATION

- [Prerequisite and Course Work](#)
- [Accreditation Status](#)
- [Course Descriptions](#)
- [Mission Statement and Long Term Goals](#)
- [Student Outcomes](#)
- [Program Specific Calendar 2011-2012](#)
- [Program Specific Calendar 2012-2013](#)

#### STUDENT INFORMATION

- [Application](#)
- [Scholarships](#)
- [Financial Aid](#)
- [Transfer Guide](#)
- [Career Information](#)
- [Student Handbook](#)



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](mailto:jhenderson@msugf.edu).

EMT-INTERMEDIATE 99

CERTIFICATE OF APPLIED SCIENCE DEGREE

Program Director: Joel Henderson

**NOTE: This program is under significant review. Please contact the Program Director for more information.**

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:**

- Upon completion the student of MSUGF Intermediate Program will demonstrate the ability to comprehend, apply, and evaluate the clinical information as it relates to the pathologies of patients with pulmonary, neurological, endocrine, allergies and anaphylaxis, gastroenterological, and urological prehospital emergencies.
- Upon completion the student of MSUGF Intermediate Program will demonstrate technical proficiency in all skills necessary assess and care for patients with pathologies relating to pulmonary, neurological, endocrine, allergies and anaphylaxis gastroenterological, and urological pre-hospital emergencies.
- Upon completion the student of MSUGF Intermediate Program will demonstrate personal behaviors consistent with professional and employer expectation.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	4,616
Application Fee	\$	30
Insurance	\$	15
Lab Fees	\$	351
Ambulance Third Rider	\$	196
Books/Supplies	\$	856
<b>TOTAL</b>	<b>\$</b>	<b>6,064</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

STUDENTS START THE INTERMEDIATE SERIES 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 CERTIFICATE 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)**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
M 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 127	EMT-Basic	<u>7+</u>	_____
	<b>Subtotal</b>	<b>20</b>	

(MUST HAVE EMS 127 PRIOR TO STARTING INTERMEDIATE CLASSES)

**SERIES ONE (F,S)**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
EMS 140*	EMT - Intermediate I	4+	_____
EMS 155*	EMT - Intermediate II	3+	_____
EMS 222*	EMT - Intermediate I Clinical	<u>1+</u>	_____
	<b>Subtotal</b>	<b>8</b>	

**SERIES TWO (S, SU)**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
EMS 217*	EMT - Intermediate III	4+	_____
EMS 227*	EMT - Intermediate II Clinical	2+	_____
EMS 233*	EMT-Intermediate Internship	<u>1+</u>	_____
	<b>Subtotal</b>	<b>7</b>	

**TOTAL PROGRAM CREDITS – 35~**

~ 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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## 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)

Prerequisite: M 065 or qualifying math placement score

Corequisite: ACTG 094 ACTG101 Orientation (students who do not complete orientation by the end of the first week of class will be dropped from the course)

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)

Prerequisites: ACTG 101

Pre OR Corequisite: 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.

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### **ACTG 201 PRINCIPLES OF FINANCIAL ACCOUNTING**

Credits: 3

Term: (F)

Prerequisites: ACTG 102

Pre OR Corequisites: M 095, M 145, or qualifying math placement 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.

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### **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: BIOH 104 or BIOH 112

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

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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 260 Workflow Analysis & Redesign**

Credits: 3

(F, S, SU)

Pre Req or Co-Req: 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**

Credits: 3

Term: (F, S, SU)

Prerequisite: CAPP 120

Corequisite: AHMS 108

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 in-office 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: (SU)

Prerequisite/Co-requisite: Instructor approval

This course is part one of a two part clinical course which provides an introduction to Medical Assistant career and the duties and responsibilities within the clinical area of an ambulatory setting including theory and practice in equipment and supplies control. Emphasis will be toward medical asepsis, preparation and maintenance of exam rooms, vital sign assessment, assisting with routine and specialty examinations and performing respiratory testing.

### 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 250 ELECTRONIC MEDICAL PROCEDURES

Credits: 2

Term: (SU)

Prerequisite: AHMS 144, AHMS 220, AHMS 158

This course introduces student to Electronic Medical Software for both front and back office

tasks. Student will learn to register patients, scheduling, patient authorizations, creating prescriptions for provider authorization, recording injections and laboratory tests, posting patient charges and follow up appointment using e-Medsys software.

---

### **AHMA 260 LABORATORY PROCEDURES I**

Credits: 2

Term: (SU)

Prerequisite: AHMA 201, AHMA 203

This course introduces the student to the purpose of a clinical lab, introduction to microscopes, standard precautions, biohazard material safety, and quality control. In addition, basic laboratory function, routine CLIA Waived Chemistry, Urinalysis tests and bacteriological procedures are covered.

---

### **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 106 HEALTHCARE PROFESSIONAL

Credits: 2

Term: (F, S)

This course will help students learn effective time management, study aids, and note taking. Students will learn the difference between profession and occupation. The responsibility of having a membership in professional organizations, attending conferences, workshops, seminars, community involvement, and being a group member in health care. Student will also learn self-appraisal, creating a professional resume and cover letter, identify employment opportunities, and prepare for the interview process in a health care setting.

### AHMS 108 HEALTH DATA CONTENT AND STRUCTURE

Credits: 3

Terms: (F, S, SU)

Prerequisites or Co-requisites: CAPP 120

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 mid-management 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.

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#### **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.

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#### **AHMS 144 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.

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

Credits: 4

Terms: (F, S, 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. Inpatient and outpatient billing will be covered. Inpatient and outpatient billing will be covered.

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#### **AHMS 158 LEGAL AND REGULATORY ASPECTS OF HEALTHCARE**

Credits: 3

Term: (F, S)

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.

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#### **AHMS 160 BEGINNING PROCEDURAL CODING**

Credits: 3

Term: (F, S)

Prerequisites: BIOH 112

Co-requisites: AHMS 201

The structure, format and use of CPT coding for physician and non-physician services is the purpose of this course. Case studies and lab exercises are used to develop basic procedural coding skills that cover all sections of the CPT coding manual with a focus on the interpretation of CPT manual section guidelines and proper modifier usage.

### **AHMS 162 BEGINNING DIAGNOSIS CODING**

Credits: 3

Term: (F,S)

Prerequisites: BIOH 112

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 the use of the electronic ICD-9-CM with an overview of encoder software. This coding class involves hands-on coding, and knowledge of basic use of applicable coding books or the electronic ICD-9-CM.

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### **AHMS 191 SPECIAL TOPICS: RESEARCH IN HIM 1**

Credits: 1

Term: (F, S, SU)

Those who work and study in the rapidly changing HIM field rely heavily on information gathered from the Internet. This course will help student develop search strategies to obtain effective search results. It will provide students with the knowledge of how to determine the credibility of the information. Students will learn to develop, organize, and maintain a portfolio of useful HIM websites.

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### **AHMS 194 PCE TOPIC**

Credits: VARIES

Term: (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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### **AHMS 201 MEDICAL SCIENCE**

Credits: 3

Terms: (F, S)

Prerequisites: AHMS 144, BIOH 112 or BIOH 201

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.

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### **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.

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### **AHMS 212 CPT CODING**

Credits: 3

Term: (F,S)

Prerequisite: AHMS 160

A basic understanding of the CPT, coding principles should already be established. This course covers extensive procedural coding protocols that apply to interpreting and abstracting data from case studies and authentic outpatient-based medical records. Proper use of HCPCS level II codes, ASC modifiers and code sequencing is stressed. Applications include the use of encoder software to determine APC and RBRVS calculations as well as CCI compliance.

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### **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 coding of health record excerpts.

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

Credits: 3

Term: (F, S)

Co-requisite: CAPP 120 and AHMS 144, or instructor approval

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.

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### **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.

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### **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.

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### **AHMS 245 SIMULATED LAB: MEDICAL SUPPORT**

Credits: 2

Terms: (F, S)

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. This course is a mastery-level course, where students utilize skills acquired in previous programmatic courses.

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### **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.

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### **AHMS 255 MEDICAL TRANSCRIPTION I**

Credits: 3

Terms: (F)

Prerequisite OR Coreqs: AHMS 144 and CAPP 120, 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.

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### **AHMS 256 MEDICAL TRANSCRIPTION II**

Credits: 3

Term: (S)

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.

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### **AHMS 257 MEDICAL TRANSCRIPTION III**

Credits: 3

Terms: (F)

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.

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

Credits: 3

Term: (S)

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.

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### **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.

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### **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.

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### **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.

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### **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. 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.

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### **AHMS 298B Medical Billing/Coding Professional Practice Experience**

Credits: 1-3

Term: (S)

Prerequisites: AHMS 108, 156, 160, 162

Corequisites: AHMS 212, 214

Students in this course will gain professional practice experience in their program of study. Students will complete coding/reimbursement assignments using a virtual lab. The virtual lab exposes students to software utilized in health information management and healthcare reimbursement. This is a capstone course in which students solve problems and apply knowledge from previous coursework.







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## Course Descriptions - Allied Health Physical Therapist Assistant (AHPT)

### AHPT 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.

### AHPT 101 PHYSICAL THERAPIST ASSISTING I / LAB

Credits: 5 (3 Lecture, 2 Lab - 45 Lecture Hours/60 Lab Hours)

Term: (F)

Prerequisites: Acceptance Into Physical Therapy Assistant Program

Co requisites: AHPT 205, 206, 210 and 218

This is the first of two sequential skills and procedures courses in the Physical Therapy Assistant 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.

### AHPT 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 and 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 and members of the health care team in various delivery systems; development of interpersonal communication skills relating to the profession, cultural diversity, and an understanding of the commitment of the graduate to continued personal and professional development. This course provides an overview of ethical/legal/professional issues relating to the role of the Physical Therapist Assistant in health care delivery. It includes such topics as the financing of physical therapy; regulations governing Physical Therapist Assistants; APTA's code of ethics and core values; scope of PT and PTA practice; and the Physical Therapist Assistant's role in research and continued education.

### AHPT 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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### **AHPT 201 PHYSICAL THERAPIST ASSISTING II / LAB**

Credits: 5 (3 Lecture, 2 Lab - 45 Lecture Hours/60 Lab Hours)

Term: (S)

Prerequisites: AHPT 101, AHPT 205, AHPT 206 and AHPT 218 all with a grade of "76%" or higher and AHPT 210 with a grade of "Pass"

Co requisites: AHPT 213, 215, and 220

This is the second in the series of procedures and application courses. The following topics are covered: theoretical principles and application of cardiopulmonary rehab, industrial rehab, ergonomics, prosthetic and orthotic application and treatment, biofeedback, topical applications, electrotherapy, ultrasound; procedure and application of cervical and lumbar traction; gait analysis and training; theory and application of massage/manual therapy.

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### **AHPT 205 ANATOMY AND KINESIOLOGY FOR THE PTA**

Credits: 6 (4 Lecture, 2 Lab - 45 Lecture Hours/60 Lab Hours )

Term: (F)

Prerequisites: Acceptance into Physical Therapy Assistant program

Co requisites: AHPT 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.

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### **AHPT 206 PATHOPHYSIOLOGY FOR THE PHYSICAL THERAPIST ASSISTANT**

Credits: 3 Lecture Hours - 45 Lecture Hours

Term: (F)

Prerequisites: Acceptance into the Physical Therapy Assistant Program

Co requisites: AHPT 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, disorders related to pregnancy, and vestibular pathologies. The course includes student presentations on disorders pertinent to physical therapy.

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### **AHPT 210 CLINICAL EXPERIENCE I**

Credits: 3 (160 Clinical Hours - 4 weeks)

Term: (F)

Prerequisites: Acceptance into the Physical Therapy Assistant program

Co requisites: AHPT 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 AHPT 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.

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### **AHPT 213 NEUROREHABILITATION FOR THE PTA**

Credits: 6 (4 Lecture Hour, 2 Lab - 60 Lecture Hours/60 Lab hours

Term: (S)

Prerequisites: AHPT 101, AHPT 205, AHPT 206, and AHPT 218 with a grade of "76%" or higher with a grade of "C-" or higher and AHPT 210 with a grade of "Pass"

Co requisites: AHPT 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.

### **AHPT 215 INTRODUCTION TO ORTHOPEDICS**

Credits: 4 (3 Lecture, 1 Lab - 45 Lecture Hours and 30 Lab Hours)

Term: (S)

Prerequisites: AHPT 101, 205, 206, and 207 with a grade of "C-" or higher and AHPT 218 with a grade of "76%" or higher and AHPT 210 with a grade of "Pass"

Co requisites: AHPT 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.

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### **AHPT 218 THERAPEUTIC EXERCISE FOR THE PTA**

Credits: 2 (30 Lecture Hours)

Term: (F)

Prerequisites: Acceptance into the Physical Assistant Program

Co requisites: AHPT 101, 205, 206, and 210

This course introduces the physical therapist assistant student to topics such as exercise physiology, exercise prescription tailored to the individual, general therapeutic exercises, aquatic therapy, relaxation techniques, group therapy, 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.

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### **AHPT 220 CLINICAL EXPERIENCE II**

Credits: 3 (160 Clinical Hours, 4 weeks in length)

Term: (S)

Prerequisites: AHPT 101, 205, 206, 207 with a grade of "C-" or higher and AHPT 218 with a grade of "76%" or higher and AHPT 210 with a grade of "Pass"

Co requisite: AHPT 201, 213, 215

The students will continue to build on their clinical experiences from AHPT 210 previous coursework. This will consist of a four-week clinical rotation at an approved site.

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### **AHPT 225 SEMINAR AND PROJECT IN PHYSICAL THERAPIST ASSISTING**

Credits: 2

Term: (SU)

Prerequisites: AHPT 101, 201, 205, 206, 213, 215, 218 with a grade of "76%" or higher and AHPT 210, 220 with a grade of "Pass"

Co requisite: AHPT 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.

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### **AHPT 230 CLINICAL EXPERIENCE III**

Credits: 6 (360 Clinical Hours, 9 weeks in length)

Term: (SU)

Prerequisites: AHPT 101, 201, 205, 206, 213, 215, 218 with a grade of "76%" or higher and AHPT 210, 220 with a grade of "Pass"  
Co requisite: AHPT 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.





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## Course Descriptions - Anthropology (ANTY)

### ANTY 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.

### ANTY 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.

### ANTY 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 History (ARTH)

### **ARTH 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.

### **ARTH 160 GLOBAL VISUAL CULTURE**

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.

### **ARTH 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 - Visual and Studio Arts (ARTZ)

### **ARTZ 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.

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### **ARTZ 101 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.

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### **ARTZ 105 VISUAL LANGUAGE - DRAWING**

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.

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### **ARTZ 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 - 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 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 - 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: (S: Offered in the spring on even-numbered years)

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: Offered in the fall on odd-numbered years)

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.

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**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.

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## Course Descriptions - Human Biology (BIOH)

### BIOH 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.

### BIOH 104 BASIC 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 CHMY 121 with a C or better is **strongly recommended** before enrolling in BIOH 201 Anatomy & Physiology I & Lab.

### BIOH 108 BASIC ANATOMY (COURSE removed from catalog Spring 2012)

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. BIOH 104 - Basic Human Biology/Lab is highly recommended before enrolling in this course.

### BIOH 112 HUMAN FORM AND FUNCTION I

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.

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### **BIOH 113 HUMAN FORM AND FUNCTION II**

Credits: 3 (Lecture only, no lab)

Terms: (F,S)

Prerequisites: BIOH 104 or BIOH 112

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.

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### **BIOH 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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### **BIOH 201 HUMAN ANATOMY AND PHYSIOLOGY I/LAB (EQUIV TO 301)**

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. BIOH 104 and CHMY 121 strongly recommended.

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### **BIOH 211 ANATOMY AND PHYSIOLOGY II/LAB (EQUIV TO 311)**

Credits: 4 (3 lecture, 1 lab)

Terms: (F,S)

Prerequisites: BIOH 201 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 Anatomy & Physiology I and II.





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## Course Descriptions - Business: General (BGEN)

### **BGEN 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.

### **BGEN 105 INTRODUCTION TO BUSINESS**

Credits: 3

Terms: (F,S)

Corequisite: BGEN094 Orientation (students who do not complete orientation by the end of the first week of class will be dropped from the course)

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.

### **BGEN 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.

### **BGEN 255 LEGAL ENVIRONMENT**

Credits: 3

Term: (S)

Prerequisite: BGEN 105

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.







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## Course Descriptions - Business: Management (BMGT)

### **BMGT 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.

### **BMGT 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.

### **BMGT 210 SMALL BUSINESS ENTREPRENEURSHIP**

Credits: 3

Term: (S)

Prerequisite: BMGT 235, BMKT 225, ACTG 201, WRIT 122, or Instructor consent.

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.

### **BMGT 215 HUMAN RESOURCE MANAGEMENT**

Credits: 3

Term: (F)

Prerequisite: BMGT 235

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.

### **BMGT 235 MANAGEMENT**

Credits: 3

Terms: (S)

Prerequisite: BGEN 105

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.

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### **BMGT 277 PRINCIPLES OF STRATEGIC MANAGEMENT**

Credits: 3

Term: (S)

Prerequisite: BMGT 235, BMGT 215, ACTG 201

This course explores the issues of defining corporate-level mission, objectives, and goals, 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 - Business: Marketing (BMKT)

### BMKT 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.

### BMKT 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.

### BMKT 225 MARKETING

Credits: 3

Terms: (F)

Prerequisite: BGEN 105

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.

### BMKT 240 ADVERTISING

Credits: 3

Term: (S)

Prerequisite: BGEN 105

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.

### BMKT 242 INTRODUCTION TO GLOBAL MARKETS

Credits: 3

Term: (Sufficient Demand)

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.



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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 (1/2 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 the operating system and word processing, spreadsheet, database, and presentation 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.

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### **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.

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### **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.

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### **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.

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### **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: (F, 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.

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### **CHMY 143 COLLEGE CHEMISTRY II/LAB**

Credits: 4 (3 lecture, 1 lab)

Term: (S: Offered in the spring on odd-numbered years)

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.

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### **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. 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 transcribed 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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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 transcribed on the student's undergraduate transcript.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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 228 WEB CONSTRUCTION

Credits: 4

Term: (S)

Prerequisites: CAPP 120 or permission of instructor

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. It also stresses the effective use of search engine optimization, Section 508 compliance, buying a domain name and acquiring a hosting server. Various utilities, such as FTP and graphics editing software, will also be examined and utilized.

### CIT 232 WEB DESIGN

Credits: 3

Term: (F)

Prerequisites: GDSN 130 and CIT 228, or permission of instructor

This course continues to utilize the skills developed in CIT 228 to build Web pages,

concentrating on high profile, advanced applications to develop students' skill sets. Students will plan, design, and develop a client web and mobile site. The course includes a thorough examination and implementation of Adobe Dreamweaver.

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### **CIT 280 DESKTOP PUBLISHING**

Credits: 3

Term: (S)

Prerequisite: GDSN 130 and GDSN 217 or permission of instructor

This course focuses on layout, and the tools/equipment used to accomplish the design/concept at hand. Students build their skills in brainstorming and producing publications such as newsletters, brochures, advertisements and résumés. Some publications are client driven. The course includes a thorough examination and implementation of Adobe InDesign.

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## Course Descriptions - College Studies (COLS)

### **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.

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### **COLS 103 BECOMING A SUCCESSFUL STUDENT**

Credits: 2  
Term: (F, S)

A survey course designed to help new MSU-Great Falls students become oriented with the College, its resources, and academic planning and success strategies. Specific topics include college policies, procedures and resources, short and long-term academic planning, career and academic major exploration, goal setting, money management, and other areas related to student success. Basic academic skills such as note-taking, study skills, test-taking strategies, and time management skills will also be covered. Students are expected to enroll in this class during their first semester or prior to completing 16 semester credits.

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### **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.







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## 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.







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## 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 111 Programming with Java I

Credits: 3

Term: (F)

Prerequisites: CAPP 120, CAPP 158 and M095, or instructor approval

This course is designed to introduce the concepts of programming using JAVA. Areas of study will include design of the program including the use of flowcharts; analysis of the program the requirements, implementation of the program and troubleshooting where necessary. Programs will use basic java objects, methods and classes in programming, arrays, control structures, basic data types, iteration, and sequencing will be utilized to accomplish the design requirements of the program.

### 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 228

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. This class will explore, examine, and evaluate currently used programming languages that allow Web interactivity and connectivity.





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## 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 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 introduces 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

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.

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### **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

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

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### **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. This course is designed as a practical task-oriented application utilizing the basic skills covered in prerequisite classes.

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### **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 Carpentry Program. The course is designed as a practical task-oriented application.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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

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students take the Performance Assessments for certification under NCCER with MINIMAL supervision using the skills and knowledge presented in the NCCER Carpentry program.



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## 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 (DENT)

### DENT 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.

### DENT 101 INTRODUCTION TO DENTAL HYGIENE/PRECLINIC

Credits: 2 (30 Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

This course is an introduction to the dental clinic and dental hygiene profession. This course presents both the theoretical basis and the clinical application of the numerous procedures performed by the dental hygienist. Includes infection control, client management and positioning, ergonomics, assessment data gathering and documentation, as well as an introduction to the principles of basic dental instruments their application for basic dental hygiene treatment.

### DENT 102 INTRODUCTION TO DENTAL HYGIENE/PRECLINIC LAB

Credits: 2 (60 Lab Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

Entry level practical experience to compliment the didactic information provided in DENT 101. The student is expected to perform all aspects of client assessment along with basic instrumentation. Competency evaluations will be given to each student assessing his/her own technical expertise. In addition to technical aspects of dental hygiene, the student will be evaluated on professionalism, infection control and efficiency.

### DENT 110 THEORY OF INFECTION CONTROL AND DISEASE PREVENTION

Credits: 1 (15 Online Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene or Dental Assistant 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.

### DENT 115 HEAD, NECK AND ORAL ANATOMY

Credits: 4

Term: (F)

The majority of this course includes content in head, neck and dental anatomy. General,

basic human biology concepts are also covered to provide the student an overall foundation to the dental sciences. Oral tissue embryology, histology, and anatomy and physiology are also introduced. 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.

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### **DENT 116 DENTAL OFFICE MANAGEMENT**

Credits: 2  
Term: (F)

This course exposes students to various front office procedures and dental practice management responsibilities commonly performed in a professional dental office. Students will learn the fundamentals of computer use in the dental practice by utilizing a dental practice management software package. Skills include creating patient records and a database to set up patient accounts, scheduling appointments, billing patient and third parties, and processing 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 online and on-campus requirements.

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### **DENT 118 ORAL ANATOMY FOR HYGIENISTS**

Credits: 3 (45 Lecture Hours)  
Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

The majority of this course focuses on the anatomy of the head, neck, and dentition. Oral tissue histology is 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.

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### **DENT 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, infection control practice, radiology equipment, supplies, and darkroom procedures, biological effects of radiation, radiation protection, intraoral exposure technique, and landmark identification and mounting of radiographs. The practical component applies radiographic theory and technique in practice.

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### **DENT 121 ORAL RADIOLOGY/RADIOGRAPHY II**

Credits: 2  
Term: (S)

Prerequisite: DENT 115, DENT 120

Oral Radiology II includes didactic, laboratory, and clinic instruction. Content in this course emphasizes perfection of intraoral techniques, extraoral radiography, 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.

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### **DENT 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.

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### **DENT 123 CHAIRSIDE THEORY AND PRACTICE I**

Credits: 4

Term: (F)

Corequisite: DENT 110, DENT 115

Chairside Theory and Practice I covers all aspects of the clinical dental assistant's duties in a general dental practice. It includes lecture, laboratory and clinical sessions covering infection control procedures, dental instruments, equipment, impression materials, basic lab procedures and chairside procedures (including patient preparation, medical history review, taking vital signs, dental charting, & taking impressions.) Occupational safety & infection control is emphasized throughout the course.

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### **DENT 124 CHAIRSIDE THEORY AND PRACTICE II**

Credits: 4

Term: (S)

Prerequisite: DENT 110, DENT 115, DENT 123

Chairside II is a continuation of Chairside I and includes lecture, laboratory and clinical sessions. Content includes emphasis on esthetic restorative procedures, rubber dam concepts, coronal polishing, pit and fissure sealant placement, fluoride treatments, dental cements, golds, waxes, and fabrication and placement of temporary crowns and restorations.

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### **DENT 125 RADIOGRAPHIC INTERPRETATION**

Credits: 1 (15 Lecture Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

This course will utilize all foundational knowledge received in DENT 122; Oral Radiology. This course will provide necessary skills to properly evaluate and interpret all radiographic series.

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### **DENT 130 DENTAL MATERIALS**

Credits: 2 (15 Lecture Hours / 30 Lab Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

Materials most often used in dentistry are studied focusing on the characteristics, physical properties, manipulation, and practical application of each material. Safety precautions relating to each material and procedure are emphasized.

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### **DENT 140 DENTAL SCIENCES/PREVENTIVE DENTISTRY**

Credits: 4

Term: (S)

Prerequisite: DENT 115, DENT 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.

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### **DENT 145 DENTAL SPECIALTIES**

Credits: 3

Term: (S)

Prerequisites: DENT 115, DENT 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.

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### **DENT 150 CLINICAL DENTAL HYGIENE THEORY I**

Credits: 2 (30 Lecture Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

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 DENT 151.

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### **DENT 151 CLINICAL DENTAL HYGIENE PRACTICE I**

Credits: 4 (180 Clinical Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

Practice in beginning instrumentation and client assessment by providing introductory comprehensive dental hygiene treatment to fellow students, healthy adults along with pediatric and adolescent clients. Ensuring that proper dental clinic procedures and policies are followed along with becoming competent in record management emphasized. This course accompanies DENT 150 Clinical Dental Hygiene Theory I.

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### **DENT 160 PERIODONTOLOGY I**

Credits: 3 (45 Lecture Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

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 DENT 151.

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### **DENT 165 ORAL HISTOLOGY AND EMBRYOLOGY**

Credits: 2 (30 Lecture Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

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.

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### **DENT 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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### **DENT 195 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 letters. This course is offered in hybrid format having clinical, online, and on-campus requirements.

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### **DENT 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.

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### **DENT 223 CLINICAL DENTAL HYGIENE THEORY II**

Credits: 2 (30 Lecture Hours)

Term: (SU)

Prerequisite: Acceptance into the Dental Hygiene Program

A continuation of DENT 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 client care. Theory background is used to support activities in DENT 251.

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### **DENT 232 COMMUNITY DENTAL HEALTH AND EDUCATION**

Credits: 2 (30 Lecture and Community Service Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

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 the development of a community project including assessment, planning, implementation, and evaluation components will encourage lifelong participation in community dental health care and volunteerism.

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### **DENT 235 PROFESSIONAL ISSUES & ETHICS IN DENTAL PRACTICE**

Credits: 2 (30 Lecture Hours)

Term: (S)

A study of the legal and ethical responsibilities associated with the practice of dental hygiene and dentistry. Practice management and preparation for career longevity will also be explored.

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### **DENT 237 GERONTOLOGY & SPECIAL NEEDS PATIENTS**

Credits: 2 (30 Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

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.

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### **DENT 240 LOCAL ANESTHESIA / NITROUS OXIDE THEORY AND LAB**

Credits: 2 (15 Lecture Hours and 30 Lab Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

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.

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### **DENT 250 CLINICAL DENTAL HYGIENE THEORY III**

Credits: 1 (15 Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

A continuation of DENT 223, 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 DENT 252.

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### **DENT 251 CLINICAL DENTAL HYGIENE PRACTICE II**

Credits: 4 (180 Clinic Hours)

Term: (SU)

Prerequisite: Acceptance into the Dental Hygiene Program

A continuation of DENT 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 DENT 223.

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### **DENT 252 CLINICAL DENTAL HYGIENE PRACTICE III**

Credits: 5 (225 Clinical Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

A continuation of DENT 251, 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 DENT 250.

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### **DENT 260 PERIODONTOLOGY II**

Credits: 2

Term: (SU)

Prerequisite: Acceptance into the Dental Hygiene Program

This course is a continuation of DENT 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 the fundamentals of building a case study which will prepare the student for further development of their capstone project in DENT 250, 252, 280, 281.

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### **DENT 263 GENERAL AND ORAL PATHOLOGY**

Credits: 3 (45 Lecture Hours)

Term: (F)

Prerequisite: Acceptance into the Dental Hygiene Program

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.

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### **DENT 280 CLINICAL DENTAL HYGIENE THEORY IV**

Credits: 1 (15 Lecture Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

A continuation of DENT 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 DENT 281.

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### **DENT 281 CLINICAL DENTAL HYGIENE PRACTICE IV**

Credits: 5 (225 Clinical Hours)

Term: (S)

Prerequisite: Acceptance into the Dental Hygiene Program

A continuation of DENT 252, this course provides multiple clinical experiences focused in time management, increased periodontally involved client treatment, and 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 clinical 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 DENT 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)

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.

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## **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.

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## 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)

Prerequisites: EET 120

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)

Prerequisites: EET 121

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)

Prerequisites: EET 240

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.

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### **EET 245 DIGITAL ELECTRONICS**

Credits: 4

Term: (S)

Prerequisites: EET 121

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.



## EMT- Intermediate 99 Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Emergency Medical Technicians and Paramedics 29-2041.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$5,003.00	\$825.00	\$196.00	n/a	\$6,024.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
				In Field	Out of Field	Seeking	Not	In Field	Out of Field	
EMT-Intermediate 99	0									

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

**EMERGENCY SERVICES - EMERGENCY MEDICAL  
TECHNICIAN PARAMEDIC (EMT-P)**

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: 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-199 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:**

- Program Cognitive Objective:
  - At the completion of the program, the graduate of MSUGF Paramedic program will demonstrate the ability to comprehend, apply, and evaluate the clinical information relative to his role as an entry level Paramedic in Cascade County, the State of Montana, and the U.S.
- Program Psychomotor Objective:
  - At the completion of this program, the Paramedic student will demonstrate technical proficiency in all skill necessary to fulfill the role of entry level Paramedic in Cascade County, the State of Montana, and the U.S.
- Program Affective Objective:
  - At the completion of the program, the Paramedic student will demonstrate professional and employer expectations for the entry level Paramedic in Cascade County, the State of Montana, and the U.S.

**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/EMERGENCY%20SERVICES/PARAMEDICAPPLICATION.PDF](http://technology.msugf.edu/programs/healthsciences/emergency%20services/paramedicapplication.pdf)

**• Minimum Requirements/prerequisite courses of Program Application**

Application minimum requirement do not fully fulfill AAS degree requirements upon completion of Paramedic courses. Students will be expected to work with advisor to attain AAS Paramedic degree plan of study.

- Current National Registry Certification as an EMT.
- Current Certification BLS HCP
- M 095 (Intermediate Algebra), or higher with a grade of at least a C-.
- WRIT 101 (College Writing), or higher with a grade of at least a C-.
- BIOH 104 (Basic Human Biology/Lab), or higher with a grade of at least a C-

- 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 February 1st with a deadline of June 1<sup>st</sup>.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6924
Application Fee	\$	30
Insurance	\$	23
Lab Fees	\$	682
Ambulance Third Rider	\$	480
Books/Supplies	\$	1565
<b>TOTAL</b>	<b>\$</b>	<b>9,703</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium

rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**GENERAL EDUCATION REQUIREMENTS**

**FALL SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHMS 142	Intro to Med Terms	1†	_____
WRIT 101**	College Writing I	3†	_____
EMS 127	EMT - Basic	7†	_____
M 121**	College Algebra <b>OR</b> Any math course in the MUS Core Subtotal	<u>3-4†</u> 14	_____

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
BIOH 104**	Basic Human Biology and Lab	4†	_____
COMM 135	Interpersonal Communication <b>OR</b>		
PSYX 100	Introduction to Psychology <b>OR</b>		
SOCI 101	Introduction to Sociology	3†	_____
	Electives***	<u>7</u>	_____
	Subtotal	14	_____

\*\*\*: PROGRAM ADVISOR will work with student to choose appropriate electives

**REQUIREMENTS ONCE FORMALLY ACCEPTED AS A PARAMEDIC STUDENT.**

**SEMESTER ONE (FALL)**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
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	1†	_____
AH 140	Pharmacology	<u>2†</u>	_____
	Subtotal	17	_____

**SEMESTER TWO (SPRING)**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
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>2†</u>	_____
	Subtotal	14	_____

**SUMMER SEMESTER (INTERNSHIP)**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
EMS 233*	Internship	6†	_____

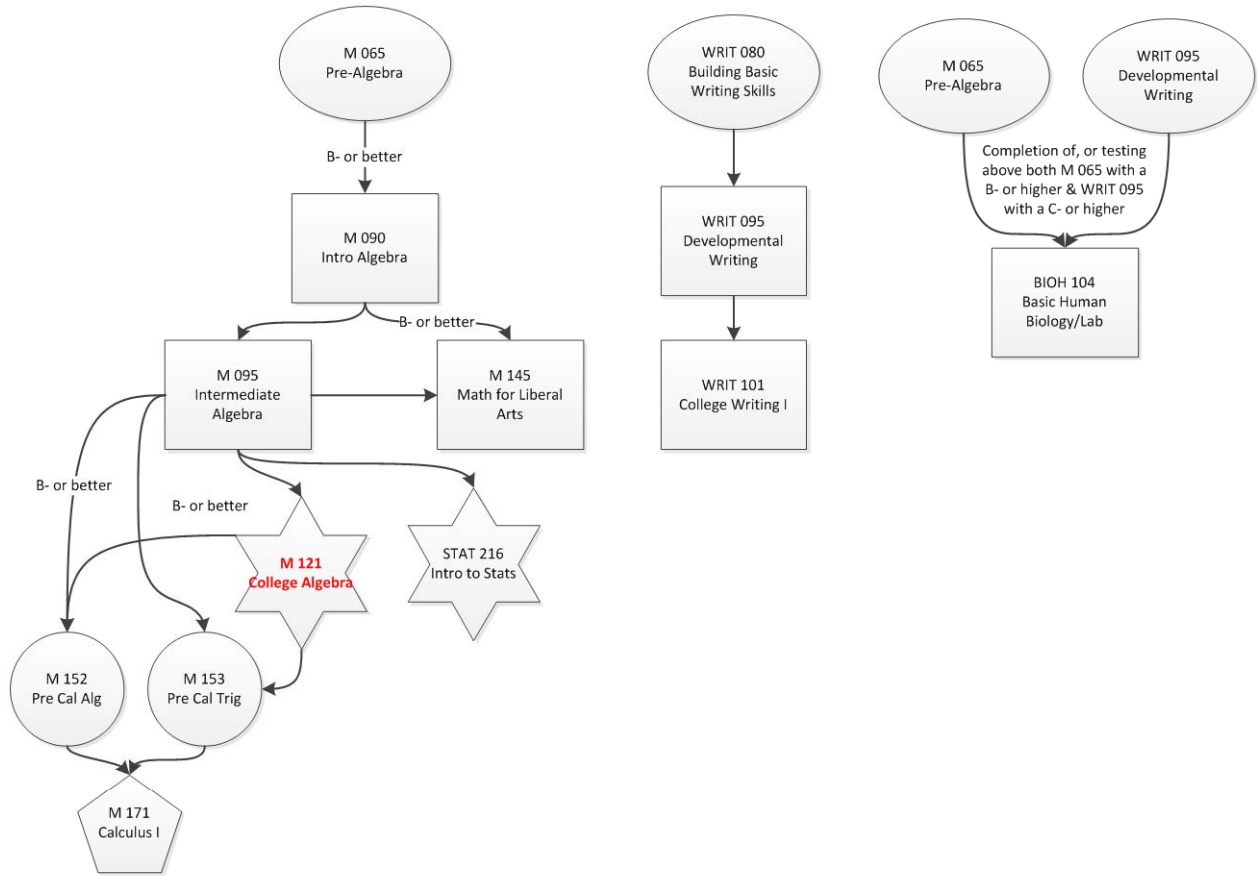
**TOTAL PROGRAM CREDITS – 65~**

~ 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.

(CONTINUED ON NEXT PAGE)



EMERGENCY SERVICES - EMERGENCY MEDICAL  
TECHNICIAN PARAMEDIC (EMT-P)





# Emergency Medical Services

Montana State University of Great Falls  
College of Technology

[HOME](#) | [APPLICATION](#) | [FACULTY](#) | [MSU-GF](#) | [MT EMS](#) | [NREMT](#) | [CAAHEP](#) | [COAEMSP](#) |

## WANTED: INDIVIDUALS TO SAVE LIVES!

Can you see yourself as a **Paramedic**, working on an ambulance, or at a fire department, maybe as a Flight Medic?

**Montana State University Great Falls College of Technology Paramedic Program** may have a spot for you. We need individuals that are high in energy, strong minded, good communicators, and most of all caring. Our Paramedic Program offers an A.A.S degree as an EMT Paramedic, with personalized instruction, high end **simulated Hospital** experience, and progressive clinical sites.

MSUGF-COT Paramedic Program has an outstanding pass rate of the NREMT exam.

For details on how to become a Paramedic student check out the requirements in our application, click on link above "APPLICATION", or in our catalog.

### Job Outlook

**Employment for EMTs and paramedics is expected to grow faster than the average for all occupations through 2016 (by 19%). Job prospects should be good, particularly in cities and private ambulance services. EMTs and paramedics who have advanced education and certifications, such as Paramedic level certification, should enjoy the most favorable job prospects as clients and patients demand higher levels of care before arriving at the hospital.**

## NEWS

- **PROGRAM RECEIVES ACCREDITATION!!**
  - MSU-GF Paramedic program receives national accreditation, see links to CAAHEP and CoAEMSP
  - 2nd program to receive national accreditation ever in Montana!
- **SIMMULATED HOSPITAL COMPLETED!!**
  - Working ambulance part of newly constructed simulated hospital.
  - Montana/region's only institution with a fully functional simulated hospital with an actual ambulance.
- **Inquire about our EMT-Basic course.**
- **Download Paramedic Application:** New application is available with updated requirements for next fall's

## Who to Contact

### Joel Henderson

EMS Program Director

**Office:** 406-268-3718

**Fax:** 406-771-4317

**email:** [jhenderson@msugf.edu](mailto:jhenderson@msugf.edu)

**EMERGENCY SERVICES  
FIRE AND RESCUE TECHNOLOGY**

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: 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.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6,154
Application Fee	\$	30
Lab Fees	\$	70
Fire Training School	\$	6,000
Books/Supplies	\$	1,157
<b>TOTAL</b>	<b>\$</b>	<b>13,411</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

A RESIDENCY OF 7 CREDIT HOURS MUST BE TAKEN TO MSU—GREAT FALLS TO QUALIFY FOR DEGREE.

**GENERAL EDUCATION REQUIREMENTS**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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	2†	_____
		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/](http://www.montana.edu/wwwfire/) for the latest schedule of technical courses and costs.

**TECHNICAL EDUCATION REQUIREMENTS**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
EMS	127	EMT Basic	7†	_____
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*	Building Construction	2†	_____
FRS	265*	Incident Management & Safety	3†	_____
FRS	270*	Tactical Operations and Company Management	5†	_____
FRS	285*	Hazardous Materials	5†	_____
		Subtotal	39	

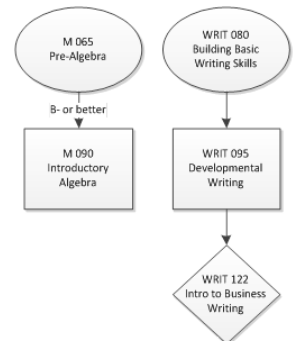
**TECHNICAL ELECTIVES – 6 CREDITS REQUIRED**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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

Program Director: Rhonda Kueffler

**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 giving 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	\$	6,154
Application Fee	\$	30
Lab Fees	\$	55
Books/Supplies	\$	2,150
<b>TOTAL</b>	<b>\$</b>	<b>8,389</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**FALL SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
ARTZ	105	Visual Language - Drawing	3†	_____
BGEN	105	Intro to Business	3†	_____
CAPP	120	Introduction to Computers	3†	_____
WRIT	122**	Intro to Business Writing	3†	_____
GDSN	101*	Design Topics and Principles	<u>3+</u>	_____
		Subtotal	15	

**SPRING SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
ARTZ	101	Art Fundamentals	3†	_____
BMKT	240*	Advertising	3†	_____
COMM	135	Interpersonal Communication	3†	_____
CIT	228*	Web Construction	4+	_____
GDSN	130	Typography	<u>3+</u>	_____
		Subtotal	16	

**FALL SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
BMKT	225*	Marketing	3†	_____
M	108**	Business Mathematics	4†	_____
GDSN	217*	Digital Design	3†	_____
GDSN	219*	Digital Illustration	3†	_____
CIT	232*	Web Design	<u>3+</u>	_____
		Subtotal	16	

**SPRING SEMESTER**

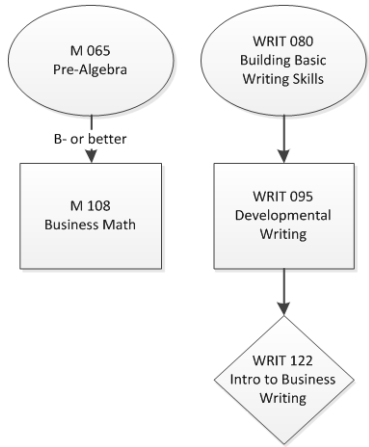
<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
CIT	280*	Desktop Publishing	3†	_____
GDSN	221*	Publishing and Pre-Press	3†	_____
GDSN	109*	Digital Photography	4†	_____
ITS	299*	Capstone: Internship	3†	_____
		Elective Option	<u>3</u>	_____
		Subtotal	16	

**SUGGESTED ELECTIVES**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
CAPP	158*	MS Access	3†	_____
CSCI	210*	Web Programming	3†	_____

**TOTAL PROGRAM CREDITS – 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.



# HEALTH INFORMATION CODING SPECIALIST

CERTIFICATE OF APPLIED SCIENCE DEGREE

**Program Director: 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](http://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	\$	4616
Application Fee	\$	30
Lab/Program Fees	\$	-
Books/Supplies	\$	2700
<b>TOTAL</b>	<b>\$</b>	<b>7,345</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**NOTE:** Curriculum is based on a full time schedule.

**SUMMER SEMESTER**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
AHMS	144	Medical Terminology	3†	_____
AH	180	Basic Pharmaceuticals	1+	_____
BIOH	112	Human Form and Function I	4+	_____
CAPP	120	Introduction to Computers	<u>3†</u>	_____
		Subtotal	11	

**FALL SEMESTER**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
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	

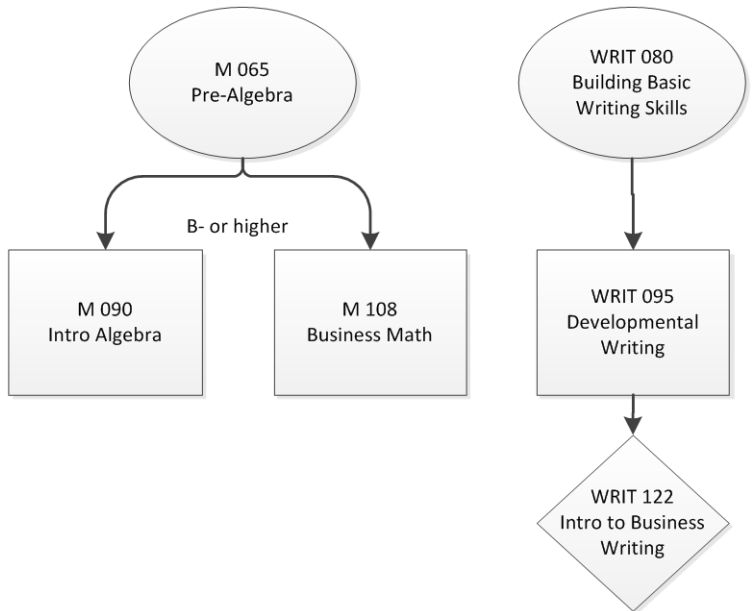
**SPRING SEMESTER**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
WRIT	122**	Introduction to Business Writing	3†	_____
M	090**	Introductory Algebra <b>OR</b>		
M	108**	Business Math <b>OR higher</b>	4+	_____
PSYX	100	Introduction to Psychology <b>OR</b>		
SOCI	101	Introduction to Sociology <b>OR</b>		
COMM	135	Interpersonal Communication	3+	_____
AHMS	214*	ICD Coding	3+	_____
AHMS	212*	CPT Coding	3+	_____
AHMS	298A*	HICS/Coding – Professional Practice Exp	<u>2+</u>	_____
		Subtotal	18	

**\*\*Recommended Course: CCA Exam Preparatory Course\*\***

**TOTAL PROGRAM CREDITS – 47~**

~ 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 Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Medical Records and Health Information Technicians 29-2071.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$4,633.00	\$2,063.00		n/a	\$6,696.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses		EMPLOYMENT						Continuing Education #	
				Employed				Continuing Education & Employed			
				In Field	Out of Field	Seeking	Not	In Field	Out of Field		
Health Information Coding Specialist	5	#	%	1	-	-	-	-	-	-	-

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a



# HEALTH INFORMATION TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: 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 (CAHIIM).

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	\$	7431
Application Fee	\$	30
Books/Supplies	\$	3427
<b>TOTAL</b>	<b>\$</b>	<b>10,888</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**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/SEM
AHMS	191	Special Topics: Research in HIM 1	1+	_____
CAPP	120	Introduction to Computers	3+	_____
AHMS	105	Healthcare Delivery	2+	_____
AHMS	144	Medical Terminology	3+	_____
BIOH	112	Human Form and Function I	4+	_____
WRIT	122**	Introduction to Business Writing	3+	_____
		Subtotal	16	

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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 Healthcare	3+	_____
		Subtotal	13	

**SUMMER SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
COMM	135	Interpersonal Communication <b>OR</b>		
PSYX	100	Introduction to Psychology <b>OR</b>		
SOCI	101	Introduction to Sociology	3+	_____
M	090**	Introductory Algebra <b>OR</b>		
M	108**	Business Math <b>OR higher</b>	4+	_____
AH	265*	Electronic Health Record in Med. Practice	3+	_____
		Subtotal	10	

**FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
AHMS	162*	Beginning Diagnosis Coding	3+	_____
AHMS	227*	Health Information Management	3+	_____
AHMS	280*	Overview of Health Informatics Systems	4+	_____
AHMS	156*	Medical Billing Fundamentals	4+	_____
AHMS	208*	Healthcare Statistics	2+	_____
		Subtotal	16	

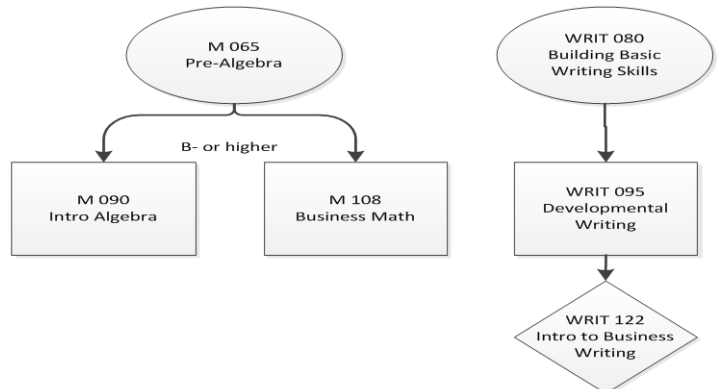
**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
AHMS	160*	Beginning Procedural Coding	3+	_____
AHMS	245*	Simulated Lab – Medical Support	2+	_____
AHMS	214*	ICD Coding	3+	_____
AHMS	240*	Clinical Quality Assessment	3+	_____
AHMS	288*	HIT Exam Preparation	3+	_____
AHMS	298*	HIT – Professional Practice Experience <b>OR</b>		
AHMS	298A*	HIT – Professional Practicum – Coding	2+	_____
		Subtotal	16	

\*Plus a 1 credit Independent Study to supplement PPE in the field of HIT

**TOTAL PROGRAM CREDITS – 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.





# MONTANA STATE UNIVERSITY • GREAT FALLS COLLEGE OF TECHNOLOGY

CURRENTLY ONLINE

## HEALTH INFORMATION TECHNOLOGY A Career in Health Information Management (HIM)

HIM professionals can expect to be in high demand as the health sector expands into the next century. In fact, the Bureau of Labor Statistics cites health information technology as one of the 20 fastest growing occupations in the US.

On top of strong job prospects, competitive salaries also await graduates. More than half of new graduates with an Associate's degree start with salaries in the \$20,000 to \$30,000 range. By five years out, one can earn upwards of \$50,000 - \$75,000 annually (with a Bachelor's degree). In the 2010-2011 academic year, there were 12 graduates in the HIT program, out of a total of 66 students that year, for a degree production rate of 18% for the program.

You can also gain further information on the different areas of employment within health information technology from the American Health Information Management Association (AHIMA) by viewing their [career video](#). On this site, you can also gain valuable knowledge of the [growth and income](#) potential you will experience while working in health information technology.

Please access the information on AHIMA's new focus, [e-HIM](#) for a view into the future of health information technology.

The Health Information Technology program at MSU-GF College of Technology is committed to providing students with the required skills and abilities to perform at high levels in the health information technology field. The Health Information Technology program's goals are also geared to support the community with highly skilled and educated professionals.



### CONTACT INFORMATION

Lynn Ward  
[lynn.ward@msugf.edu](mailto:lynn.ward@msugf.edu)

### QUICK LINKS

- [HIT Degree](#)
- [HIT Curriculum](#)
- [HIC Certificates](#)
- [HIC Curriculum](#)
- [HICS GE Information](#)
- [RHIA](#)
- [Health Informatics](#)
- [Health Informatics Tech Professional Certificate](#)



Our **Health Information Technology** Program at MSU-GF is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).



Montana State University-Great Falls College of Technology • 2100 16th Avenue South • Great Falls, MT 59405 | [MAP IT](#)  
406.771.4300 • 800.446.2698 • FAX: 406.771.4317 • TDD: 406.771.4311

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## HEALTHCARE INFORMATICS TECH PROFESSIONAL CERTIFICATE

**Program Director: 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. **THEN**
- A completed Application Packet Cover and Check-Off Sheet must be included by **all** students entering the program (Check-Off Sheet included in this packet)

**AND**

- Fit **one** of the bulleted intake criteria listed below:

#### Informatics Tech Intake Criteria

- 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, Computer Science, Network Technology, Information Technology, allied health and/or related fields. *Provide Official College transcript\**;

- 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, Computer Science, Network Technology, Information Technology, 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;*
- Currently enrolled in a two- or four-year Medical Office Management, Health Information Management, Medical Assistant, Medical Technician, Computer Science, Network Technology, Information Technology, allied health and/or related fields and consent of Program Director. *Provide most recent transcripts;*
- 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;*

*\*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	\$	1539
Application Fee	\$	30
Books/Supplies	\$	1046
<b>TOTAL</b>	<b>\$</b>	<b>2,615</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**NOTE: Curriculum is based on a full time schedule. The courses should be taken in the specified order to ensure that you have completed all prerequisites for each course.**

#### **FIRST SEMESTER**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
CAPP	120	Introduction to Computers	3+	_____
AHMS	105	Healthcare Delivery	2+	_____
AHMS	144	Basic Medical Terminology	3+	_____
HCI	1016*	Introduction to Healthcare Informatics	<u>3±</u>	_____
		Subtotal	11	_____

#### **SECOND SEMESTER**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
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	<u>3±</u>	_____
		Subtotal	13	_____

#### **TOTAL PROGRAM CREDITS – 24~**

~ 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.



# MONTANA STATE UNIVERSITY • GREAT FALLS COLLEGE OF TECHNOLOGY



## HEALTHCARE INFORMATICS TECH Professional Certificate

The healthcare industry stands on the brink of exciting new change as the transition from paper-based records systems gives way to electronic record applications and other higher-level systems of health information exchange.

The Healthcare Informatics Tech Professional Certificate was designed and developed to provide guidance to technology professionals, recent graduates of information technology or computer science, and allied health or healthcare professionals currently working in the healthcare system. The courses are designed to provide support and guidance in the transition to the Electronic Health Record.

The certificate program is under a subcontract of a multi-state consortia of colleges (Region A) supported by a federally-funded cooperative agreement through the Department of Health & Human Services (Community College Consortium of Information Technology Professionals on Health Care). The certificate consists of two distinct Tracks.

Track 1 is designed for Information Technology Professionals. Track 2 is designed for Allied Health Care and Health Care Professionals. Each track consists of a total of 16 credits. Each of these tracks was designed to be completed in one semester (< 6 months) for a student attending full-time. Students need only complete one track for completion of the program.

In seeking admission into the program, the student is required to complete all the Application Requirements found to the right on this page. The Intake Form provides specific guidance with regard to the student's educational and work related experiences.

[TOP]



### CONTACT INFORMATION

**Kathryn Peterson**  
RHIT  
[kathryn.peterson@msugf.edu](mailto:kathryn.peterson@msugf.edu)

### APPLICATION REQUIREMENTS:

- [Apply to MSU-GF](#)
- [Application Packet](#)
- [Financial Aid Form](#)

### OTHER IMPORTANT QUICK LINKS:

- [Curriculum](#)
- [Tuition/Fees](#)
- [HIT Program](#)
- [HIC Program](#)



## Healthcare Informatics Tech Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Document Management Specialists 15-1099.14](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$1,564.00	\$468.00		n/a	\$2,032.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT						Continuing Education #	
				Employed				Continuing Education & Employed			
				In Field	Out of Field	Seeking	Not	In Field	Out of Field		
Healthcare Informatics Tech	0										

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

# INTERIOR DESIGN

ASSOCIATE OF APPLIED SCIENCE DEGREE

Program Director: Julie Myers

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 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 CAD drafting and rendering and professional sample boards and finish schedules.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6,924
Application Fee	\$	30
Lab Fee	\$	-
Program Fee	\$	50
Books/Supplies	\$	2,821
<b>TOTAL</b>	<b>\$</b>	<b>9,824</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

Students are strongly advised to enter the program with good keyboarding skills.

**FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
IDSN	101	Introduction to Interior Design	3†	_____
IDSN	130	Interior Design Graphics	3†	_____
IDSN	110	History of Interior Design I Ancient-1900	3†	_____
IDSN	122	Textiles & Interior Finishes	3†	_____
CAPP	120	Intro to Computers	<u>3±</u>	_____
		Subtotal	15	

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
IDSN	131*	Presentation Drawing	3†	_____
IDSN	111*	History of Interior Design II 1900-Contemp	3†	_____
IDSN	135*	Fundamentals of Space Planning	3†	_____
IDSN	225*	Light, Color, and Lighting Systems	3†	_____
IDSN	230	Interior Architectural CAD	<u>4†</u>	_____
		Subtotal	16	

**SUMMER SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
COMM	135	Interpersonal Communication	3†	_____
IDSN	298*	Internship	<u>3-5†</u>	_____
		Subtotal	6-8	

**FALL SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
IDSN	240*	Studio I Residential	4+	_____
IDSN	266*	Kitchen and Bath I	3+	_____
WRIT	101**	College Writing I	3+	_____
ETCC	173	Architectural Construction & Materials	3+	_____
		Electives	<u>3</u>	_____
		Subtotal	16	

**SPRING SEMESTER**

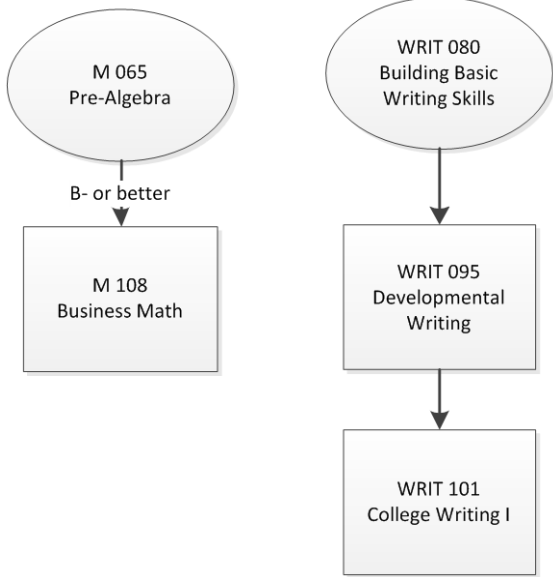
COURSE	NO.	TITLE	CREDITS	GRADE/SEM
IDSN	250*	Studio II Commercial	4†	_____
IDSN	275*	Professional Practices	3†	_____
IDSN	267*	Kitchen & Bath II	3†	_____
M	108**	Business Mathematics	4†	_____
		Electives	<u>2</u>	_____
		Subtotal	16	

**SUGGESTED ELECTIVES (5 CREDITS REQUIRED)**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
ACTG	101**	Accounting Procedures I	3	_____
ARTH	160	Global Visual Culture	3	_____
ARTZ	105	Visual Language - Drawing	3	_____
BGEN	105	Introduction to Business	3	_____
WRIT	122**	Intro to Business Writing	3	_____
CIT	280*	Desktop Publishing	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

#### Program Director: Pamela Christianson, CMA (AAMA), CPHT (PTCB), BS

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	\$	7,308
Application Fee	\$	30
Insurance	\$	38
Lab Fee	\$	291
Books/Supplies	\$	2,714
<b>TOTAL</b>	<b>\$</b>	<b>10,381</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

#### 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.

AHMA 260 and AHMA 262 must register at the same time. AHMA 260 will be offered the first half of the semester, and AHMA 262 will be offered the second half of the semester.

#### FALL SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE/SEM
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/SEM
BIOH 112	Human Form & Function I	4+	_____
AHMA 201*	Medical Assisting Clinical Procedures I	4+	_____
M 121**	College Algebra <b>OR higher</b>	3+	_____
AHMS 156*	Medical Billing Fundamentals	4+	_____
AH 140*	Pharmacology	2+	_____
	Subtotal	17	

#### SUMMER SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHMA 250*	Electronic Medical Procedures	2+	_____
AHMS 220*	Medical Office Procedures	3+	_____
PSYX 100	Introduction to Psychology	3+	_____
	Subtotal	8	

#### FALL SEMESTER

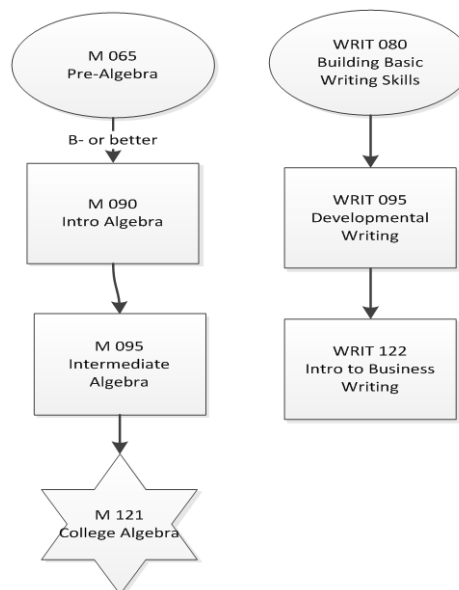
COURSE NO.	TITLE	CREDITS	GRADE/SEM
BIOH 113*	Human Form & Function II	3+	_____
AHMA 203*	Med Asst Clinical Procedures II	4+	_____
AHMA 260*	Laboratory Procedures I	2+	_____
AHMA 262*	Laboratory Procedures II	2+	_____
AHMS 158*	Legal and Regulatory Aspects of Healthcare	3+	_____
	Subtotal	14	

#### SPRING SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHMS 160*	Beginning Procedural Coding	3+	_____
AHMS 201*	Medical Science	3+	_____
AHMA 280*	Medical Assistant Exam Prep	2+	_____
AHMA 298*	Medical Assistant Practicum	4+	_____
	Subtotal	12	

#### TOTAL PROGRAM CREDITS – 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.







# MONTANA STATE UNIVERSITY • GREAT FALLS

## COLLEGE OF TECHNOLOGY

CURRENTLY ONLINE

## MEDICAL ASSISTANT

### Associate of Applied Science Degree

Medical Assistants are specially trained to work in ambulatory medical settings such as physicians' offices, clinics, and surgical centers. These multiskilled allied health personnel can function in both administrative and clinical areas. *The Medical Assistant Program offered at Montana State University-COT Great Falls, MT is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) on the recommendation of the Medical Assisting Education Review Board (MAERB). The Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, Florida 33756, phone (727)210-2350, fax (727) 210-2354.* Upon graduation from an accredited program, students are eligible to sit for the certifying examination through the AAMA.

#### What is a Medical Assistant

#### Outcomes: Graduates are prepared to:

1. Perform many "front office" tasks including insurance billing, bookkeeping, and scheduling appointments and procedures;
2. Collect and prepare laboratory specimens and perform basic laboratory tests;
3. Perform diagnostic tests, such as suture removal, electrocardiography, and "back office" duties;
4. Assist in patient care: screen patients, take vital signs, assist with office procedures, and patient exams;
5. Administer medications applying pharmacology principles; maintain medical and immunization records under medical provider's supervision;
6. Respond to and initiate written communications in a professional manner to patients and medical facilities;
7. Follow legal guidelines in maintaining documentation and patient records and understand and apply HIPPA guidelines in the office setting; and
8. Utilize computer software competently for various medical office functions.

[TOP]



#### CONTACT INFORMATION:

**Pam Christianson**  
 Medical Assistant Program  
 Director  
 406-771-4411  
[pamela.christianson@msugf.edu](mailto:pamela.christianson@msugf.edu)

**Megann McDonald**  
 Administrative Associate  
 406-771-4350  
[megann.mcdonald@msugf.edu](mailto:megann.mcdonald@msugf.edu)

#### QUICK LINKS

- [AAMA](#)
- [Curriculum](#)
- [CAAHEP](#)

#### CAREER OPTIONS

- Audiology Assistant
- Dental Aide
- Departmental Supervisor
- EEG Technician
- EMG Technician
- Histology Assistant
- Home Care Aide
- In-Serv. Educator-Medical
- Medical Admin. Assistant
- Medical Lab Technician
- Medical Records Clerk
- Medical Transcriptionist
- Office Manager
- Optometric Assistant
- Phlebotomist
- Receptionist

Potential advancement generally requires further education





## MEDICAL BILLING SPECIALIST

CERTIFICATE OF APPLIED SCIENCE DEGREE

Program Director: 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. All courses in this curriculum can be applied to the AAS in Medical Billing and Coding.

### 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	\$	4354
Application Fee	\$	30
Lab/Program Fees	\$	-
Books/Supplies	\$	1901
<b>TOTAL</b>	<b>\$</b>	<b>6,286</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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/SEM
AHMS	144	Medical Terminology	3+	_____
BIOH	112	Human Form and Function I	4+	_____
CAPP	120	Introduction to Computers	3+	_____
AHMS	108*	Health Data Content and Structure	3+	_____
AHMS	156*	Medical Billing Fundamentals	4+	_____
Subtotal			17	

### SUMMER SEMESTER

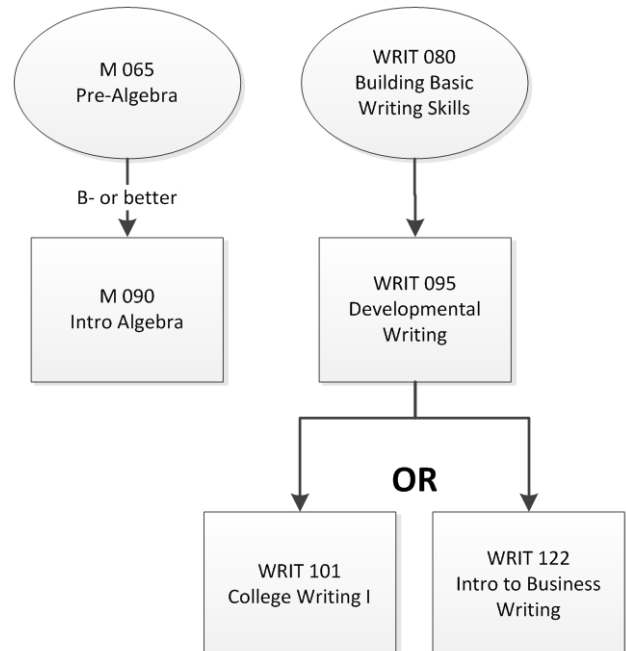
COURSE	NO.	TITLE	CREDITS	GRADE/SEM
WRIT	122**	Introduction to Business Writing OR		
WRIT	101**	College Writing I	3+	_____
PSYX	100	Introduction to Psychology OR		
SOCI	101	Introduction to Sociology	3+	_____
M	---**	090 or Higher	4+	_____
Subtotal			10	

### SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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+	_____
AHMS	252*	Computerized Medical Billing	3+	_____
AHMS	298B*	Prof Practice Exp in Billing/Coding	1-3+	_____
Subtotal			16-18	

### 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.



## Medical Billing Specialist Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Billing, Cost, and Rate Clerks 43-3021.02](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$4,376.00	\$1,898.00		n/a	\$6,274.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
				In Field	Out of Field	Seeking	Not	In Field	Out of Field	
Medical Billing Specialist	1	1	100	1	-	-	-	-	-	-

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

# MEDICAL BILLING AND CODING SPECIALIST

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: 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. Students completing this program are prepared to sit for the Certified Medical Reimbursement Specialist exam (CMRS). 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	\$	6539
Application Fee	\$	30
Lab/Program Fees	\$	-
Books/Supplies	\$	2942
<b>TOTAL</b>	<b>\$</b>	<b>9,511</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

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/SEM
AHMS 105	Healthcare Delivery	2+	_____
AHMS 144	Medical Terminology	3+	_____
BIOH 112	Human Form and Function I	4+	_____
CAPP 120	Introduction to Computers	3+	_____
M ---**	090 or Higher	<u>4+</u>	_____
	Subtotal	16	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AH 180	Basic Pharmaceuticals	1+	_____
AHMS 201*	Medical Science	3+	_____
BIOH 113*	Human Form and Function II	3+	_____
AHMS 160*	Beginning Procedural Coding	3+	_____
AHMS 162*	Beginning Diagnosis Coding	3+	_____
WRIT 122**	Intro to Business Writing <b>OR</b>		
WRIT 101**	College Writing I	<u>3+</u>	_____
	Subtotal	16	

**SUMMER SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHMS 108*	Health Data Content and Structure	3+	_____
AH 265*	Electronic Health Record in Med Practice	<u>3+</u>	_____
	Subtotal	6	

**FALL SEMESTER**

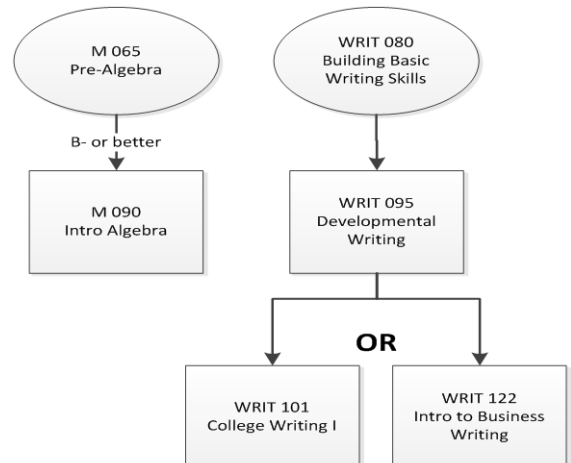
COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHMS 214*	ICD-9 Coding	3+	_____
AHMS 212*	CPT Coding	3+	_____
AHMS 280*	Overview of Health Informatics	4+	_____
AHMS 245*	Simulated Laboratory	2+	_____
AHMS 156*	Medical Billing Fundamentals	<u>4+</u>	_____
	Subtotal	16	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHMS 158*	Legal & Regulatory Aspects	3+	_____
AHMS 252*	Computerized Medical Billing	3+	_____
PSYX 100	Introduction to Psychology <b>OR</b>		
SOCI 101	Introduction to Sociology	3+	_____
AHMS 298B*	Prof Practice Exp in Billing/Coding	<u>1-3</u>	_____
	Subtotal	10-12	

**TOTAL PROGRAM CREDITS -64-66~**

~ 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

Program Director: Susan Whatley

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	\$	6,539
Application Fee	\$	30
Books/Supplies	\$	3,438
<b>TOTAL</b>	<b>\$</b>	<b>10,007</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

TASK 090 Introductory Keyboarding is recommended for students with keyboarding skills less than 45 wpm.

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/SEM
AHMS	105	Healthcare Delivery	3†	_____
AHMS	144	Medical Terminology	3†	_____
AHMS	255	Medical Transcription I	3†	_____
CAPP	120	Introduction to Computers	3†	_____
M	090**	Introduction to Algebra OR		
M	108**	Business Mathematics	4†	_____
		Subtotal	16	

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
BIOH	112	Human Form and Function I	4+	_____
AH	180	Basic Pharmaceuticals	1†	_____
AHMS	256*	Medical Transcription II	3†	_____
CAPP	154*	MS Word	3†	_____
WRIT	122**	Intro to Business Writing	3±	_____
		Subtotal	14	

**FALL SEMESTER**

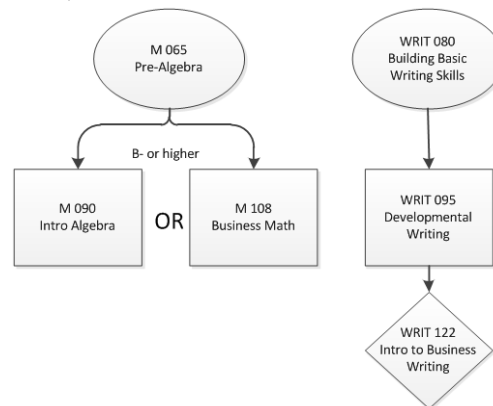
COURSE	NO.	TITLE	CREDITS	GRADE/SEM
AHMS	108*	Health Data Content and Structure	3†	_____
BIOH	113*	Human Form and Function II	3+	_____
AH	108*	Disease Concepts	2†	_____
AHMS	257*	Medical Transcription III	3†	_____
AHMS	201*	Medical Science	3±	_____
		Subtotal	14	

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
AHMS	118	Health Care Personnel and Supervision	2†	_____
AHMS	158*	Legal and Regulatory Aspects of Healthcare	3†	_____
AHMS	258*	Medical Transcription Practicum	3†	_____
AHMS	106*	Healthcare Professional	2†	_____
PSYX	100	Introduction to Psychology OR		
SOCI	101	Intro to Sociology	3†	_____
AH	150	Fitness for Life	2†	_____
AH	265	EHR in Medical Practice	3±	_____
		Subtotal	18	

**TOTAL PROGRAM CREDITS - 62~**

~ 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

Program Director: Susan Whatley

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	\$	3,846
Application Fee	\$	30
Books/Supplies	\$	1,971
<b>TOTAL</b>	<b>\$</b>	<b>5,847</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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/SEM
AHMS	144	Medical Terminology	3†	_____
BIOH	112	Human Form and Function I	4+	_____
CAPP	120	Introduction to Computers	3†	_____
M	090**	Introductory Algebra <b>OR</b>		
M	108**	Business Mathematics	4†	_____
AHMS	255*	Med Transcription I	3†	_____
		Subtotal	17	

#### SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
WRIT	122**	Intro to Business Writing	3†	_____
AH	180	Basic Pharmaceuticals	1†	_____
AHMS	158*	Legal & Regulatory Aspects of Healthcare	3†	_____
AHMS	256*	Med Transcription II	3†	_____
AHMS	201*	Medical Science	3†	_____
PSYX	100	Introduction to Psychology <b>OR</b>		
SOCI	101	Intro to Sociology	3†	_____
		Subtotal	16	

#### FALL SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
AHMS	108*	Health Data Content and Structure	3†	_____
AH	265*	Electronic Health Record-Medical Practice	3†	_____
CAPP	154*	Microsoft Word	3†	_____
		Subtotal	9	

#### TOTAL CREDITS – 42~

~ 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

## Medical Transcription Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site [Medical Transcriptionists 31-9094.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,838.00	\$1,650.00		n/a	\$5,488.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
				In Field	Out of Field	Seeking	Not	In Field	Out of Field	
Medical Transcription	3	2	67	1	1	-	-	-	-	-

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a



## PRACTICAL NURSE

ASSOCIATE OF APPLIED SCIENCE DEGREE

Program Director: TBA

Program Faculty: 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	\$	6539
Application Fee	\$	30
Insurance	\$	23
Uniforms	\$	225
Course Fees	\$	257
Program Fee	\$	135
Books/Supplies	\$	1598
<b>TOTAL</b>	<b>\$</b>	<b>8,807</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

**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	CREDITS	GRADE/SEM
BIOH	201**	Human 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/SEM
NUTR	121*	Clinical Human Nutrition	2†	_____
BIOH	211*	Human 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/SEM
NRSG	130*	Fundamentals of Nursing	7†	_____
NRSG	135*	Nursing Pharmacology	3†	_____
NRSG	138*	Gerontology for Nursing	<u>2†</u>	_____
		Subtotal	12	

**SPRING SEMESTER**

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
NRSG	140*	Adult Nursing	7†	_____
NRSG	142*	Maternal Child Nursing	3†	_____
NRSG	144*	Mental Health Nursing	2†	_____
NRSG	148*	Leadership Issues	<u>2†</u>	_____
		Subtotal	14	

(CONTINUED ON NEXT PAGE)

PRACTICAL NURSE

ASSOCIATE OF APPLIED SCIENCE DEGREE

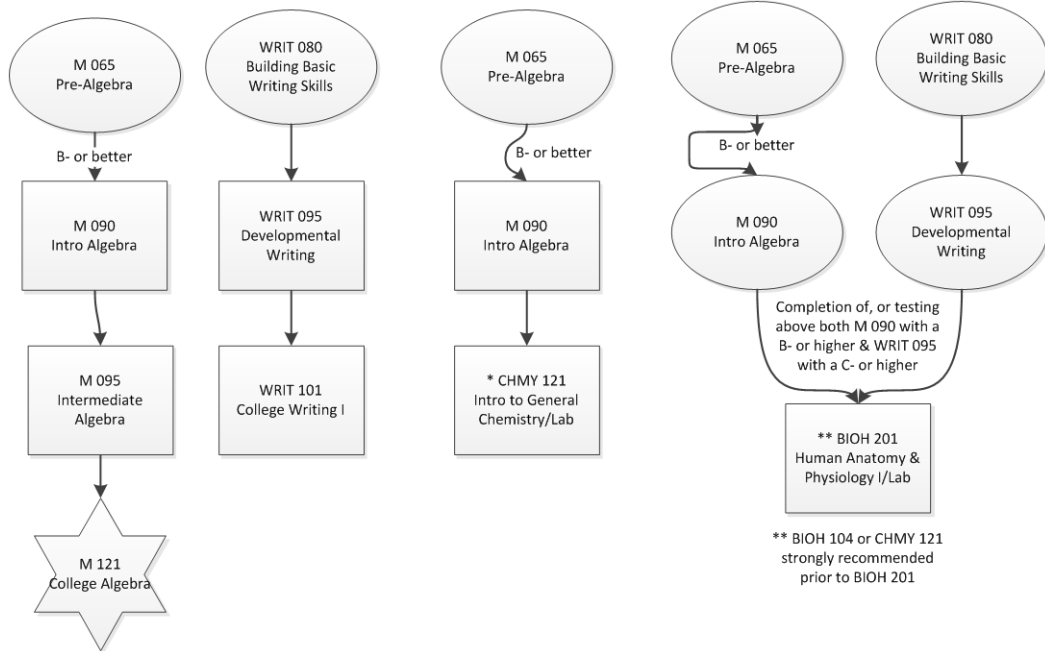
SUGGESTED ELECTIVES

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
AH	120*	IV Therapy	1	_____

\* 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~

~ 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.





## NURSING

### "Nurses Put the Care Into Health Care"



Founded in 1961, MSU Great Falls College of Technology Nursing includes one of Montana's oldest PN programs.

The Nursing Department has classes starting every fall. This program can be completed within one year. Students will be utilizing the newly opened SIM hospital which will allow students to fulfill some of their clinical requirements, allowing flexibility related to fluctuation in care settings census. Use of Simulation hospital will allow enhanced educational opportunity to reinforce classroom and lab requirements.

In 2011 MSU Great Falls College of Technology was approved to start an Associates of Science RN program. The first cohort of students will begin in fall 2012. The ASN program is 2 semesters in length. All students will be currently working LPNs or currently in the Practical Nurse program.

MSU Great Falls College of Technology Nursing is approved by the Montana State Board of Nursing and accredited by the Northwest Commission on Colleges and Universities.



### QUICK LINKS

- [ASN Student Handbook](#)
- [Course Sequence](#)
- [Course Schedule](#)
- [Faculty](#)
- [Practical Nurse](#)
- [Registered Nurse](#)
- [PN Application](#)
- [RN Application](#)
- [Test Scores](#)

### CONTACT INFORMATION

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**Cynthia Schultz, RN, BSN**  
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 406-771-4356



## PHARMACY TECHNICIAN

PROFESSIONAL CERTIFICATE – Online (except for on-site clinical)

Program Director: Pam Christianson

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 a 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, pharmacy calculations, ethics, pharmacology and healthcare delivery methods pertaining to pharmacy law, practice and calculations.

### ESTIMATED RESIDENT PROGRAM COST\*:

Tuition and Fees	\$	3077
Application Fee	\$	30
Course Fees	\$	-
Montana Board of Pharmacy Licensing Fee	\$	60
Books/Supplies	\$	1042
<b>TOTAL</b>	<b>\$</b>	<b>4,209</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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 Health Sciences Division.

### FALL SEMESTER (PRE-REQUISITE COURSES)

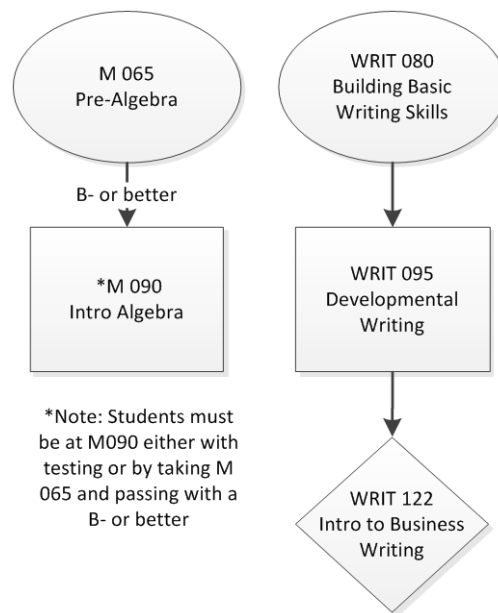
COURSE NO.	TITLE	CREDITS	GRADE/SEM
WRIT 122**	Introduction to Business Writing	3†	_____
PHAR 100	Intro to Pharm Practice for Techs	2+	_____
PHAR 101	Pharmacy Calculations	3+	_____
CAPP 120	Introduction to Computers	3+	_____
AHMS 144	Basic Medical Terminology	<u>3±</u>	_____
	Subtotal	14	

### SPRING SEMESTER (PROGRAM COURSE REQUIREMENT AFTER FORMAL ACCEPTANCE)

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHMS 105	Healthcare Delivery	2†	_____
PHL 221	Intro to Philosophy & Biomed Ethics	3+	_____
AH 140*	Pharmacology	2†	_____
PHAR 112 *	Pharmacy Practice, Law, & Calc	4+	_____
PHAR 198*	Internship	<u>4±</u>	_____
	Subtotal	15	

### TOTAL PROGRAM CREDITS - 29~

~ 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.





# **Pharmacy Technician Program**

Student Information and  
Application Packet Spring 2012

Revised December 2011

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**Dear Prospective Pharmacy Technician Student,**

Thank you for your interest in the Pharmacy Technician Certificate program here at Montana State University-Great Falls College of Technology. With the program's inception spring 2010, our college and the local pharmacists on our advisory board were pleased to learn of the interest in this program by hundreds of potential students! As a result of that interest, it has become necessary to adjust to a limited enrollment application process beginning fall 2010 for the spring 2011 semester.

Although the Pharmacy Technician Certificate program is not itself accredited, MSU – Great Falls is accredited by The Northwest Commission on Colleges and Universities as an institution. The program will prepare you to enter the profession and work toward completion of your pharmacy technician certification upon graduation. As a part of the Introduction to Pharmacy Technician Course, you will be expected to complete a “Pharmacy Technician/Technician-In-Training” application in order to work at your chosen clinical sites. Once you complete the program and graduate, you will have approximately 12 months to sit for the Pharmacy Technician Certification Board (PTCB) exam or the Exam for the Certification of Pharmacy Technicians (ExCPT) to become a nationally certified pharmacy technician.\* As a graduate of the program, having completed 90 hours of hands-on training split between retail and acute care pharmacies and having successfully passed your certification exam, you will have a competitive advantage over other potential Pharmacy Technician applicants and would likely be hired at a higher wage and have more promotion opportunities due to your education and experience.

The Pharmacy Technician program is available completely online with 90 hours of required clinical experience in pharmacy settings. The pharmacy experience if at all possible is scheduled in pharmacies in or close to your location. The program has a limited enrollment capacity of **twenty-three new students in the spring of each year**. The small class size is advantageous to you as a student, allowing you more individualized attention and more opportunity for hands-on experience as well as a greater opportunity for employment after graduation. The student selection process is done by points, in the event of two students reaching the 23<sup>rd</sup> spot, having the same point value, then, the first applicant turned in will be chosen. Information regarding the profession, the program, and application materials for spring 2012 entry are enclosed in this packet. **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 contact Pam Christianson at 406) 771-4411 or [pam.christianson@msugf.edu](mailto:pam.christianson@msugf.edu) Please don't hesitate to contact us.

Sincerely,

Pamela Christianson, CMA (AAMA), CPhT (PTCB), BS  
Medical Assisting & Pharmacy Technology Program Director  
Montana State University-Great Falls  
2100 16th Ave. S  
Great Falls, MT 59405  
406-771-4411

*\*Note: National PTCB or ExCPT Certification do not substitute for state licensure through the Montana Board of Pharmacy.*

**MONTANA STATE UNIVERSITY-GREAT FALLS  
COLLEGE OF TECHNOLOGY  
PHARMACY TECHNICIAN CERTIFICATE**

**Job description and occupational outlook**

Pharmacy technicians help licensed Pharmacists provide medication and other health care products to patients. Technicians usually perform routine tasks to help prepare prescribed medication, such as counting pills, verifying prescription information, mixing medications and labeling bottles. They also perform administrative duties, such as answering phones, preparing insurance claims for patients, stocking shelves, taking inventory and operating cash registers. When working in a clinical setting, Pharmacy Techs must work under a Pharmacist's supervision to read charts and prepare medications for patients. Technicians refer any questions regarding prescriptions, drug information, or health matters to a pharmacist. Upon graduation, you will have the skills and knowledge that will enable you to qualify for entry-level positions in pharmacies as well to sit for one of the national certification exams. Courses are online with on-site clinicals in pharmacies close to students' homes.

About 75 percent of Pharmacy Technician jobs are in retail pharmacies, either independently owned or part of a drugstore chain, grocery store, department store, or mass retailer. About 20 percent of jobs are in hospitals and about 5 % are in mail-order and Internet pharmacies, offices of physicians, pharmaceutical wholesalers, or with the Federal Government. Employment of pharmacy technicians is expected to increase by 32 percent from 2006 to 2016, which is much faster than the average for all occupations. The median salary in Montana in 2010 was \$13.78/ hr with a median annual salary of \$24,289.

The MSU-Great Falls Pharmacy Technician Certificate program has limited enrollment program accepting up to 23 students each spring semester. Interested students must complete a current application to the program (**separate from the institution application**) for acceptance and are urged to contact Student Central or the Program Director for student advising specific to program admission requirements.

Following acceptance to the program, Pharmacy Technician program students will receive their training through a variety of methods including online discussions, practice in mock procedures, and actual clinical experience in pharmacies in their local communities. All Pharmacy Technician program coursework must be completed with a "C-" or better and must be either completed prior to, or concurrently with PHA 150, Hospital & Community Practice, to continue in and/or graduate from the program. Students must arrange their own clinical sites and schedules with the assistance of their instructor. Program fees do not cover certification examination, transportation or lodging costs (if necessary) during clinical practice. Students will be required to arrange and pay for their transportation and lodging for their clinical experiences. There may also be additional immunization requirements beyond the initial ones required with the college application depending on the clinical site.

Students at MSU-Great Falls are required to carry their own health insurance if they take 4 or more credits. If you need health insurance it is available at registration time. Students will be financially responsible for their health care if they become ill or injured in the clinical setting. Please contact Student Central for further information on student health insurance.

Student Central  
MSU-Great Falls College of Technology  
Phone – 406-771-4414  
Fax - 406-771-4329



## **Pharmacy Technician Certificate Program Admissions Process**

The Pharmacy Technician program admissions committee will review completed application packets after the due date.

Students who apply to the Pharmacy Technician Certificate program must have already have successfully completed (C- or better) **M 065—Pre-Algebra**, or have tested into **M 090—Introductory Algebra**, and **have completed WRIT 095—Developmental Writing (or their equivalent courses)**.

Students must complete many of the courses in the curriculum prior to entry to the Pharmacy Technician program.

Courses that must be completed or currently taking before applying to the Pharmacy Technician Program:

WRIT 122 Introduction to Business Writing  
PHA 100 Introduction to Pharmacy Technician  
PHA 101 Pharmacy Calculations & Pharmaceuticals  
AHMS 144 Basic Medical Terminology  
CAPP 120 Introduction to Computers

Students may take ahead of time or during the program the following courses:

PHL 221 Introduction to Philosophy & Biomed Ethic  
AH 140 Pharmacology  
AHMS 105 Health Care Delivery in the US  
PHA 110 Introduction to Pharmacy practice, & PHA150 Hospital and Community Pharmacy Practice, however, are restricted to entry **only** by the students accepted into the program.

**The complete Pharmacy Technician Certificate program application must be submitted to:**

Susan Gassaway, RN, MS  
Director of Pharmacy Technician Program  
2100-16<sup>th</sup> Ave S  
Great Falls, MT 59405

**Note:** Applications will be time and date stamped as they are received. Only complete applications of qualified applicants will be considered. Applications must be received by November 1, 2011, to be considered for acceptance in the class Spring of 2012. If the slots are not filled in the first selection after November 1<sup>st</sup>, the applications will be accepted until December 1, 2011.

### **Pharmacy Technician program characteristics/expectations**

You can expect to commit to a busy semester when accepted into the Pharmacy Technician Certificate program at MSU-Great Falls College of Technology. One of the first things you will be expected to do following acceptance in to the program is to attend a mandatory orientation in person or via teleconference. When the semester begins it will be important for you to remember that most online courses include assignments that require you to prioritize and dedicate time to program course work, clinical experiences and any other program requirements that may arise. It will be necessary at times for you to be able to balance your coursework deadlines with family, social and work obligations. Students should expect to log in to their courses regularly, several times each week to ensure they receive all communications from instructors in a timely manner and keep up with course requirements.

There are a variety of learning activities within the program which make for an exciting and challenging experience. You should read assigned material and complete any other assignments online. A good rule of thumb is that for every class hour, a student will spend **at least 2** hours outside of class in preparation for class and/or completion of assignments. A full-time load for college students is 12 credits and a 14 or 15

credit load is equivalent to working a full-time 40 hour a week job.

**Student course requirements:**

Students who apply to the Pharmacy Technician Certificate program must have already have successfully completed (C- or better) **M 065—Pre-Algebra**, or have tested into **M 090—Introductory Algebra**, and complete **WRIT 095—Developmental Writing (or their equivalent courses)**.

The Pharmacy Technician program curriculum is as follows:

**FALL SEMESTER**

<b>COURSE NO.</b>	<b>TITLE</b>	<b>CREDITS</b>
WRIT 122	INTRODUCTION TO BUSINESS WRITING	3
PHA 101	PHARMACY CALCULATIONS& PHARM.	3
CAPP 120	INTRODUCTION TO COMPUTERS	3
PHA 100	INTRO TO PHARM TECH	2
AHMS 144	BASIC MEDICAL TERMINOLOGY	3
	<b>SUBTOTAL</b>	<b>14</b>

**SPRING SEMESTER**

<b>COURSE NO.</b>	<b>TITLE</b>	<b>CREDITS</b>
PHL 221	INTRO TO PHILOSOPHY & BIOMED ETHICS	3
AH 140	PHARMACOLOGY	2
AHMS 105	HEALTH CARE DELIVERY IN US	2
PHA 110	INTRODUCTION TO PHARMACY PRACTICE	4
PHA 150	HOSPITAL AND COMMUNITY PHARMACY PRACTICE	4
	<b>Subtotal</b>	<b>15</b>

**Total 29**

**TOTAL PROGRAM CREDITS - 29~**

~ 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.

**Information regarding transferable courses:**

Coursework taken at other educational institutions may be designated as equivalent courses for MSU-Great Falls College of Technology. For a current listing of approved equivalent courses, visit the Transfer Guide under Student Information at:

[https://atlas.montana.edu:9001/pls/gfagent/hwzkxfer.p\\_selstate](https://atlas.montana.edu:9001/pls/gfagent/hwzkxfer.p_selstate)[https://atlas.montana.edu:9001/pls/gfagent/hwzkxfer.p\\_selstate](https://atlas.montana.edu:9001/pls/gfagent/hwzkxfer.p_selstate)

If you have additional questions about transferability of courses, send a written request for evaluation of your prior transcript to the Registrar at MSU-Great Falls College of Technology. Please include appropriate course descriptions and official transcripts from former colleges with your request for evaluation.

**Pharmacy Technician program expenses**

The Pharmacy Technician program is a relatively inexpensive program. However, students should begin planning early for financial aid or other arrangements to meet their educational needs. Beyond tuition and fees, students will be required to purchase the following:

- Books and classroom & clinic supplies (approx. \$500)
- Montana Board of Pharmacy - Pharmacy Technician in Training Application (\$60.00)
- Certification examination fee (approx. \$129)
- Medical liability insurance
- Budgeted time for clinical experience and class work
- Transportation and lodging at distant clinical experience sites, if applicable

Note: Students must arrange their own clinical sites with the assistance of the instructor.

**MSU–Great Falls College of Technology  
Pharmacy Technician Program**

**APPLICATION PACKET COVER**

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ST \_\_\_\_\_ Zip Code \_\_\_\_\_

TELEPHONE (Home) \_\_\_\_\_ (Other) \_\_\_\_\_

E-Mail ADDRESS \_\_\_\_\_

STUDENT IDENTIFICATION NUMBER \_\_\_\_\_

**Note:** Turn all application materials in **at one time** so as not to risk misplacement of any items.  
**Incomplete applications will not be reviewed for Pharmacy Technician Program slots.**

Check-off List (please check off all completed)

√	Item
	<b>Complete application and documentation for admission to MSU-GF College of Technology. Please include a copy of the Acceptance letter.</b>
	<b>Application Packet Cover &amp; Check-off sheet</b>
	<b>MSU Health Science-Student Immunization and Verification Form *</b>
	<b>Official Transcripts for all College Work (Send original transcripts to Registrar-Send copies with your application packet; including current coursework.)</b>
	<b>Application Evaluation (complete form for submission)</b>
	<b>Have completed with a C- or better M 065 Pre-Algebra or tested into M 090 Introductory Algebra</b>
	<b>Have completed with C- or better WRIT 095 Developmental Writing or tested into WRIT 122 Introduction to Business Writing</b>

**\*It is ideal to have your TB and Hepatitis B Vaccinations completed when submitting the application. It is absolutely necessary that it be started prior to entering clinical the second semester.**



# MSU – GREAT FALLS COLLEGE OF TECHNOLOGY

## Student Immunization and Verification Form

Name \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_ Date of Birth \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

Program of Study \_\_\_\_\_ Phone # \_\_\_\_\_

Email Address: \_\_\_\_\_

### IMMUNIZATIONS: PLEASE LIST DATES....

Measles, Mumps, Rubella \_\_\_\_\_ Diphtheria \_\_\_\_\_ Tetanus (within last 7-10 years) \_\_\_\_\_

Hepatitis B Series (proof of test results required) 1) \_\_\_\_\_ 2) \_\_\_\_\_ 3) \_\_\_\_\_  
 Titer \_\_\_\_\_ (STRONGLY recommended by OSHA, CDC, and MSU – Great Falls College of Technology)

TB (proof of test results required) \_\_\_\_\_ positive \_\_\_\_\_ negative \_\_\_\_\_

PPD Date completed \_\_\_\_\_ Two-step TB test required Date completed \_\_\_\_\_

Varicella (Proof of Chicken Pox or Vaccination date) \_\_\_\_\_

Current Influenza 1.) \_\_\_\_\_

### VERIFY THE FOLLOWING....

	YES	NO	Initials
Allergic to Latex or Latex products.			
CPR for Health Care Providers verification, completed and current upon admission: Online courses not accepted. (Photocopy of certification card, both sides, showing expiration and instructor's signature).			
I have read the Technical Standards Sheet for the program of application.			
I have provided proof of all immunizations or test results required.			

## **IMPORTANT APPLICATION DATES**

Only Complete applications will be accepted.

Applications can be turned in to the Health Sciences Office as soon as completed and students have either completed all the courses listed in the first semester or are currently enrolled in those courses.

November 1, 2011 –Applications due

November 15, 2011- Letter of acceptance or denial will be sent out to applicants.\*

November 23, 2011- Letter of Intent to Enroll back to Health Science Division     Attn: Susan Gassaway

November 29, 2011- Mandatory Orientation

If slots not filled in 1<sup>st</sup> selection process, applications accepted until Dec 1, 2011.

\*Applicants are accepted on a point system, the persons with the highest points will be accepted.



**MSU Great Falls College of Technology**

**Pharmacy Technician Program**

*2100 16<sup>th</sup> Avenue South  
Great Falls, MT 59405*

**APPLICATION EVALUATION 2012**

Applicant Number \_\_\_\_\_ Submission Date: \_\_\_\_\_ MT Resident (Y/N) \_\_\_\_\_ City \_\_\_\_\_

**Eligibility Assessment (Put "Y" in blank to indicate that eligibility requirement has been met)**

- Admitted to MSU—Great Falls College of Technology \_\_\_\_\_
- Hepatitis B Vaccination verification: 1<sup>st</sup> \_\_\_\_\_ 2<sup>nd</sup> \_\_\_\_\_ 3<sup>rd</sup> \_\_\_\_\_ Titer \_\_\_\_\_
- Tuberculosis testing verification (PPD): (current) \_\_\_\_\_
- Each prerequisite completed w/minimum grade of "C" (WRIT 095 & M 065) \_\_\_\_\_
- MSU Health Science Immunization form: \_\_\_\_\_

**Points for Admission to Pharmacy Technician Program**

3 points for an A, 2 points for a B, and 1 point for a C

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS/WEIGHT</u>	<u>GRADE</u>	<u>POINTS</u>
WRIT	122	INTRODUCTION TO BUSINESS WRITING	3	_____	_____
PHA	101	PHARMACY CALCULATIONS& PHARM.	3	_____	_____
CAPP	120	INTRODUCTION TO COM	3	_____	_____
PHA	100	INTRO TO PHARM TEC	2	_____	_____
AHMS	144	BASIC MEDICAL TERMINOLOGY	3	_____	_____
PHL	221	INTRO TO PHILOSOPHY & BIOMED ETHICS	3	_____	_____
AH	140	PHARMACOLOGY	2	_____	_____
AHMS	105	HEALTH CARE DELIVERY IN US	2	_____	_____

**Total Points**

\_\_\_\_\_

These classes must be completed within 5 years of applying. ~ Submission date is used in the event of tie admissions totals.

## **Film, Videotape, and/or Photograph Consent Form**

### **Montana State University-Great Falls College of Technology**

I (the undersigned) do hereby irrevocably grant to Montana State University-Great Falls College of Technology (MSUGF), its officers, agents, employees, students, assigns, and licensees, [hereinafter referred to as MSUGF] the absolute right and permission to record my likeness and/or voice with still photography, film or videotape, to edit such still photographs, film, or videotape at MSUGF's discretion, to incorporate the same into photo exhibits, motion picture films and video presentations, to use or authorize the use of still photographs, films, and/or videotapes, or any portion thereof, in any manner at any time or times throughout the world in perpetuity, to copyright, use, reuse, publish, republish, exhibit, display, print, and reprint in advertising, publicity or promotional material, magazines, books, or any other media and the right to use my name, likeness, and biographical and other information concerning me in connection with the exhibition, advertising, exploitation, promotion or any other use of such still photographs, films, and/or videotapes.

I hereby waive any right to inspect or to approve the still photographs, films, and/or videotapes or the editorial or printed matter that may be used in conjunction therewith and further waive any claim that I may have with respect to the eventual use to which they may be applied. Such still photographs, films, and/or videotapes, may be used at MSUGF's sole discretion, with or without my name, alone or in conjunction with any other material of any kind or nature.

I further expressly agree that the foregoing release is intended to be as broad and inclusive as is permitted by the law of the State of Montana and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full legal force and effect.

I acknowledge that I have read this document and understand its terms. I am signing the release freely and voluntarily.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Parent/Guardian if Minor:  
\_\_\_\_\_

Signature of Parent/Guardian:  
\_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State, Zip Code: \_\_\_\_\_

## Pharmacy Technician Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Pharmacy Technicians 29-2052.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,069.00	\$550.00	\$60.00	n/a	\$3,679.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT				Continuing Education & Employed		Continuing Education #
				Employed				In Field	Out of Field	
			%	In Field	Out of Field	Seeking	Not			In Field
Pharmacy Technician	3	0	0	-	-	-	-	-	-	-

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a



## PHYSICAL THERAPIST ASSISTANT

### ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: Brad Bechard**

**Program Faculty: Charlene Marshall**

The formal portion of the Physical Therapist Assistant (PTA) program begins fall semester with a limited enrollment of 20 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 and a minimal GPA of 2.5 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 studies.
- 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	\$	7693
Application Fee	\$	30
Insurance	\$	23
Course Fees	\$	820
Program Fee	\$	123
Books/Supplies	\$	2538
<b>TOTAL</b>	<b>\$</b>	<b>11,226</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium

**rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

Background in basic sciences and proficiency in keyboarding are essential to success in the Physical Therapy Assistant Program.

Prior to fall admission into the PTA program students must:

- Have completed high school physics AND chemistry with a "C-" or better (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)
- Provide proof of keyboarding must be completed at the high school or collegiate level with a "C-" or better. If these courses are to be taken at the collegiate level, contact the PTA program director to assure that you take the appropriate course/courses to meet the requirements for admission to the formal PTA program.
- Be admitted to MSU-GF COT and in good academic standing. Application information may be acquired at the office, or by calling Student Central at (406) 771-4414 or toll free at 1-800-446-2698 or via the Internet at <http://www.msugf.edu/>.
- Complete 40 hours or more of observation with a licensed physical therapist or physical therapist assistant. Please note that higher point values for admission to the PTA Program are awarded at 10 hour intervals. Refer to section "Observation Hours" in the application packet.
- 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.

**Please see Program website for application packet for PTA program.**

**<http://www.msugf.edu/webs/PhysTherapistAsst/index.htm>**

#### **PREREQUISITE COURSES**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
AHMS	144	Medical Terminology	3+	_____
SOCI	101	Introduction to Sociology	3+	_____
BIOH	201**	Human Anatomy & Phys I Lecture/Lab	4†	_____
BIOH	211*	Human Anatomy & Phys II Lecture/Lab	4†	_____
COMM	130	Public Speaking <b>OR</b>		
COMM	135	Interpersonal Communication	3†	_____
M	121**	College Algebra <b>OR</b>		
		any math course in the MUS Core	3†	_____
WRIT	101**	College Writing I	3†	_____
PSYX	100	Introduction to Psychology	3†	_____
PSYX	230	Developmental Psychology	3†	_____
AHPT	105	Intro to Physical Therapy Assisting	<u>3±</u>	_____
		Subtotal	32	

#### **Program Course Requirements After Formal Acceptance**

##### **FALL SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
AHPT	101*	Physical Therapist Assisting I/Lab	5†	_____
AHPT	205*	Anatomy & Kinesiology for the PTA/Lab	6+	_____
AHPT	206*	Pathophysiology for the PTA	3+	_____
AHPT	218*	Therapeutic Exercise for the PTA	2+	_____
AHPT	210*	Clinical Experience I (4-week) ~ 160 hours	<u>3±</u>	_____
		Subtotal	19	

**CONTINUED ON NEXT PAGE...**

PHYSICAL THERAPIST ASSISTANT

ASSOCIATE OF APPLIED SCIENCE DEGREE

SPRING SEMESTER

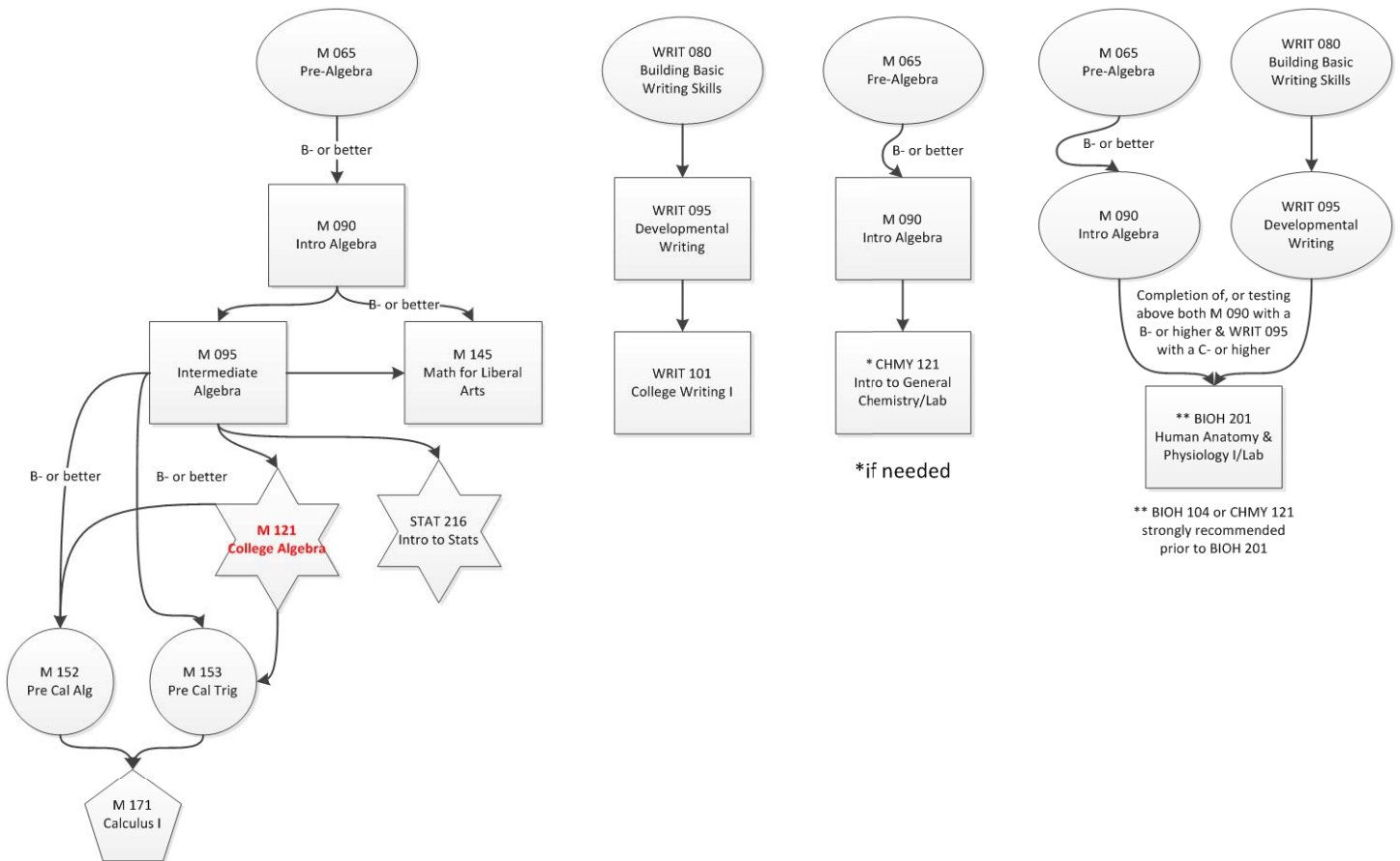
COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHPT 201*	Physical Therapist Assisting II/Lab	5+	_____
AHPT 213*	Neurorehabilitation for the PTA/Lab	6+	_____
AHPT 215*	Introduction to Orthopedics/Lab	4+	_____
AHPT 220*	Clinical Experience II (4-week) ~ 160 hours	3†	_____
	Subtotal	18	

SUMMER SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHPT 225*	Seminar & Project in PTA	2+	_____
AHPT 230*	Clinical Experience III (9-week) ~ 360 hours	6†	_____
	Subtotal	8	

TOTAL PROGRAM CREDITS – 77 ~

~ 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. A grade of 76% or better is required to pass each class within the professional phase of the program.





## PHYSICAL THERAPIST ASSISTANT

### Associate of Applied Science Degree

Physical Therapist Assistants (PTAs) provide physical therapy services under the direction and supervision of a Physical Therapist. PTAs help people of all ages who have medical problems, or other health-related conditions that limit their ability to move and perform functional activities in their daily lives. The program is based from the 4 main areas of physical therapy which include: musculoskeletal, neuromuscular, cardiopulmonary, and integumentary as outlined in the Guide to Physical Therapy. PTAs work in a variety of settings including hospitals, private practices, outpatient clinics, home health, nursing homes, schools, sports facilities, and more. PTAs must complete a 2-year associate of applied science degree and are licensed, certified, or registered in most states. Care provided by a PTA may include teaching patients/clients exercise for mobility, strength and coordination, training for activities such as walking with crutches, canes, or walkers, massage, and the use of physical agents and electrotherapy such as ultrasound and electrical stimulation.

The PTA contributes to society and the PT profession through the provision of physical therapy services, teaching, and administration.

#### PTA duties include:

1. Implement selected components of patient interventions (i.e. exercise, massage, electrical stimulation, paraffin bath, hot and cold pack, traction, and ultrasound)
2. Make modifications to progress the patient as directed by the PT
3. Ensure patient safety and comfort
4. Educate and interact with other health care providers, patients, the patient's families, and caregivers
5. Respond to patient and environmental emergency situations.

The PTA contributes to society and the PT profession through the provision of physical therapy services, teaching and administration.

Physical Therapy is the care and services provided by or under the direction and supervision of a physical therapist. More than 750,000 individuals are treated every day in the United States. The practice of physical therapy consists of diagnosing and managing movement dysfunction by enhancing physical and functional abilities. It consists of clinical applications that help to alleviate pain, prevent the onset or progression of limitations or disability, and prevent changes in health status that occur as a result of disease, disorders, conditions and injuries. Physical therapy interventions can also restore health, maintain overall wellness, improve fitness, and provide quality of life as it relates



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#### PTA PROGRAM INFORMATION

- [Advisory Sheets](#)
- [Fall 2012 Student Information and Application Packets](#)

#### OBSERVATION MATERIALS

- [Observation Form](#)
- [Observation Information](#)
- [Potential Local Observation Sites](#)

#### PTA CLASS OF 2012



[Click Here to Enlarge](#)

to movement and health.

The Physical Therapist Assistant 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 entry-level physical therapist assistants having successfully passed the National Physical Therapist Assistant Examination (NPTAE). Graduates from the program are prepared to work in a variety of healthcare settings including acute care, outpatient, rehabilitation, and extended care.

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### Program Outcomes

The program prepares graduates to:

1. **Demonstrate a combination of critical thinking skills, provision of skilled interventions, 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.**
2. **Effectively demonstrate in the areas of education and communication towards various special populations in regards to their cultural, community, and individual needs.**
3. **Address an area of need within the PTA scope of practice utilizing demonstration, audio and visual aids to accommodate different learning styles of the patient or community.**
4. **Apply mathematical knowledge to help augment learning experiences through current healthcare literature and research studies.**
5. **Display a commitment to lifelong learning, ongoing professional development, and high quality care in the realm of physical therapy practice.**

The formal portion of the Physical Therapist Assistant (PTA) program begins fall semester with a limited enrollment of **20** students. Enrollment is a competitive process. There are 32 credits of prerequisite courses which may take one year or longer to complete. All prerequisite 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%" or "pass" is required for all courses 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 board examination for physical therapist assistants 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.

After completion of the program, the graduate is eligible to take the national licensure examination for physical therapist assistants through the Federation of State Boards of Physical Therapy. Montana does require licensure to practice as a physical therapist assistant.

**In seeking admission into the program, the student is required to complete all requirements listed in the Physical Therapist Assistant Program Information and Application Packet.**

**PTA Program Requirements Prior to Admission:**

Prior to Fall admission into the PTA program students must:

- Have completed high school physics AND chemistry with a “C-” or better (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)
- Provide proof of keyboarding must be completed at the high school or collegiate level with a “C-” or better. If these courses are to be taken at the collegiate level, contact the PTA program director to assure that you take the appropriate course/courses to meet the requirements for admission to the formal PTA program.
- Be admitted to MSU-GF COT and in good academic standing. Application information may be acquired at the office, or by calling Student Central at (406) 771-4414 or toll free at 1-800-446-2698 or via the Internet at <http://www.msugf.edu/>.
- Complete 40 hours or more of observation with a licensed physical therapist or physical therapist assistant. Please note that higher point values for admission to the PTA Program are awarded at 10 hour intervals. Refer to section “Observation Hours” in the application packet.
- 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

**Accreditation Status:**

From 1996 - 2003, MSU–Great Falls College of Technology offered the only physical therapist assistant postsecondary education program in Montana graduating six classes. From 2003 to 2007, the PTA program was in a state of moratorium. Due to high demand in Montana for the physical therapist assistant in the workforce, the program has been reactivated. It is currently the only PTA program in Montana.

Following an on-site visit, the Physical Therapist Assistant (PTA) Program at Montana State University–Great Falls College of Technology was reinstated and has earned accreditation from the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association (APTA) in April of 2009. The next onsite visit will occur in 2018.

CAPTE can be contacted as follows: Commission on Accreditation in Physical Therapy Education, 1111 North Fairfax Street, Alexandria, Virginia 22314, [accreditation@apta.org](mailto:accreditation@apta.org), 703.684.2782 or 703.706.3245.

**PTA Program Statistics as of 11/23/11:**

	'07-'08	'08-'09	'09-'10
Acceptance Rate	100%	85.7%	100%
Graduates who entered the program	6	12	17
Graduates who completed the program	5	12	17
% Completion Rate	83%	100%	100%
3-year average graduation rate	**	**	97%
Graduates who	5	12	15

took the NPTAE			
Graduates who passed the NPTAE on first attempt	5	12	14
Graduates who passed the NPTAE on second attempt	NA	NA	1
Graduates who have not passed the NPTAE	0	0	0
Employment Rate	100%	92%	88%

\*\*Limited results are available as this is a re-established program

\*Has not been surveyed as of this time.

**PTA Programmatic Student Demographic Characteristics:**

	'09-'10	'10-'11	'11-'12
Number of Students Admitted to Program	17	20	18
Average Age in years	27	33	32
Gender: Number of Females	13	17	14
Gender: Number of Males	4	3	4
Race : African-American/Black (Non-Hispanic)	0	0	0
Race : American Indian/Alaskan Native:	0	0	0
Race: Asian/Pacific Islander:	0	0	0
Race: Hispanic/Latino:	0	0	1
Race: White (not of Hispanic origin):	17	20	17
Race: Other:	0	0	0
Race: Unknown:	0	0	0
Number of Students with no College	12	7	10

Degree			
Number of Students with Associate Degree	0	2	2
Number of Students with Bachelor Degree	5	11	6
Number of Students with Master Degree	0	0	0

**Complaints:**

Complaints from the community, faculty, or students regarding the program or the program graduates should be first addressed by contacting the PTA Program Director. Unresolved complaints or complaints about the Program Director should be directed to Dr Greg Paulauskis- Director of Health Sciences. Dr. Paulauskis e-mail address is gpaulauskis@msugf.edu and his contact number is (406) 771-4361. All complaints will be documented, including the projected outcome, and kept on file at the program facility.

Complaints regarding accreditation of this program should be addressed to the Commission for Accreditation for Physical Therapy Education. This Commission is located at 1111 North Fairfax Street, Alexandria, Virginia, 22314.

[TOP]



**PUBLIC SAFETY COMMUNICATIONS**

PROFESSIONAL CERTIFICATIONS

Advisor: Deb Richerson

**PUBLIC SAFETY COMMUNICATIONS**

**PROFESSIONAL CERTIFICATION (GENERAL)**

**NOTE: This program is in moratorium and will not be accepting new students.**

The Public Safety Communications (PSC) professional certification imparts a technical edge to those applying for employment as a PSC professional (such as a 911 dispatcher). The professional certification 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 certification program. A criminal 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 Certification may be completed with the EMT- Basic class. This advanced professional certification 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 certification provides valuable field experience for those interested in the Public Safety Communications profession. The Public Safety Communications Professional Certification 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 Certification with EMT-Basic include completion of the requirements for the general Public Safety Communications Professional Certification 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 Certification. 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 Health Sciences Department for a program overview
- Online learning orientation on the MSU—Great Falls College of Technology campus

**Estimated Resident Program Cost:**

Tuition and Fees.....	\$1506
Application Fee .....	30
Books/Supplies.....	350
TOTAL.....	\$1886

**PUBLIC SAFETY COMMUNICATIONS**

**PROFESSIONAL CERTIFICATION (GENERAL)**

<b>Course</b>	<b>No.</b>	<b>Title</b>	<b>Credits</b>	<b>Grade</b>
PSC	194	PSC Terminology and Report Writing	1+	—
PSC	194	Stress and Crisis Intervention for PSC	1+	—
PSC	194	PSC Skill	2+	—
PSC	194	Clinical for PSC	1+	—
PSC	194	Legal Responsibility, Ethics, Criminal and Civil Law for PSC	3+	—
COMM	135	Interpersonal Communication	3+	—
CAPP	120	Introduction to Computers	3+	—
		Subtotal	14	

**ADVANCED PUBLIC SAFETY COMMUNICATIONS**

**PROFESSIONAL CERTIFICATION WITH EMT-BASIC**

<b>Course</b>	<b>No.</b>	<b>Title</b>	<b>Credits</b>	<b>Grade</b>
PSC	194	PSC Terminology and Report Writing	1+	—
PSC	194	Stress and Crisis Intervention for PSC	1+	—
PSC	194	PSC Skill	2+	—
PSC	194	Clinical for PSC	1+	—
PSC	194	Legal Responsibility, Ethics, Criminal and Civil Law for PSC	3+	—
COMM	135	Interpersonal Communication	3+	—
CAPP	120	Introduction to Computers	3+	—
EMS	137	EMT Basic	6+	—
		Subtotal	20	

~ 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 Communcations Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Police, Fire, and Ambulance Dispatchers 43-5031.00](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$1,634.00	\$425.00		n/a	\$2,059.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
				In Field	Out of Field	Seeking	Not	In Field	Out of Field	
Public Safety Communications	1	0	0	-	-	-	-	-	-	-

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

## RADIOLOGIC TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: Greg Paulauskis**

**Program Faculty: 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, 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 Radiologic Technology Program Student Information and Application Packet. 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	\$	7308
Application Fee	\$	30
Insurance	\$	38
Books/Supplies	\$	1583
<b>TOTAL</b>	<b>\$</b>	<b>8,958</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

Computer skills, Anatomy and Physiology I & II, and Chemistry are highly recommended.

### DEGREE COMPLETION OPTION

Individuals who possess a current registration with the American Registry of Radiologic Technologists (AART) 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

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
AHMS	142	Intro to Medical Terminology	1†	_____
BIOH	104**	Basic Human Biology/Lab	4†	_____
COMM	135	Interpersonal Communication	3†	_____
WRIT	101**	College Writing I	3†	_____
M	121**	College Algebra <b>OR higher</b>	<u>3-4†</u>	_____
		Subtotal	14	

### 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

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
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	

**CONTINUED ON NEXT PAGE...**

RADIOLOGIC TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE DEGREE

SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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/SEM
AHXR	298*	Radiographic Internship	8†	_____
		Subtotal	8	

FALL SEMESTER

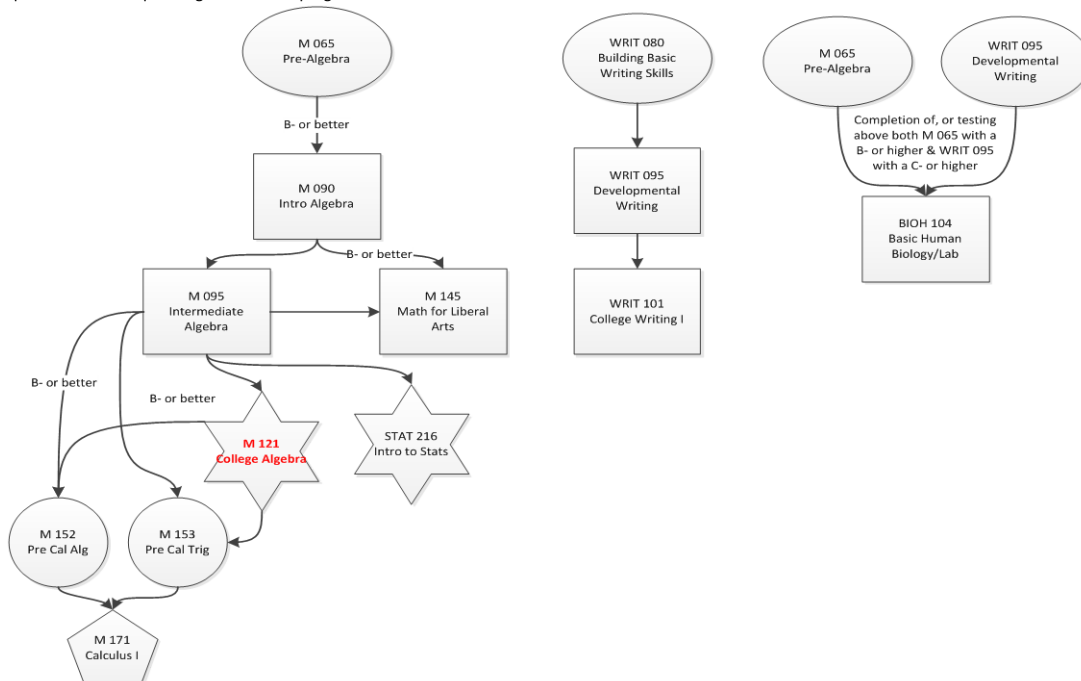
COURSE	NO.	TITLE	CREDITS	GRADE/SEM
AHXR	230*	Radiographic Positioning/Procedures III	4†	_____
AHXR	233*	Elements of Imaging III	2†	_____
AHXR	295A*	Radiographic Clinical III	8†	_____
		Subtotal	14	

SPRING SEMESTER

COURSE	NO.	TITLE	CREDITS	GRADE/SEM
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~

~ 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.





# MONTANA STATE UNIVERSITY • GREAT FALLS COLLEGE OF TECHNOLOGY

CURRENTLY ONLINE

## RADIOLOGIC TECHNOLOGY Associate of Applied Science Degree

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.

Accreditation for the Radiologic Technology Program is presently been acquired through Northwest Association Commission on Colleges. This regional accrediting agency is the organization that accredits MSU Great Falls COT.

After completion of the program the graduate is eligible to take a nationally recognized certification examination administered by the American Registry of Radiologic Technologists (ARRT).

In seeking admission into the program, the student is required to complete the requirements of the [Radiologic Technology Program Student Information and Application Packet](#). 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. Computer skills, Medical Terminology, Physics, and Chemistry are highly recommended.

[TOP]



### QUICK LINKS

- [Advisement Sheet](#)
- [Advanced Placement](#)
- [Catalog Information](#)
- [Fall 2012 Application Packet](#)

### OTHER LINKS

- [American Society of Radiologic Technologists](#)
- [US Department of Labor](#)

### CONTACT INFORMATION

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## REGISTERED NURSE

ASSOCIATE OF SCIENCE DEGREE

Program Director:

Program Faculty: Cindy Shultz

Registered nurses (RNs) work to promote good health and prevent illness. They educate patients and the public about various medical conditions; treat patients and help in their rehabilitation; and provide advice and emotional support to patients' families. RNs use considerable judgment in providing a wide variety of services. The Registered 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 Science Degree in Registered Nursing, students will be prepared to begin a successful career as a registered nurse. Students are prepared to sit for the national licensure examination for registered nursing.

**OUTCOMES: GRADUATES ARE PREPARED TO:**

- Administer effective and ethical individual patient care utilizing human needs as a foundation for assessing behaviors, assigning priorities to desired outcomes, and planning and prioritization nursing interventions
- Incorporate knowledge of cultural, religious, and socioeconomic factors in providing nursing care for individuals in a variety of healthcare settings
- Coordinate, delegate, and prioritize the delivery of care aimed at meeting the needs of patients, communities of patients and their families
- Practice collaboratively within the proper scope of practice, legal, and ethical frameworks, and within national and state standards of nursing practice
- Use communication that is effective and therapeutic, along with information technology, to implement problem solving processes in the evidence base management of patient care
- Provide competent, evidence based nursing care recognizing the values and beliefs of the patient

The Registered Nurse program is a limited enrollment program. Interested students must apply for entry into the program. An application packet with the criteria for admission is available on the program website and from the Health Science Program Assistant.

- Currently licensed LPN applicants must present a copy of current unencumbered Montana LPN license
- Spring 2012 graduates of a PN program may submit their applications without the LPN license, but must have the Montana license number submitted no later than June 22, 2012 to remain eligible
- The length of the program is two 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	\$	9608
Application Fee	\$	30
Insurance	\$	38
Uniforms	\$	225
Course Fees	\$	211
Program Fee	\$	225
Books/Supplies	\$	2,225
<b>TOTAL</b>	<b>\$</b>	<b>12,731</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**Coursework**

The following courses must be completed prior to admission into the Registered Nurse Program. All prerequisite course work must be completed with a minimum grade of "C" in each course. Grades in prerequisite courses are a major factor in ranking applications for program acceptance.

**FIRST SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE</b>
BIOH	201**	Anatomy & Physiology I/Lab	4+	_____
CHMY	121*	Introduction to General Chemistry/ Lab	4+	_____
M	121**	College Algebra	3+	_____
NRSG	100	Introduction to Nursing	1+	_____
		Subtotal	12	

**SECOND SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE</b>
NUTR	121*	Clinical Human Nutrition	2+	_____
BIOH	211*	Anatomy & Physiology II/Lab	4+	_____
WRIT	101**	College Writing I	3+	_____
PSYX	100	Intro to Psychology	3+	_____
		Subtotal	12	

For those LPNs with an active unencumbered Montana license, there is no age limit on the prerequisite credits.

**COMPLETION OF AN LPN PROGRAM IS REQUIRED FOR AN ADDITIONAL 26 CREDITS**

LPN program curriculum can be found at:

<http://www.msugf.edu/catalog/Programs/Practical%20Nurse%202012-2013.pdf>

**PROGRAM COURSE REQUIREMENTS AFTER FORMAL ACCEPTANCE**

Once enrolled in Registered Nurse program, 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 Science degree in Registered Nursing. The courses are offered at MSU—Great Falls College of Technology in the following sequence:

**FALL SEMESTER**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE</b>
NRSG	250*	LPN to RN Transition	3+	_____
NRSG	252*	Complex Care Maternal/Child	3+	_____
NRSG	254*	Complex Care Mental Health	2+	_____
NRSG	256*	Pathophysiology	3+	_____
BIOM	250	Microbiology/Lab	4+	_____
		Subtotal	15	

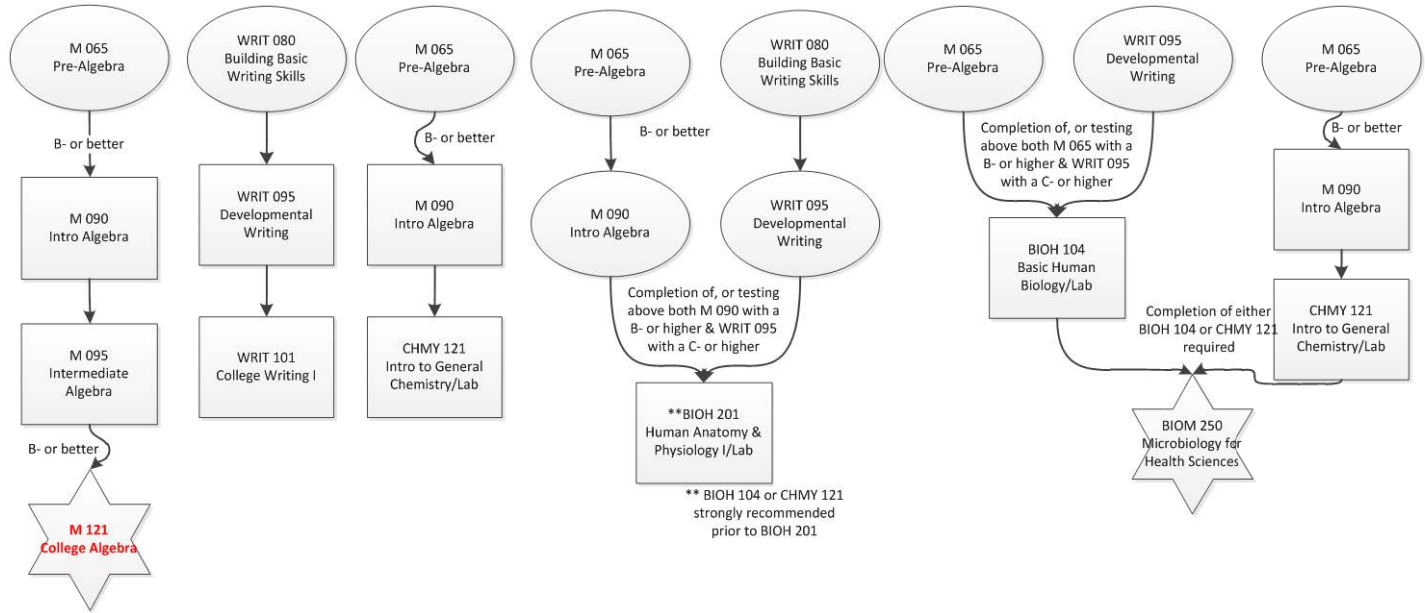
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SPRING SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE
NRSG 262*	Complex Care Adult	4+	_____
NRSG 265*	Advanced Clinical Skills Lab	1+	_____
NRSG 266*	Managing Client Care	4+	_____
SOCI 101	Introduction to Sociology	3+	_____
	Subtotal	12	

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

TOTAL PROGRAM CREDITS - 77~



## RESPIRATORY CARE

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: Leonard Bates****Program Faculty: Brian Cayko**

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 breathe 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	\$	8585
Application Fee	\$	30
Insurance	\$	38
Course Fees	\$	280
Program Fee	\$	280
Books/Supplies	\$	1882
<b>TOTAL</b>	<b>\$</b>	<b>11,094</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**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**

<b><u>COURSE</u></b>	<b><u>NO.</u></b>	<b><u>TITLE</u></b>	<b><u>CREDITS</u></b>	<b><u>GRADE/SEM</u></b>
BIOH	201**	Human Anat & Phys I/Lab	4†	_____
WRIT	101**	College Writing I	3†	_____
M	121**	College Algebra	3†	_____
COMM	135	Interpersonal Communication <b>OR</b>		
PSYX	100	Introduction to Psychology <b>OR</b>		
PSYX	230	Developmental Psychology	<u>3†</u>	_____
		Subtotal	13	

**CONTINUED ON NEXT PAGE...**



# RESPIRATORY CARE

## ASSOCIATE OF APPLIED SCIENCE DEGREE

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

COURSE NO.	TITLE	CREDITS	GRADE/SEM
BIOH 211*	Human Anat & Phys II/Lab	4†	_____
RC 150*	Respiratory Care	3†	_____
RC 155*	Respiratory Physiology	3†	_____
RC 170*	Resp Tech & Procedures I	5†	_____
	Subtotal	15	

#### SPRING SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE/SEM
RC 140*	Resp Care Clinic I	3†	_____
RC 171*	Resp Techn & Procedures II	5†	_____
RC 180*	Ventilator Management	2†	_____
RC 255*	Pulmonary Assessment	3†	_____
	Subtotal	13	

#### SUMMER SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE/SEM
RC 141*	Resp Care Clinic II	4†	_____
RC 260*	Neonatal Respiratory Care	3†	_____
	Subtotal	7	

#### FALL SEMESTER

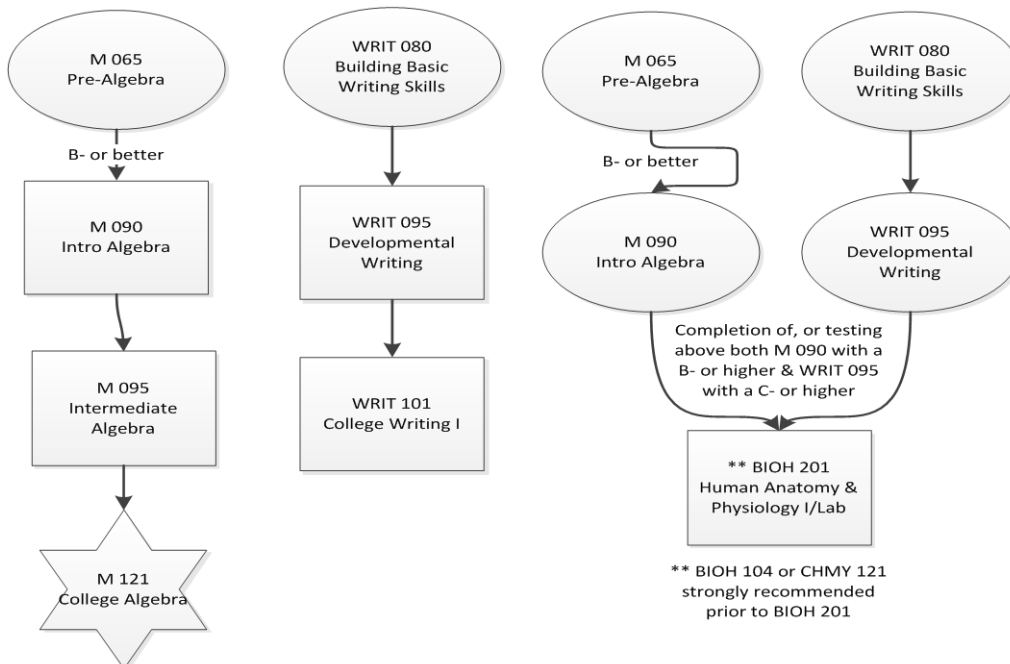
COURSE NO.	TITLE	CREDITS	GRADE/SEM
RC 240*	Resp Care Clinic III	5†	_____
RC 245*	Resp Care Clinical Seminar I	1†	_____
RC 250*	Hemodynamic Monitoring	4†	_____
RC 275*	Pulmonary Disease	2†	_____
	Subtotal	12	

#### SPRING SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AH 120	Intravenous Therapy	1†	_____
EMS 146	Pediatric Advanced Life Support	1†	_____
RC 241*	Resp Care Clinic IV	4†	_____
RC 246*	Resp Care Clinical Seminar II	1†	_____
RC 265*	Resp Care in Alternative Sites	1†	_____
RC 273*	Pulmonary Function Testing	2†	_____
RC 280*	Supervisory Management	2†	_____
	Subtotal	12	

#### TOTAL PROGRAM CREDITS - 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.





# Respiratory Care



About Respiratory Care

Orientation Packet

Application Process

Testimonials

Professional Observation

Employment Outlook

Other Links

Professional Accreditations

Contact Information

## Our Mission and Our Goal

### Our Mission

To provide high-quality Respiratory Care education. It is through the balance of classroom instruction, laboratory investigation, and clinical practice at local and out-of-town sites that provide our students with a well rounded, advanced knowledge of Respiratory Therapy.

### Our Goal

A graduating Respiratory Therapist has the ability to:

- Think critically.
- Place the patient first.
- Practice Respiratory Care at the highest level.
- Be a health care professional.
- Continue to advance his/her education.
- Be a positive representative of the profession.



## SURGICAL TECHNOLOGY

## ASSOCIATE OF APPLIED SCIENCE DEGREE

Program Director: Sandra Allen

**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-STSA) 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.
- Promote lifelong learning fostering the development of professional and personal growth, critical thinking and leadership
- Demonstrate understanding of biomedical sciences and technology as they apply to the patient focused events that occur in the operating room.
- Promote lifelong learning fostering the development of professional and personal growth, critical thinking, and leadership.
- Sit for the National Certified Surgical Technologist Exam.

**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:

<http://www.msugf.edu/webs/Surgical%20Technology/default.htm>

**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 & Surgical Assisting (ARC-STSA).

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	7693
Application Fee	\$	30
Insurance	\$	23
Lab/Program Fees	\$	719
Books/Supplies	\$	2424
<b>TOTAL</b>	<b>\$</b>	<b>10,889</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**PREREQUISITE COURSES**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
BIOH	201**	Human Anatomy & Physiology I & 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 <b>OR</b> higher	4†	_____
WRIT	095**	Developmental Writing <b>OR</b> higher	4†	_____
		Subtotal	25	_____

**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**

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE/SEM</b>
PHL	221	Intro to Philosophy and Biomedical Ethics	3†	_____
BIOH	211*	Human Anatomy & Physiology II & lab	4†	_____
AHST	101*	Introduction to Surgical Technology	3†	_____
AHST	115*	Surgical Lab I	3†	_____
AHST	154*	Surgical Pharmacology	3†	_____
		Subtotal	16	_____

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SURGICAL TECHNOLOGY

ASSOCIATE OF APPLIED SCIENCE DEGREE

FALL SEMESTER

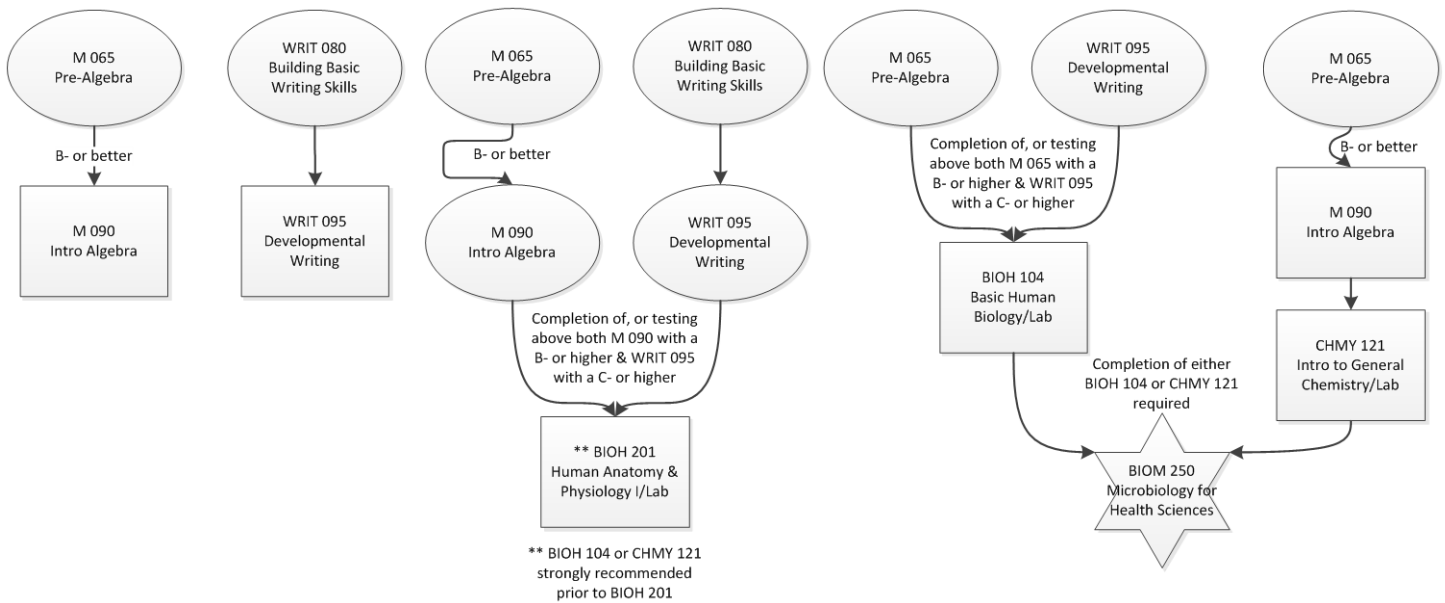
COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHST 200*	Operating Room Techniques	5†	_____
AHST 201*	Surgical Procedures I	4†	_____
AHST 215*	Surgical Lab II	3†	_____
AHST 250*	Surgical Clinical I	<u>4†</u>	_____
	Subtotal	16	

SPRING SEMESTER

COURSE NO.	TITLE	CREDITS	GRADE/SEM
AHST 202*	Surgical Procedures II	5†	_____
AHST 251*	Surgical Clinical II	5†	_____
AHST 298*	Surgical Internship	<u>5†</u>	_____
	Subtotal	15	

TOTAL PROGRAM CREDITS – 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.





Montana State University Great Falls  
College of Technology

## Surgical Technology Program

Nationally recognized as a PAE Elite Twenty Program



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### Pre-Surgical Technology Student Info

- [Questions](#)
- [Forms](#)
- [Links](#)

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### Program Students

- [Student Handbook](#)
-

## SUSTAINABLE ENERGY TECHNICIAN

CERTIFICATE OF APPLIED SCIENCE DEGREE

**Program Director: Jason Harding**

**NOTE:** The Sustainable Energy Technician program is a limited enrollment program. Interested students must apply for entry into the program. An application packet is available on the MSUGF catalog website and from the Business, Trades, and Technology Administrative Assistant (Room B116).

The Sustainable Energy Technician Certificate of Applied Science program prepares students for operation and maintenance jobs in the rapidly expanding sustainable energy industry. Program graduates have general skills in industrial safety, electrical troubleshooting, hydraulic and pneumatic system operation, and mechanical system repair. These skills are built on a strong educational foundation in math, writing, communications, and computing.

**OUTCOMES: GRADUATES ARE PREPARED TO:**

- 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 an understanding of both conventional and renewable energy sources.
- Demonstrate the ability to use personal computers and common operating systems and applications software.
- Develop and practice professional standards of workplace communication and interpersonal skills.

**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. The program is available on all four campuses.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	3077
Application Fee	\$	30
Program Fee	\$	500
Books/Supplies	\$	1198
<b>TOTAL</b>	<b>\$</b>	<b>4,805</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**FALL SEMESTER**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
SET	101	Introduction to Sustainable Energy	3+	_____
EET	120	AC/DC Electronics I	3+	_____
M	111*	Technical Mathematics	3+	_____
SET	102	Industrial Safety and Rigging	3+	_____
WRIT	104**	Workplace Communication	2+	_____
SET	103	Fundamentals of Mechanical Systems	<u>3+</u>	_____
		Subtotal	17	

**SPRING SEMESTER**

<u>COURSE</u>	<u>NO.</u>	<u>TITLE</u>	<u>CREDITS</u>	<u>GRADE/SEM</u>
CAPP	120	Introduction to Computers	3+	_____
EET	121*	AC/DC Electronics II	3+	_____
ELEC	130*	Electric Motors and Generators	3+	_____
SET	104*	Fundamentals of Hydraulic/Pneumatic Sys	3+	_____
COMM	135	Interpersonal Communication	<u>3+</u>	_____
		Subtotal	15	

**TOTAL PROGRAM CREDITS – 32~**

~ 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.

Course Number	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>
	<b>Total</b>	<b>11-14</b>

\* Denotes classes which are required for the CAS Degree

± Denotes classes which are required for the AAS 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). To graduate from the AAS program you will need 61 Credits.

## 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

Course Number	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>
<b>Total</b>		<b>12</b>

### Spring Semester 2

Course Number	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>
<b>Total</b>		<b>9</b>

### Fall Semester 3

Course Number	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>
<b>Total</b>		<b>13</b>

### Spring Semester 4

Course Number	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>
<b>Total</b>		<b>13</b>

<b>TOTAL PROGRAM CREDITS CAS</b>	<b>32</b>
<b>TOTAL PROGRAM CREDITS AAS</b>	<b>61</b>

**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>	<b>Title</b>	<b>Credits</b>
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 complete applications of qualified 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 up to the point 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, I am requesting priority of service, which I understand will move me to the top of any waiting list for admission into the SET program. (Documentation will be requested if priority of service is applied.)

Check-Off List

✓	Item
✓	<b>Application Packet Cover &amp; Check-off sheet</b> ( <i>personal information must be complete</i> )
	<b>Documentation of admission to MSU-Great Falls College of Technology and good academic standing.</b> 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.
	<b>Statement of Understanding.</b> 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 discarded.



# 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.

I have read and understand the essential job functions above. I realize that if I do not meet all of these essential job functions, that my opportunities for employment as a sustainable energy technician are extremely limited.

---

Name (print)

---

Signature

---

Date

## Sustainable Energy Technician Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site [Wind Turbine Service Technicians 49-9099.02](#)

### On-Time Graduation Rate

For privacy reasons this is not being disclosed for 09-10

### Tuition, Fees, Books & Supplies

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Room & Board	Estimated Program Total Cost
\$3,599.00	\$550.00		n/a	\$4,149.00

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
				In Field	Out of Field	Seeking	Not	In Field	Out of Field	
Sustainable Energy Technician	0									

### Median Loan Debt

For privacy reasons this is not being disclosed for 09-10

### Other Information

n/a

# SUSTAINABLE ENERGY TECHNICIAN

ASSOCIATE OF APPLIED SCIENCE DEGREE

**Program Director: Jason Harding**

**NOTE:** The Sustainable Energy Technician program is a limited enrollment program. Interested students must apply for entry into the program. An application packet is available on the MSUGF catalog website and from the Business, Trades, and Technology Administrative Assistant (Room B116).

The Sustainable Energy Technician Associate of Applied Science degree program prepares graduates for technician jobs in the rapidly expanding sustainable energy industry. Program graduates have general skills in industrial safety, electrical troubleshooting, hydraulic and pneumatic system operation, and mechanical system repair. They also have 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, communications, and computing.

**OUTCOMES: GRADUATES ARE PREPARED TO:**

- 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 an understanding of both conventional and renewable energy sources.
- Demonstrate the ability to use personal computers and common operating systems and applications 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 AC & DC variable speed motor drives.
- Demonstrate a basic understanding of programmable logic controllers.
- Demonstrate a basic understanding of digital electronics.
- 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. The program is available on all four campuses.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6154
Application Fee	\$	30
Program Fee	\$	1000
Books/Supplies	\$	1997
<b>TOTAL</b>	<b>\$</b>	<b>9,181</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**FALL SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
SET 101	Introduction to Sustainable Energy	3+	_____
EET 120	AC/DC Electronics I	3+	_____
M 111*	Technical Mathematics	3+	_____
SET 102	Industrial Safety and Rigging	3+	_____
WRIT 104**	Workplace Communication	2+	_____
SET 103	Fundamentals of Mechanical Systems	<u>3±</u>	_____
	Subtotal	17	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
CAPP 120	Introduction to Computers	3+	_____
EET 121*	AC/DC Electronics II	3+	_____
ELEC 130*	Electric Motors and Generators	3+	_____
SET 104*	Fundamentals of Hydraulic/Pneumatic Sys	3+	_____
COMM 135	Interpersonal Communication	<u>3±</u>	_____
	Subtotal	15	

**FALL SEMESTER**

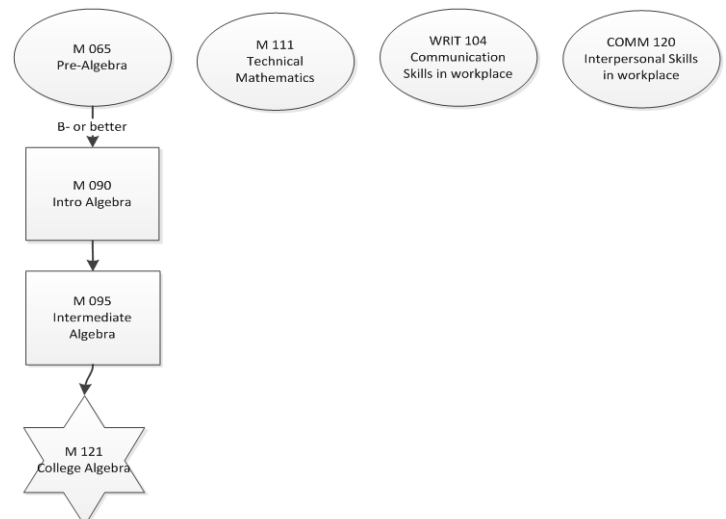
COURSE NO.	TITLE	CREDITS	GRADE/SEM
M 121**	College Algebra	3+	_____
EET 240*	Electrical Power and Distribution I	3+	_____
ELEC 230*	Programmable Logic Controllers	3+	_____
SET 201*	Wind Technician Safety	4+	_____
SET 202*	Wind Turbine Equipment	<u>3±</u>	_____
	Subtotal	16	

**SPRING SEMESTER**

COURSE NO.	TITLE	CREDITS	GRADE/SEM
SET 203*	Wind Turbine Operations and Maintenance	3+	_____
EET 241*	Electrical Power and Distribution II	3+	_____
ELEC 231*	Electric Drive Systems	3+	_____
EET 245*	Digital Electronics	<u>4±</u>	_____
	Subtotal	13	

**TOTAL PROGRAM CREDITS – 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.



## **Welding Technology Program Admissions Process**

The Welding Technology Program admissions committee will review completed application packets after May 15, 2012. WLDG courses are restricted entry courses. Only students who have been admitted into the program will be able to enter courses with WLDG prefixes.

Completed Welding Technology program application packets must be submitted to:

Pam Buckheit  
Business Trades and Technology Administrative Assistant  
B116  
MSU-Great Falls, College of Technology  
2100 16th Avenue South  
Great Falls, MT 59405

**Note:** Applications will be date and time stamped as they are received. The first 18 completed applications will be accepted into the program. Only complete applications will be considered. To be considered complete, the applicant must submit all of the required application materials. Only students in Good Academic Standing will be eligible for program acceptance.

**Waiting List:** After the 18 slots are filled, up to 12 students will be kept on a waiting list. If accepted students drop out of the program prior to the start of Fall 2012 semester or if they fail to complete the required Welding Success Session, students on the waiting list will be accepted into the program in the order their completed applications were received. Waiting list students are eligible and encouraged to participate in Welding Success Session activities during the week of August 13-17. Waiting list students who complete the Fall 2012 Welding Success Session and are not accepted into the program for Fall 2012 will get first priority for the Fall 2013 class.

**MSU-GREAT FALLS COLLEGE OF TECHNOLOGY  
WELDING TECHNOLOGY PROGRAM  
FALL 2012**

**APPLICATION PACKET COVER AND CHECK-OFF SHEET**

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone (Home) \_\_\_\_\_ (Other) \_\_\_\_\_

E-Mail Address \_\_\_\_\_

Student ID Number \_\_\_\_\_

Check-Off List

✓	Item
	<b>Application Packet Cover &amp; Check-off sheet</b> ( <i>personal information must be complete</i> )
	<b>Documentation of admission to MSU-Great Falls College of Technology and good academic standing.</b> 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. Student Central personnel are able to help students obtain copies of their academic transcript or acceptance letter.
	<b>Statement of Understanding.</b> Student must complete a Statement of Understanding about a mandatory week long Welding Success Session prior to the start of Fall semester. 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.

# Statement of Understanding

## MSU-Great Falls College of Technology

### Welding Technology Program

The Welding Technology program is a popular program. We have many more students who want to take the program than our capacity allows. Therefore, it is important that all students who start the program are serious about completing it and are aware of program expectations. With that in mind, all students are required to complete a one week Welding Success Session prior to the start of Fall 2012 semester. Specific details of the Welding Success Session are as follows:

- The Welding Success Session will be offered August 13<sup>th</sup> through August 17<sup>th</sup> in the welding lab of the Trades building on the MSU-Great Falls campus.
- Welding Success Session hours are from 9am -3pm each day.
- 100% attendance for every hour of every day is required. Any student who misses any part of the Welding Success Session will not be allowed to start the Welding Technology program at the beginning of Fall semester (August 27<sup>th</sup>).
- If any student misses any part of the Welding Success Session, his/her spot in the Welding Technology program will be forfeited and given to the next student on the waiting list.
- Exceptions to the 100% attendance requirement will be extremely rare and must be approved by the Business, Trades, and Technology Division Director.
- All Personal Protective Equipment (PPE) and necessary tools for the welding success session will be provided by the college.

I have read and understand the Welding Success Session attendance requirements above. I realize that if I do not attend every hour of every day of the Welding Success Session, my spot in the program will be forfeited and given to the next student on the waiting list.

---

Name (print)

---

Student ID number

---

Signature

---

Date

## Welding Technology Gainful Employment Information

### Program Occupation Information

U.S. Department of Labor's Standard Occupational Classification (SOC) code and link from U.S. Department of Labor's O\*NET Web site

[Welders, Cutters, and Welder Fitters 51-4121.06](#)

**On-Time Graduation Rate** 85.71%

Resident Tuition, Fees Per Program	Cost for Books & Supplies	Estimated Cost for Tools	Estimated Program Total Cost
\$3,605.00	\$308.00	Varies	\$3913.00+

### Job Placement Rate

#### Graduate Employment and Educational Placement, 2009-2010

PROGRAM	Total Graduates #	Total Responses # %		EMPLOYMENT						Continuing Education #
				Employed				Continuing Education & Employed		
				In Field	Out of Field	Seeking	Not	In Field	Out of Field	
Welding Technology	21	6	29	3	1	-	-	-	-	2

### Median Loan Debt

Federal	\$2,874.00
Private	\$0.00
Institutional	\$0.00

### Other Information

n/a

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 apply to Montana State University-Bozeman's College of Nursing and go through the placement process. Placement information can be found at the following:

<http://www.montana.edu/nursing/academic/placement.htm>

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.**

Estimated Resident Program Cost:	
Tuition and Fees	\$ 7,693
Application Fee	\$ 30
Lab/Course Fees	\$ 245
Books	\$ 2,190
TOTAL:	\$ 10,158

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

I. MONTANA UNIVERSITY SYSTEM CORE - 32 CREDITS

COMMUNICATION--6 CREDITS

(NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3+
<b>AND 1 of the following</b>			
COMM	130	Public Speaking	3+
COMM	135	Interpersonal Communication	3+

MATHEMATICS--4 CREDITS

Course	No.	Title	Credits
STAT	216**	Introduction to Statistics	4+

HUMANITIES--3 CREDITS

Course	No.	Title	Credits
LIT	110	Intro to Literature	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
ARTH	160	Global Visual Culture	3+
ARTZ	101	Art Fundamentals	3+
ARTZ	105	Visual Language - Drawing	3+
ISDN	101	Introduction to Interior 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
NUTR	221	Basic Human Nutrition	3+
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
ANTY	101	Anthro & the Human Experience	3+
BMKT	242	Introduction to Global Markets	3+
HUM	244	American Cultural Values	3+
SIGN	101	Intro to American Sign Lang	3+
NASX	232N	MT Ind Citrs/Hstry/Iss	3+
NASX	204N	Intro to NA Beliefs & Philsphy	3+
NASX	240N	Native American Lit	3+

II. ADDITIONAL REQUIRED COURSES – 19 CREDITS

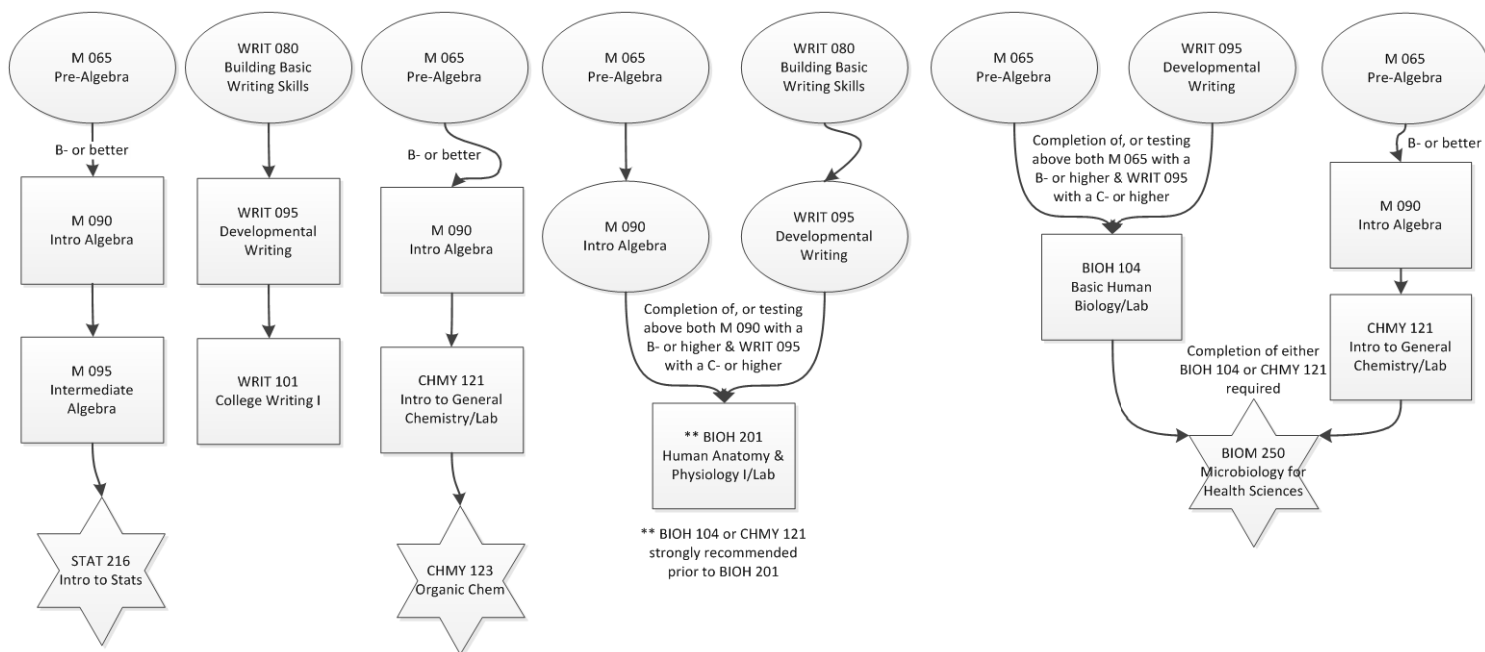
Course	No.	Title	Credits
BIOH	201**	Human Anat Phys I/Lab	4+
BIOH	211*	Human Anat Phys II & Lab	4+
BIOM	250*	Microbiology for Hlth Sciences/Lab	4+
CHMY	123*	Intro to Organic and Biochem/Lab	4+
SOCI	101	Introduction to Sociology	3+

\*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, 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





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](mailto:j_bullard@umwestern.edu)

**Estimated Resident Program Cost:**

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab/Course Fees	\$	35
Books	\$	1,178
TOTAL:	\$	8,936

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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.	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+

CREATIVE ARTS -- 3 CREDITS

Course	No.	Title	Credits
ARTH	160	Global Visual Culture	3+
ARTZ	101	Art Fundamentals	3+
ARTZ	105	Visual Language - Drawing	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

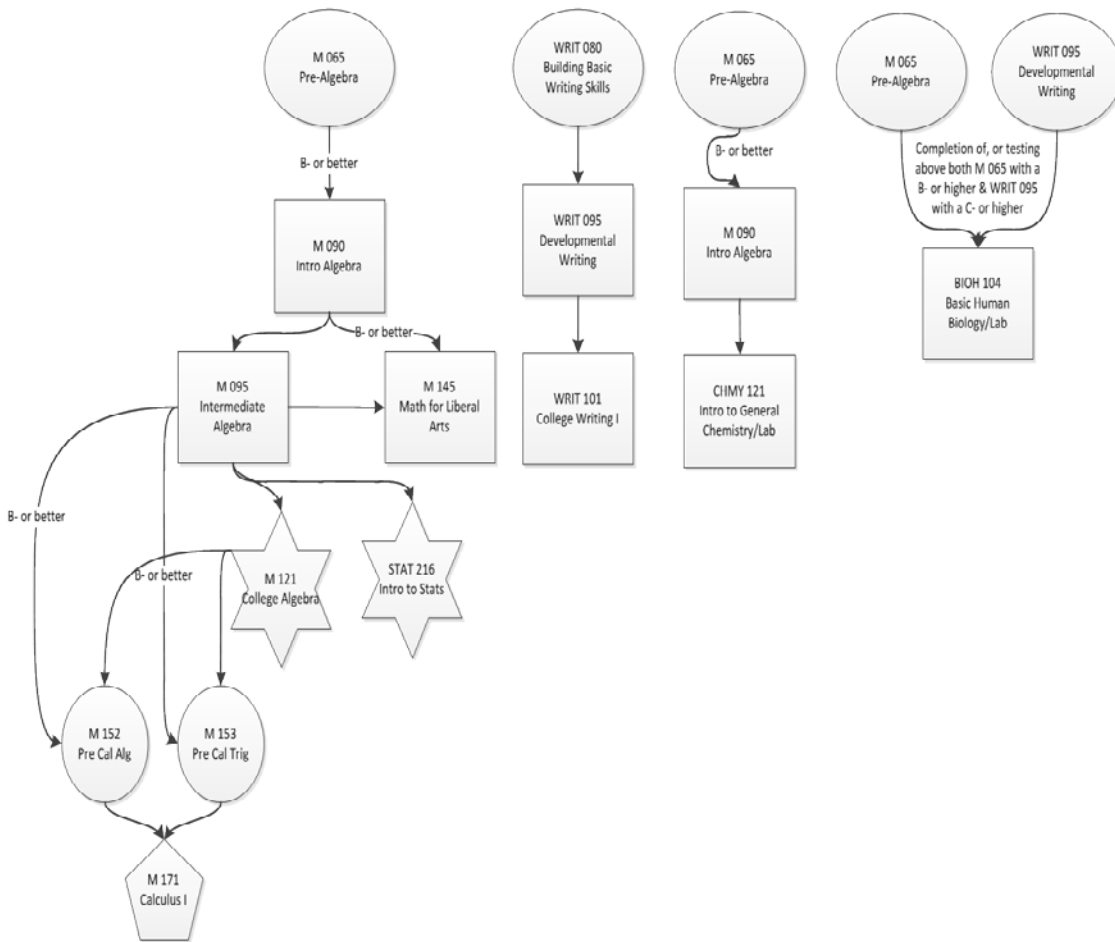
I. Early Childhood Core Courses

Course	No.	Title	Credits
EDEC	109	Introduction to EC Education	1
EDEC	110	Intro to EC Education Lab	1
EDEC	210	Meeting the Needs of Families	2
EDEC	211	Mtng the Needs of Families Lab	1
EDEC	220	Crtng Envrnmnt for Lrng, EC	2
EDEC	221	Crtng Envrnmnt Lrng, EC Lab	1
EDEC	230	Positive Child Guidance	2
EDEC	231	Positive Child Guidance Lab	1
EDEC	247	Child and Adolescent Dvlpmnt	3
EDEC	248	Child and Adolesc Dvlpmnt Lab	1
EDEC	265	Ldrshp & Professnlsm in EC Ed	2
EDEC	266	Ldrshp & Profess in EC Ed Lab	1
EDEC	281	EC Curr Dsgn & Implemnt I	2
EDEC	282	EC Curr Dsgn & Implemnt I Lab	1
EDEC	283	EC Curr Dsgn & Implemnt II	2
EDEC	284	EC Curr Dsgn & Implemnt II Lab	1

TOTAL CREDITS – 24

TOTAL PROGRAM CREDITS – 60-63~

~ 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.



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**

**Estimated Resident Program Cost:**

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab/Course Fees	\$	110
Books	\$	2,082
TOTAL:	\$	9,915

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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 <b>OR</b>	
MUSI	105	Music Theory I <b>OR</b>	
MUSI	203	American Popular Music <b>OR</b>	
MUSI	207	World Music <b>OR</b>	
ENGL	217	Creative Writing	3+
<b>AND one of the following</b>			
LIT	110	Intro to Literature	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
NUTR	221	Basic Human Nutrition <b>OR</b>	
CHMY	101	Chemistry for the Consumer	3+
<b>AND one of the following</b>			

BIOH	104**	Basic 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 <b>OR</b>	
SOCI	101	Introduction to Sociology	3+
<b>And one of the following</b>			
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 Y	101	Anthro & the Human Experience	3+
BMKT	242	Introduction to Global Markets	3+
HUM	244	American Cultural Values	3+
NASX	204N	Intro to NA Beliefs & Philsphy	3+
NASX	232N	MT Ind Cltrs/Hstry/Iss	3+
NASX	240N	Native American Literature	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
ARTH	160	Global Visual Culture <b>OR</b>	
ARTZ	101	Art Fundamentals <b>OR</b>	
ARTZ	105	Visual Language - Drawing	3+
<b>And</b>			
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.

CONTINUED ON NEXT PAGE...

If you are interested in completing an Associate of Arts with MSU-Great Falls College of Technology, please contact your 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
EDEC	109	Introduction to EC Education	1
EDEC	110	Intro to EC Education Lab	1
EDEC	210	Meeting the Needs of Families	2
EDEC	211	Mtng the Needs of Families Lab	1
EDEC	220	Crting Envrnmnt for Lrnng, EC	2
EDEC	221	Crting Envrnmnt Lrnng, EC Lab	1
EDEC	230	Positive Child Guidance	2
EDEC	231	Positive Child Guidance Lab	1
EDEC	247	Child and Adolescent Dvlpmnt	3
EDEC	248	Child and Adolesc Dvlpmnt Lab	1
EDEC	265	Ldrshp & Professnlsim in EC Ed	2
EDEC	266	Ldrshp & Profess in EC Ed Lab	1
EDEC	281	EC Curr Dsgn & Implemnt I	2
EDEC	282	EC Curr Dsgn & Implemnt I Lab	1
EDEC	283	EC Curr Dsgn & Implemnt II	2
EDEC	284	EC Curr Dsgn & Implemnt II Lab	1

II. Early Childhood Specialty Courses

Course	No.	Title	Credits
EDEC	249	Infant/Toddler Dev&Group Care	4
ED	341	Exceptional Learner	3
EDEC	450	Literacy in the EC Classroom	3
EDEC	352	Math and Science for EC	3
EDEC	353	Fostering Movement in Yng Ch	1
EDEC	430	Soc/Emot Dvlpmnt in Yng Child	3
EDEC	452	Reggio Emilia & Project Apprch	3
EDEC	410	Family, Communities, Culture	3
EDEC	405	Assessment in EC	3
EDEC	445	Child Dev Research	3
EDEC	460	Mentoring and Coaching in ECE	3
EDEC	496	EC Advanced Practicum	6

Total Credits - 62

TOTAL PROGRAM CREDITS – 120~



THIS PROGRAM OF STUDY IS DESIGNED  
FOR STUDENTS PLANNING TO APPLY TO  
THE UNIVERSITY OF GREAT FALLS

Students may begin pursuit of a baccalaureate degree from UGF  
by following the articulated plan of study below.

**THE INFORMATION ON ALL TRANSFER PROGRAMS IS  
SUBJECT TO CHANGE. STUDENTS SHOULD CONTACT THE  
ADMISSIONS OFFICE AT UGF FOR POTENTIAL CHANGES:  
406-791-5202**

**Estimated Resident Program Cost:**

Tuition and Fees	\$	3,077
Application Fee	\$	30
Lab/Course Fees	\$	110
Books	\$	1,381
TOTAL:	\$	4,598

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**I. GENERAL EDUCATION CORE COURSES – 23 CREDITS**

COMMUNICATION -- 6 CREDITS

(NEED 3 WRITING & 3 VERBAL CREDITS)

Course	No.	Title	Credits
WRIT	101**	College Writing I	3+
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
ARTH	101	Global Visual Culture	3+
ARTZ	101	Art Fundamentals	3+
ARTZ	105	Visual Language - Drawing	3+
MUSI	105	Music Theory I	3+
MUSI	101	Enjoyment of Music	3+
MUSI	203	American Popular Music	3+
MUSI	207	World Music	3+
<b>And one of the following</b>			
LIT	110	Intro to Literature	3+
HUM	242	Gender and Equality	3+
PHL	101	Introduction to Philosophy	3+

NATURAL SCIENCE -- 4 CREDITS

(Must include 1 lab course)

Course	No.	Title	Credits
BIOB	101**	Discover Biology/Lab	4+
BIOH	104**	Basic Human Biology & Lab	4+
BIOB	160**	Principles of Living Systems/Lab4+	
BIOB	170**	Prin. Of Biological Diversity/Lab4+	
CHMY	121**	Intro to General Chem/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	130	Fund Physical Science/Lab	4+

SOCIAL SCIENCES/ HISTORY -- 3 CREDITS

Course	No.	Title	Credits
PSYX	100	Introduction to Psychology	3+
SOCI	101	Introduction to Sociology	3+

II. COMPUTER SKILLS/USAGE – 3 CREDITS

Course	No.	Title	Credits
CAPP	120	Introduction to Computers	3+

III. ARTICULATION COURSEWORK – 3 CREDITS

Course	No.	Title	Credits
WRIT	201*	College Writing II	3+

TOTAL CREDITS – 29

~ 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.

OUTLINE FOR THE COMPLETION OF THE UNIVERSITY  
CORE CURRICULUM FROM  
THE UNIVERSITY OF GREAT FALLS

FOUNDATION SKILLS COURSES – 6 CREDITS

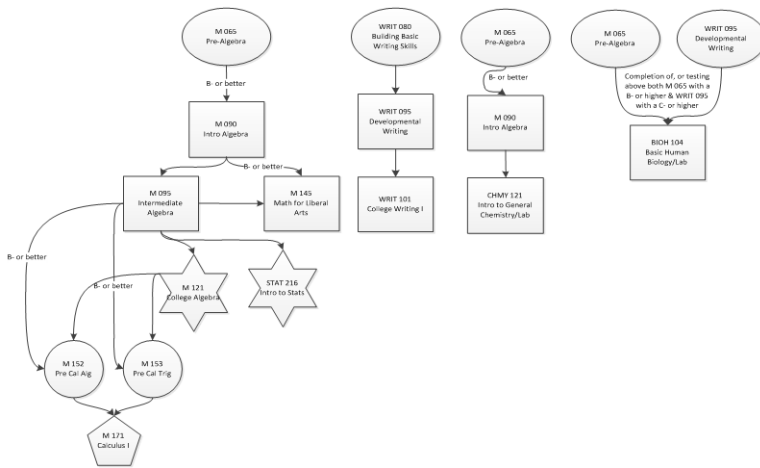
Course	No.	Title	Credits
CPS	110	Conquering the Digital Divide	3+
TRL	200	Fund. Of Christian Theology	3+

GREAT QUESTIONS COURSES – 8 CREDITS

Course	No.	Title	Credits
ILC	330x	What is Truth	4+
ILC	350x	What is the Common Good	4+

UPPER DIVISION WRITING COURSE – 3 CREDITS

Course	No.	Title	Credits
ENG	300-319	Upper level writing course	3+





*changing lives – achieving dreams* [ 2012-2013 catalog ]

[>MSU-GF](#) [>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.



MSU-Great Falls College of Technology | 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.



## ASSOCIATE OF ARTS DEGREE WITH ACCOUNTING AND BUSINESS COURSEWORK TRANSFER TO MSU BILLINGS

The Associate of Arts with articulated coursework in Accounting and Business is designed for students interested in a Bachelor of Science in Business Administration – Accounting Option at MSU Billings.

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

Tuition and Fees	\$	7,684
Application Fee	\$	30
Lab Fees	\$	110
Books	\$	869
<b>TOTAL:</b>	<b>\$</b>	<b>8,693</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

### **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+
COMM	130	Public Speaking	3+

MATHEMATICS--3 CREDITS +

Course	No.	Title	Credits
M	145**	Math for Liberal Arts	3+
M	171**	Calculus I	4+

HUMANITIES/FINE ARTS--6 CREDITS +

Course	No.	Title	Credits
ARTZ	101	Art Fundamentals	3+
ARTZ	105	Visual Language - Drawing	3+
MUSI	101	Enjoyment of Music	3+
<b>AND one of the following</b>			
LIT	110	Intro to Literature	3+
PHL	110	Introduction to Ethics	3+

NATURAL SCIENCE--8 CREDITS +

(Must include 1 lab course)

Course	No.	Title	Credits
BIOB	101**	Discover Biology/Lab	4+
BIOB	160**	Principles of Living Systems/Lab	4+
<b>AND one of the following</b>			
CHMY	121**	Intro to General Chemistry/Lab	4+
CHMY	141**	College Chemistry I/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
ECNS	201	Principles of Microeconomics	3+
<b>AND one of the following</b>			
HSTA	101N	American History I	3+
HSTA	102N	American History II	3+

HSTR	101	Western Civilization I	3+
HSTR	102	Western Civilization II	3+

CULTURAL DIVERSITY--3 CREDITS +

Course	No.	Title	Credits
ANTY	101	Anthro and the Human Experience	3+
BMKT	242	Introduction to Global Markets	3+
HUM	244	American Cultural Values	3+
NASX	204N	Intro to NA Beliefs & Philsphy	3+
NASX	232N	MT Ind Cltrs/Hstry/Iss	3+
NASX	240N	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 ACCOUNTING, ARTS, BUSINESS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS +

Course	No.	Title	Credits
ACTG	101**	Accounting Procedures I	3+
ACTG	102*	Accounting Procedures II	3+
BGEN	105	Introduction to Business	3+

CONTINUED ON NEXT PAGE...

**IV. ARTICULATION COURSEWORK – 16 CREDITS****ANY OF THE FOLLOWING:**

Course	No.	Title	Credits
ACTG	201*	Principles of Fin Acct	3
ACTG	202*	Principles of Mang Acct	3
BGEN	235*	Business Law	3
ECNS	202	Principles of Macroeconomics	3
STAT	216**	Basic Statistics	4
WRIT	122**	Intro to Business Writing	3

**TOTAL PROGRAM CREDITS – 60-63~**

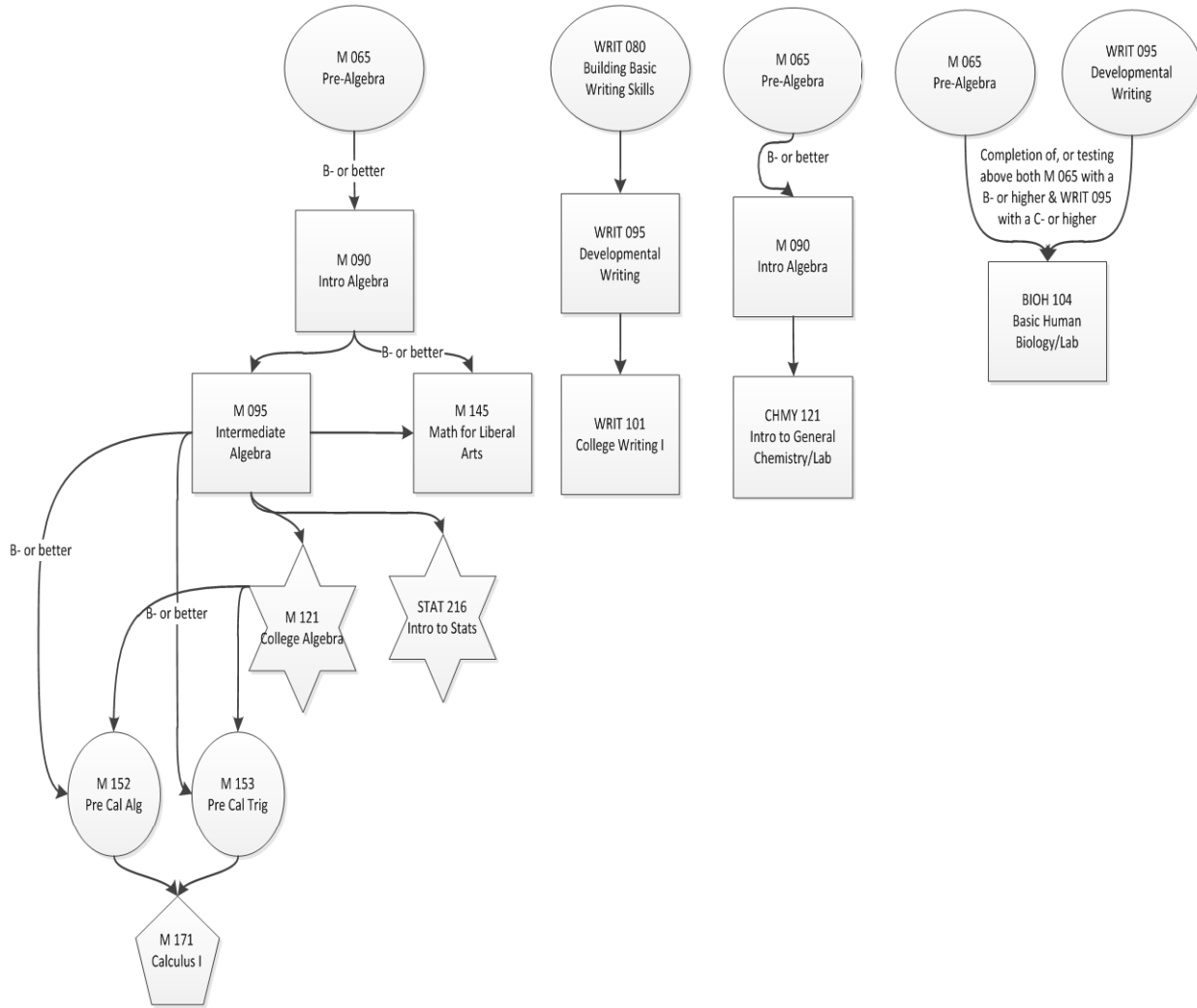
~ Many students need preliminary math, writing, and biology courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and English placement before planning out their full program schedules.

**OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE IN  
BUSINESS ADMINISTRATION – ACCOUNTING OPTION  
DEGREE FROM MSU BILLINGS**

The Associate of Arts with articulated coursework in Business is designed for students interested in a Bachelor of Science in Business Administration - Accounting Option at MSU Billings. The following courses would be taken at MSU-Billings after transfer with the Associate of Arts coursework completed at MSU-Great Falls

COB Productivity Application Software Proficiency Exam			
BUS	315	Applied Business Decisions	3
MGMT	321	Principles of Management	3
MIS	330	Principles of Management Information Systems	3
MKT	340	Principles of Marketing	3
FIN	351	Principles of Financial Management	3
MGMT	322	Operations Management	3
MGMT	488	Business Strategy	3
ACTG	301	Intermediate Accounting I	3
ACTG	302	Intermediate Accounting II	3
ACTG	303	Intermediate Accounting III and Theory	3
ACTG	410	Cost/Management Accounting I	3
ACTG	415	Government and Not-for-Profit Accounting I	3
BUS	405	Business Law II	3
ACTG	321	Accounting Information Systems I	3
ACTG	401	Principles of Fed Tax - Individuals	3
ACTG	411	Auditing I	3
ACTG	436	Advanced Accounting	3
Restricted Electives			6
Electives			7

**Total Program Credits – 120**



## ASSOCIATE OF ARTS DEGREE WITH ACCOUNTING AND BUSINESS COURSEWORK TRANSFER TO MSU BILLINGS

The Associate of Arts with articulated coursework in Accounting and Business is designed for students interested in a Bachelor of Science in Business Administration – General Business Option at MSU Billings.

### ESTIMATED RESIDENT PROGRAM COST\*:

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab Fees	\$	110
Books/Supplies	\$	1964
<b>TOTAL:</b>	<b>\$</b>	<b>9,797</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

### 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+
COMM	130	Public Speaking	3+

#### MATHEMATICS--3 CREDITS +

Course	No.	Title	Credits
M	145**	Math for Liberal Arts	3+
M	171**	Calculus I	4+

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

Course	No.	Title	Credits
ARTZ	101	Art Fundamentals	3+
ARTZ	105	Visual Language - Drawing	3+
MUSI	101	Enjoyment of Music	3+
<b>AND one of the following</b>			
LIT	110	Intro to Literature	3+
PHL	110	Introduction to Ethics	3+

#### NATURAL SCIENCE--8 CREDITS +

(Must include 1 lab course)

Course	No.	Title	Credits
BIOB	101**	Discover Biology/Lab	4+
BIOB	160**	Principles of Living Systems/Lab	4+
<b>AND one of the following</b>			
CHMY	121**	Intro to General Chemistry/Lab	4+
CHMY	141**	College Chemistry I/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
ECNS	201	Principles of Microeconomics	3
<b>AND one of the following</b>			

HSTA	101N	American History I	3
HSTA	102N	American History II	3
HSTR	101	Western Civilization I	3
HSTR	102	Western Civilization II	3

#### CULTURAL DIVERSITY--3 CREDITS +

Course	No.	Title	Credits
ANTY	101	Anthro & the Human Experience	3+
BMKT	242	Introduction to Global Markets	3+
HUM	244	American Cultural Values	3+
NASX	204N	Intro to NA Beliefs & Philsphy	3+
NASX	232N	MT Ind Cltrs/Hstry/Iss	3+
NASX	240N	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 ACCOUNTING, ARTS, BUSINESS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS +

Course	No.	Title	Credits
ACTG	101**	Accounting Procedures I	3+
ACTG	102*	Accounting Procedures II	3+
BGEN	105	Introduction to Business	3+

CONTINUED ON NEXT PAGE...

## IV. ARTICULATION COURSEWORK – 16 CREDITS

ANY OF THE FOLLOWING: +

~~ 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	No.	Title	Credits
ACTG	201*	Principles of Fin Acct	3+
ACTG	202*	Principles of Mang Acct	3+
BGEN	355*	Business Law	3+
ECNS	202	Principles of Macroeconomics	3+
STAT	216**	Basic Statistics	4+
WRIT	122**	Intro to Business Writing	3+

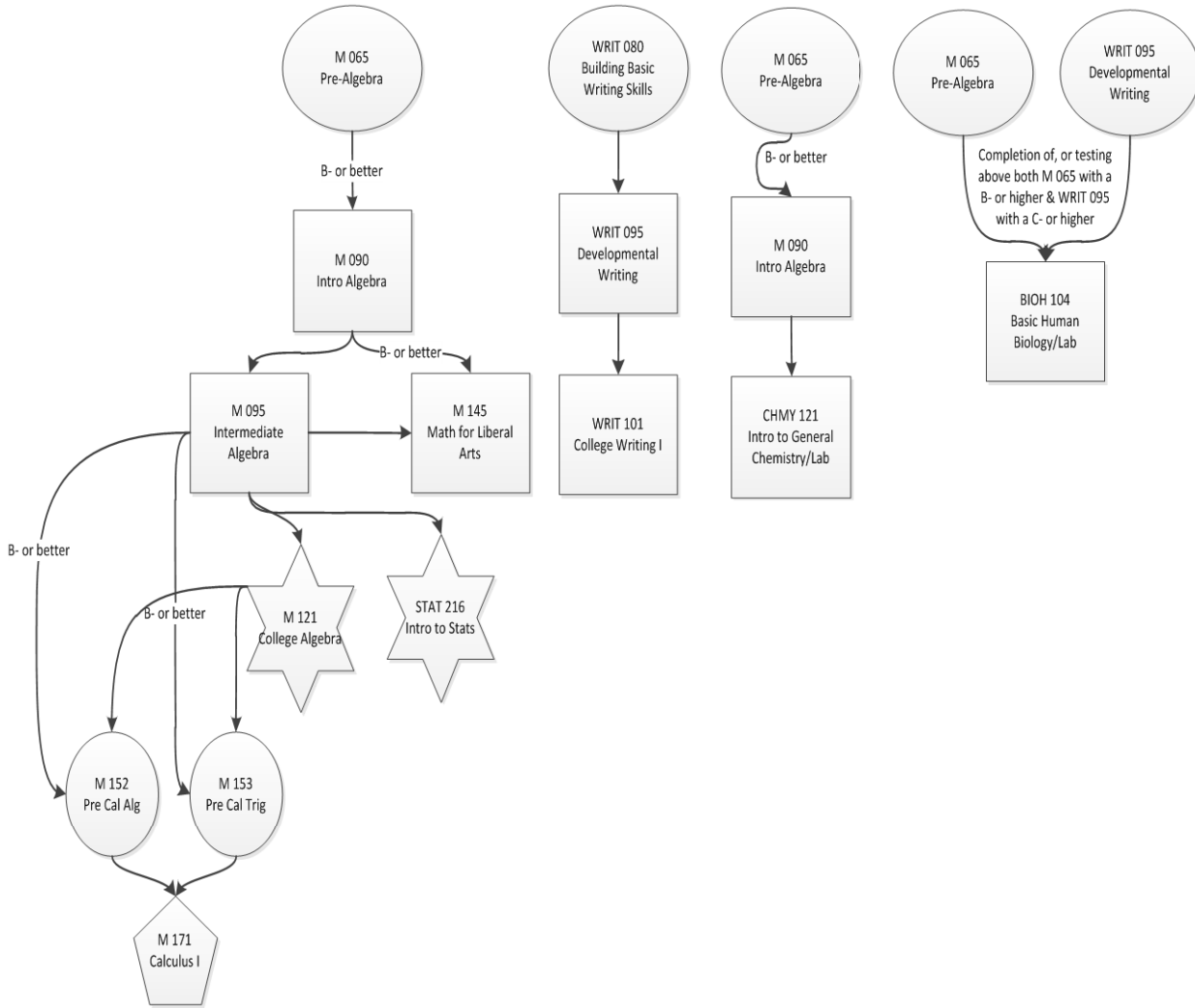
TOTAL PROGRAM CREDITS – 60-63

## OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION – GENERAL BUSINESS OPTION DEGREE FROM MSU BILLINGS

The Associate of Arts with articulated coursework in Business is designed for students interested in a Bachelor of Science in Business Administration - General Business Option at MSU Billings. The following courses would be taken at MSU-Billings after transfer with the Associate of Arts coursework completed at MSU-Great Falls

COB Productivity Application Software Proficiency Exam	
FIN 316 Quantitative Methods in Business and Economics	3
FIN 351 Principles of Financial Management	3
MGMT 321 Principles of Management	3
MGMT 322 Operations Management	3
BUS 347 Integrated Business Cases and Simulation	3
MKT 340 Principles of Marketing	3
MKT 341 Consumer Behavior	3
MIS 330 Principles of Management Information Systems	3
MIS 310 Web Design, Development and Implementation	3
MIS 352 Microcomputer Database Design & Implementation	3
BUS 440 Business and the Environment	3
BUS 485 Capstone	3
MGMT 439 Entrepreneurship	3
FIN 352 Microcomputer Database Design & Implementation	3
MGMT 422 Microcomputer Database Design & Implementation	3
Restricted Electives	6
Electives	7

**Total Program Credits – 120**



## ASSOCIATE OF ARTS DEGREE WITH BUSINESS COURSEWORK TRANSFER TO MSU-NORTHERN

**The Associate of Arts with articulated coursework in Accounting and Business is designed for students interested in a baccalaureate degree in Business Administration at MSU-Northern.**

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

Tuition and Fees	\$	7,684
Application Fee	\$	30
Lab Fees	\$	110
Books	\$	869
<b>TOTAL:</b>	<b>\$</b>	<b>8,693</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

### 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+
<b>AND one of the following</b>			
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
ARTH	101	Global Visual Culture	3+
ARTZ	101	Art Fundamentals	3+
ARTZ	105	Visual Language - Drawing	3+
IDSN	101	Introduction to Interior Design	3+
LIT	110	Intro to Literature	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
BIOB	101**	Discover Biology/Lab	4+
BIOB	160**	Principles of Living Systems/Lab	4+
BIOB	170**	Principles of Biol.Diversity/Lab	4+
BIOH	104**	Basic Human Biology and Lab	4+
CHMY	101	Chemistry for the Consumer	3+

CHMY	121**	Intro to General Chem/Lab	4+
CHMY	141**	College Chemistry I/Lab	4+
CHMY	143*	College Chemistry II/Lab	4+
GEO	101	Intro to Physical Geology/Lab	4+
NUTR	121*	Basic Human Nutrition	3+
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+
<b>AND 1 of the following</b>			
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+

#### CULTURAL DIVERSITY--3 CREDITS

Course	No.	Title	Credits
ANTY	101	Anthro & the Human Experience	3+
BMKT	242	Introduction to Global Markets	3+
HUM	244	American Cultural Values	3+
SIGN	101	Intro to American Sign Lang	3+
NASX	232N	MT Ind Cltrs/Hstry/Iss	3+
NASX	204N	Intro to NA Beliefs & Philsphy	3+
NASX	240N	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.

**CONTINUED ON NEXT PAGE....**

II. COMPUTER SKILLS/USAGE - 3 CREDITS

Course No.	Title	Credits
CAPP 120	Introduction to Computers	3+

III. CONCENTRATION IN ARTS, ACCOUNTING, BUSINESS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS

Course No.	Title	Credits
ACTG 101**	Accounting Procedures I	3+
ACTG 102*	Accounting Procedures II	3+
BGEN 105	Introduction to Business	3+
WRIT 122**	Intro to Business Writing	3+

IV. ARTICULATION COURSEWORK – 16 CREDITS

ANY OF THE FOLLOWING:

Course No.	Title	Credits
ACTG 201*	Principles of Fin Acct	3+
ACTG 202*	Principles of Mang Acct	3+
BMGT 235*	Management	3+
BGEN 235*	Business Law	3+
STAT 216**	Introduction to Statistics	4+

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.

**OUTLINE FOR COMPLETION OF THE BACHELOR OF SCIENCE IN  
BUSINESS ADMINISTRATION DEGREE  
FROM MSU-NORTHERN**

The Associate of Arts with articulated coursework in Accounting and Business is designed for students interested in a baccalaureate degree in Business Administration at MSU-Northern.

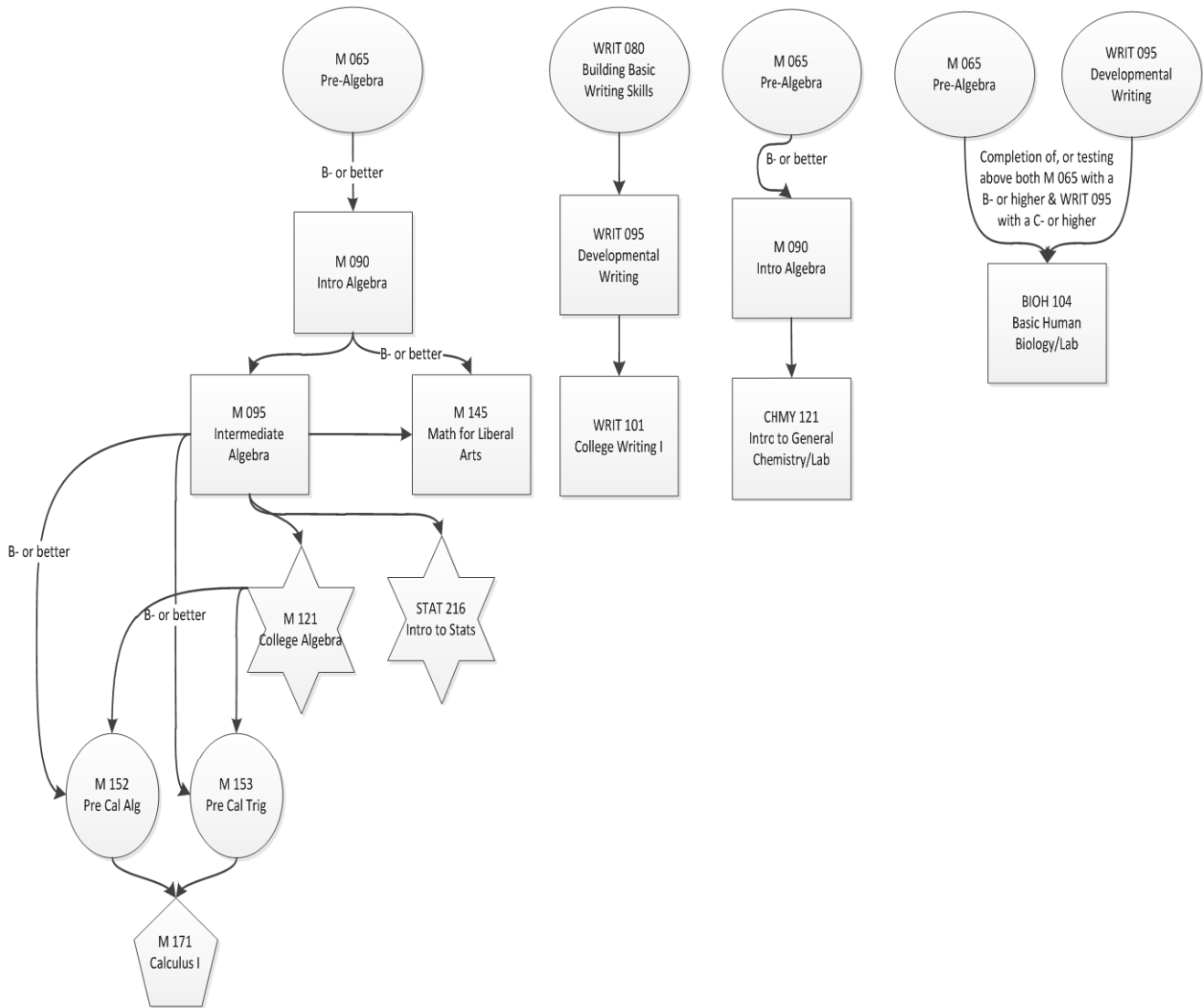
**1. Technical Requirements – 30 credits**

Course	No.	Title	Credits
BMGT	335	Management in Organizations	3
BMGT	329	Human Resource Management	3
BMKT	325	Principles of Marketing	3
BMKT	341	Advanced Marketing Applications	3
BFIN	322	Business Finance	3
BMGT	322	Operations Management	3
BGEN	468	Contemporary Issues in Business Ethics	3
BUS	406	Management Information Systems	3
BUS	410	International Business	3
BGEN	494	Seminar	3
			<u>30</u>

**II. Minor – 30 credits – Selected by the student**

TOTAL TECHNICAL REQUIREMENTS	30
MINOR	30
TRANSFERRED BLOCK	<u>60</u>
	120





ASSOCIATE OF ARTS DEGREE  
WITH ACCOUNTING AND BUSINESS COURSEWORK  
TRANSFER TO MT TECH

The Associate of Arts with articulated coursework in Accounting and Business is designed for students interested in a Bachelor of Science in Business & Information Technology with Management Option degree at MT Tech.

**Estimated Resident Program Cost:**

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab/Course Fees	\$	110
Books/Supplies	\$	1,964
TOTAL:	\$	9,797

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

I. MUS CORE – 32 SEMESTER HOURS

COMMUNICATION--6 CREDITS

(NEED 3 WRITING & 3 VERBAL CREDITS)

COURSE NO.	TITLE	CREDITS	GRADE
WRIT 101**	College Writing I	3+	_____
COMM 130	Public Speaking	3+	_____

MATHEMATICS--4 CREDITS

COURSE NO.	TITLE	CREDITS	GRADE
STAT 216**	Basic Statistics	4+	_____

HUMANITIES/FINE ARTS--6 CREDITS

COURSE NO.	TITLE	CREDITS	GRADE
ARTH 101	Global Visual Culture	3+	_____
ARTZ 101	Art Fundamentals	3+	_____
ARTZ 105	Visual Language - Drawing	3+	_____
IDSN 101	intro to Interior Design	3+	_____
LIT 110	Intro to Literature	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	GRADE
BIOB 101**	Discover Biology/Lab	4+	_____
BIOB 160**	Principles of Living Systems/Lab	4+	_____
BIOB 170**	Principles of Biol Diversity/Lab	4+	_____

BIOH 104**	Basic Human Biology and Lab	4+	_____
CHMY 121**	Intro to General Chem/Lab	4+	_____
CHMY 141**	College Chemistry I/Lab	4+	_____
CHMY 143*	College Chemistry II/Lab	4+	_____
GEO 101	Intro to Physical Geology/Lab	4+	_____
NUTR 121**	Basic Human Nutrition	3+	_____
PHYS 110	Survey of Natural Sciences	3+	_____
PHYS 130	Fund Physical Science Lab	4+	_____

SOCIAL SCIENCES/ HISTORY --6 CREDITS

COURSE NO.	TITLE	CREDITS	GRADE
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+	_____

CULTURAL DIVERSITY--3 CREDITS

COURSE NO.	TITLE	CREDITS	GRADE
ANTY 101	Anthro & the Human Experience	3+	_____
BMKT 242	Intro to Global Markets	3+	_____
HUM 244	American Cultural Values	3+	_____
SIGN 101	Intro to American Sign Lang	3+	_____
NASX 232N	MT Ind Cltrs/Hstry/Iss	3+	_____
NASX 204N	Intro to NA Beliefs & Philsphy	3+	_____
NASX 240N	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	GRADE
CAPP 120	Introduction to Computers	3+	_____

III. CONCENTRATION IN ARTS, ACCOUNTING, BUSINESS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS+

COURSE NO.	TITLE	CREDITS	GRADE
ACTG 101**	Accounting Procedures I	3+	_____
ACTG 102*	Accounting Procedures II	3+	_____
BGEN 105	Introduction to Business	3+	_____

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## IV. ARTICULATION COURSEWORK – 27 CREDITS

ANY OF THE FOLLOWING:

<b>COURSE</b>	<b>NO.</b>	<b>TITLE</b>	<b>CREDITS</b>	<b>GRADE</b>
ACTG	201*	Principles of Fin Acct	3+	_____
ACTG	202*	Principles of Mang Acct	3+	_____
ECNS	201	Principles of Microeconomics	3+	_____
ECNS	202	Principles of Macroeconomics	3+	_____
CAPP	156*	MS Excel	3+	_____
CAPP	158*	MS Access	3+	_____
BMGT	235	Management	3+	_____
BMKT	225	Marketing	3+	_____
BGEN	235	Business Law	3+	_____

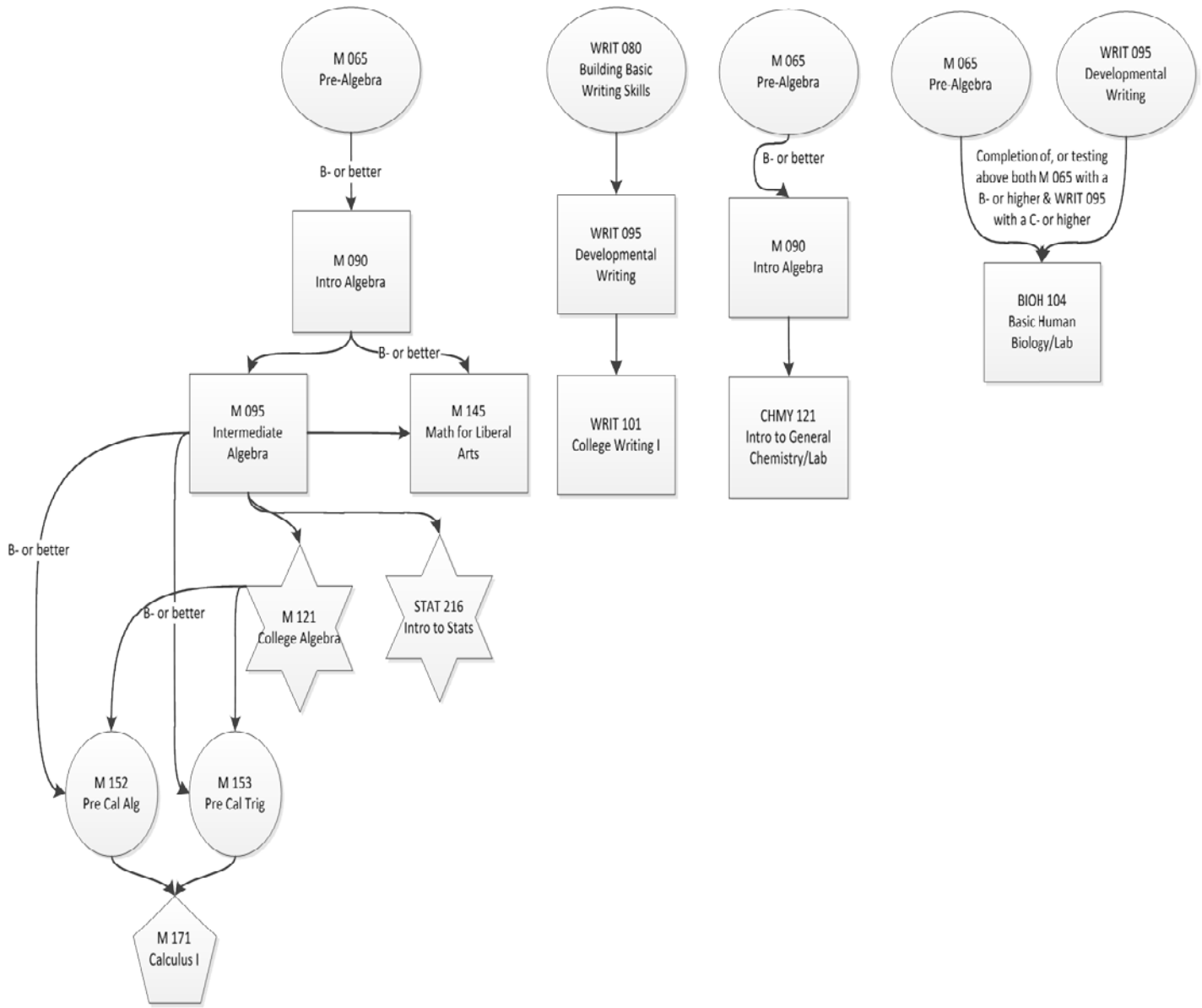
**TOTAL PROGRAM CREDITS – 71~**

~ 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.

## OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE IN BUSINESS & INFORMATION TECHNOLOGY WITH INFORMATION TECHNOLOGY OPTION FROM MT TECH

The Associate of Arts with articulated coursework in Accounting and Business is designed for students interested in a Bachelor of Science in Business & Information Technology with Management Option degree at MT Tech.

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
ACTG	410	Cost/MGMT/Acct I	3
ACTG	301	Intermediate Accounting	3
ACTG	302	Intermediate Accounting II	3
ACTG	321	Accounting Information Systems	3
ACTG	401	Principles of Federal Taxation	3
ACTG	411	Auditing I	3
BUS	3636	Business Ethics	3
BUS	3516	Business Finance	3
BUS	3666	Operations and Production Management	3
BUS	4516	International Business	3
BUS	4566	Financial Markets and Institutions	3
BUS	4936	Strategic Management	3
CSCI	110	Programming with Visual Basics	3
CSCI	321	Systems Design Process	3
M	141	Math for Business and Social Science	3
M	142	Math for Business and Social Science	3
WRIT	322	Advanced Business Writing	3
CS/IT/HCI/PTC Elective			6
Concentration Elective			<u>3</u>
			60



ASSOCIATE OF ARTS DEGREE  
WITH ELEMENTARY EDUCATION TRANSFER TO  
MSU-NORTHERN – ELEMENTARY EDUCATION

**ESTIMATED RESIDENT PROGRAM COST:\***

Tuition and Fees	\$	7,684
Application Fee	\$	30
Lab Fees	\$	110
Books	\$	869
<b>TOTAL:</b>	<b>\$</b>	<b>8,693</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

The Associate of Arts with articulated coursework in Education 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 first Aid/CPR card prior to entering their junior year at MSU-Northern.

**I. MUS CORE – 34-35 SEMESTER HOURS****COMMUNICATION--6 CREDITS**

Course	No.	Title	Credits
WRIT	101**	College Writing I	3+
COMM	135	Interpersonal Communication	3+

**MATHEMATICS--3 CREDITS**

Course	No.	Title	Credits
M	121**	College Algebra	3+

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

Course	No.	Title	Credits
LIT	110	Intro to Literature	3+
<b>AND 1 of the following</b>			
ARTH	101	Global Visual Culture	3+
ARTZ	101	Art Fundamentals	3+
ARTZ	105	Visual Language - Drawing	3+
IDSN	101	Introduction to Interior Design	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
BIOB	101**	Discover Biology/Lab	4+
<b>AND 1 of the following</b>			
PHYS	110	Survey of Natural Science	3+
PHYS	130	Fund of Phys Science/Lab	4+

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

Course	No.	Title	Credits
HSTA	255N	Montana History	3+
PSCI	210	Intro to American Government	3+

**CULTURAL DIVERSITY--3 CREDITS**

Course	No.	Title	Credits
NASX	232N	MT Ind Cltrs/Hstry/Iss	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+

\*or any CAPP, CSCI, ITS, CIT 3 credit hour course that has CAPP 120 as a prerequisite

**III. CONCENTRATION IN ARTS, ACCOUNTING, BUSINESS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS**

Course	No.	Title	Credits
EDU	221	Educational Psych & Measurement	3+
PSYX	230	Developmental Psychology	3+
Any ARTH, ARTZ, MUSI, PSYX core course or			
	SOCI 101		3+

**IV. EDUCATION COURSEWORK – 17 CREDITS**

Course	No.	Title	Credits
EDU	200	Introduction to Education	3+
EDU	270*	Instructional Technology	3+
HHD	106	Drug & Health Issues for Ed	3+
M	135**	Math for K-8 Teachers I	4+
M	136*	Math for K-8 Teachers II	4+

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.

CONTINUED ON NEXT PAGE...

**Recommended Electives**

Course No.	Title	Credits
EDU 211	Multicultural Education	3+
See advisor for minor/concentration courses		3+
<b>TOTAL PROGRAM CREDITS - 60</b>		

~ 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.

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

**OUTLINE FOR COMPLETION OF THE BACHELOR OF SCIENCE IN  
ELEMENTARY EDUCATION FROM MSU-NORTHERN**

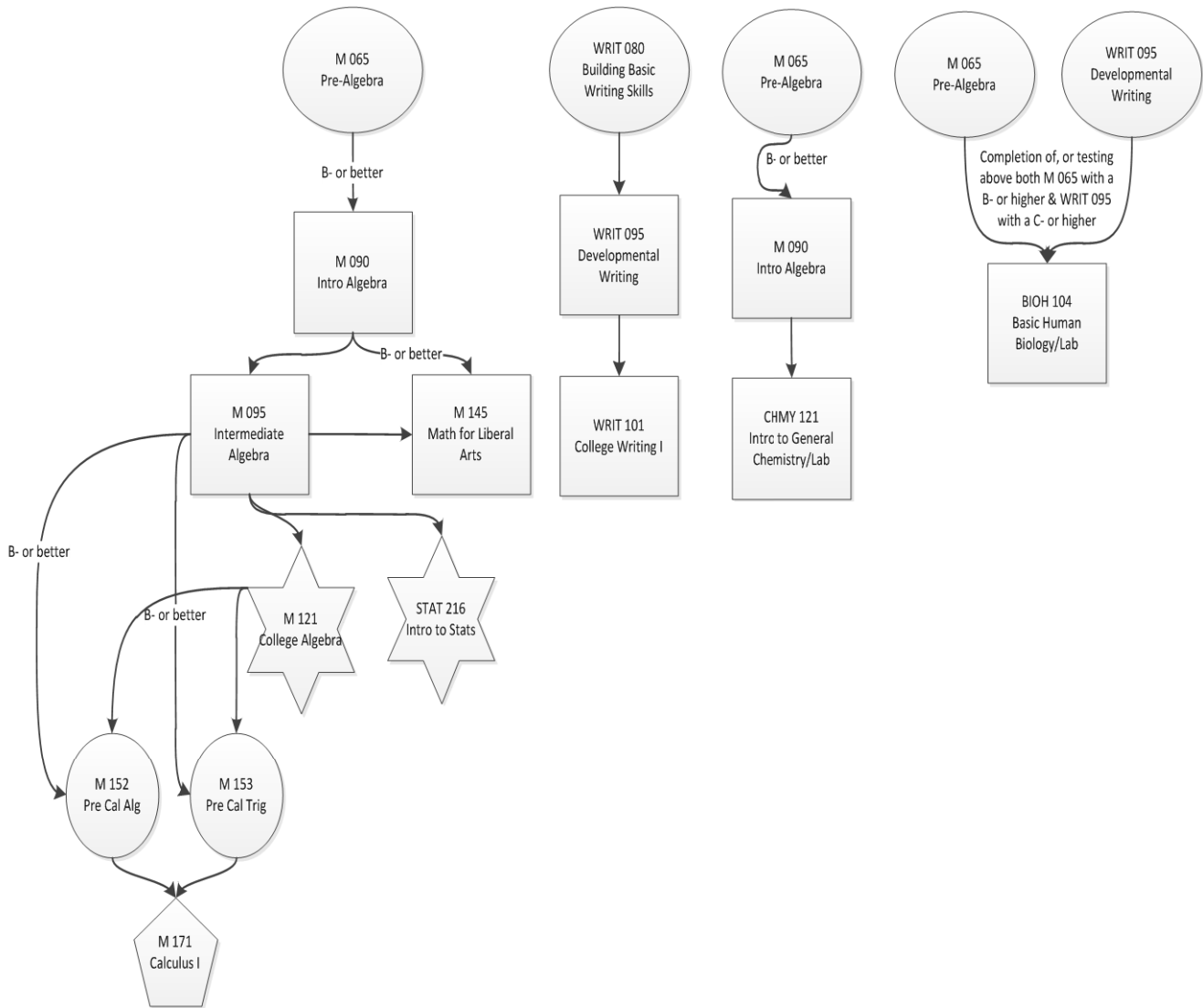
The Associate of Arts with articulated coursework in Education is designed for students interested in a Bachelor of Science in Elementary Education degree at MSU-Northern.

Course	No	Title	Credits
EDPY	350	Educational Psychology of the Exceptional Child	3
EDU	380	Introduction to Curriculum Planning and Practice	3
EDU	397	MAMethods: K-8 Mathematics	2
EDU	397	SC Methods: K-8 Science	2
EDU	397	SSMethods: K-8 Social Science	2
EDU	397	CA Methods: K-8 Integrated Arts/All Learners	2
EDUC	334	Methods of Teaching Integrated Language Arts	3
EDU	335	Fundamental and Corrective Strategies in Reading	3
EDUC	336	Integrated Field Experience	1
EDU	311	Cultures, Diversity & Ethics in Global Education	3
EDU	397	HE Methods: K-8 Health Enhancement	2
EDU	383	Assessment in Education	3
EDU	380	Classroom Environment and Management	3
EDU	495	ELStudent Teaching K-8	12
<b>OR</b>			
EDU	495	ES Student Teaching K-12	12
EDU	315	Integrating IEFA Across the Curriculum	2
EDU	337	Reading Materials for the Elementary Child	2
EDU	452	Advanced Practicum in Education	<u>3</u>
			51

**MINORS/CONCENTRATIONS/ELECTIVES\***

21-30

\* 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.



# 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.

**Estimated Resident Program Cost:**

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab/Course Fees	\$	110
Books/Supplies	\$	1,964
<b>TOTAL:</b>	<b>\$</b>	<b>9,797</b>

**\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.**

**I. MUS CORE – 33 SEMESTER HOURS**

**COMMUNICATION -- 6 CREDITS**

(NEED 3 WRITING & 3 VERBAL CREDITS)

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
WRIT	101**	College Writing I	3+
COMM	130	Public Speaking	3+

**MATHEMATICS -- 4 CREDITS**

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
STAT	216**	Basic Statistics	4+

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

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
ARTH	101	Global Visual Culture	3+
ARTZ	101	Art Fundamentals	3+
ARTZ	105	Visual Language - Drawing	3+
MUSI	105	Music Theory I	3+
MUSI	101	Enjoyment of Music	3+
MUSI	203	American Popular Music	3+
MUSI	207	World Music	3+

**And one of the following**

LIT	110	Intro to Literature	3+
HUM	242	Gender and Equality	3+
PHL	101	Introduction to Philosophy	3+

**NATURAL SCIENCE-- 8 CREDITS**

(Must include 1 lab course)

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
BIOB	101**	Discover Biology/Lab	4+
BIOH	104**	Basic Human Biology & Lab	4+
BIOB	160**	Principles of Living Systems/Lab	4+
BIOB	170**	Prin. Of Biological Diversity/Lab	4+
CHMY	121**	Intro to General Chem/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	130	Fund Physical Science/Lab	4+

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

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
ECNS	201	Principles of Microeconomics	3+
SOCI	101	Introduction to Sociology <b>OR</b>	
PSYX	100	Intro to Psychology	3+

**CULTURAL DIVERSITY -- 3 CREDITS**

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
NASX	240N	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**

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
CAPP	120	Introduction to Computers	3+

**III. CONCENTRATION IN ARTS, HUMANITIES, AND SOCIAL SCIENCES – 9 CREDITS**

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
WRIT	201*	College Writing II	3+
ECNS	202	Principles of Macroeconomics	3+
ACTG	101**	Accounting Procedures I	3+

**IV. ARTICULATION COURSEWORK – 16 CREDITS**

ANY OF THE FOLLOWING:

<u>Course</u>	<u>No.</u>	<u>Title</u>	<u>Credits</u>
ACTG	102*	Accounting Procedures II	3
ACTG	201*	Principles of Fin Acct	3
ACTG	202*	Principles of Mang Acct	3
BGEN	105	Introduction to Business	3
BMGT	235*	Management	3
BGEN	235*	Business Las	3
CAPP	156*	MS Excel	3

**TOTAL PROGRAM CREDITS – 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.

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# OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE IN ACCOUNTING DEGREE 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

### FOUNDATION SKILLS COURSES – 6 CREDITS

Course	No.	Title	Credits
CPS	110	Conquering the Digital Divide	3
TRL	200	Fund. Of Christian Theology	3

### GREAT QUESTIONS COURSES – 8 CREDITS

Course	No.	Title	Credits
ILC	330x	What is Truth	4
ILC	350x	What is the Common Good	4

### UPPER DIVISION WRITING COURSE – 3 CREDITS

Course	No.	Title	Credits
ENG	312	Writing for Business and Prof	3

## II. ACCOUNTING MAJOR

\*\*CREDITS & COURSES DEPENDENT UPON

### ARTICULATION COURSES TAKEN AT MSUGF

Course	No.	Title	Credits
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

## III. TOTAL CREDITS TOWARD DEGREE:

61 CREDITS (AA – MSUGF)

37 CREDITS (BS – UGF)

17 CREDITS (CORE – UGF)

13 CREDITS (ELECTIVES)

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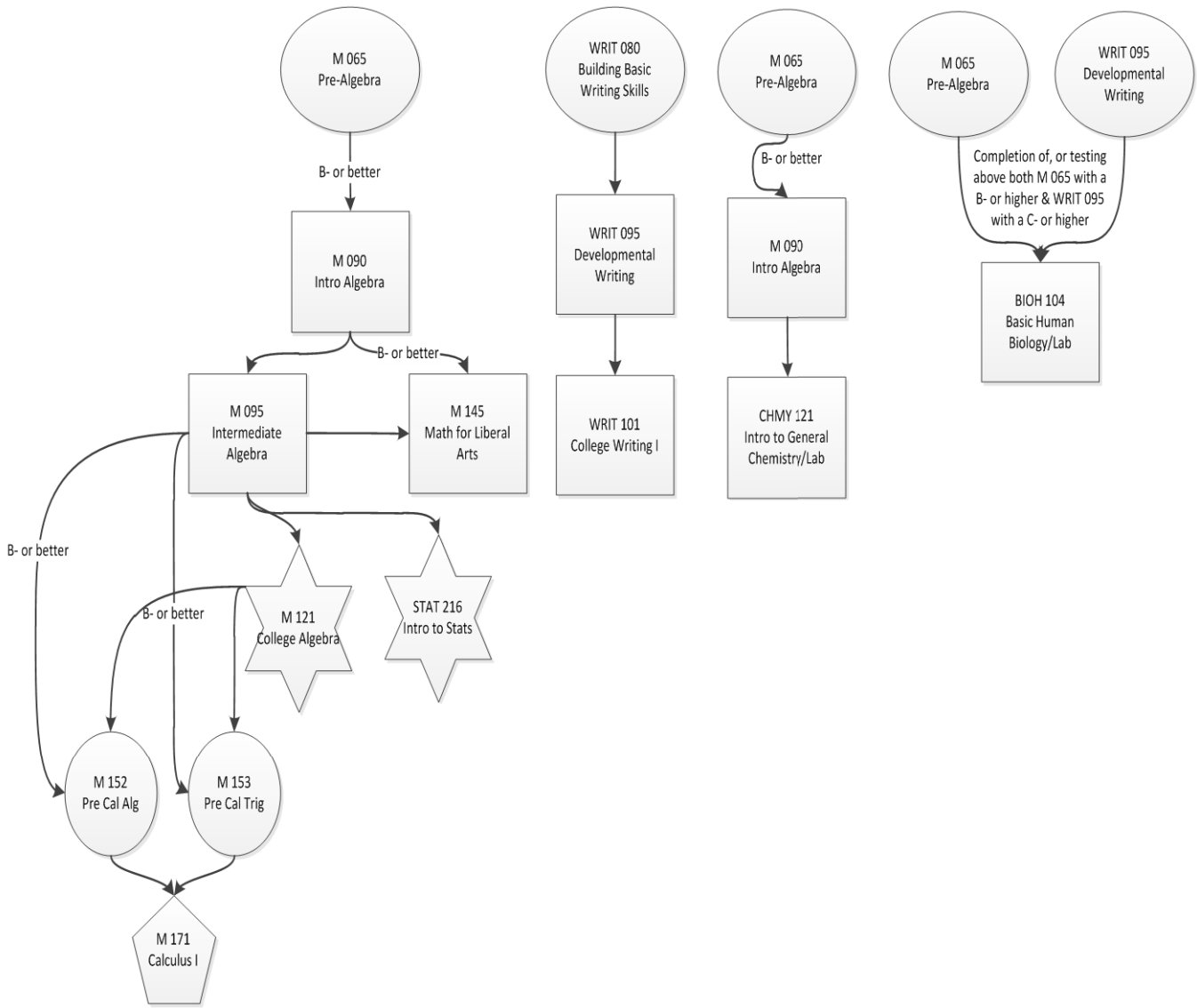
128 TOTAL CREDITS

## UGF GRADUATION REQUIREMENTS:

1. Complete a minimum of 128 credits.
2. Maintain a cumulative University of Great Falls grade point average of 2.00 or higher.
3. Complete the University Core curriculum.
4. Complete a major. All courses used to complete the requirements of a major, minor, or concentration must have a grade of C or better. Some majors may require completion of a minor or concentration.
5. Complete thirty of the last forty semester hours of coursework at the University of Great Falls. Students enrolled in an approved Servicemembers Opportunity Colleges Army Degree (SOCAD) program may satisfy the academic residency requirements with coursework taken at any time during their enrollment at the university.
6. Complete a minimum of 40% or 15 credits of their major (whichever is greater) and a minimum of 40% of their minor in residency at the University of Great Falls. Completion of credits within a concentration will not count toward residency in the major. This requirement does not apply to those completing an approved major or minor in 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 the University of Great Falls. (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.

## Course Equivalencies

MSU-GF Course	UGF Course
ACTG 201	ACC 201
ACTG 202	ACC 202
BMGT 235	BUS 240
BGEN 235	BUS 335
CAPP 156	CPS 205



## 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.

### Estimated Resident Program Cost:

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab/Course Fees	\$	110
Books/Supplies	\$	1,964
TOTAL:	\$	9,797

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

### I. MUS CORE – 33 SEMESTER HOURS

#### COMMUNICATION -- 6 CREDITS

(NEED 3 WRITING & 3 VERBAL CREDITS)

Course No.	Title	Credits
WRIT 101**	College Writing I	3
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
ARTH 101	Global Visual Culture	3
ARTZ 101	Art Fundamentals	3
ARTZ 105	Visual Language - Drawing	3
MUSI 105	Music Theory I	3
MUSI 101	Enjoyment of Music	3
MUSI 203	American Popular Music	3
MUSI 207	World Music	3

#### And one of the following

LIT 110	Intro to Literature	3
HUM 242	Gender and Equality	3
PHL 101	Introduction to Philosophy	3

#### NATURAL SCIENCE -- 8 CREDITS

(Must include 1 lab course)

Course No.	Title	Credits
BIOB 101**	Discover Biology/Lab	4
BIOH 104**	Basic Human Biology & Lab	4
BIOB 160**	Principles of Living Systems/Lab	4
BIOB 170**	Prin. Of Biological Diversity/Lab	4
CHMY 121**	Intro to General Chem/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 130	Fund Physical Science/Lab	4

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

Course No.	Title	Credits
ECNS 201	Principles of Microeconomics	3
SOCI 101	Introduction to Sociology OR	
PSYX 100	Intro to Psychology	3

#### CULTURAL DIVERSITY -- 3 CREDITS

Course No.	Title	Credits
NASX 240N	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
WRIT 201*	College Writing II	3
ECNS 202	Principles of Macroeconomics	3
ACTG 101**	Accounting Procedures I	3

### IV. ARTICULATION COURSEWORK – 16 CREDITS

ANY OF THE FOLLOWING:

Course No.	Title	Credits
ACTG 102*	Accounting Procedures II	3
ACTG 201*	Principles of Fin Acct	3
ACTG 202*	Principles of Mang Acct	3
BGEN 105	Introduction to Business	3
BGEN 235*	Business Law	3
BMGT 235*	Management	3
BMKT 225*	Marketing	3
CAPP 156*	MS Excel	3

#### TOTAL PROGRAM CREDITS – 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.

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## OUTLINE FOR COMPLETION OF BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION DEGREE 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**

**FOUNDATION SKILLS COURSES – 6 CREDITS**

Course	No.	Title	Credits
CPS	110	Conquering the Digital Divide	3
TRL	200	Fund. Of Christian Theology	3

**GREAT QUESTIONS COURSES – 8 CREDITS**

Course	No.	Title	Credits
ILC	330x	What is Truth	4
ILC	350x	What is the Common Good	4

**UPPER DIVISION WRITING COURSE – 3 CREDITS**

Course	No.	Title	Credits
ENG	312	Writing for Business and Prof.	3

**II. BUSINESS ADMINISTRATION MAJOR**

\*\*CREDITS & COURSES DEPENDENT UPON

**ARTICULATION COURSES TAKEN AT MSUGF**

Course	No.	Title	Credits
ACC	201	Principles of Financial Acct	3
ACC	202	Principles of Managerial Acct	3
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	495	Internship	3
BUS	496	Commerce Integration	3
COM	301	The Art of Communication	3
CPS	205	Spreadsheets	3
Business Related Approved Electives			6

**III. TOTAL CREDITS TOWARD DEGREE:**

61 CREDITS (AA – MSUGF)  
 27 CREDITS (BS – UGF)  
 17 CREDITS (CORE – UGF)  
 23 CREDITS (ELECTIVE)

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128 TOTAL CREDITS

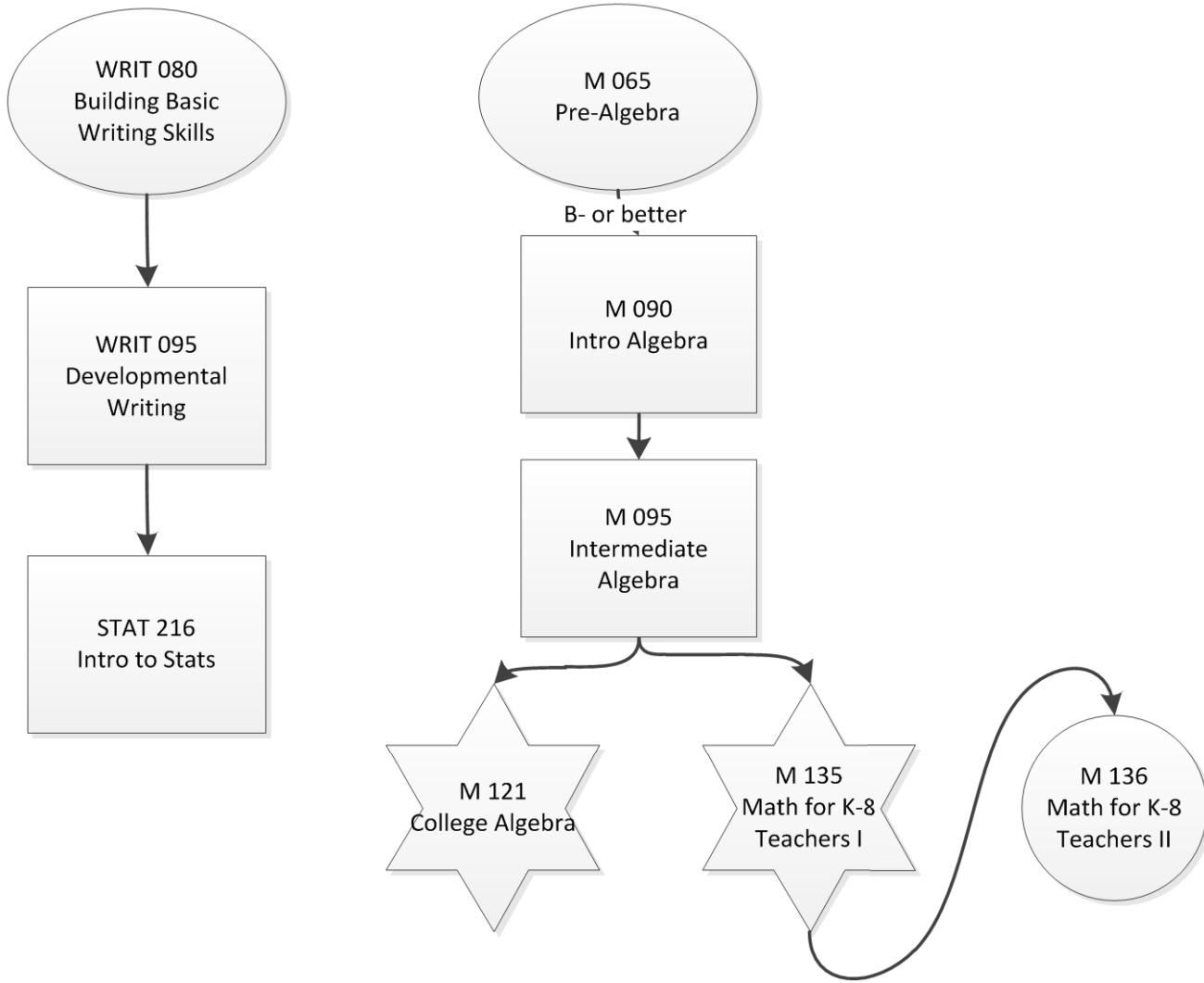
**UGF GRADUATION REQUIREMENTS:**

1. Complete a minimum of 128 credits.
2. Maintain a cumulative University of Great Falls grade point average of 2.00 or higher.
3. Complete the University Core curriculum.
4. Complete a major. All courses used to complete the requirements of a major, minor, or concentration must have a grade of C or better. Some majors may require completion of a minor or concentration.
5. Complete thirty of the last forty semester hours of coursework at the University of Great Falls. Students enrolled in an approved Servicemembers Opportunity Colleges Army Degree (SOCAD) program may satisfy the academic residency requirements with coursework taken at any time during their enrollment at the university.
6. Complete a minimum of 40% or 15 credits of their major (whichever is greater) and a minimum of 40% of their minor in residency at the University of Great Falls. Completion of credits within a concentration will not count toward residency in the major. This requirement does not apply to those completing an approved major or minor in 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 the University of Great Falls. (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.

**Course Equivalencies**

MSU-GF Course	UGF Course
ACTG 201	ACC 201
ACTG 202	ACC 202
BMGT 235	BUS 240
BMKT 225	BUS 260
BGEN 235	BUS 335
CAPP 156	CPS 205

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## 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.

### Estimated Resident Program Cost:

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab/Course Fees	\$	110
Books/Supplies	\$	1,964
TOTAL:	\$	9,797

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

### I. MUS CORE – 33 SEMESTER HOURS

#### COMMUNICATION -- 6 CREDITS

(NEED 3 WRITING & 3 VERBAL CREDITS)

Course No.	Title	Credits
WRIT 101**	College Writing I	3+
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
ARTH 101	Global Visual Culture	3+
ARTH 101	Art Fundamentals	3+
ARTZ 105	Visual Language - Drawing	3+
MUSI 105	Music Theory I	3+
MUSI 101	Enjoyment of Music	3+
MUSI 203	American Popular Music	3+
MUSI 207	World Music	3+

#### And one of the following

LIT 110	Intro to Literature	3+
HUM 242	Gender and Equality	3+
PHL 101	Introduction to Philosophy	3+

#### NATURAL SCIENCE -- 8 CREDITS

(Must include 1 lab course)

Course No.	Title	Credits
BIOB 101**	Discover Biology/Lab	4+
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+

#### CULTURAL DIVERSITY -- 3 CREDITS

Course No.	Title	Credits
NASX 240N	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
WRIT 201*	College Writing II	3+
EDU 221	Ed Psych & Measurement	3+
<b>AND</b>		
SOCI 101	Introduction to Sociology	<b>OR</b>
PSYX 100	Introduction to Psychology	3+

### IV. ARTICULATION COURSEWORK – 17 CREDITS

Course No.	Title	Credits
EDU 200	Introduction to Education	3
EDU 270*	Instructional Technology	3
EDU 211	Multicultural Education	3
M 135**	Math for K-8 Teachers I	4
M 136*	Math for K-8 Teachers II	4
		Electives***

\*\*\*Please see your advisor in regard to elective credits that will transfer to an applicable major and/or minor at UGF

#### TOTAL PROGRAM CREDITS – 62

~ 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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## OUTLINE FOR COMPLETION OF BACHELOR OF ARTS IN ELEMENTARY EDUCATION DEGREE 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 – 17 CREDITS

#### FOUNDATION SKILLS COURSES – 6 CREDITS

Course	No.	Title	Credits
CPS	110	Conquering the Digital Divide	3
TRL	200	Fund. Of Christian Theology	3

#### GREAT QUESTIONS COURSES – 8 CREDITS

Course	No.	Title	Credits
ILC	330x	What is Truth	4
ILC	350x	What is the Common Good	4

#### UPPER DIVISION WRITING COURSE – 3 CREDITS

Course	No.	Title	Credits
ENG	300-319	Upper level writing course	3

### II. ELEMENTARY EDUCATION MAJOR - 54 CREDITS

Course	No.	Title	Credits
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

#### Other required courses:

GSC	158	History of Science	4
HPE	110	Wellness Perspectives	3
HST	230	World and Regional Geography	3
HPE	300	Strategies in Hlth Enhancement	3
MUS	250	Elementary School Music	2

### II. DUAL MAJOR IN SPECIAL EDUCATION OR CONCENTRATION NECESSARY FOR COMPLETION OF ELEMENTARY EDUCATION DEGREE FROM UGF

#### III. TOTAL CREDITS TOWARD DEGREE:

61 CREDITS (AA – MSUGF)

54 CREDITS (BS – UGF)

17 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

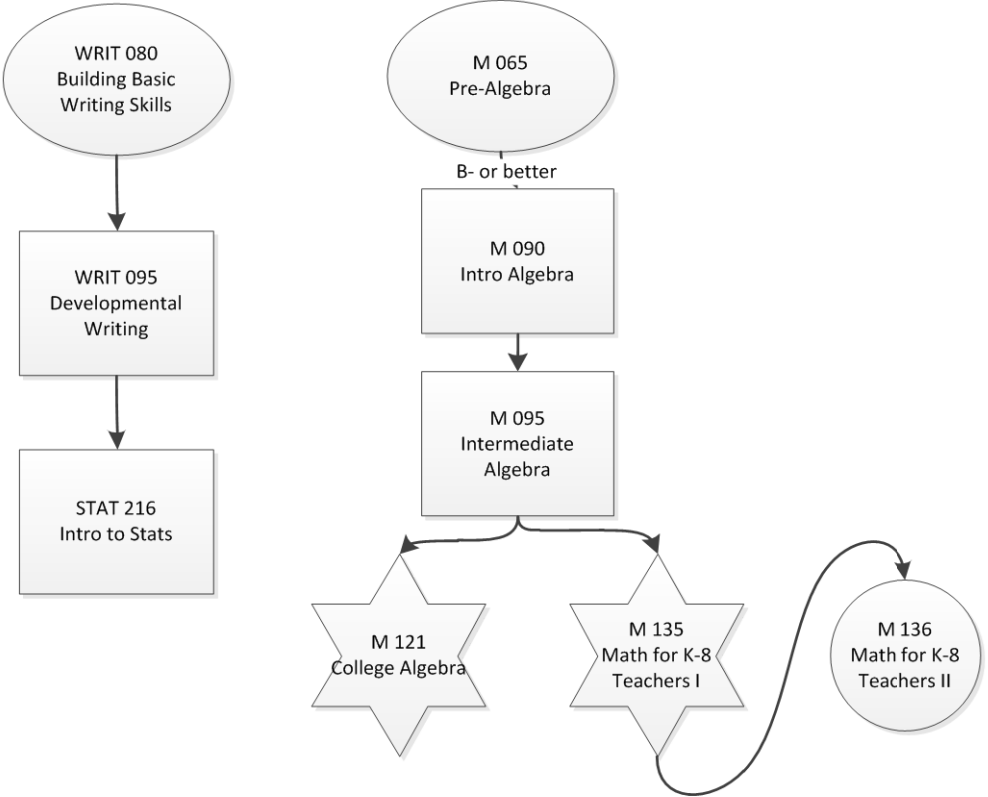
Health and Physical Education Concentration

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 Education is designed for students interested in a baccalaureate degree in Secondary Education at the University of Great Falls.

### Estimated Resident Program Cost:

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab/Course Fees	\$	110
Books/Supplies	\$	1,964
TOTAL:	\$	9,797

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

### I. MUS CORE – 33 SEMESTER HOURS

#### COMMUNICATION -- 6 CREDITS

(NEED 3 WRITING & 3 VERBAL CREDITS)

Course No.	Title	Credits
WRIT 101**	College Writing I	3+
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
ARTH 101	Global Visual Culture	3+
ARTZ 101	Art Fundamentals	3+
ARTZ 105	Visual Language - Drawing	3+
MUSI 105	Music Theory I	3+
MUSI 101	Enjoyment of Music	3+
MUSI 203	American Popular Music	3+
MUSI 207	World Music	3+

#### And one of the following

LIT 110	Intro to Literature	3+
HUM 242	Gender and Equality	3+
PHL 101	Introduction to Philosophy	3+

#### NATURAL SCIENCE -- 8 CREDITS

(Must include 1 lab course)

Course No.	Title	Credits
BIOB 101**	Discover Biology/Lab	4+
BIOH 104**	Basic Human Biology & Lab	4+
BIOB 160**	Principles of Living Systems/Lab	4+
BIOB 170**	Prin. Of Biological Diversity/Lab	4+
CHMY 121**	Intro to General Chem/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 130	Fund Physical Science/Lab	4+

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

Course No.	Title	Credits
HSTR 101	Western Civilization I	3+
HSTR 102	Western Civilization II	3+

#### CULTURAL DIVERSITY -- 3 CREDITS

Course No.	Title	Credits
NASX 240N	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
WRIT 201*	College Writing II	3+
EDU 221	Ed Psych & Measurement	3+
<b>AND one of the following</b>		
SOCI 101	Introduction to Sociology	3+
PSYX 100	Introduction to Psychology	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
	Electives***	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 – 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.

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## OUTLINE FOR COMPLETION OF BACHELOR OF ARTS IN SECONDARY EDUCATION DEGREE 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

#### FOUNDATION SKILLS COURSES – 6 CREDITS

Course	No.	Title	Credits
CPS	110	Conquering the Digital Divide	3
TRL	200	Fund. Of Christian Theology	3

#### GREAT QUESTIONS COURSES – 8 CREDITS

Course	No.	Title	Credits
ILC	330x	What is Truth	4
ILC	350x	What is the Common Good	4

#### UPPER DIVISION WRITING COURSE – 3 CREDITS

Course	No.	Title	Credits
ENG	300-319	Upper level writing course	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	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

*\*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:

61 CREDITS (AA – MSUGF)  
25 CREDITS (BS – UGF)  
17 CREDITS (CORE – UGF)

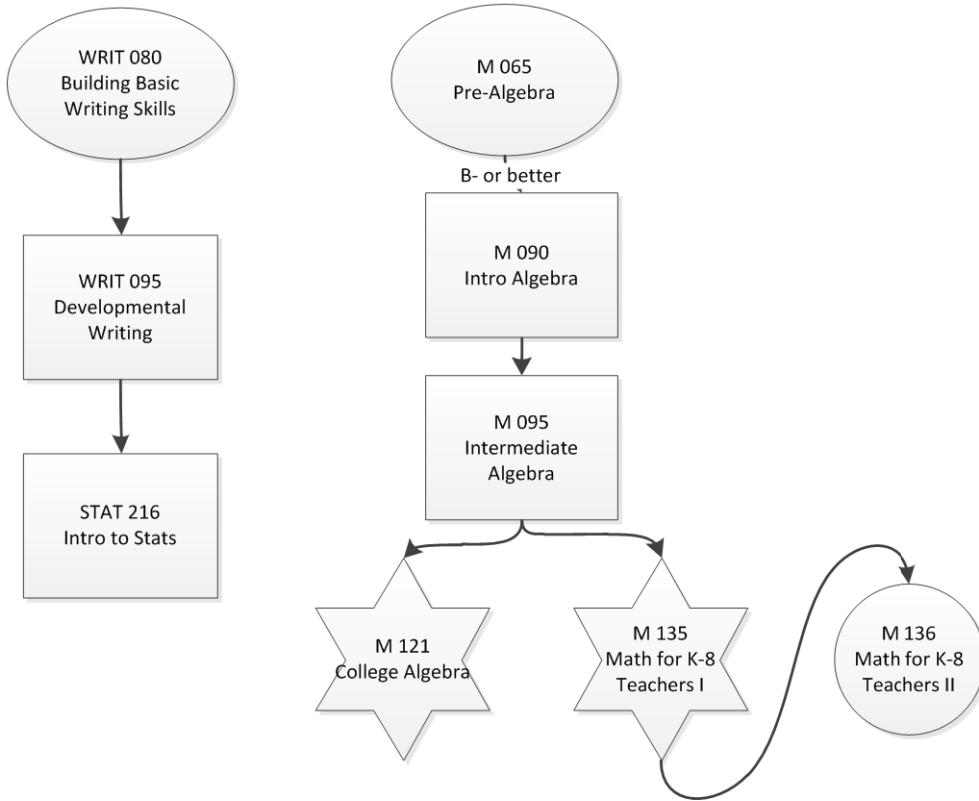
### REMAINING CREDITS (DUAL MAJOR AND MINOR)

128 TOTAL CREDITS NECESSARY FOR GRADUATION

#### UGF GRADUATION REQUIREMENTS:

1. Complete a minimum of 128 credits.
2. Maintain a cumulative University of Great Falls grade point average of 2.00 or higher.
3. Complete the University Core curriculum.
4. Complete a major. All courses used to complete the requirements of a major, minor, or concentration must have a grade of C or better. Some majors may require completion of a minor or concentration.
5. Complete thirty of the last forty semester hours of coursework at the University of Great Falls. Students enrolled in an approved Servicemembers Opportunity Colleges Army Degree (SOCAD) program may satisfy the academic residency requirements with coursework taken at any time during their enrollment at the university.
6. Complete a minimum of 40% or 15 credits of their major (whichever is greater) and a minimum of 40% of their minor in residency at the University of Great Falls. Completion of credits within a concentration will not count toward residency in the major. This requirement does not apply to those completing an approved major or minor in 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 the University of Great Falls. (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.

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ASSOCIATE OF APPLIED SCIENCE DEGREE  
IN MICROCOMPUTER SUPPORT  
TRANSFER TO MSU-NORTHERN – COMPUTER INFORMATION SYSTEMS

The Associate of Applied Science with articulated coursework in Microcomputer Support is designed for students interested in a baccalaureate degree in Computer Information Systems at Montana State University-Northern.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6154
Application Fee	\$	30
Lab Fees	\$	175
Books/Supplies	\$	2105
<b>TOTAL</b>	<b>\$</b>	<b>8,465</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

Course	No.	Title	Credits
BGEN	105	Introduction to Business	3+
CAPP	120	Intro to Computers	3+
CAPP	154*	MS Word	3+
CAPP	156*	MS Excel	3+
CAPP	158*	MS Access	3+
CSCI	111*	Programming w/Java	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+
ITS	252*	CCNA 4: Exploration	3+
ITS	280*	Computer Repair & Maintenance	4+
ITS	298*	Internship/Cooperative Education	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**

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OUTLINE FOR COMPLETION OF A BACHELOR OF SCIENCE IN COMPUTER INFORMATION SYSTEMS DEGREE FROM MSU-NORTHERN

**I. Technical Requirements – 54 credits**

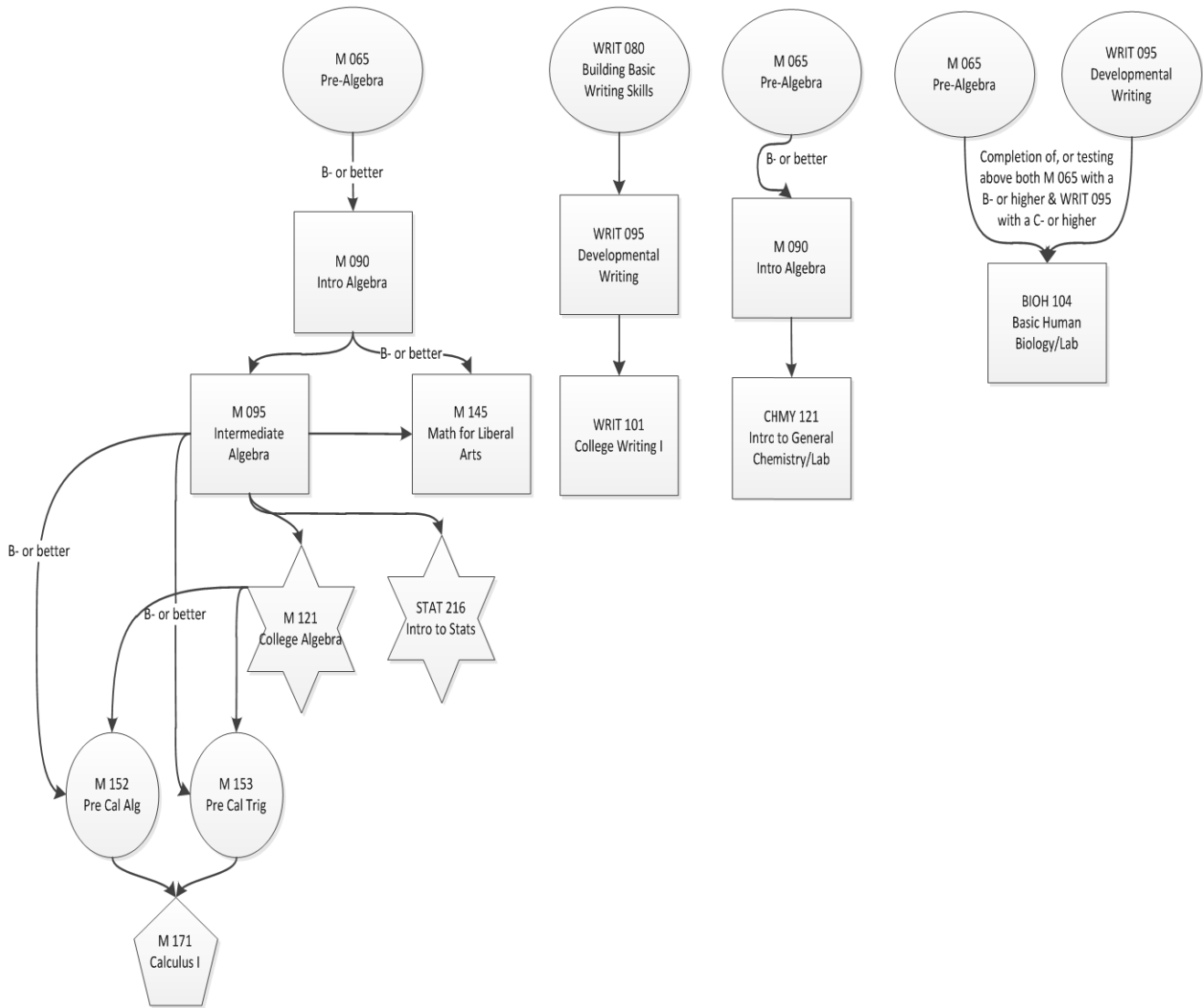
Course	No.	Title	Credits
ACTG	201	Principles of Fin Accounting	3
CAPP	266	Advanced MS Excel Applications	3
CIS	410	Enterprise Resource Planning	3
CSCI	201	Java for Experienced Programmers	3
CSCI	221	System Analysis and Design	3
CSCI	460	Operating Systems	3
CSCI	499	Senior Thesis/Capstone	3
WRIT	350	Technical Editing	3
ESOF	322	Software Engineering	3
CIS	410	Interfacing	3
CSCI	232	Data Structures and Algorithms	3
CSCI	411	Advanced Web Programming	3
CSCI	476	Computer Security	3
CSCI	498	Cooperative Education	3
ITS	360	Business Telecommunications and Networking	3
CSCI	340	Database Design	3
Upper division electives			6

**III. General Education Requirements – 21 credits**

<b>Category III</b>	<i>Natural Sciences w/ lab:</i> AG 204, BIOB, BIOE, BIOH, BIOM, BIOO, CHMY, ENSC, ESCI, GEO, PHYS, TSCI 110, TSCI 230, TSCI 304, TSCI 320 <b>(6 credits)</b>
<b>Category IV</b>	<i>Social Sciences / History:</i> CMSV 101, ECNS 201, ECNS 202, ECNS 372, HSTA 101, HSTA 102, HSTR 101, HSTR 102, HSTA 255, HIST 330, HIST 374, PSCI 210, PSCI 250, PSCI 471, PSYX 230, SOCI 101, SOCI 241, SOSC 201 <b>(6 credits)</b>
<b>Category V</b>	<i>Cultural Diversity:</i> BUS 365, NASL 120, NASL 121, NASL 331 NASX 105, NASX 235, NASX 310, NASX 376, NASX 450, NRSG 331, SOCI 315, SPNS 101, SPNS 102 <b>(3 credits)</b>
<b>Category VI</b>	<i>Humanities/Fine Arts:</i> ART 115, ART 120, ART 150, ART 151, ART 204, ART 353, ARTH 160, ARTH 330, ARTH 340, ENGL 311, LIT 110, LIT 210, LIT 211, LIT 223, LIT 224, LIT 230, LIT 309 LIT 382, LIT 363, LIT 327, GDSN 270, HUM 201, MUSI 103, MUSI 201, PHIL 200, PHIL 210, THTR 105 <b>(6 credits)</b>

TOTAL TECHNICAL REQUIREMENTS	54
TRANSFERRED BLOCK	60/61
GENERAL EDUCATION	<u>21</u>
	135/136

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ASSOCIATE OF APPLIED SCIENCE DEGREE  
IN HEALTH INFORMATION TECHNOLOGY  
TRANSFER TO STEPHENS COLLEGE – HEALTH INFORMATION ADMINISTRATION

The Associate of Applied Science Degree with articulated coursework in Health Information Technology is designed for students interested in a baccalaureate degree in Health Information Administration at Stephens College.

**Estimated Resident Program Cost:**

Tuition and Fees	\$	7,693
Application Fee	\$	30
Lab/Course Fees	\$	110
Books/Supplies	\$	1,964
TOTAL:	\$	9,797

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

COURSE	NO.	TITLE	CREDITS	GRADE
AH	180	Basic Pharmaceuticals	1+	__
AH	265*	Electronic Health Record in Med. Practice	3+	__
AHMS	105	Healthcare Delivery	2+	__
AHMS	108*	Health Data Content and Structure	3+	__
AHMS	144	Medical Terminology	3+	__
AHMS	156*	Medical Billing Fundamentals	4+	__
AHMS	158*	Legal & Regulatory Aspects of Healthcare	3+	__
AHMS	160*	Beginning Procedural Coding	3+	__
AHMS	162*	Beginning Diagnosis Coding	3+	__
AHMS	201*	Medical Science	3+	__
AHMS	208*	Healthcare Statistics	2+	__
AHMS	214*	ICD-9 Coding	3+	__
AHMS	227*	Health Information Management	3+	__
AHMS	240*	Clinical Quality Assessment	3+	__
AHMS	245*	Simulated Lab – Medical Support	2+	__
AHMS	280*	Overview of Health Informatics Systems	4+	__
AHMS	288*	HIT Exam Preparation	3+	__
AHMS	298*	HIT – Prof Practice Experience OR		
AHMS	298A*	HIT – Professional Practicum – Coding	2+	__
BIOH	112	Human Form and Function I	4+	__
BIOH	113*	Human Form and Function II	3+	__
CAPP	120	Introduction to Computers	3+	__
M	121**	College Algebra <b>OR</b>		
M	108**	Business Math <b>OR</b> higher	3-4+	
PSYX	100	Introduction to Psychology <b>OR</b>		
SOCI	101	Introduction to Sociology	3+	__
WRIT	122**	Introduction to Business Writing	3+	__

**TOTAL PROGRAM CREDITS – 70~**

~ 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.

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## OUTLINE FOR COMPLETION OF A BACHELOR OF SCIENCE IN HEALTH INFORMATION ADMINISTRATION DEGREE FROM STEPHENS COLLEGE

The Health Information Administration (HIA) Program is designed to assist women and men in their quest to become Registered Health Information Administrators (RHIA's). Satisfactory completion of the HIA Program establishes a student's eligibility to sit for the national registration examination (RHIA). The HIA Program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). This degree is available online.

### I. HIA Core Courses - 33 credits

<b>Course</b>	<b>No.</b>	<b>Title</b>	<b>Credits</b>
BUS	305	Human Resource Management	3
HIA	330	Legal Issues in HIA	3
HIA	347	Mgmt/Clinical Classification & Reimbursement Systems	3
HIA	351	Health Information Systems	3
HIA	354	Accounting & Finance for HIA	3
HIA	355	Integrated Quality Management	3
HIA	375	Advanced Information Systems	3
HIA	401	Management of Health Information Centers	3
HIA	450	Professional Practice Experience	3
HIA	491	Senior Seminar	3
HIA	492	Senior Capstone	3

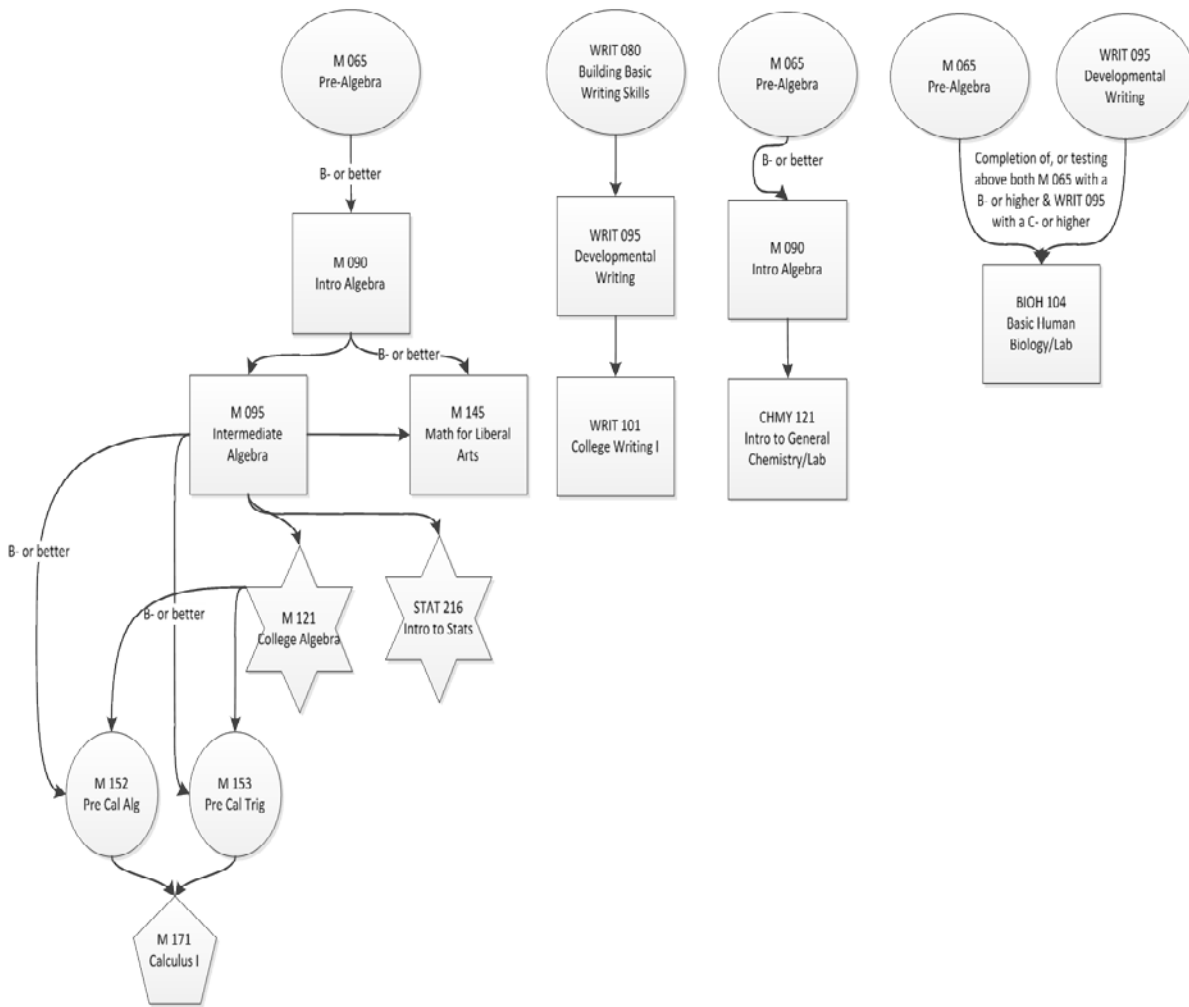
### II. LBA Coursework – 27 credits

Cultural Studies  
 English Composition I  
 English Composition II  
 Historical Studies  
 Literary Studies  
 Mathematics (College Algebra or higher)  
 Natural Science  
 PHL350: Global Ethics  
 Social Science

**TOTAL – 120 CREDITS**

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**ASSOCIATE OF APPLIED SCIENCE DEGREE  
IN BUSINESS ADMINISTRATION - MANAGEMENT  
TRANSFER TO MSU-NORTHERN – BUSINESS ADMINISTRATION WITH A MINOR IN SMALL  
BUSINESS MANAGEMENT**

The Associate of Applied Science Degree with articulated coursework in Business Administration - Management is designed for students interested in a baccalaureate degree in Business Administration with a minor in Small Business Management at MSU-Northern

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6154
Application Fee	\$	30
Books/Supplies	\$	2956
<b>TOTAL</b>	<b>\$</b>	<b>9,140</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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 Managerial Acct	3+
BGEN	105	Introduction to Business	3+
BGEN	235*	Business Law	3+
BMGT	215*	Human Resource Management	3+
BMGT	235*	Management	3+
BMGT	277*	Principles of Strategic Management	3+
BMKT	225*	Marketing	3+
CAPP	120	Introduction to Computers	3+
CAPP	154*	MS Word	3+
CAPP	156*	MS Excel	3+
COMM	135	Interpersonal Communication	3+
M	108**	Business Mathematics	4+
M	145**	Math for Liberal Arts <b>OR</b>	
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**

~ 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.

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## OUTLINE FOR COMPLETION OF THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION & SMALL BUSINESS MANAGEMENT DEGREE FROM MSU- NORTHERN

### 1. Technical Requirements – 35 credits

Course	No	Title	Credits
BGEN	253	Business Statistics and Research	3
BMGT	335	Management & Organization	3
BMGT	329	Human Resource Management	3
BMKT	325	Principles of Marketing	3
BMKT	341	Advanced Marketing Applications	3
BFIN	322	Business Finance	3
BMGT	322	Operations Management	3
BGEN	468	Contemporary Issues in Business Ethics	3
BUS	406	Management Information Systems	3
BGEN	360	International Business	3
BGEN	494	Seminar	3
ECNS	201	Principles of Microeconomics <b>OR</b>	
ECNS	202	Principles of Macroeconomics	3

### II. Minor – 12 credits

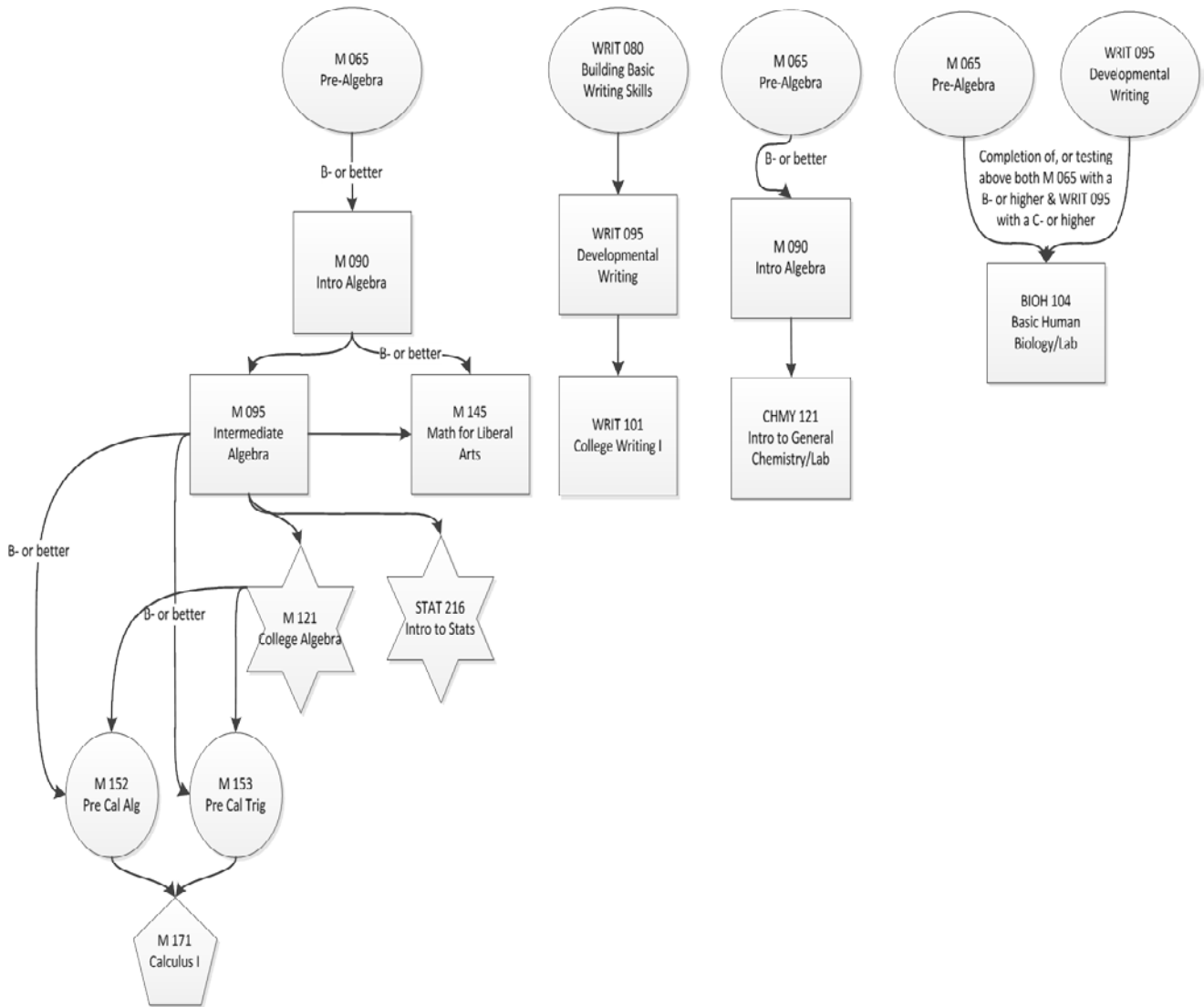
Course	No.	Title	Credits
SBM	338	Advertising & Promotion	3
SBM	402	Small Business Management	3
SBM	416	New Venture Development	3
BMGT	245	Customer Service Management	3

### III. General Education Requirements – 12 credits

<b>Category III</b>	Natural Sciences w/ lab: AG 204, BIOB, BIOE, BIOH, BIOM, BIOO, CHMY, ENSC, ESCI, GEO, PHYS, TSCI 110, TSCI 230, TSCI 304, TSCI 320 (6 credits)
<b>Category IV</b>	Social Sciences/History: CMSV 101, ECNS 372, HSTA 101, HSTA 102, HSTR 101, HSTR 102, HSTA 255, HIST 330, HIST 374, PSCI 210, PSCI 250, PSCI 471, PSYX 230, SOCI 101, SOCI 241, SOSC 201 (3 credits)
<b>Category VI</b>	Humanities/Fine Arts: ART 115, ART 120, ART 150, ART 151, ART 204, ART 353, ARTH 160, ARTH 330, ARTH 340, ENGL 311, LIT 110, LIT 210, LIT 211, LIT 223, LIT 224, LIT 230, LIT 309 LIT 382, LIT 363, LIT 327, GDSN 270, HUM 201, MUSI 103, MUSI 201, PHIL 200, PHIL 210, THTR 105 (6 credits)

TOTAL TECHNICAL REQUIREMENTS	36
MINOR	12
GENERAL EDUCATION	12
TRANSFERRED BLOCK	<u>61</u>
	121

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ASSOCIATE OF APPLIED SCIENCE DEGREE  
 IN BUSINESS ADMINISTRATION - ENTREPRENEURSHIP  
 TRANSFER TO MSU-NORTHERN – BUSINESS ADMINISTRATION WITH A MINOR IN SMALL  
 BUSINESS MANAGEMENT

Completion of an Associate of Applied Science Degree in Business Administration - Entrepreneurship allows for students interested in a baccalaureate degree in Business Administration with a minor in Small Business Management to transfer to Montana State University-Northern.

**ESTIMATED RESIDENT PROGRAM COST\*:**

Tuition and Fees	\$	6154
Application Fee	\$	30
Books/Supplies	\$	2920
<b>TOTAL</b>	<b>\$</b>	<b>9,104</b>

\*Beginning with fall 2012, MUS Student Health Insurance Premium is changing, please check the online catalog and Student Central soon for confirmed premium rates. Students will be charged an additional fee of \$20 per credit for online/hybrid courses.

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 Financial Acct	3+
ACTG	202*	Principles of Managerial Acct	3+
BGEN	105	Introduction to Business	3+
BGEN	235*	Business Law	3+
BMGT	210*	Small Business Entrepreneurship	3+
BMGT	215*	Human Resource Management	3+
BMGT	235*	Management	3+
BMKT	225*	Marketing	3+
BMKT	240*	Advertising	3+
CAPP	120	Introduction to Computers	3+
CAPP	156*	MS Excel	3+
COMM	135	Interpersonal Communication	3+
M	108**	Business Mathematics	4+
M	145**	Math for Liberal Arts <b>OR</b>	
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**

~ 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 THE BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION & SMALL BUSINESS MANAGEMENT FROM MSU-NORTHERN

### 1. Technical Requirements – 36 credits

Course	No	Title	Credits
BGEN	253	Business Statistics and Research	3
BMGT	335	Management & Organization	3
BMGT	329	Human Resource Management	3
BMKT	325	Principles of Marketing	3
BMKT	341	Advanced Marketing Applications	3
BFIN	322	Business Finance	3
BMGT	322	Operations Management	3
BGEN	468	Contemporary Issues in Business Ethics	3
BUS	406	Management Information Systems	3
BGEN	360	International Business	3
BGEN	494	Seminar	3
ECNS	201	Principles of Microeconomics <b>OR</b>	
ECNS	202	Principles of Macroeconomics	3

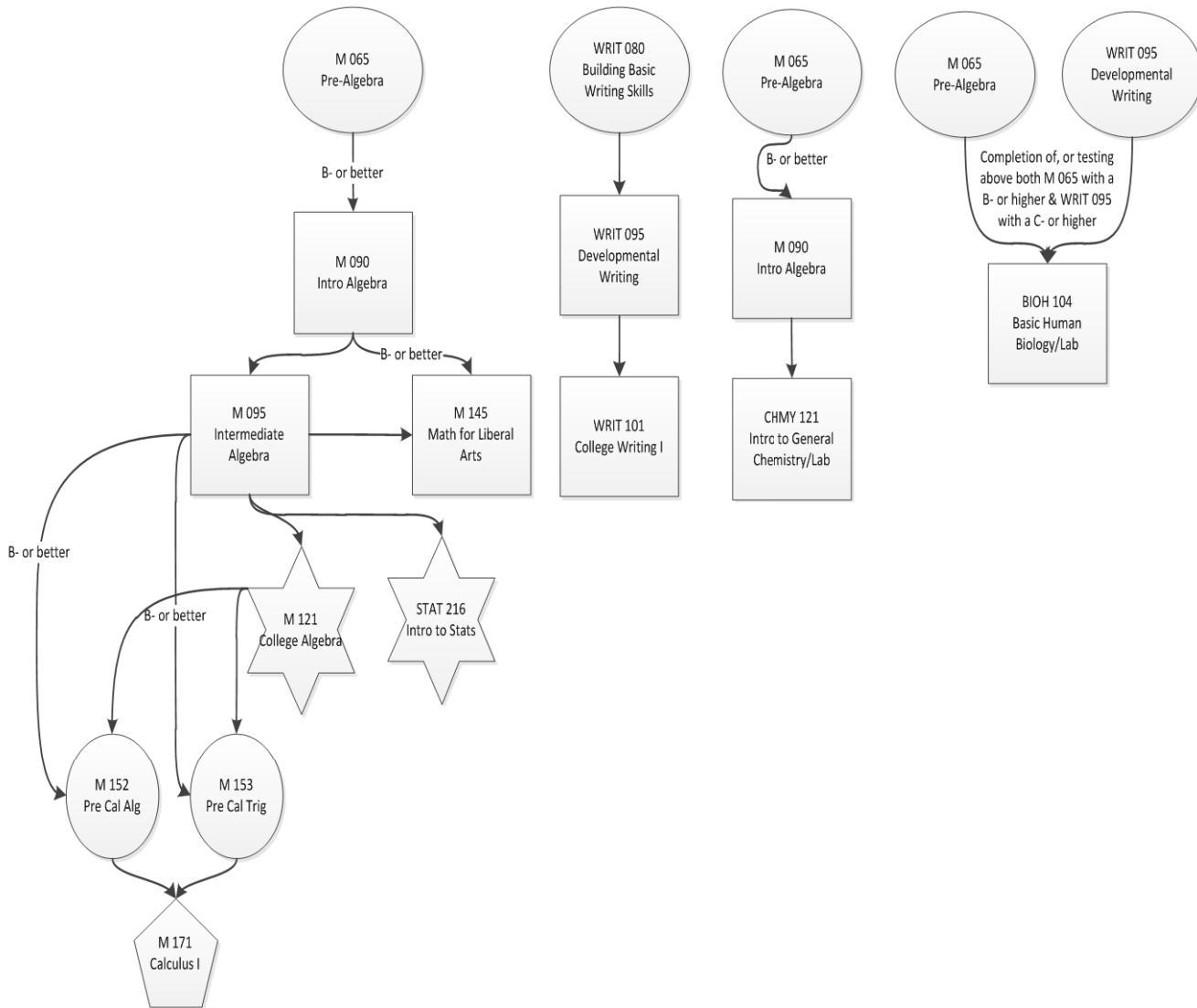
### II. Minor – 12 credits

Course	No.	Title	Credits
SBM	338	Advertising & Promotion	3
SBM	402	Small Business Management	3
SBM	416	New Venture Development	3
TSS	222	Customer Service	3

### III. General Education Requirements – 12 credits

<b>Category III</b>	Natural Sciences w/ lab: AG 204, BIOB, BIOE, BIOH, BIOM, BIOO, CHMY, ENSC, ESCI, GEO, PHYS, TSCI 110, TSCI 230, TSCI 304, TSCI 320 (6 credits)
<b>Category IV</b>	Social Sciences/History: CMSV 101, ECNS 201 or ECNS 202, ECNS 372, HSTA 101, HSTA 102, HSTR 101, HSTR 102, HSTA 255, HIST 330, HIST 374, PSCI 210, PSCI 250, PSCI 471, PSYX 230, SOCI 101, SOCI 241, SOSC 201 (3 credits)
<b>Category VI</b>	Humanities/Fine Arts: ART 115, ART 120, ART 150, ART 151, ART 204, ART 353, ARTH 160, ARTH 330, ARTH 340, ENGL 311, LIT 110, LIT 210, LIT 211, LIT 223, LIT 224, LIT 230, LIT 309, LIT 382, LIT 363, LIT 327, GDSN 270, HUM 201, MUSI 103, MUSI 201, PHIL 200, PHIL 210, THTR 105 (6 credits)

TOTAL TECHNICAL REQUIREMENTS	36
MINOR	12
GENERAL EDUCATION	12
TRANSFERRED BLOCK	<u>61</u>
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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.

Note: Formal acceptance into Paramedic program

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, 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 Paramedic program

This course provides the student with information and skill development in the areas of student Anatomy and Physiology, Pathophysiology, Pulmonary, Neurological, and Endocrine Emergencies. This course also covers Allergies and Anaphylaxis, urology, and Gastroenterology.

### EMS 110 EMT-PARAMEDIC I/II SKILLS LAB

Credits: 2

Term: (F)

Prerequisite: Instructor approval required

Note: Formal acceptance into Paramedic program

This course provides the students with laboratory experience in the areas of pt assessment; including physical examination, history gathering, and the utilization of monitor equipment. This course also covers basic and advanced airway management skills, and the initiation and management of fluid therapy/medication administration, and finally Basic Life Support (BLS) and Advance Cardiac Life Support (ACLS) related material.

### EMS 115 EMT-PARAMEDIC II



Credits: 3

Term: (F)

Prerequisite: Instructor approval required.

Note: Formal acceptance into Paramedic program

This course covers subject matter in cardiovascular emergencies, Toxicology, Hematology, and Environmental conditions. Assessment and management of each topic will be the primary focus. Each topic will be discussed, reviewed and examined. This course will have both in class and online requirements.

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### **EMS 120 EMT-PARAMEDIC I/II CLINICAL & FIELD INTERNSHIP**

Credits: 3

Term: (F)

Prerequisite: Instructor approval required.

Note: Formal acceptance into Paramedic program

This course includes hospital ER and surgical rotations with an approved clinical site. Students will begin clinical notebook and be required to work with a clinical preceptor, documenting required skills and assessments preformed. Students will spend 135 hours between clinical sites.

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### **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.

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### **EMS 127 EMERGENCY MEDICAL TECHNICIAN BASIC (EMT-B)**

Credits: 7 (4 lecture, 2 skills lab, 1 clinical)

Term: (F, S, SU)

Prerequisite: none

Note: Must be 18 years of age and a current BLS HCP card to take national certification examination, however a student may be younger to take course.

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 is 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 didactic lecture, skill lab, and field internship. Field internship involves at least 24 hours of ride time on an ambulance and a shift in the ER. Upon successful completion of the course, graduates are eligible to sit for the National Registry EMT certification examinations, NREMT exam is not part of this course. All aspects of authorization/certification are the responsibility of the student.

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### **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.

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### **EMS 145 ACLS PREPARATION**

Credits: 1

Term: (F)

Prerequisite: Instructor approval required.

This course will certify prepared students in Advance Cardiac Life Support (ACLS). Topics include Pulseless arrest including BLS and advance life support procedures, bradycardia, tachycardia, acute coronary syndrome, and stroke.

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### **EMS 146 PALS PREPARATION**

Credits: 1

Term: (S)

This course will certify prepared students in the American Heart Association's Pediatric Advanced Cardiac Support Provider Course (PALS). PAL'S covers course topics of pediatric advance cardiac life support, as well as assessment and management of the pediatric with regards to respiratory emergencies and shock.

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### **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.

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### **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.

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### **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.

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### **EMS 205 EMT-PARAMEDIC III**

Credits: 3

Term: (S)

Prerequisite: Successful completion of Paramedic I/II or Faculty approval

This course will introduce Traumatic emergencies in regards to Paramedic scope of practice focusing on 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. The second part of this course will focus ambulance Operations, medical Incident command, rescue awareness and operations, crime scene awareness, hazardous materials incidents, and finally bioterrorism and weapons of mass destruction.

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### **EMS 210 EMT-PARAMEDIC III/IV SKILLS LAB**

Credits: 2

Term: (S)

Prerequisite: Instructor approval required.

This laboratory section will be a continuation of the fall Paramedic skills lab with a reinforcement of skill sets and assessments techniques such as emergency pharmacology, airway, and IV therapy. Student will also revisit chapter content material application of assessment and management of medical patients covered in the fall as well as the material introduced to remaining medical and trauma patients content chapter material covered this spring. An overall focus will be putting it all together and students will be evaluated on individual assessment techniques and overall scene management.

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### **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.

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### **EMS 220 EMT-PARAMEDIC III/IV CLINICAL AND FIELD INTERNSHIP**

Credits: 4

Term: (S)

Prerequisite: Instructor approval required.

This course includes hospital and surgical center rotations as well as field internship experiences with Benefis Healthcare and Great Falls Emergency Services. Student will follow objective stated in Paramedic student manual from required number of hours, assessments, and skills based on the DOT standards and program objectives. Upon completion of this course students will have the necessary number of clinical hours, assessments, and skill sets completed that were started in the fall. Students will also start their ambulance ride time completing 120 hours in preparation for their summer field internship. Preceptors for summer internship will also be selected during ambulance ride time. Students will record all their data onto a flash drive and then enter transfer information to their fisdap online skill tracker for instructor review.

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### **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.

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### **EMS 223 EMT-INTERMEDIATE INTERNSHIP**

Credits: 1

Term: (SU)

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This course is the final stage of the EMT-Intermediate technical core classes. This course emphasizes team leadership as an EMT-Intermediate student.

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**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 including infectious disease, behavioral disorders, gynecology, obstetrics, neonatology, pediatrics, and geriatrics. Other special considerations will include emergencies in the elderly including abuse and assault, patients with special challenges, and acute interventions for the chronic care patient.

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**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.

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**EMS 233 INTERNSHIP**

Credits: 6

Term: (SU)

This course will provide the educational field internship experience required to prepare the student to achieve Certification/ licensure as a Paramedic. The field internship allows the Paramedic student to apply learned theory and clinical skills while under the direct observation and guidance of a trained Paramedic preceptor. Students will complete 360 hours of internship with a minimum of 50 ALS Team Leads.

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## 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.





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## 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.

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### 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

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### 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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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).



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**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.

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**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.





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## 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 101 DESIGN TOPICS AND PRINCIPLES**

Credits: 3

Term: (F)

This course begins with an overview of the graphic and web design programs and shows how they prepare students to enter the career fields of graphic and web design. Students will gain insight on the different career opportunities, expectations of the profession and programs, job outlook and salaries. Then, to lay the foundation for the programs, students will engage in exploratory activities to survey and study the fundamentals and principles of design, as well as gaining an understanding of copyright and ethics issues.

### **GDSN 109 DIGITAL PHOTOGRAPHY**

Credits: 4 Term: (S) Prerequisite: CAPP 120 or permission of instructor

This course covers 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, practice digital processing, and examine 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, and still documentation.

### **GDSN 130 TYPOGRAPHY**

Credits: 3

Term: (S)

Prerequisite: CAPP 120

Co-requisite: GDSN 101 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 an understanding of the vocabulary surrounding letter forms and the design of text. Symbolic communication inherent in different typefaces will also be explored. Typographic relationships with other graphic elements will be 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.

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### **GDSN 217 DIGITAL DESIGN**

Credits: 3

Term: (F)

Prerequisite: GDSN 130 or permission of instructor

This course focuses on raster-based graphics and layout, and the tools/equipment used to accomplish the design/concept at hand. Students build their skills in brainstorming, preparation, designing posters, billboards, slides and photo retouching and restoration by producing several projects. The course includes a thorough examination and implementation of Adobe Photoshop.

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### **GDSN 219 DIGITAL ILLUSTRATION**

Credits: 3

Term: (F)

Prerequisite: GDSN 130 or permission of instructor

This course focuses on vector-based graphics and layout, and the tools/equipment used to accomplish the design/concept at hand. Students build their skills in brainstorming, preparation, designing, packaging, signing, and production of several projects. The course includes a thorough examination and implementation of Adobe Illustrator.

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### **GDSN 221 PUBLISHING & PRE-PRESS**

Credits: 3

Term: (S)

Co-requisite CIT 280 or permission of instructor

This course provides a technical background to the Designer. The course covers material related to actual design production, which is often overlooked during education and must often be learned by experience. Press-checks, color specifications and proofing, file preparation, and paper selections will all be addressed. Field trips may also be included.

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## 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 - German (GRMN)

### **GRMN 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.

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### **GRMN 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.

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### 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.

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### 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.





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## Course Descriptions - Healthcare (HLTH)

### HLTH 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.

### HLTH 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.

### HLTH 0102 Soft Skills for the Health Professional

Credits: 1

Terms: (F, S, SU)

This course is designed to teach students about the personal values and interpersonal skills necessary to succeed in today's working environment. These "soft skills" play a crucial and increasingly important role in career development and are fast becoming the deal breaker in many of today's hiring decisions.





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## 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.







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## Course Descriptions - History (HSTA)

### 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 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.







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## Course Descriptions - History (HSTR)

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### **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.

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### **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.

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### **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.

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### **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.

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### **ITS 299 CAPSTONE: INTERNSHIP**

Credits: 3

Term: (S)

Prerequisite: Last semester of programs – Instructor Consent

This is the final course that completes the student's curriculum for the Graphic /Web Design, and the Computer Information Technology degrees. Students will pull together what they have learned in their previous classes and demonstrate their capabilities in preparation for the workforce.

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### **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.

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### **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.

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### **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.

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### **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: (S)

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.

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### **ITS 250 CCNA 3: EXPLORATION**

Credits: 3

Term: (S)

Prerequisite: ITS 150; ITS 152

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.

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### **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 hands-on 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.

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### **ITS 256 CCNA SECURITY**

Credits: 3

Term: (Based on Sufficient Demand)

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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **ITS 294 SEMINAR**

Credits: Variable

Term: (Based on sufficient demand)

Prerequisites: ITS 250 or instructor approval

Topics vary and will be determined by industry changes, technological advances, and



student interest.

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### **ITS 299 CAPSTONE**

Credits: 3

Term: (S)

Prerequisites: Sophomore or instructor approval

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This is the final course that completes the student's curriculum for the Graphic /Web Design, and the Computer Information Technology degrees. Students will pull together what they have learned in their previous classes and demonstrate their capabilities in preparation for the workforce. This course has two tracks: Design and Technical. The Design track deals 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. The Technical track provides students with experience in training and supporting end users, techniques for developing and delivering training modules, and strategies for providing on-going technical support. Emphasis is on problem solving, such as debugging, troubleshooting and interaction with users. Both tracks will prepare and take a certification (geared toward their track), acquire firsthand experience by completing an internship, and study interviewing techniques including preparation of an appropriate resume, personal letterhead, and appropriate methods used for contacting potential employers, personal dress, and attitudes relating to the interview presentation process.





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## Course Descriptions - Interior Design (IDSN)

### **IDSN 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.

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### **IDSN 101 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.

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### **IDSN 110 INTERIOR ARTS BEFORE 1900**

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.

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### **IDSN 111 INTERIOR ARTS AFTER 1900**

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.

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### **IDSN 122 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.

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### **IDSN 130 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.

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### **IDSN 131 PRESENTATION DRAWING**

Credits: 3

Term: (S)

Prerequisite: IDSN 130 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 and sketching. Addition of color to drawings by use of hand and digital methods is introduced.

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### **IDSN 135 FUNDAMENTALS OF 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.

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### **IDSN 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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### **IDSN 225 LIGHT, COLOR, AND LIGHTING SYSTEMS**

Credits: 3

Term: (S)

Prerequisite: IDSN 101 and IDSN 130

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.

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### **IDSN 230 INTERIOR ARCHITECTURAL CAD**

Credits: 4

Term: (S)

The interior design student will learn basic commands in CAD, and then apply these applications to the creation of residential and commercial construction drawings, furniture plans and 3D rendering using computer-aided drafting. Topics covered include drawing set-up, creation, 2D and 3D color rendering, and plotting.

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### **IDSN 240 STUDIO I RESIDENTIAL**

Credits: 4

Term: (F)

Prerequisite: Completion of all 100-level technical courses and IDSN 225

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.

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### **IDSN 250 STUDIO II COMMERCIAL**

Credits: 4

Term: (S)

Prerequisite: Completion of all 100-level IDSN courses, IDSN 225, IDSN 230, and IDSN 240

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.

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### **IDSN 266 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.

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### **IDSN 267 KITCHEN AND BATH II**

Credits: 3

Term: (S)

Prerequisite: Completion of all 100-level technical courses, IDSN 240, IDSN 266.

This studio course is a continuation of IDSN 166 Kitchen and Bath I. There will be further exploration into products and more advanced design solutions with an emphasis on preparation for the AKBD certification exam.

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### **IDSN 275 PROFESSIONAL PRACTICES**

Credits: 3

Term: (S)

Prerequisite: Completion of all 100-level technical courses, IDSN 240

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. Ethics and professional growth and organizations are discussed. A portfolio, resume and cover letter will be completed during this class.

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### **IDSN 298 INTERNSHIP**

Credits: 3-5

Term: (SU)

This course is a 3 or 5 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.



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## 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 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)

Prerequisite: Qualifying placement assessment score within the past 3 years effective Fall 2012

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: M 065 with a grade of "B-" or higher, or PASS prior to Fall 2011, or a qualifying placement assessment score within the past 3 years

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 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, SU)

Prerequisite: M 090 with a grade of "C-" or higher, or a 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 108 BUSINESS MATHEMATICS**

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

Prerequisite: M 065 with a grade of "B-" or higher, or PASS prior to Fall 2011, or a qualifying placement assessment score within the past 3 years

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.

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### **M 111 TECHNICAL MATHEMATICS**

Credits: 3

Terms: (F,S)

Prerequisite: Qualifying placement assessment score within the past 3 years effective Fall 2012

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.

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### **M 116 MATH FOR HEALTH CAREERS**

Credits: 3

Terms: (Summer 2012, then no longer offered)

Prerequisite: M 090 with a grade of "B-" or higher, or a 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.

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### **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.

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### **M 135 MATHEMATICS FOR K-8 TEACHERS**

Credits: 4

Terms: (F)

Prerequisite:

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### **M 136 MATHEMATICS FOR K-8 TEACHERS II**

Credits: 4

Term: (S)

Prerequisite:

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### **M 145 MATH FOR LIBERAL ARTS**

Credits: 3

Term: (F,S)

Prerequisite: M 090 with a grade of "B-" or higher, or a qualifying placement assessment score within the past 3 years

Basic skills in applicable mathematics including linear quadratic and exponential models,



financial mathematic, trigonometry, and some elementary 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.

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### **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.

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### **M 171 CALCULUS I**

Credits: 4

Term: (F)

Prerequisites: Both M 152 and M 153 with grades of "C-" or higher, 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.

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### **M 172 CALCULUS II**

Credits: 4

Term: (S)

Prerequisite: M 171 with a grade of "C-" or higher

Integration theory, methods of integration, applications of the integral, Taylor's theorem, infinite sequences, and series are studied.

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### **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.





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## 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.





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## 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: BIOH 104 or BIOH 201 or CHMY 121 or instructor permission

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

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.



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## Course Descriptions - Native American Studies (NASX)

### **NASX 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.

### **NASX 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.

### **NASX 204 INTRO TO NATIVE AMERICAN BELIEFS & PHILOSOPHY**

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.

### **NASX 232 MONTANA'S INDIANS: CULTURES, HISTORIES, CURRENT ISSUES (EQUIV TO 332)**

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.

### **NASX 240 NATIVE AMERICAN LITERATURE (EQUIV TO 340)**

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.







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## Course Descriptions - Nursing (NRSNG)

### **NRSNG 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.

### **NRSNG 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.

### **NRSNG 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.

### **NRSNG 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.

### **NRSNG 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

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#### **NRSNG 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.

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#### **NRSNG 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.

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#### **NRSNG 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.

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#### **NRSNG 148 LEADERSHIP ISSUES**

Credits: 2 (15 Hours Lecture / 45 Hours Clinical)

Term: (S)

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.

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#### **NRSNG 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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#### **NRSNG 250 LPN to RN Transition (FIRST CLASS OFFERED FALL 2012)**

Credits: 3 (lecture)

Terms: (F)

Prerequisite: Acceptance into RN program

This course assists students in the transition from LPN/LVN to the RN role. Includes components of lifelong learning, adapting to change, critical thinking, nursing process, legal and ethical issues, math for meds, IV therapy, APA format, scope of practice, and skill review to "socialize" the student into the Associate degree nursing.

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**NRSNG 252      Complex Care Maternal/Child    (FIRST CLASS OFFERED FALL 2012)**

Credits: 3 (2 lecture/1 clinical)

Terms: (F)

Prerequisite: Acceptance into RN program

This course prepares the student to provide care to maternal/child clients experiencing acutely changing conditions in settings where outcome is less predictable. Topics include care of the client during childbirth, high-risk pregnancies, obstetrical emergencies, neonatal emergencies, and infants and children requiring complex collaborative care.

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**NRSNG 254      Complex Care Mental Health Client    (FIRST CLASS OFFERED FALL 2012)**

Credits: 2 (1 lecture/1 clinical)

Terms: (F)

Prerequisite: Acceptance into RN program

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.

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**NRSNG 256      Pathophysiology    (FIRST CLASS OFFERED FALL 2012)**

Credits: 3 (lecture)

Terms: (F)

Prerequisite: Acceptance into RN program

This course will introduce the student to the basic principles and processes of pathophysiology including cellular communication, genes and genetic diseases, forms of cellular injury, fluid & electrolyte, acid base balance, immunity, stress coping and illness, and tumor biology. Pathophysiology of the most common alterations according to body system will also be discussed as well as the latest developments in research related to each area.

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**NRSNG 262      Complex Care Adult    (FIRST CLASS OFFERED SPRING 2013)**

Credits: 4 (2 lecture/2 clinical)

Terms: (S)

Prerequisite: Completion of first semester of RN program

This course prepares the student to provide nursing care to adult clients experiencing acutely changing conditions in setting where outcomes are less predictable. Emphasis is placed on the nurse's response to emergent/life-threatening/rapidly changing conditions. Topics covered include collaborative therapeutic modalities related to acute/complex neurological, cardiac, respiratory, hematological, endocrinologic event, shock, sepsis/SIRS. Complex burns, etc.

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**NRSNG 265      Advanced Clinical Skills Lab    (FIRST CLASS OFFERED SPRING 2013)**

Credits: 1 (lab)

Terms: (S)

Prerequisite: Completion of first semester of RN program

This course prepares the student to carry out complex nursing interventions across the lifespan. Topics covered include central venous therapy, parenteral nutrition, hemodynamic monitoring, advance airway/ventilator support, fetal heart monitoring, intracranial pressure monitoring, IV medication administration, high risk IV infusions, blood/blood product administration, conscious sedation, advanced wound care, etc.

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**NRSRG 266      Managing Client Care (FIRST CLASS OFFERED SPRING 2013)**

Credits: 4 (2 lecture/2 clinical)

Terms: (S)

Prerequisite: Completion of first semester of RN program

This course covers topics related to integrated nursing care of individual clients and groups of clients as well as basic principles related to supervision of nursing practice and management of resources. Topics include: role differentiation among care providers, organization & prioritization, delegation supervision and appropriate practice/practice settings, management of the needs of individual and groups of clients, management of health care resources. Additionally the course helps the student integrate didactic content from all other nursing courses and will help the student in his/her transition from the student role to the role of the Registered nurse. Students will examine legal/ethical issues in nursing, values clarification, conflict resolution & consensus building and effective communication techniques in the employment setting. NCLEX-RN preparation and process are also included as a component of the course. The preceptor-based clinical component allows the student to function in the role of a registered nurse while working one-on-one with a designated RN preceptor.

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## 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 121 CLINICAL HUMAN NUTRITION

Credits: 2

Term: (S)

Prerequisites: BIOH 201 or CHMY 121

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.

### 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.

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**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.

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**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.

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**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.

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**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.

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**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.

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**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.

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**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.*

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**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.

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#### **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 variety of food service lab experiences. Work approximately 10 hours per week.

*For DT Program Students only.*

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#### **NUTR 270 NUTRITION MEDICAL THERAPY**

Credits: 3

Terms: S **FIRST CLASS TO BE OFFERED SPRING OF 2013**

Prerequisites: NUTR 221, NUTR 230, NUTR 245

Disease state requiring modified diets. Medical nutrition therapy for various diseases, including diabetes, heart disease, cancer, AIDS, gastrointestinal disorders, renal disease and tube feedings.

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#### **NUTR 271 NUTRITION MEDICAL THERAPY LABORATORY**

Credits: 3

Terms: S **FIRST CLASS TO BE OFFERED SPRING OF 2013**

Prerequisites: NUTR 221, NUTR 230, NUTR 245

Co-Requisites: NUTR 270

Engagement in a variety of medical nutrition lab experiences. Work approximately 10 hours per week.

*For DT Program Students only.*

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## 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 (PHAR)

### 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.

### PHAR 100 INTRODUCTION TO PHARMACY PRACTICE FOR TECHNICIANS

Credits: 2  
Terms: (F, S)

The purpose of this course is to initiate the student to the roles/functions/expectations of the pharmacy technician. This course will explore professional courtesy, behavior, dress, and communications, also ethical behavior and confidential communications. This course covers basic communication in the business environment, including; verbal and non-verbal communication, listening, speaking, reading, good customer service and appropriate answers to common interview questions. This course includes the shadowing of a pharmacy technician for 2-3 hours.

### PHAR 101 PHARMACY CALCULATIONS

Credits: 3  
Terms: (F)

This course teaches calculations used in pharmacy practice including: various systems of weights and measures, dosage determinations, percentage preparations, reducing and enlarging formulas, dilution and concentration. This course provides basic knowledge of the most commonly prescribed pharmaceuticals with an emphasis on classification, indications, therapeutic effects, side effects, interactions, and contraindications.

### PHAR 112 INTRO TO PHARMACY PRACTICE, LAW, & CALCULATIONS

Credits: 4  
Terms: (S)  
Co-Requisites: PHAR 198

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 and the different areas there in 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.

### PHAR 198 INTERNSHIP: HOSPITAL & COMMUNITY PHARMACY PRACTICE

Credits: 4



Terms: (S)

Co-Requisites: PHAR 110

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 - 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.







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## 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.

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### **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.

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### **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.



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## 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. 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.

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### **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.

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### **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.

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### **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.

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### **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.



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**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.

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**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.

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**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.

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**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.

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**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.

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**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.

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**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.

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### **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.

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### **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.

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### **AHXR 231 RADIOGRAPHIC POSITIONING/PROCEDURES IV**

Credits: 2

Term: (S)

Prerequisite: AHXR 230

This course introduces the student to the anatomy of the circulatory system and angiographic imaging. It includes instruction related to angiographic procedures and the equipment necessary to perform angiographic procedures. It will also include common pathologic conditions that require angiographic studies and the radiographic appearance of these pathologic conditions. Several therapeutic procedures performed with angiographic methods are also included.

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### **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.

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### **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.

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### **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 students will be scheduled for clinical observation in areas of specialized imaging including CT, MRI, ultrasonography, nuclear medicine and angiography. 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.

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### **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. This semester provides the student with a clinical observation in radiation therapy in addition to those in diagnostic imaging. IT is expected that the student will finish documentation of the completion of the clinical competency requirements of the ARRT and the COT program.

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### **AHXR 298 RADIOGRAPHIC INTERNSHIP**

Credits: 8 (320 Clinical Hours)

Term: (SU)

Prerequisite: AHXR 195

This course provides the student with the opportunity to practice in an internship setting completing 40 hours of clinical time per week during the 10 week summer session. During this session the student is given the opportunity to set up a two0week externship to another clinical site if they wish to or to do a one-week rotation at an orthopedic office in Great Falls and a week of evening rotation. The student will be required to continue to demonstrate competency in new radiographic procedures to meet the clinical competency requirements of the ARRT and COT program.





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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

The course is an introduction course to the field of Respiratory Care. The topics covered are essential for the student to enter the clinical portion of the Respiratory Therapist Program. Course content includes gases, the field of Respiratory Care as it relates to the entire health care delivery system, medical terminology, communication, ethics, effects of tobacco on health, and respiratory medications.

### 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, O<sub>2</sub> and CO<sub>2</sub> transport, ventilation and perfusion balance, acid-base balance, and interpretation of arterial blood gases.

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### **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.

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### **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 adult and infant mechanical ventilation. Ventilators including but not limited to: Respironics V60 & BiPAP Vision, Puritan Bennett 840, Hamilton Galileo Gold, Sensormedics 3100A High Frequency Oscillator. Other areas such as arterial blood gas techniques, transcutaneous gas monitoring, hyperbaric oxygen therapy, mixed gas therapy, discontinuance of mechanical ventilation, troubleshooting during mechanical ventilation, techniques of ventilation, ventilator waveforms and high frequency ventilation will also be investigated.

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### **RC 180 VENTILATOR MANAGEMENT**

Credits: 2

Term: (S)

Prerequisite: Completion of the 1st semester 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.

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### **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.

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### **RC 240 RESPIRATORY CARE CLINIC III**

Credits: 5

Term: (F)

Prerequisite: Completion of the 3rd semester of the RT program

Students will be supervised in an in-hospital practice advanced therapeutic and diagnostic respiratory care procedures including pulmonary function testing, arterial blood gases, intubations, continuing education, pulmonary rehabilitation, newborn and adult intensive care, and supervisory management. This course with RC 241 extended through two semesters.

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**RC 241 RESPIRATORY CARE CLINIC IV**

Credits: 4

Term: (S)

Prerequisite: Completion of the 4th semester of the RT program

Students will be supervised in an in-hospital practice advanced therapeutic and diagnostic respiratory care procedures including pulmonary function testing, arterial blood gases, intubations, continuing education, pulmonary rehabilitation, newborn and adult intensive care, and supervisory management. This course with RC 240 extended through two semesters.

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**RC 245 RESPIRATORY CARE CLINICAL SEMINAR I**

Credits: 1

Term: (F)

Prerequisite: Completion of the 3rd semester of the RT program

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 succeed on the NBRC Clinical Simulation Examination and participate in taking the NBRC comprehensive self-assessment exam. Complete job seeking skills will be taught. This course is concurrent with Respiratory Therapy Clinical RC 240.

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**RC 246 RESPIRATORY CARE CLINICAL SEMINAR II**

Credits: 1

Term: (S)

Prerequisite: Completion of the 4th semester of the RT program

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 succeed on the NBRC Clinical Simulation Examination and participate in taking the NBRC comprehensive self-assessment exam. Complete job seeking skills will be taught. This course is concurrent with Respiratory Therapy Clinical RC 240.

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**RC 250 HEMODYNAMIC MONITORING**

Credits: 4

Term: (F)

Prerequisite: Completion of the 3rd semester of the RT program

Hemodynamic Monitoring covers topics about the circulatory system necessary Respiratory Therapist to work in adult intensive care settings. Course content includes: cardiac dysrhythmias and management of the circulatory system based on hemodynamic measurements.

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**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.

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**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. Topics studied are fetal to neonatal transition, assessment of the newborn, cardiopulmonary disorders of the newborn and respiratory therapeutic procedures for the newborn.

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### **RC 265 ALTERNATE SITES FOR RESPIRATORY CARE**

Credits: 1

Term: (S)

Prerequisite: Completion of the 4th semester of the RT program

Respiratory Care is performed in many sites outside of the traditional medical center setting. This course will provide the student with the knowledge and practice of respiratory care in pulmonary rehabilitation, home care, and subacute care skilled nursing facilities.

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### **RC 273 PULMONARY FUNCTION TESTING**

Credits: 2

Term: (S)

Prerequisite: Completion of the 4th semester of the RT program

Pulmonary Function Testing is a study of pulmonary diagnostic testing. The student will survey, and interpret spirometry, lung volumes, diffusion tests and perform spirometry, lung volumes tests.

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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.

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### **RC 280 SUPERVISORY MANAGEMENT**

Credits: 2

Term: (S)

Prerequisite: Completion of the 4th semester of the RT program

The objective of this course is to provide students with the information and skills to facilitate the transition from respiratory therapist to respiratory supervisor. The areas investigated include interpersonal communications, planning, organizing, staffing, influencing, motivating, and controlling. Practical respiratory supervisory scenarios provide student participation requiring role-play in interpersonal communications, problem solving and critical thinking.

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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 transcribed on the student's continuing education transcript.

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### **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.

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### **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 transcribed on the student's undergraduate transcript.

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### **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 (SOCl)

### SOCl 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.

### SOCl 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.

### SOCl 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.

### SOCl 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 - 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 transcribed 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 transcribed 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.





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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 and 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.

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### **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.

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### **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.

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### **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, Ophthalmic, Cardiothoracic, Peripheral Vascular, and Neurosurgical procedures. This course will be an integration of face-to-face lecture and online-presentations.

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### **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 and circulator roles. This course will include lecture, as well as hands-on, problem solving sessions and clinical observation experiences.

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### **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.

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### **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.

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### **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 201 WIND TECHNICIAN SAFETY

Credits: 4  
Terms: (F)  
Prerequisites: SET 102

This course builds on the safety topics covered in the Industrial Safety and Rigging course and focuses on safety requirements and techniques common in wind energy technician jobs.



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### **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.

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### **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 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—including the alphabet, number, and symbol keys—and also an introduction to common business formats for email, letters, memos, reports, and tables.

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### **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 transcribed on the student's continuing education transcript.

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### **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 transcribed on the student's undergraduate transcript.



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## Course Descriptions - Workshops (WKSP)

### **WKSP 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.

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### **WKSP 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 - 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 transcribed 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 cutting (OFC) 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 and cutting. Shielded metal arc welding (SMAW) practical work will involve flat and horizontal, vertical, and overhead welding skills using a variety of electrodes.

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### **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.

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### **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 gas mixtures for shielding during welding. Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), Shielded Metal Arc Welding (SMAW), Flux Core Arc Welding (FCAW), and Plasma Arc Cutting (PAC) operations will be thoroughly covered. Process selection and use for welding ferrous and nonferrous metals will be covered.

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### **WLDG 121 WELDING THEORY II PRACTICAL**

Credits: 3

Term: (F)

Corequisite: WLDG 110, WLDG 111

Practical work involves the application of SMAW, FCAW, 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.

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### **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 SMAW, FCAW, 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.

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### **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.

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### **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.

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### **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 v-groove butt 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.

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### **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 transcribed on the student's undergraduate transcript.

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### **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 transcribed 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.

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### **WRIT 104 WORKPLACE COMMUNICATIONS**

Credits: 2 Terms: (F, S)

This course reviews the basic elements of grammar and language arts skills in business writing. Emphasis is placed on writing business letters and emails for a variety of business applications. Letters of application and resumes are also covered.

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### **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

This course emphasizes the importance of writing business documents that are clear, concise, correct, complete, and courteous. Emphasis is placed on format, tone, and organization of business letters, memos, emails, and reports for a variety of business situations. Appropriate grammar and language arts skills are also taught.

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### **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 transcribed on the student's undergraduate transcript.

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### **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.

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### **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

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

### A

Sandra I. Allen, CST Surgical Technology A.S., Miami Dade Community College

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Ed. D., University of South Dakota  
M. Ed., Northern State University  
B.S., Northern State University

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A.S., San Antonio College

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M.S., Montana State University Billings  
B.A., Montana State University

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M.S. University of Mary  
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M.A.S. & B.A., University of Montana

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M.B.A., Illinois State University  
B.A., Millikin University

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B.S., University of Montana

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M.B.A., Pacific Lutheran University  
B.S., U.S. Military Academy, West Point

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<b>F</b>		
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Jason Harding	Sustainable Energy Technology	A.A.S., Wyoming Technical Institute
Jaime Hauer	Academic Advisor	

M.A., Argosy University  
 B.A., Carroll College  
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 B.A., Washington State University

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**J**

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 B.A., Beloit College

**K**

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 B.S., University of Great Falls

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 Webmaster/Designer                      A.A.S, Montana State University - Great Falls COT

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Quincie Lords                      Science Lab Instructor                      B.S., Montana State University – Northern

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**V**

Lawrence J. Vaccaro	Communication	M.Ed., Montana State University –
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M.A., University of Northern Colorado  
M.S., Air Force Institute of Technology  
B.A.A.S., Southwest Texas State  
University

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**W**

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## Support Personnel

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- David Bonilla - Computer Support
- Wayne Breau - eLearning
- Courtney Brooks - Bookstore
- Sandy Brown - Cafeteria
- Pamela Buckheit - Business, Tech & Trades Division
- Marie Cherry - Accounting
- Dwight Cook - Maintenance
- Beth Cooper - Library
- Thomas Degel - Registrar's Office
- Gerald Eberl - Maintenance
- Jillian Ehnot - Accounting
- Brianne Feulmer – Human Resources
- Lee Anne Gills – Developmental Education & Transfer Division
- Julie Freshly - Student Central
- Kathleen Haggart - Payroll
- Steven Halsted - Bookstore
- Lorene Jaynes - Associate Dean's Office
- Jack Logozzo - Maintenance
- Craig Lucas - Maintenance
- Loretta Marquis - Cafeteria
- Alicia McCalla – Student Accounts
- Cheryl McGee - Maintenance
- Willie McGee - Computer Support
- Lee Ann Myllymaki - Financial Aid
- Deborah Richerson – Outreach
- Erica Rominger - Recruiter
- Julie Rummel - Financial Aid
- Rich Saunders - Maintenance
- Holly Schott – Dental Clinic Manager
- Pam Skogen – Student Central
- Eugene Stewart - Maintenance
- EJ Suek - Computer Support
- James Sweat - Print Center
- Barbara Towne - Bookstore
- Benjamin Truman - Library
- Karen Vosen - eLearning
- Amelia Ward - Registrar's Office
- Brian Wergin - Construction Trades
- Bill Willis - Maintenance



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## Accreditation - 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

### 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](mailto:accreditation@apta.org)  
Tel (703) 684-2782 or (703) 706-3245

### Dental Assisting

Accredited by the American Dental Association  
Council on Dental Education  
211 East Chicago Avenue  
Chicago, Illinois 60611  
Tel (312) 440-4653

### Respiratory Care

Committee on Accreditation for Respiratory Care (CoARC)  
1248 Harwood Road  
Bedford, TX 76021-4244  
Tel (817) 283-2835  
[webmaster@coarc.com](mailto:webmaster@coarc.com)

### 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

### Surgical Technology

Commission on Accreditation of Allied Health Education Programs (CAAHEP)  
1361 Park Street  
Clearwater, FL 33756

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233 N. Michigan Avenue, Suite 2150  
Chicago, IL 60601-5800  
Tel (312) 233-1100

Tel (727) 210-2350

**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



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