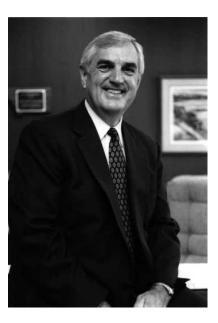


## MONTANA STATE UNIVERSITY COLLEGE OF TECHNOLOGY GREAT FALLS

**COURSE CATALOG 1998-99** 





Montana State University COLLEGE OF TECHNOLOGY Great Falls

Dear Prospective Student,

In my years as Dean of Montana State University College of Technology—Great Falls I have come to greatly appreciate the full importance of this distinctive, dynamic, and progressive College.

The College is a unique combination of educational courses and programs that challenge students to attain a high level of skill and professionalism, competent faculty who place their first emphasis on teaching and student learning, caring staff who dedicate themselves to providing quality service to meet individual student

needs, and bright, articulate students who strive to achieve a broad range of personal and educational goals.

In a rapidly changing world, education means opportunity. The College provides viable opportunities for students to complete one- and two-year programs in high demand career fields, to upgrade job skills, to complete the first two years of a four-year degree, and to learn for personal growth and enrichment. These opportunities are enhanced through partnerships with regional businesses and educational institutions.

The College's students, faculty, and staff invite you to come and explore the opportunities Montana State University College of Technology—Great Falls offers. We look forward to helping you reach your educational goals.

We are PUTTING IT TOGETHER FOR YOU!

Willard R. Weaver Dean

## MISSION OF THE COLLEGE

Montana State University College of Technology—Great Falls is committed to a dual mission: providing viable technical education to prepare individuals for work in a technologically driven global economy and providing learning opportunities to enhance educational access to the Montana University System.

Montana State University College of Technology—Great Falls, utilizing the delivery of course offerings on campus as well as at appropriate off-campus sites and through electronic technology, has an academic mission to:

- award Degrees or Certificates in the career areas of Allied Health and Business and Technology;
- award Associate Degrees for transfer to four-year programs;
- offer courses reflective of the core curriculum requirements at Montana State University-Bozeman;
- offer courses, seminars, workshops, and customized training to meet the educational needs of individuals, businesses, and other populations.

Montana State University College of Technology—Great Falls is a teaching institution that:

- provides beneficial and accessible technical education for training or retraining in high demand career fields to meet present and emerging employment needs;
- provides general core transfer courses and associate degrees parallel to the first two years of a four-year degree;
- stresses a learner-centered approach to the delivery of educational services;
- promotes equal opportunity in education for all students;
- engages in community service and technical assistance activities.

Montana State University College of Technology—Great Falls designs its programs and courses to enhance the student's ability to:

- demonstrate competence in technical and related subject matter to realize lifelong career goals;
- acquire the knowledge and skills to live a productive life while achieving a balance between career, personal life, and service to others;
- analyze problems and identify and evaluate important information resources;
- recognize the importance of lifelong learning, and gain the confidence to be a self-directed learner;
- think critically with a sensitivity to the human community and the ethics of the physical world;
- discover personal potential, and respect the uniqueness of others.

Montana State University College of Technology—Great Falls is committed to strengthening access to public postsecondary educational opportunities through the administration of the Montana University Higher Education Center of Great Falls; maintenance of a contemporary telecommunications complex; and expansion of collaborative relationships with secondary and postsecondary institutions as well as with appropriate business, government, and human service entities to ensure the most effective use of resources.

## About Great Falls......

Serving as Central Montana's educational, financial, medical, and retail trade center, Great Falls' high-tech environment is complemented by the friendly attitude of its people. Great Falls is in the heart of some of the finest farmland in the country making agriculture a major part of the local economy. Malmstrom Air Force Base, the Montana Air National Guard and reserve units of the U.S. Army, Navy, and Air Force are headquartered here and are a respected, integral part of the community.

Welcoming and prosperous, Great Falls is situated in central Montana between Glacier and Yellowstone National Parks. Its population of approximately 60,000 enjoys a moderate climate with clean, pure air, low humidity, and long days of sunshine. "Chinook" winds make most winter days warm and pleasant.

Surrounded by three mountain ranges and with the confluence of the Missouri and Sun rivers in the heart of town, some of the finest, readily accessible hunting and fishing opportunities in the country lie near Great Falls. There are unexcelled opportunities for campers, hikers, skiers, sportsmen and outdoor enthusiasts.

The present Great Falls townsite was first noted in the journals of Lewis and Clark in 1805 as they portaged around "the thundering great falls of the Missouri." In 1882, Paris Gibson, a Minneapolis city planner and engineer, recognized the potential in the area's abundant resources and central location and with the backing of railroad magnate James J. Hill, became the city's first developer. Gibson's legacy was a carefully planned city incorporating 56 parks--a heritage of beauty that makes Great Falls unique today.

The city's natural beauty is enhanced by the artistic flavor of the world-famous C. M. Russell Museum, a well-established symphony and symphonic choir and professional theater groups.

The Great Falls school system is known for its high standards and quality education. The Montana State School for the Deaf and Blind is located here. Along with the College of Technology, other higher education opportunities include the University of Great Falls, a four-year liberal arts institution, Malmstrom Air Force Base Education Center, and Montana State University-Northern at Great Falls. The campus of the College of Technology serves as the site for the Montana University System Higher Education Center in Great Falls and coordinates courses and programs to be delivered in Great Falls by Montana's four-year campuses.

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September1998 Edition

## ACADEMIC CALENDAR

SUMMER TERM 1998	
Ten-Week Session Begins Last Day to Add Classes-10 week Last Day to Drop/Delete-10 week Registration	
Last Day to Add Classes-10 week	
Last Day to Drop/Delete-10 week	May 28
Registration	June 1
Eight-Week Session Begins	June 2
Last Day to Add Classes-8 week	June 8
Last Day to Add Classes-8 week Graduation Applications Due	June 8
Last Day to Drop/Delete-8 week	June 10
Last Day to Drop Classes with a "W"-10 week	June 15
Last Day to Drop Classes with a "W"-8 week	June 29
Last Day to Drop/Delete-8 week Last Day to Drop Classes with a "W"-10 week Last Day to Drop Classes with a "W"-8 week Summer Term Ends.	July 28
Commencement	July 28
FALL SEMESTER 1998	
Early Bird Registration/Orientation Challenge Testing	July 9
Challenge Testing	August 21
Orientation	August 24
Registration	August 25
Classes Begin Labor Day Holiday	August 31
Labor Day Holiday	September 7
Last Day to Add Classes	September 14
Last Day to Drop/Delete Last Day to Drop Classes with a "W"	September 21
Last Day to Drop Classes_with a "W"	October 26
Graduation Applications Due	October 26
Graduation Applications Due	November 11
I hanksgiving Holiday	November 26-2/
Last Day of Classes	December 11
Finals Schedule	
Commencement	December 17
SPRING SEMESTER 1999	
Challenge Testing Orientation	January 6
Orientation	January 7
Registration	January 8
Classes Begin	January 13
Martin Luther King Holiday	January 18
Last Day to Add Classes Last Day to Drop/Delete	January 27
Last Day to Drop/Delete	February 3
Presidents Day Holiday	February 15
Last Day to Drop Classes with a "W"	March 11
Graduation Applications Due	March 11
Presidents Day Holiday Last Day to Drop Classes with a "W" Graduation Applications Due Spring Break	March 15-19
Finals Schedule	May 3-6

## **TELEPHONE DIRECTORY**

#### Office

**Telephone Numbers** 

Admissions & Records	. *406-771-4300
Bookstore	. *406-771-4367
Business Office	. *406-771-4315
Financial Aid	. *406-771-4334
Library	. *406-771-4318
Library Placement Office	. *406-771-4323
Student Services	
FAX	406-771-4317

\* Or call 1-800-446-2698

## PROGAMS

#### **ALLIED HEALTH**

#### Associate of Applied Science Degree

Bioscience Technology Animal Laboratory Technician Instrumentation Technician Research Laboratory Technician Emergency Services Paramedic Fire & Rescue Technology Health Information Technology Occupational Therapy Assistant Physical Therapist Assistant Respiratory Care

#### Certificate

Dental Assistant Practical Nurse

#### **BUSINESS AND TECHNOLOGY**

#### Associate of Applied Science Degree

Business Accounting Business Management/Entrepreneurship Computer Technology Microcomputer Support Network Support Interior Design Medical Assistant Office Technology Administrative Assistant Legal Secretary Medical Secretary Medical Transcription

#### Certificate

Accounting Assistant Auto Body Repair & Refinishing Computer Assistant Fundamentals of Business Office Support Dental Office General Office Legal Office Medical Office

#### TRANSFER

#### Associate of Science Degree

Montana State University-Billings College of Business Economics Finance Management Marketing

Montana State University–Bozeman College of Business Accounting Finance Management Marketing

Montana State University–Northern Business Technology Accounting/Finance Marketing Small Business Management

#### Associate of Applied Science Degree

Montana State University–Northern Business Technology Small Business Management

University of Great Falls Respiratory Therapy Computer Systems Integration

#### **General Education Core**

Montana University System Units

# ESTIMATED PROGRAM COST Resident Tuition and Fees are Listed

#### ALLIED HEALTH

Bioscience Technology Animal Laboratory Technic	tian Option
Tuition and Fees	\$4877
Application Fee	30
Lab Fees	90
Books	1155
Total	\$6152
Instrumentation Technician	Option
Tuition and Fees	\$4664
Application Fee	30
Lab Fees	90
Books	1155
Total	\$5939
Research Laboratory Techr	nician Option
Tuition and Fees	\$4877
Application Fee	30
Lab Fees	90
Books	1155
Total	\$6152
Dental Assistant	
Tuition and Fees	\$3190
Application Fee	30
Books/Supplies	634
Uniforms/Lab Jacket	150
Shoes	50
Lab Fees	150
Liability Insurance	18
Total	\$4222
2 00002	÷
Emergency Services	
Tuition and Fees	Refer to fee schedule
Application Fee	\$ 30
Liability Insurance	Variable
Health Information Techno	logy
Tuition and Fees	\$4598
Application Fee	30
Lab Fees	90
Books	938
Liability Insurance	24
Total	\$5680

Occupational Therapy Assistant Tuition and Fees Application Fee Lab Fees Books Liability Insurance Total	\$6098 30 250 2520 <u>30</u> \$8928
Physical Therapist Assistant Tuition and Fees Application Fee Lab Fees Books Liability Insurance Total	\$5972 30 90 1268 <u>30</u> \$7390
Practical Nurse Tuition and Fees Application Fee Lab Fees Books Liability Insurance Uniforms Total	4020 30 135 1378 18 <u>221</u> \$5984
Respiratory Care Tuition and Fees Application Fee Books/Supplies Uniforms Lab Fees Liability Insurance Total	\$6168 30 953 63 90 <u>30</u> \$7334
<b>BUSINESS AND TECHNOLOGY</b> Accounting Assistant Tuition and Fees	\$3088
Application Fee Books/Supplies Total	30 <u>644</u> \$3762
Accounting Option Tuition and Fees Application Fee Books/Supplies Total	\$4188 30 <u>1268</u> \$5486

A deviation Assistant Oution	
Administrative Assistant Option Tuition and Fees	\$4188
Application Fee	30
Books/Supplies	1047
Total	\$5265
	<i>qv</i> <b>=</b> <i>vv</i>
Auto Body Repair and Refinishing	
Tuition and Fees	\$5770
Application Fee	30
Books/Supplies	346
Tools	1417
Clothing	84
Lab/Material Fees	320
Total	\$7967
<b>Business Management/Entrepreneurship</b>	Ontion
Tuition and Fees	\$5148
Application Fee	30
Books/Supplies	1102
Total	\$6280
Computer Assistant	<b>*****</b>
Tuition and Fees	\$2877
Application Fee	30
Books/Supplies Total	<u>496</u> \$3403
Total	\$3405
Dental Office Option	
Tuition and Fees	\$3694
Application Fee	30
Books/Supplies	634
Total	\$4358
Fundamentals of Business Tuition and Fees	\$2130
Application Fee	\$2130 30
Books/Supplies	524
Total	\$2684
	<b>42</b> 00 .
General Office Option	
Tuition and Fees	\$2805
Application Fee	30
Books/Supplies	497
Total	\$3332
Interior Design	
Tuition and Fees	\$4118
Application Fee	30
Books/Supplies	827
Total	\$4975

Legal Office Option Tuition and Fees Application Fee Books/Supplies Total	\$2342 30 <u>386</u> \$2758
Legal Secretary Option Tuition and Fees Application Fee Books/Supplies Total	\$4118 30 <u>827</u> \$4975
Medical Assistant Tuition and Fees Application Fee Books/Supplies Liability Insurance Total	\$4118 30 992 <u>10</u> \$5150
Medical Office Option Tuition and Fees Application Fee Books/Supplies Total	\$ 1925 30 <u>497</u> \$ 2452
Medical Secretary Tuition and Fees Application Fee Books/Supplies Total	\$ 3850 30 <u>919</u> \$ 4799
Medical Transcription Tuition and Fees Application Fee Books/Supplies Total	\$ 3850 30 <u>965</u> \$ 4845
<b>Computer Technology Programs</b> Tuition and Fees Application Fee Books/Supplies <b>Total</b>	\$ 3850 30 <u>997</u> \$ 4877

## GOVERNANCE

University Montana State College of Technology—Great Falls is two-year а 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 Public University System.

Although a stand-alone institution for purposes of institutional accreditation, budget, personnel, and management, effective July 1, 1994, Montana State University College of Technology-Great Falls was affiliated with Montana State University-Bozeman. Benefits of this affiliation include but are not limited to: common University System core curriculum requirements: associate degrees that transfer to Montana State University-Bozeman as well as to other units of the University System; coordination of library systems; and technical assistance.

## ACCREDITATION

Montana State University College of Technology—Great Falls is fully accredited by Northwest Association of Schools and Colleges, 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, Emergency Medical Technician, Health Information Technology, Medical Assistant, Occupational Therapy Assistant, Physical Therapist Assistant, Practical Nurse, and Respiratory Care programs are fully 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 Veteran's Affairs, and Montana Department of Vocational Rehabilitation Services.

## IMPORTANT COLLEGE REGULATIONS

## **Drug-Free Campus**

#### Policy:

In compliance with the Drug Free Workplace Act of 1988, Public Law 101-690, Montana State University College of Technology-Great Falls is committed to a good faith effort to provide a drug-free campus. Therefore, the manufacture, distribution, sale, possession, use, and/or abuse of illicit and/or prescription drugs or the inappropriate use of alcohol at the College or in any of its activities is prohibited. In addition, the College will enforce the Board of Regents' policy, Section 503.1, of the Policy and Procedures regarding alcoholic Manual beverages.

Students and employees of the College must comply with this policy as a condition of Violations of this attendance/employment. policy will result in disciplinary action up to and including dismissal and/or referral for prosecution. At the discretion of the Dean of the College of Technology, a student or employee violating the policy may be required to satisfactorily complete a drug or alcohol abuse rehabilitation program as an alternative to dismissal.

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.

## General Information

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. Counselors, faculty, and staff at the 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.

## <u>Crime Awareness and</u> <u>Campus Security</u>

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. A brochure which provides campus crime prevention information as well as statistics identifying incidents of campus crime is available from the Main Office.

## Firearms, Munitions, Explosives

Possession, use, or threatened use of firearms, ammunition, explosives, chemicals, and/or any other object as weapons in the building or on campus are prohibited. Concealed weapons are prohibited. Violations of this policy will result in disciplinary action up to and including dismissal and/or referral for prosecution.

## **Student Conduct Guidelines**

Montana State University College of Technology—Great Falls expects all students to conduct themselves as honest, responsible, and law-abiding members of the academic community and to respect the rights of other students, members of the faculty and staff, and the public to use, enjoy, and participate in the College programs and facilities. Student conduct that disrupts, invades or violates the personal, educational, and/or property rights of others is prohibited and may be subject to disciplinary action up to and including dismissal and/or referral for prosecution.

## NOTICE CONCERNING MATERIALS DESCRIBED IN THIS CATALOG

Postsecondary budgets are funded through appropriations from the Montana State Legislature. Without that support, Montana State University College of Technology—Great Falls would be unable to continue its programs. 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 as to their availability will be determined by enrollment, available faculty, funds, and employer training needs.

## **Applicants**

As an open admission institution, Montana State University College of Technology—Great Falls will attempt to admit all persons who complete admission requirements. In the case of programs with limited enrollment, acceptance of individuals will be based on timely completion of the admission requirements for each program. For the Physical Therapist Assistant program admission requirements, please refer to page 49.

All applicants will be considered regardless of race, color, religion, national origin, marital status, age, gender, disability, or disadvantage in accordance with the following guidelines:

#### **Degree Seeking**

A degree seeking applicant is one who possesses a high school diploma or its equivalent, and will enroll in a specific program to earn a certificate or degree.

#### Non-degree seeking

A non-degree seeking applicant is one who will not enroll in a specific program to earn a certificate or degree.

#### **Full-time Student**

A full time student is one who is enrolled in 12 or more credit hours. Students who do not meet the criterion for full-time classification are parttime students.

#### **Undeclared Applicant**

An undeclared applicant is one who is degree/certificate seeking but is undecided about his/her field of study.

#### **Allied Health Applicants**

Enrollments in Allied Health programs are limited in number. Application packets with specific information pertaining to the application and selection procedures are available from the Admissions & Records Office.

Some licensing or certification boards have varied restrictions which may affect persons with a history of felony conviction. The College assumes no responsibility for the denial of licensure or certification by such boards. Prospective students are responsible for contacting the appropriate boards concerning any questions regarding their eligibility for licensure or certification.

### **<u>Residency Requirements</u>**

Under policies established by the Board of Regents in accordance with Montana statutes regarding residency, all applicants for admission and students at the units of the Montana University System shall be classified as in-state or out-of-state for fee purposes:

1. A person may be classified as in-state following a 12-month continuous period of domicile in Montana with a documented and dated intent to become a resident of Montana as outlined in the Montana University System Guide to Montana's Residency Policy.

2. Members of the United States Armed Forces, their spouses, and dependent children are considered Montana residents.

Questions regarding residency status should be addressed to the Admissions & Records Office.

#### Nonimmigrant Foreign Students

MSU College of Technology—Great Falls is authorized under Federal law to enroll nonimmigrant foreign students. Each nonimmigrant foreign student is required to furnish the following documents in order to be considered for admission as a full-time student:

- 1. Completed Application for Admission accompanied by a \$30 non-refundable application fee;
- 2. TOEFL (Test of English as a Foreign Language) scores from an accredited testing service. A minimum score of 500 is the acceptable standard. More information about TOEFL may be obtained from the Education Testing Service, Princeton, NJ 08540;
- Proof of completion of the equivalent of an American high school education with satisfactory grades. Transcripts must be sent to the Admissions & Records Office, Montana State University College of Technology—Great Falls;
- 4. A Declaration of Finances or other present evidence of funds necessary to pay all living expenses and travel to and from the College;
- 5. All nonimmigrant foreign students must show a physician-validated immunization record for measles, rubella, diphtheria, tetanus, and skin testing for tuberculosis. The evidence must be presented before a student will be permitted to register.
- 6. Evidence of an accident and sickness insurance policy or one of equal coverage for each semester in attendance at the College.

After a nonimmigrant foreign student has completed all of the above items and returned the required forms, his/her admission file will be reviewed and a letter sent indicating either acceptance or denial of admission. Upon acceptance, the College will issue an I-20 Certificate of Eligibility for non-immigrant "F-1" student status.

### Admission Requirements

## 1. Complete and Submit Application for Admission

Applications for admission may be obtained from the Admissions & Records Office at the College, other units of the University System, and most high schools in the state. Prospective students are encouraged to consult with an admissions counselor for information about selection of a program and financial aid before submitting their applications. Call 406-771-4300 or 1-800-446-2698 (In Montana) to arrange for an appointment with an admission counselor.

A one-time non-refundable \$30 application fee must accompany the Application for Admission.

#### 2. Furnish High School and College Transcripts

Official high school transcripts or GED scores and official college transcripts must be furnished to the Admissions & Records Office for evaluation. Official transcripts must be sent directly to Montana State University College of Technology – Great Falls from the originating institution.

#### 3. Complete Admission Assessment

All applicants are required to take the ASSET placement test or submit their American College Test (ACT) or Scholastic Aptitude Test (SAT) scores. The ASSET is a standardized test which is diagnostic in nature and a measure of an applicant's proficiency in English, reading and mathematics. The results are used to determine placement in courses. Special arrangements can be made for those applicants who have a disability or who are working and unable to test during the day. Arrangements for taking the ASSET can be made by contacting the Admissions & Records Office, 406-771-4300 or 1-800-446-2698 (in Montana).

Special arrangements can be made for those applicants who have a documented or temporary disability or who are working and unable to complete the assessment during the day.

Students may choose to have their ACT or SAT scores sent to the College to determine placement if the test was taken within the past three years. Please have scores sent to the Admissions & Records Office directly from ACT or SAT. The College's ACT code is 2432, and the SAT code is 4482. The addresses and telephone numbers for ACT and SAT are:

ACT Records P.O. Box 451 Iowa City, IA 52243-0451 319-337-1313

SAT Program Princeton, NJ 08541 609-771-7600

For persons wishing to attend a postsecondary institution other than Montana State University College of Technology—Great Falls, Student Services will provide monitoring for admission assessments. Individuals must arrange for the assessment materials to be sent to the College and for an assessment date through the student services staff. A forwarding address to the appropriate institution must also be provided.

#### 4. Immunization

In order to be in compliance with Montana state law, amended in 1993, students born after January 1, 1957, taking seven (7) or more credits OR enrolled in a certificate/degree/transfer program must:

- Submit proof of **2** vaccinations against measles and one against rubella. Immunizations must have been given after 1967 and after the student's first birthday and must have been administered at least **30** days apart. Current immunizations must have been administered in the form of the MMR vaccine. Immunizations must be documented by a physician, registered nurse, or school official; or
- Submit documentation of having contracted measles and rubella. Documentation by a physician is required including dates of illness; or
- File a medical or religious exemption.

Such evidence must be submitted before students will be permitted to register for courses.

## Early Admission

High school students may be admitted and allowed to register for college-level courses provided they are academically prepared. High school students may earn college-level credit to

be applied to a degree at Montana State University College of Technology—Great Falls or to transfer to another college or university once they graduate from high school. Course records for students will be entered and maintained on a Montana State University College of Technology—Great Falls transcript.

### **Credit By Examination**

## College Advanced Placement (High School Students)

Applicants who have taken advanced placement courses in high school should request that the official scores be sent to the College's Admissions & Records Office. Grades of 3, 4, or 5 on an advanced placement examination will be granted college credit for the appropriate courses.

#### Challenge

The College offers challenge examinations for some of the courses described in this catalog. If an applicant or student feels he/she has knowledge about a particular subject area and wishes to take an examination to demonstrate that knowledge, he/she may, with the approval of faculty, take a comprehensive examination. If a student's performance is sufficient to merit the awarding of credit, a grade of "P" (generally equivalent to a "C" or above) will be recorded on the student's academic record. A course cannot be challenged which is a prerequisite to a second course that has been completed or a course that has been failed or previously audited.

## College Level Examination Program (CLEP) and DANTES

Montana State University College of Technology—Great Falls awards credit toward graduation for successful performance in certain subject examinations of the CLEP and DANTES programs. Students may arrange to take these examinations at designated centers. Passing grades and the awarding of credit is determined by the American Council on Education (ACE) credit recommendations. The College of Technology's DANTES identification number is 9472.

#### Tech Prep Credit



Tech Prep provides high school students an opportunity to earn credits toward one- or twovear certificates or degrees in business and technology and allied health programs at Montana State University College of Technology while still in high school. It is a cooperative program carried out under articulation agreements between secondary and postsecondary institutions which have made a commitment to the program. Counselors and instructors of participating high schools have information available for interested students.

College credit earned by currently enrolled students who successfully complete approved advanced placement examinations, CLEP examinations, department prepared challenge examinations, and Tech Prep articulations will have credits recorded on their academic records without an additional fee. Credit will not be awarded for courses which are prerequisites to subsequent courses that have been completed or courses that have been failed or previously audited.

## **Transfer From Other Institutions**

Credits from other regionally accredited postsecondary institutions may be accepted as they apply to the established course requirements of Montana State University College of Technology—Great Falls under the following guidelines:

- The transferring student must initiate the request for evaluation of credit during the admission procedure by furnishing an official transcript from the transferring institution(s) and the necessary materials, including copies of the appropriate catalog descriptions or course syllabi, to the Admissions & Records Office. It is the responsibility of the student to pursue the status of that evaluation upon enrollment.
- Grades less than a "C" (2.00 GPA) for previous course work will not be considered for transfer credit. Course work taken more than 5 years prior to transfer request will be reviewed. If transfer credit cannot be granted, the student has the option of challenging a course or courses.
- To receive a certificate/degree, a student must complete 51 percent of the course work required by his/her program at the College.
- Transfer credit will be posted on the transcript for accepted transferred course work.
- Transfer grades are not figured in the grade point average (GPA).

## **Transfer to Other Institutions**

Montana State University College of Technology—Great Falls is fully accredited by Northwest Association Commission on Colleges. Students can expect to transfer to other colleges and universities with ease. Appropriate 100 and 200 level courses are eligible for transfer. A Transfer of Credit Guide which provides a comprehensive listing of the College's courses that are transferable to other Montana public and private institutions of higher education is available upon request. For information regarding transferability of courses,

contact the Admissions & Records Office, 406-771-4300 or 1-800-446-2698 (in Montana).

### Course Waiver

A course may be waived if the student has previously completed equivalent work. All waivers must be approved by the department responsible for the requirements of the course in question and must be approved by the department chairman or lead faculty for the program. College credit will not be given for a waiver.

#### **Course Substitution**

Students may request a substitution for any stated course if they have previously completed a college course in which the subject matter closely parallels that of the course for which they request the substitution. All substitutions must be approved by the department chairman or lead faculty. In no instance will a reduction be made in the number of credits required for completion of a program.

#### **Acceptance**

Notification of acceptance will be mailed when admission requirements have been completed and an opening in a selected program exists. Individuals accepted for admission into a program with limited enrollment who do not enroll in that program on its starting date must reapply.

#### **Advisors**

Students will be assigned academic advisors when they enroll. Advisors are faculty members who will assist in course scheduling each term and be available to provide information regarding courses and/or academic progress as needed.

## Late Registration

Registration at times other than before the beginning of a term may be granted upon the approval of faculty and available classroom space. A late registration fee of \$40 may be charged.

## **Students Owing Debts**

The College reserves the right to refuse to register a student who has an overdue debt owing to this institution. Transcripts, certificates, and degrees may be withheld from any student who owes tuition, fees or charges, or has not returned books and/or materials belonging to the College or other Montana University System units.

## TUITION AND FEES 1998-99

The Montana Board of Regents of Higher Education has approved the following tuition and fees schedule for the 1998-99 academic year beginning Fall Term 1998. Tuition and fees are based on credit hours and are paid by the student each semester. Costs, in addition to tuition and fees, are subject to change without notice.

Semester Credit Hours	Registration Fee	Resident Tuition	Building Fee	Computer Fee	Equipment Fee	Network Services Fee	Library Fee	Student Government	Total Resident Fee	Additional Nonresident Fee	Total Nonresident Tuition
1	\$30.00	\$60.70	\$3.50	\$2.35	\$1.50	\$2.15	\$1.00	\$5.00	\$106.20	\$106.00	\$212.20
2	\$30.00	\$121.40	\$7.00	\$4.70	\$3.00	\$4.30	\$2.00	\$5.00	\$177.40	\$212.00	\$389.40
3	\$30.00	\$182.10	\$10.50	\$7.05	\$4.50	\$6.45	\$3.00	\$5.00	\$248.60	\$318.00	\$566.60
4	\$30.00	\$242.80	\$14.00	\$9.40	\$6.00	\$8.60	\$4.00	\$5.00	\$319.80	\$424.00	\$743.80
5	\$30.00	\$303.50	\$17.50	\$11.75	\$7.50	\$10.75	\$5.00	\$5.00	\$391.00	\$530.00	\$921.00
6	\$30.00	\$364.20	\$21.00	\$14.10	\$9.00	\$12.90	\$6.00	\$5.00	\$462.20	\$636.00	\$1,098.20
7	\$30.00	\$424.90	\$24.50	\$16.45	\$10.50	\$15.05	\$7.00	\$5.00	\$533.40	\$742.00	\$1,275.40
8	\$30.00	\$485.60	\$28.00	\$18.80	\$12.00	\$17.20	\$8.00	\$5.00	\$604.60	\$848.00	\$1,452.60
9	\$30.00	\$546.30	\$31.50	\$21.15	\$13.50	\$19.35	\$9.00	\$5.00	\$675.80	\$954.00	\$1,629.80
10	\$30.00	\$607.00	\$35.00	\$23.50	\$15.00	\$21.50	\$10.00	\$5.00	\$747.00	\$1,060.00	\$1,807.00
11	\$30.00	\$667.70	\$38.50	\$25.85	\$16.50	\$23.65	\$11.00	\$5.00	\$818.20	\$1,166.00	\$1,984.20
12	\$30.00	\$728.40	\$42.00	\$28.20	\$18.00	\$25.80	\$12.00	\$5.00	\$889.40	\$1,272.00	\$2,161.40
13	\$30.00	\$789.10	\$45.50	\$30.55	\$19.50	\$27.95	\$13.00	\$5.00	\$960.60	\$1,378.00	\$2,338.60
14-18	\$30.00	\$849.80	\$49.00	\$32.90	\$21.00	\$30.10	\$14.00	\$5.00	\$1,031.80	\$1,484.00	\$2,515.80
19	\$30.00	\$910.50	\$52.50	\$35.25	\$22.50	\$32.25	\$15.00	\$5.00	\$1,103.00	\$1,590.00	\$2,693.00
20	\$30.00	\$971.20	\$56.00	\$37.60	\$24.00	\$34.40	\$16.00	\$5.00	\$1,174.20	\$1,696.00	\$2,870.20
21	\$30.00	\$1,031.90	\$59.50	\$39.95	\$25.50	\$36.55	\$17.00	\$5.00	\$1,245.40	\$1,802.00	\$3,047.40
22	\$30.00	\$1,092.60	\$63.00	\$42.30	\$27.00	\$38.70	\$18.00	\$5.00	\$1,316.60	\$1,908.00	\$3,224.60

## POST BACCALAUREATE TUITION AND FEES 1998-99

The Montana Board of Regents of Higher Education has approved the following tuition and fees schedule for individuals holding baccalaureate degrees for the 1998-99 academic year beginning Fall Term 1998. Tuition and fees are based on credit hours and are paid by the student each semester. Costs, in addition to tuition and fees, are subject to change without notice.

Semester Credit Hours	Registration Fee	Resident Tuition	Building Fee	Computer Fee	Equipment Fee	Network Services Fee	Library Fee	Student Government Fee	Total Resident Fee	Additional Nonresident Tuition	Total Nonresident Tuition
1	\$30.00	\$ 72.85	\$ 3.50	\$ 2.35	\$ 1.50	\$2.15	\$ 1.00	\$5.00	\$118.35	\$106.00	\$224.35
2	\$30.00	\$145.70	\$ 7.00	\$ 4.70	\$ 3.00	\$4.30	\$ 2.00	\$5.00	\$201.70	\$212.00	\$413.70
3	\$30.00	\$218.55	\$ 10.50	\$ 7.05	\$ 4.50	\$6.45	\$ 3.00	\$5.00	\$285.05	\$318.00	\$603.05
4	\$30.00	\$291.40	\$14.00	\$ 9.40	\$ 6.00	\$8.60	\$ 4.00	\$5.00	\$368.40	\$424.00	\$792.40
5	\$30.00	\$364.25	\$17.50	\$11.75	\$ 7.50	\$10.75	\$ 5.00	\$5.00	\$451.75	\$530.00	\$981.75
6	\$30.00	\$437.10	\$21.00	\$14.10	\$ 9.00	\$12.90	\$ 6.00	\$5.00	\$535.10	\$636.00	\$1,171.10
7	\$30.00	\$509.95	\$24.50	\$16.45	\$10.50	\$15.05	\$ 7.00	\$5.00	\$618.45	\$742.00	\$1,360.45
8	\$30.00	\$582.80	\$28.00	\$18.80	\$12.00	\$17.20	\$ 8.00	\$5.00	\$701.80	\$848.00	\$1,549.80
9	\$30.00	\$655.65	\$31.50	\$21.15	\$13.50	\$19.35	\$ 9.00	\$5.00	\$785.15	\$954.00	\$1,739.15
10	\$30.00	\$728.50	\$35.00	\$23.50	\$15.00	\$21.50	\$10.00	\$5.00	\$868.50	\$1,060.00	\$1,928.50
11	\$30.00	\$801.35	\$38.50	\$25.85	\$16.50	\$23.65	\$11.00	\$5.00	\$951.85	\$1,166.00	\$2,117.85
12	\$30.00	\$874.20	\$42.00	\$28.20	\$18.00	\$25.80	\$12.00	\$5.00	\$1,035.20	\$1,272.00	\$2,307.20
13	\$30.00	\$947.05	\$45.50	\$30.55	\$19.50	\$27.95	\$13.00	\$5.00	\$1,118.55	\$1,378.00	\$2,469.55
14-18	\$30.00	\$1,019.90	\$49.00	\$32.90	\$21.00	\$30.10	\$14.00	\$5.00	\$1,201.90	\$1,484.00	\$2,685.90
19	\$30.00	\$1,092.75	\$52.50	\$35.25	\$22.50	\$32.25	\$15.00	\$5.00	\$1,285.25	\$1,590.00	\$2,875.25
20	\$30.00	\$1,165.60	\$56.00	\$37.60	\$24.00	\$34.40	\$16.00	\$5.00	\$1,368.60	\$1,696.00	\$3,064.60
21	\$30.00	\$1,238.45	\$59.50	\$39.95	\$25.50	\$36.55	\$17.00	\$5.00	\$1,451.95	\$1,802.00	\$3,253.95
22	\$30.00	\$1,311.30	\$63.00	\$42.30	\$27.00	\$38.70	\$18.00	\$5.00	\$1,535.30	\$1,908.00	\$3,443.30

Tuition and Fees DEFERRED PAYMENTS PLAN FEE REFUNDS

## **Deferred Payment Plan**

The deferred fee payment plan is an installment loan available for qualified applicants who are unable to make full payment of current semester tuition, fees, and other charges on the regular fee payment day. This plan is available to all qualifying students through the Office of Financial Aid. Installment payments and applicable fees are collected and processed by the Business Office.

### Fee Refunds

#### Withdrawal From the College

Unless otherwise required by the Higher Education Act of 1965, as amended, students withdrawing from Montana State University College of Technology—Great Falls are refunded the fees paid in accordance with the following schedule established by the Board of Regents. In order for a student to receive a refund under the Board of Regents policy, an official withdrawal form must be on file in the Registrar's Office:

#### Days of Instruction Percent Refunded

Registration day	100
1-5	90
6-10	75
11-15	50
16-on	0

## Changes in Credit Load After Payment of Fees

Students adding courses after payment of fees are required to pay additional fees created by the change in credit load. Students dropping classes (but not withdrawing) will receive a 100 percent refund on courses dropped before the end of the 15th class day. Refunds will not be made after the 15th class day. If a student drops a course or courses and then withdraws, all dropped courses will fall under the withdrawal/refund policy.

Summer term(s) are pro-rated. Please see the class schedule for the deadline dates.

#### Seminars

A modified refund policy is in place for seminars. Please contact the Continuing Education Department or the Admissions & Records Office regarding seminar fee refunds--406-771-4300.

Fee refunds are processed approximately 5 weeks after the start of a semester and mailed to the student's permanent address.

## Academic Information ACADEMIC PROGRESS COURSE NUMBERING SYSTEM

ATTENDANCE ADDING/DROPPING CLASSES

### Academic Progress

Academic progress standards are as follows:

- Full- and part-time students enrolled at the Montana State University College of Technology—Great Falls are required to maintain a 2.0 cumulative grade point average (GPA). Students with less than a 2.0 GPA at the end of any academic term may be placed on academic probation for the following academic term.
- Full- and part-time students receiving less than a 2.0 GPA for the second consecutive academic term may be suspended from the College for one academic term before being considered for readmission.
- Readmission must be initiated through the Admissions & Records Office. Current catalog admission requirements will be followed, and re-enrolled students will enter on a probationary status.

A student who has been placed on academic probation or suspension may appeal in writing to the Admissions & Records Office for review of circumstances.

#### **Course Numbering System**

Zero (0)-numbered courses cannot be used to satisfy core requirements or general elective requirements and do not count toward graduation requirements. They do count as credits required to meet financial aid satisfactory academic progress requirements if enrollment is required based on placement test scores. The remainder of the College's courses are numbered 100 to 299.

### **Attendance**

Absences are handled exclusively within the purview of the faculty. When a student enrolls in a course, he/she enters into a contractual agreement with faculty for the duration of the course, and both the student and the faculty are expected to honor the specified terms of that agreement. It is important, therefore, for the student to understand the particular attendance requirements in each course. Generally, faculty communicate these requirements to students through the course syllabi and verbally during the first or second class meeting.

## Adding and Dropping Courses

Students may add courses with faculty approval up to the end of the 10th day of instruction.

All students may drop one or more courses with no grade up to the end of the 15th day of instruction with faculty approval. Although no refund will be given, students may continue to drop one or more courses with a grade of a "W" prior to the end of the 40th day of instruction with faculty approval. No drops will be allowed during the last half of the semester, except for extreme mitigating circumstances.

A course which is scheduled for a half semester must be dropped prior to the end of the 20th day of college instruction. No drops will be allowed after the 20th day, except for extreme mitigating circumstances.

The deadlines are pro-rated for the summer term(s). Please see the class schedule for the deadline dates.

Academic Information WITHDRAWL/READMISSION EVALUATION OF COURSES GRADING

In all courses for which a student fails to complete all requirements and for which no formal withdrawal (drop) has been filed in the Admissions & Records Office, the final grade will be the grade the student has earned at the end of the course.

The procedure for adding/dropping a course is:

- 1. Obtain an official drop/add card from the Admissions & Records Office;
- 2. Complete the card and secure the necessary faculty signature(s); and
- 3. Return the card to the Admissions & Records Office.

#### Withdrawal from the College

Any student who is considering withdrawal from the College should consult student services. Official withdrawal is important, since it may affect financial aid eligibility, tuition refunds, readmission to the College, and the grade point average. Courses in which the student is enrolled at the time of withdrawal from the College will be entered on the student's transcript in accordance with the grading policy applied to dropping from courses.

#### **Readmission to the College**

Students who have previously attended Montana State University College of Technology—Great Falls must have their records reactivated when they have been inactive for 2 consecutive semesters, excluding summer.

Reactivated students will be responsible for the current requirements of the program they are

entering and will have a new program acceptance date to reflect the current graduation requirements of the program.

Previously earned credits will be evaluated toward the current degree or certificate requirements. Credits earned 5 or more calendar years earlier will be reviewed by the appropriate department chairman and/or lead faculty who may require repetition of any course in which the content has substantially changed.

#### **Evaluation of Courses**

Students are provided the opportunity to evaluate each of the courses they complete at the College during the final 4 weeks of each course.

Students are asked to professionally and positively approach the serious task of course evaluation. All faculty look forward to input from students who complete a course. Faculty utilizes the input from their students to improve or modify courses.

## **Grading**

The following is an explanation of grades used at Montana State University College of Technology—Great Falls:

#### **Passing Grades**

C	Quality	
Grades	of Work	for Each Credit
A	Excellent	
В	Above average	
С	Average	
D	Passing	
Р	Pass	0
AU	Audit	0
W	Withdraw	0

## Academic Information

GRADING

#### **Nonpassing Grades**

Grades	-	Grade Points for Each Credit
F	Fail	0
I	Incomplete	0
	-	s0

#### Audit

Registered students may, with the permission of faculty, enroll in a course as an auditor for no credit. A student must decide to audit a course by the 15th day of the semester. Auditors pay the same fees as students enrolled for credit and are expected to follow the attendance guidelines set forth in the course.

#### Incomplete

An incomplete grade is given at the discretion of faculty when the course work of a student has been satisfactory but for some unavoidable mitigating circumstance the student was unable to complete the work by the end of the term. A student wishing to make up the incomplete must make arrangements with the faculty who issued the incomplete. The student will have until the end of the following semester to make up the incomplete. If a student fails to make up an incomplete within the allotted time, the incomplete grade will be converted to an "F".

#### **Course Repeat**

Courses may be repeated to increase one's knowledge and/or grade point average. The original grade as well as the subsequent repeats are reflected on the academic transcript. However, the grade and grade point value for the repeated course will replace the earlier grade and grade point value in the cumulative totals. The grade and accompanying information for a repeated course will be posted on the student's academic transcript for the semester during which the repeated course was completed. Course repeats will not affect academic progress as it relates to recipients of Federal and State financial aid.

A course repeat form, available from the Admissions & Records Office, must be completed by students wishing to repeat a course or courses. If the course repeat form is not properly completed and submitted, the grades and accompanying information for both course attempts will be posted on the students' academic transcript.

#### Grade Point Average (GPA)

A student's level of academic performance is determined by grade point average (GPA). To calculate the GPA the total number of grade points is divided by the total number of credits that have grade point values. Grades of A, B, C, and D have grade point values.

#### **Grade Reports**

Students may arrange to receive their grades through the mail by providing the Admissions & Records Office with a stamped, self-addressed envelope. Otherwise, grades are available in the Admissions & Records Office 2 weeks after the end of the term.

#### **Change of Grade**

Once grades have been submitted to the Admissions & Records Office by faculty, they will not be changed except in case of clerical error or if fraudulently obtained. Students who believe an error in grading has occurred should first consult with the faculty member.

Academic Information HONORS TRANSCRIPTS GRADUATION

## **Honors**

Montana State University College of Technology—Great Falls recognizes students' academic achievements according to the following standards:

#### **Honor Roll**

The honor roll includes students taking 12 or more credits in courses at the 100 level or above who earned a grade point average of 3.25 for that semester. The names of students on the honor roll are published each semester in area newspapers unless a "Do Not Release" form is on file in the Student Services office. These forms are available at the reception desk in the Main Office.

#### Dean's List

To be eligible for the Dean's List, a student must:

- 1. Earn 12 or more credits in courses at the 100 level or above in one term;
- 2. Have a semester grade point average of at least 3.5;
- 3. Not have any "I" grades. If "I" grades are changed to passing grades, thereby affecting Dean's List eligibility, the student may request a letter noting Dean's List recognition.

#### **Graduation Honors**

Upon successful completion of program requirements a graduating student with a GPA of 3.75 will receive highest honors, and a graduating student with a GPA between 3.5 and 3.75 will receive honors.

#### **Transcripts**

Copies of official academic transcripts are available upon written request of the student from the Admissions & Records Office. The first copy requested is free of charge; each additional copy costs \$3.

#### **Graduation**

Montana State University College of Technology - Great Falls' students follow the catalog in effect when they began their enrollment at the College or may elect to follow any subsequent catalog if there has not been a break of more than one academic year in their attendance. If absent for 2 or more semesters the catalogue they re-enroll under is in effect. Students must pass all required courses and have an overall grade point average of 2.0 to graduate from Montana State University College of Technology-Great Falls.

Each program in the Allied Health Department has specific requirements for matriculation and graduation. Enrolled students must pass all courses with a minimum grade of "C" and are informed of other specific program policies and requirements at the time of orientation and throughout their educational experience.

Identified programs in the Business and Technology Department have specific requirements for matriculation and graduation. Courses which require a grade of "C" or above are designated for each program in the program section of this catalog.

A student must file a formal application for graduation with the Admissions & Records Office no later than the end of the **5th** week of the semester which the student intends to graduate. Upon satisfactory completion of program requirements, a student will be awarded a certificate/degree for his/her declared program

## Academic Information DEGREES OFFERED

of study. Students who fail to submit an application for graduation will not receive a certificate/degree.

A \$15 non-refundable graduation fee is due upon submission of the application for graduation. Caps and gowns are purchased through the Bookstore for a fee of \$20. Graduation announcements are also purchased through the Bookstore.

Commencement exercises are held three times per year. Commencement dates will be announced at the beginning of each semester.

Diplomas can be replaced at the request of the student. The cost of replacing a certificate or diploma is \$10, and the cost of replacing the cover is \$10.

## DEGREES OFFERED

## Associate of Applied Science (A.A.S.)

The Associate of Applied Science (A.A.S.) degree is awarded in specific technical career fields. This degree is designed to prepare students for immediate entry into employment but may be fully or partially transferable to programs at selected four-year institutions.

Montana State University College of Technology—Great Falls offers A.A.S. degrees in the program areas of business and technology and allied health. Specific requirements for each program are listed in the program section of this catalog.

#### Associate of Science (A.S.)

The Associate of Science (A.S.) degree is a general transfer degree awarded without major designation. This degree indicates that a student has completed a course of study essentially equivalent to the first two years of a four-year degree.

Associate of Science degree concentrations and requirements are set out in the program section of this catalog.

## MONTANA UNIVERSITY SYSTEM HIGHER EDUCATION CENTER IN GREAT FALLS

The campus of Montana State University College of Technology-Great Falls serves as the site for the Montana University System Higher Education Center in Great Falls. The Higher Education Center coordinates courses and programs to be delivered in Great Falls by Montana's four-year campuses. Degree programs and courses offered through the Higher Education Center are primarily designed for area residents who are interested in enrolling in a graduate or four-year degree programs not currently available in Great Further information about the Higher Falls. Education Center in Great Falls can be requested from Montana State University College of Technology-Great Falls' Main Office or by calling the College at 406-771-4300 or 1-800-446-2698 (in Montana).

## **GENERAL STUDIES**

In cooperation with other Montana colleges and universities, Montana State University College of Technology—Great Falls offers a general studies option to students who plan to pursue degrees at other colleges or universities but wish to take basic courses at the College. This option is also available to those students who are uncertain about a major field of study or want to explore a variety of courses before making a final choice. Required general education core courses are particularly well suited for transfer to other colleges or universities.

An advisor will assist students in preparing an individualized program to explore various areas and at the same time fulfill general education course requirements or electives in any curriculum. A Transfer of Credit Guide which provides a comprehensive listing of the College's courses that are transferable to other Montana public and private institutions of higher education is available upon request. For information regarding transferability of courses, contact the Admissions & Records Office, 406-771-4300 or 1-800-446-2698 (in Montana).

## COOPERATIVE COURSES WITH THE UNIVERSITY OF GREAT FALLS

The College has an agreement with the University of Great Falls to offer cooperative courses. To be eligible to enroll in cooperative classes offered at University of Great Falls students must <u>not</u> be currently enrolled and degree seeking with the University of Great Falls or vice versa when the College offers the cooperative course.

The academic policies and procedures of Montana State University College of Technology—Great Falls will apply to students matriculated at the College who enroll in cooperative courses offered at the University of Great Falls. Conversely, the academic policies and procedures of the University of Great Falls will apply to students matriculated at the University who enroll in cooperative courses offered at Montana State University College of Technology—Great Falls.

## **DEPARTMENT OF OUTREACH**

Suzanne Waring, Director 771-4300 or 1-800-446-2698

The Department of Outreach of Montana State University College of Technology—Great Falls is committed to providing access to learning and training opportunities to Montanans through the Centers for Extended Studies, Continuing Education, Customized Training, and Distance Learning.

### **<u>Center for Extended Studies</u>**

The Center for Extended Studies provides workshops, courses, and programs to off-campus sites and credit-bearing seminars on campus.

The Center uses a variety of delivery methods to best accommodate students and the situation, such as hiring qualified faculty in the community electronically delivering or courses. Electronically delivered courses, seminars, and workshops are offered via two interactive video systems serving urban and rural communities: computer-mediated instruction; satellite downlinking; cable television courses; and prerecorded videotapes. The Center plans both distance learning opportunities and coordinates the delivery along with serving as a liaison for student support services.

Additionally, approximately 75 annual computer seminars provide participants with the latest technology in word processing, spreadsheet, database, graphic, and accounting applications. These one-credit seminars are offered each semester on campus during the evening hours.

Those interested should call the Main Office at 406-771-4300 or 1-800-446-2698 to request a schedule showing when and where various

computer application seminars and off-campus courses and programs are offered.

## **Continuing Education Center**

The Center for Continuing Education provides non-credit bearing workshops that train and upgrade participants' skills in health, microcomputer management, general education, and technology fields for general public enrollment.

Workshop fliers on a variety of training topics are often 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.

## Customized Training Center

The Customized Training Center assists businesses, including those located in rural communities, to maximize their ability to make a profit; brings together groups of business people for effective exchange of knowledge; and develops and provides specialized, effective training for all areas of business. Examples of training currently being offered include: Customer Service, Telephone Etiquette, Sales Training, Marketing and Advertising, Work Safety, Records Management, Communications Styles, Time Management, Business Plans, Cash Flow and Computer Skills

The College takes pride in the faculty who are skilled in various instructional areas. They are prepared to provide workshop and seminar training for business and industry and to develop workshops fitting the special needs of a particular company. Call the Director of Outreach at 406-771-4300 or 1-800-446-2698 (in Montana) to learn more about how Montana State University College of Technology—Great Falls can provide customized training required in today's business environment.

## **EVENING CLASSES**

The College offers evening courses which are an extension of the daytime course offerings. In Fall and Spring semesters over 40 evening courses are offered in general education, computer technology, business, allied health, and office technology. During summer term an emphasis is placed on offering evening classes which support programs at the College of Technology as well as on other Montana State University campuses.

Courses for two Associate of Applied Science Degree programs: Business and Computer Technology are now offered in their entirety on a three- to four-year cycle during the evening. Please consult with an admissions counselor for more information as to when courses for these programs are offered.

#### **INTERNET CLASSES**

The computer-mediated instruction courses (Internet) presently being offered are the following:

Course	No.	Title	<u>Credits</u>
AH	150	Fitness for Life	3
BIO	105	Fund of Human Biology	3
BM	106	Introduction to Business	3
CS	110	Introduction to Computers	3
ENGL	121	Composition I	3
ENGL	128	Business & Technical Comr	n 3
00	185	Basic Medical Terminology	3
00	225	Medical Transcription I	3
PHYS	130	Fund of Physical Science	3
PSY	101	General Psychology	3

For more information, call 771-4440.

### SPECIALIZED ENDORSEMENTS

The College's academic departments offer Specialized Endorsement programs which provide the student with the opportunity to rapidly move into the job market with a core of skills. The Specialized Endorsement programs are offered during the day, late afternoon, and evening to afford individuals the opportunity to earn credits while working. Serving as pivotal courses in many degree and certificate programs, these courses provide students the opportunity to utilize the credits to earn a Degree or a Certificate at a later date.

#### **Business Management**

Course	e No.	Title	Credits
BM	106	Introduction to Business	3
BM	255	Legal Environment	3
BM	240	Advertising	3
BM	230	Management	3
BM	235	Marketing	3
COMI	M130	Public Speaking <b>OR</b>	3
COMI	M135	Interpersonal Communicat	tions <u>3</u>
		Total	18

#### **Professional Communications**

Course N	0.	Title Cred	lits
COMM13	30	Public Speaking	3
COMM13	35	Interpersonal Communications	3
CS 11	0	Introduction to Computers	3
ENGL 12	20	Introduction to Composition O	<b>R</b> 3
ENGL 12	21	Composition I	3
ENGL 12	24	Business & Professional Comm	n 2
00 10	)7	Keyboarding I <b>OR</b>	3
00 10	)8	Keyboarding II	3
00 26	55	WordPerfect <b>OR</b>	3
00 26	66	Microsoft Word	<u>3</u>
		Total	20

## **Computerized Accounting**

Course No.	Title	<b>Credits</b>
ACCT 101	Accounting Procedures I	3
ACCT 102	Accounting Procedures II	3
ACCT 190	Payroll Accounting	3
CS 110	Introduction to Computers	3
CS 220	Electronic Spreadsheets	3
MATH 104	<b>Business Mathematics</b>	4
00 173	Electronic Calculators	<u>2</u>
	Total	21

## Legal Information

Course	No.	Title	Credits
CS	110	Introduction to Computers	3
ENGL	120	Introduction to Composition	on <b>OR</b> 3
ENGL	121	Composition I	3
00	107	Keyboarding I OR	3
00	108	Keyboarding II	3
00	180	Legal Studies I	4
00	260	Machine Transcription	3
00	265	WordPerfect OR	3
00	266	Microsoft Word	3
00	285	Legal Transcription I	<u>3</u>
		Total	22

## Medical Office Paraprofessional

Course	No.	Title	Credits
BIO	105	Fund of Human Biology	3
CS	110	Introduction to Computers	3
00	107	Keyboarding I	3
00	185	Basic Medical Terminology	/ 4
HI	237	Outpatient Coding	3
00	241	Medical Office Procedures	2
00	265	WordPerfect <b>OR</b>	3
00	266	Microsoft Word	3
00	260	Machine Transcription	3
00	255	Medical Transcription I	3
00	295	Admin Office Procedures	<u>3</u>
		Total	30

## Medical Record Coding

Course	No.	Title	Credits [Variable]
BIO	105	Fundamentals of Human Bi	ology3
CS	110	Introduction to Computers	3
00	107	Keyboarding I	3
00	185	Basic Medical Terminology	<sup>,</sup> 4
HI	237	Outpatient Coding	3
00	265	WordPerfect <b>OR</b>	3
00	288	Microsoft Word	<u>3</u>
		Total	19

### Microcomputer

Course	No.	Title Ci	edits
CS	110	Introduction to Computers	3
CS	120	Internet Basics	1
CS	166	Computer Operating Systems	3
CS	205	Database Management	3
CS	220	Electronic Spreadsheets	3
MATH	101	Introductory Algebra	4
00	107	Keyboarding I	3
00	265	WordPerfect <b>OR</b>	3
00	266	Microsoft Word	<u>3</u>
		Total	23

## Microcomputer Word Processing

Credits
omputers 3
ng 3
omposition <b>OR</b> 3
3
3
3
3
3
1
1
<u>1</u>
30

## **Eligibility Requirements**

All recipients of Federal financial aid at Montana State University College of Technology—Great Falls must meet the following general eligibility requirements:

- Have financial need as determined by a need analysis formula provided through information on the Free Application for Federal Student Aid (FAFSA);
- Be a U.S. citizen or an eligible noncitizen;
- Have a high school diploma, or GED;
- Generally be enrolled at least half-time as a regular student in a financial aid eligible certificate or degree program;
- Maintain Satisfactory Academic Progress in accordance with the policy of the Office of Financial Aid;
- Not owe a refund on a Federal grant or be in default on any Title IV loan;
- Register with Selective Service, if required;
- Agree to use any Federal student aid received solely for educational purposes;
- Comply with the requirements of the Anti-Drug Abuse Act.

#### Assistance in Applying for Financial Aid

Assistance is available to prospective students applying for financial aid. In addition, financial aid counseling for new students is an integral part of the admissions and orientation process. Once enrolled, students may receive counseling and assistance as needed. For assistance, please call 406-771-4334 or 1-800-446-2698 (in Montana), or write Office of Financial Aid, Montana State University College of Technology—Great Falls, 2100 16th Avenue South, Great Falls, MT 59405.

#### **Priority Deadlines**

Priority deadlines are set to inform students when they need to apply for financial aid each year. REMEMBER: Every student must reapply for financial aid each academic year.

**The Priority Deadline is MARCH 1** for all students attending in the Summer, Fall, or Spring Terms.

**The Application Deadline is MARCH 1** for all students attending in the Summer Term.

**The Application Deadline is JULY 1** for new students beginning their attendance in the Fall Semester.

**The Application Deadline is NOVEMBER 1** for new students beginning their attendance in the Spring Semester.

Although the deadlines for Fall and Spring are set in July and November, some of the Federal financial aid programs with limited funding may already be fully expended for the award year. An applicant should apply by the **March 1** priority deadline to ensure consideration for all Federal funding available for the award year.

**Students may apply after these deadline dates;** however, they may not have their financial aid awarded in time for the beginning of that semester. If a student's aid process is not complete when institutional charges are due, the student must pay his/her institutional

charges and be reimbursed with his/her financial aid eligibility once the financial aid process has been completed and aid is received.

### **Application Process**

Students seeking Federal financial aid (which includes grants and loans) must complete the Free Application for Federal Student Aid (FAFSA) which is available at the Office of Financial Aid. The applicant mails the completed form to the central processor. As a result of this form, an applicant will receive a Federal Student Aid Report (SAR) in the mail. Students should submit the SAR to the Office of Financial Aid as quickly as possible.

Students receiving financial aid must also submit copies of the proper Federal income tax forms and any other information requested by the Office of Financial Aid.

Students who have attended other postsecondary institutions in the last 12 months must request a financial aid transcript from all postsecondary institutions attended during that period of time. These transcripts must be requested even if financial aid was not received at that institution. Forms for requesting financial aid transcripts are available in the Office of Financial Aid.

Students who have incomplete financial aid files will be ineligible for financial assistance until files have been completed.

#### **Financial Aid Programs**

The following Federal and State programs are available at Montana State University College of Technology—Great Falls.

#### **Federal Pell Grant**

A Federal Pell grant is a form of gift aid for students enrolled at least half-time in an eligible program of study who do not already have a bachelor's degree. The amount of the Federal Pell Grant is determined by the Estimated Family Contribution on the Federal Student Aid Report, the number of credits in which the student is enrolled and the student's educational budget for the award year. Federal Pell Grant disbursements are made after the 15th class day of the academic term and after July 1 for Summer Term. A student's enrollment status for Federal Pell Grant eligibility is based on credits carried at the end of the drop/add period for the academic term or July 1 for Summer Term.

#### Federal Work-Study (FWS)

The Federal Work-Study Program offers parttime employment for eligible students. Students seeking eligibility under this program must complete the Free Application for Federal Student Aid (FAFSA). A student's earnings are limited to the amount awarded through the Office of Financial Aid. Federal Work-Study students are paid every other week according to the State of Montana payroll schedule. Funding is limited and is awarded on a first-come, firstserved basis.

#### State Work-Study (SWS)

The State Work-Study Program offers part-time employment for eligible students who are Montana residents. Students seeking eligibility under this program must complete the Free Application for Federal Student Aid (FAFSA). A student's earnings are limited to the amount awarded through the Office of Financial Aid. State Work-Study students are paid every other week according to the State of Montana payroll schedule. Funding is limited and is awarded on a first-come, first-served basis.

## FederalSupplementalEducationOpportunity Grants (FSEOG)

Federal Supplemental Educational Opportunity Grants are a form of gift aid. Student eligibility is determined by completing the FAFSA. Preference for the FSEOG is given to students who have Federal Pell Grant eligibility and who are early applicants. Funding is limited and is awarded on a first-come, first-served basis.

#### **State Student Incentive Grants (SSIG)**

State Student Incentive Grants are a Federal and State program of gift aid. Students must have financial need and be a Montana resident. Student eligibility is determined by submitting the FAFSA. Students with Federal Pell Grant eligibility and who apply early have preference. Funding is limited and is awarded on a firstcome, first-served basis.

#### Fee Waivers

Fee waivers are administered by the Office of Financial Aid. For all students, inquiries should be directed to the Office of Financial Aid. All fee waivers are based on financial need as a criterion whenever possible, except for honor scholarships for National Merit Scholarship semifinalists, high school honor scholarships, and faculty and staff fee waivers. Fee waivers do not require repayment. Fee waivers are state funded and require Montana residency status with the exception of the faculty/staff fee waiver.

The number of fee waivers is limited and are awarded on a first-come, first-served basis. In order to retain the waiver, it is necessary to maintain satisfactory academic progress in accordance with Office of Financial Aid policy.

#### Honorably Discharged Veterans' Fee Waiver

The registration fee and tuition shall be waived for honorably discharged persons who served with the United States Armed Forces in any of its wars and are currently residents of the State of Montana according to the Board of Regents residency policy. A provision of this policy states that the fee waiver shall not apply to persons who qualify under federal laws granting educational benefits to veterans. Application forms are available from the Office of Financial Aid. Funding is limited and is awarded on a first come, first-served basis. Recipients of this fee waiver are subject to satisfactory academic progress requirements.

Fee waivers are available for War Orphans and Dependents of Prisoners of War. Direct inquiries to the Office of Financial Aid.

#### American Indian Fee Waiver

This fee waiver waives the registration fee and tuition each semester and is awarded by the Office of Financial Aid to students who complete an affidavit stating they are at least 1/4 American Indian, have been bona fide residents of the State of Montana for at least one year prior to enrollment in the Montana University System, and demonstrate financial need. Applicants for this fee waiver must file a Free Application for Federal Student Aid and complete their financial aid file with the Office of Financial Aid. Application forms for this fee waiver are available at the Office of Financial Aid. Funding is limited and is awarded on a first-come, first-served basis. Recipients of this fee waiver are subject to satisfactory academic progress requirements.

#### Montana Senior Citizen Fee Waiver

Tuition and registration fees shall be waived for students classified as in-state residents for fee purposes and who are at least 62 years of age at time of registration. To apply, students must submit a copy of their driver's license or state ID card to the Office of Financial Aid. Funding is limited and is awarded on a first come, firstserved basis.

#### Surviving Dependents of Montana Firefighters/Peace Officers Fee Waiver

Registration fee and tuition shall be waived for the surviving spouse or child of any Montana firefighter or peace officer killed in the course and scope of employment. This waiver shall not apply to the extent that any person is eligible for educational benefits from any governmental or provides private benefits program that comparable benefits. To apply, please contact the Office of Financial Aid. Funding is limited and is awarded on a first-come, first-served basis. Recipients of this fee waiver are subject to satisfactory academic progress requirements.

#### Faculty and Staff Fee Waiver

All fees, except registration and building fees, shall be waived for a maximum of 6 credits per term for permanent Montana University System employees who are employed at least 3/4-time during the entire period of enrollment. Application forms are available from the Office of Financial Aid.

#### **Scholarships**

#### High School Honor Scholarship

The principal of each fully accredited Montana high school may name one or more members from each year's graduating class to receive a High School Honor Scholarship issued by the Montana University System. This scholarship (fee waiver) is applicable at any of the units of the Montana University System and covers registration fee and tuition for 2 semesters. Recipients must submit a copy of their High School Honor Scholarship letter from the Commissioner of Higher Education to the Office of Financial Aid 1 month prior to registration.

#### Honor Scholarship for National Merit Scholarship Semifinalists

Tuition and registration fee shall be waived for National Merit Scholarship semifinalists from Montana. This scholarship (fee waiver) will be valid through the first two semesters of enrollment exclusive of any credits earned prior to high school graduation.

#### **Scholarship Searches**

Graduating seniors should talk with their high school counselors. Many high schools offer good scholarship services for little or no charge. Continuing students should periodically check the financial aid bulletin board. The Office of Financial Aid will post scholarship information and deadlines on the financial aid bulletin board as information becomes available. Also, all students should check the Montana State University College of Technology Library's reference section for materials on grants and scholarships.

The CASHE program is a free scholarship search. For more information call 1-800-537-7508.

Another tool available is the Financial Aid Information Page on the World Wide Web. There are several free scholarship searches available at this web site. The address to this page is http://www.finaid.org/

**Remember** scholarship application deadlines are crucial.

#### <u>Federal Family Education Loan Program</u> (FFELP)

#### Federal Subsidized Stafford/Federal Unsubsidized Stafford/Federal PLUS

The Free Application for Federal Student Aid (FAFSA) must be completed to determine eligibility for all FFELP loans. The FFELP loans offer assistance from a participating lending institution of the borrower's choice.

First-year, first-time borrowers at Montana State University College of Technology—Great Falls will have the first disbursement of their loan held for 30 calendar days from the first day of classes. First-time borrowers will be required to attend an entrance counseling session before their first check is released.

All borrowers must maintain satisfactory academic progress in accordance with the policy of the Office of Financial Aid and be enrolled at least half-time to qualify for any FFELP loans. Regulations and requirements change from year to year. Latest information can be obtained from the Office of Financial Aid.

## Veterans' Benefits

Students who are Veterans of military services may be eligible for Veterans' Benefits. Application for benefits should be made **at least** 30 days in advance of the start of the academic term. Other educational benefits are extended to orphans of Veterans and for the vocational rehabilitation of Veterans. Once enrolled, recipients must request that the Office of Financial Aid verify their enrollment with the Department of Veterans Affairs before benefits will begin. For information on Veterans' Benefits, contact the Office of Financial Aid at 406-771-4334 or the Veterans Administration at 1-800-827-1000.

#### State and Local Services

Montana Social and Rehabilitative Services Division, Montana Job Service, Bureau of Indian Affairs, Project Challenge, and Rural Employment Opportunities may offer assistance to students who qualify for their programs. For information regarding eligibility requirements, contact the specific program. The Office of Financial Aid must be notified by the student if any assistance is received from an outside agency.

#### <u>Withdrawals/Changes in Enrollment</u> <u>Status</u>

Those students who are receiving financial aid and completely withdraw from classes may owe the Department of Education a prorated amount of aid received based on weeks completed in the term. Students who owe repayment will be ineligible for further Federal financial aid as long as a repayment is outstanding.

Students who do not officially withdraw but stop attending classes will be considered unofficial withdrawals. The last date of attendance will be determined by instructors' attendance records. Based on this date, students may owe a repayment of aid received.

Students receiving financial aid are expected to complete a designated percentage of the credits for which they are funded each academic term. The Office of Financial Aid must be notified by the student of any increase or decrease in number of credits. Students may be suspended from financial aid for not completing the designated percentage of credits.

## **Transfer Students**

Students who have attended other postsecondary educational institutions in the last 12 months must provide a financial aid transcript for each institution attended during this time regardless of whether financial aid was received. Students who are on financial aid suspension from another institution may be placed on financial aid probation at Montana State University College of Technology-Great Falls. They will have one academic term in which to earn a 2.0 grade point average (GPA) and complete the minimum percentage of credits attempted. Students who are on financial aid probation and do not earn a 2.0 GPA or complete the minimum percentage of credits attempted will be suspended from receiving further financial aid until they meet satisfactory academic progress requirements at the College.

### Satisfactory Academic Progress Requirements for Financial Aid Recipients

Federal and State financial aid regulations require that all financial aid recipients maintain satisfactory academic progress in their programs of study. Below is a brief outline of the standards to achieve satisfactory progress for financial aid recipients at Montana State University College of Technology—Great Falls. For a complete copy of the policy contact the Office of Financial Aid.

• Students are required to maintain a minimum 2.0 cumulative grade-point average (C average). Students with less than a 2.0 GPA, but at least a 1.50 GPA, at the end of each academic term will be placed on financial aid probation for the next academic term and placed on financial aid suspension at the end of the probation term if the GPA is not 2.0 or above. If at any time a student's GPA is less than a 1.50, the

student will be placed on financial aid suspension;

- Students must complete 67 percent of the number of attempted credits each term;
- Students have a maximum time frame in which to receive financial aid which is based on 150 percent of the number of required credits specified for each program of study;
- The minimum number of credits to be completed per academic term must apply toward a certificate or degree or be necessary remedial courses;
- Students who have been placed on financial aid suspension and bring themselves into good standing may be reinstated for the payment period following the semester in which they regained satisfactory progress status. Students must submit a written request for reinstatement;
- Students will receive written notice when they are placed on financial aid probation or suspension; however, it is the student's responsibility to know if they are maintaining satisfactory academic progress for financial aid recipients.

Students who have been placed on financial aid suspension because of failure to meet the satisfactory academic progress requirements may appeal in writing to the Office of Financial Aid for review of circumstances. Current Federal regulations allow only for mitigating circumstances and occurrences beyond the student's control to constitute an eligible appeal. All appeals must contain documentation to verify the mitigating circumstances listed in the appeal.

Contact the Office of Financial Aid for a complete satisfactory academic progress policy for financial aid recipients.

### **Repayment Policy**

For Federal student financial aid recipients, all non-institutional living expenses are prorated based on the number of weeks the student completes during the semester before withdrawing, rounded upward to the nearest 10%.

For students who begin attendance at the College, 100% of the books and supplies allowance is considered to be expended.

#### <u>Changes to Financial Aid Policies or</u> <u>Requirements</u>

Exceptions or amendments to any of the specific provisions regarding financial aid policies or requirements may be made at any time, without publication, due to changes in Federal, State, and/or institutional regulations and policies.

# **Guidance and Counseling**

Professional staff are available to provide admission and financial aid information as well as career, education, and personal assistance to prospective and enrolled students. Appointments can be scheduled at the main office or by telephone: 406-771-4300 or 1-800-446-2698 (in Montana)

New students are encouraged to visit Student Services for general information about the College and for selection of a program.

## Services for Students with Disabilities

Students with disabilities who require a reasonable accommodation of that disability to enhance their access to courses or programs may request such assistance through the College's Student Services Department. Diagnostic verification of a specific disability by a qualified clinical and/or medical professional and statement of the need for and type of accommodation must be on file prior to requesting assistance.

Formal written request for accommodation must be completed with the Student Services Department at least 2 weeks prior to enrollment and/or to the time the accommodation is to take effect. Forms for completing the formal written request are available from the Main Office. Continuing students must maintain "good academic standing" to continue using this service. Physical access to the building for persons with physical disabilities is provided through designated parking, a ramp at the East and North parking lots and an automatic door at the East entrance to the building.

The College has specialized adaptive equipment for persons with disabilities. Video magnifiers, computer magnification systems, speech systems or screen readers/braille systems are available. For further information, please contact the Coordinator of Special Services at 406-771-4300 or 1-800-446-2698 (in Montana).

# **Educational Talent Search**

Educational Talent Search encourages and assists middle and high school students and young adults to complete high school and continue on to postsecondary institutions. Talent Search also assists students in returning Services provided to school. include comprehensive counseling and referral in academic, vocational, and career planning, as well as financial aid. These services are available to young adults, age 11-27, who are low income and/or whose parents have not completed a four-year college degree. For further information. contact the coordinator at (406)771-4325.

# **Educational Opportunity Center**

The Educational Opportunity Center promotes access to postsecondary education for underrepresented traditionally populations within a 17-county region of northern Montana. Primarily a pre-entry service, counselors provide information and assistance in job retraining, academic readiness, financial aid, career and academic assessment, career counseling, and referral to community service agencies. These services are available to adults aged 19 or older who are low income and/or whose parents have not completed a four-year college degree. For further information contact the coordinator at (406)771-4326.

# Job Placement and Follow Up

Through a cooperative agreement with Great Falls Job Service on-campus job placement assistance is available to all students and graduates. Information is provided regarding current job openings and trends, as well as jobfinding techniques. Placement is a team effort involving the program faculty, the placement office, and the student.

# **Bookstore**

The College's Bookstore carries an inventory of required textbooks and supplies. It also offers snack items, postage stamps, bus passes, and a check-cashing service. The Bookstore is open daytime, Monday through Friday.

# <u>Library</u>

The College's Library provides a comfortable environment as well as the educational resources and services to support the academic endeavors of students, faculty, and staff.

Library resources include books, periodicals, newspapers, audio and video tapes, on-line catalog, internet access, periodical indexes and full text databases. The Library also has available interlibrary loan services, photocopying, computer lab, laser printers, and a video viewing station for student use.

# **Snack Bar and Cafeteria**

For the convenience of students, the College has a snack bar and cafeteria located in the student commons area. Breakfast, lunch, and snacks are available.

# **Student Orientation**

A student orientation session is conducted before each semester to acquaint students with academic assistance, special services, and academic and institutional policies of particular importance.

# Accidents/Illness

In the event a student incurs an injury or becomes ill while on campus, the following procedure will be implemented: If the student is conscious and able to respond, and the injury or illness is not perceived to be life threatening or potentially life threatening, the student will be asked regarding desired medical treatment and/or an individual to transport him/her home or to medical assistance. If the student is unconscious, unable to respond, or the injury or illness is perceived to be of a life-threatening or potentially life-threatening nature, Emergency Response Services (911) will be called. Students are responsible for the cost of transport and treatment for and incidences of accident or illness.

# Associated Students

The Associated Students organization of Montana State University College of Technology-Great Falls provides input to the College's administrative staff and to the Montana Board of Regents regarding issues and policies that impact students; plans student and campus activities; and prioritizes how student funds will be expended. Associated Students' officers and Program Senators are elected at the end of each spring semester and hold office until the following year.

# **Change of Address**

A current mailing/permanent address and telephone number should be on file in the Admissions & Records Office. A forwarding address should be provided when a student withdraws or graduates.

# **Children of Students**

Children of students may not accompany their parent(s) to class or wait without adult supervision in other parts of the building.

# **Commercial Activities/Fund Raising**

The sale of goods and/or services which benefit an individual and/or organization not associated with the College is prohibited in the building, at campus-sponsored activities, or on the College grounds. Solicitation of funds by any person and/or organization unaffiliated with the College is prohibited in the building, at campussponsored activities, or on campus unless permission has been granted in writing by the Dean or the Dean's designee.

# Expression

Prior to distribution in the College or on the College's property, a copy of College-sponsored or non-College-sponsored publications shall be reviewed with the Dean of the College for approval. The Dean, or his designee, may stop distribution of publications which are obscene or inflammatory, which infringe on the rights of others, or which will cause substantial disruption of the College's activities. The Dean will provide guidance regarding restrictions that may apply to distribution.

# Food and Beverages

Consumption of food and beverages by students is restricted to the Student Commons Area.

# **Housing**

The College is a commuter campus and does not have residential facilities. A brochure providing housing information for the Great Falls area is available in the main office.

# Lost and Found

Any article found should be taken to the Main Office.

## <u>Messages</u>

College personnel will not deliver messages to individual students except in the case of emergencies or calls from schools and/or day care providers. Other messages will be placed on the bulletin board in the Student Commons Area.

# **Parking**

The College has north, east, and south parking lots for student use. It is requested that students do not park in the designated visitor and handicapped parking area at the east side of the building. Students occupying handicapped parking should register their vehicle with student services as well as maintain a handicapped parking decal. The roadway around the facility is a fire lane, and no parking is allowed.

# **Posted Announcements**

There is a student bulletin board located near the cafeteria. This board is for and by the use of Montana State University College of Technology-Great Falls' students.

Students must:

- Take responsibility for the posting and removal of their announcements.
- Ensure that all items are dated on the front, or they will be removed.
- Be aware that items to be posted cannot be disruptive to the educational environment.

The use of any other bulletin boards, walls, or windows on campus for the posting of announcements shall go through the Dean's Office for approval. This will also include any outside businesses or entities that have requests for the posting of items.

# **Religion**

It is the responsibility of the College not to interfere with students' religious freedom. Students have the right to practice their own religious beliefs as long as they do not violate the constitutional rights of others.

# <u>Safety</u>

Unsafe conditions in the building should be reported immediately to faculty, staff, or the Main Office. As some instructional areas require safety clothing or equipment, students may not be allowed to work in these areas without proper clothing and/or equipment.

# <u>Smoking</u>

University College Montana State of Technology-Great Falls is a smoke-free building. Smoking is not allowed anywhere in the building or in the building entry ways. The outside patio area which can be accessed through the door leading from the South Commons and the west exit near Heritage Hall by the Cable 7 office are both equipped with receptacles for smoker convenience. Smokers are asked to use receptacles for disposal of cigarettes in lieu of disposing of them on the campus grounds.

# <u>Student Emergency Assistance</u> <u>Program</u>

The Student Emergency Assistance Program (S.E.A.P) is sponsored by Associated Students and is dedicated to providing emergency assistance to students or to aid them in contacting other resources in the Great Falls area. SEAP is governed and regulated by a committee of students. All resources are obtained through donations and fund raising activities.

# Student Identification Card

Each student will be issued a nontransferable identification card that will be required by the Library when checking out books and materials. The identification card is also required for admittance to College functions and when purchasing books or cashing checks in the bookstore. Cards must be validated at the beginning of each semester when fee finalization is completed. Identification cards remain the property of the College and must be turned in when the student graduates or withdraws from the College. Lost identification cards may be replaced by purchasing them through the Library.

# **Student Records**

Students attending Montana State University College of Technology—Great Falls may have access to their student central file and transcript upon written request. Student records are considered confidential, and information regarding students is not released without the written permission of the student and/or by order of the court.

# **Student Responsibilities**

Students attending Montana State University College of Technology—Great Falls have a responsibility to:

- Be informed regarding institutional policies and procedures that guide the educational experience;
- Attend classes regularly and be prepared to participate in classroom activities;
- Treat other students, faculty members, and staff with courtesy and respect;
- Meet with their faculty advisors at least twice each semester to monitor progress and plan the program of study;
- Follow fair and appropriate procedures when evaluating courses;
- Maintain academic integrity in regard to proper acknowledgment of authorship of written documentation and other academic endeavors.

# **Student Right to Education and Participation**

Every student has the right to an education without disruption and a corresponding responsibility not to deny this right to any other student.

Students have the right to contribute information that will be considered when decisions that affect the quality and content of their education are made.

# **Telephones**

The College's telephones are for business purposes. Students' personal calls should be made on the pay telephones provided in the Student Commons Area.

# AFFIRMATIVE ACTION/ EQUAL OPPORTUNITY

## **General Policy:**

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

## **Sexual Harassment Policy:**

The College reaffirms its desire to create a study environment for all students that supports and nurtures students on the basis of ability and performance, regardless of gender. Sexual harassment is a violation of Title VII of the Civil Rights Act and Title IX of the Educational Amendments Act of 1972.

Students are legally protected from retaliation resulting from discrimination/harassment complaints.

# **Grievance Procedure:**

The College's Human Resources/Affirmative Action/Equal Opportunity Officer is Patricia Kercher, Associate Dean for Academic Affairs and Student Services, 2100 16th Avenue South, Great Falls, MT 59405. Telephone: 406-771-4300.

If any student believes that he/she has been discriminated against or sexually harassed, he/she should utilize the following procedure:

- 1. Discuss the situation with the individual immediately involved or if this is not possible, with a counselor or the supervisory staff nearest the individual directly involved, i.e., the department chairman or department supervisor.
- 2. If an acceptable resolution cannot be identified, or if such a discussion is not possible, contact the College's Affirmative Action Officer. To expedite an accurate investigation and a fair resolution of the problem at this level, the complaint should be stated in writing and be brought to the attention of the Affirmative Action Officer as quickly as possible, within 10 days. All communication with the Affirmative Action Officer will be held in confidence. If a student is dissatisfied with the resolution set forth by the College's Affirmative Action Officer, a written request for review of the matter may be presented to the Dean of the College.

# Programs of Study

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This section is designed to help students determine which classes they will need to complete in order to meet their educational goals.

The curricula emphasize particular academic or technical areas and are recommended to students planning careers and/or further college work in those areas.

The section contains:

- A list of all programs of study and transfer courses offered at Montana State University College of Technology—Great Falls;
- Requirements for the Associate of Applied Science Degree, Associate of Science Degree and General Education Core for transfer;

For students who plan to transfer to a four-year institution after attending Montana State University College of Technology—Great Falls, it is important that they consult with the receiving institution regarding its general graduation requirements.

# Programs of Study ALLIED HEALTH

# **BIOSCIENCE TECHNOLOGY** Associate of Applied Science Degree

## Advisor: Diane Lund

Bioscience technicians use the principles and theories of science and mathematics to assist researchers and scientists to solve problems in research and development. Their jobs are more practically oriented than those of the researcher or scientist. Graduates who complete one of the concentrations in the Bioscience Technology program are expected to perform work duties such as the following:

Laboratory Animal Technicians provide appropriate care of experimental animals in a manner compatible with humane concerns and the advancement of scientific knowledge. Duties include mixing and dispensing special diets, specimen collection, pre- and postoperative care, record maintenance, mixing and dispensing medications and treatments, fulfilling special housing requirements, or assisting with restraint and handling procedures.

Research Laboratory Technicians work with biologists who study living organisms. They may assist scientists who conduct medical or genetic research or they may help conduct pharmaceutical research. They may also work with agricultural scientists in food and fiber research, production and processing. Some conduct tests and experiments to improve the yield and quality of crops or to increase the resistance of plants and animals to disease, insects or other hazards. Many work in laboratories to analyze organic substances such as blood, food and drugs; some may work in criminal investigation.

**Instrumentation Technicians** test, install, repair, calibrate, and maintain complex

biomedical instruments that sense, measure, and record changes in industrial, clinical, and commercial environments. These instruments include heart-lung machines, kidney dialysis machines, infusion pumps, cardiac monitors and other devices used in medical diagnosis, monitoring, and treatment.

A grade of "C" or above is required in each didactic course in order to progress through the program and fulfill all graduation requirements. Externships are also incorporated into the curriculum design. These courses require a "B" or above to fulfill graduation requirements. Externships involve a full-time 6-week affiliation within the bioscience technology community. Sites for externships are located throughout the state of Montana, and the additional travel/living expenses are incurred by the student for externship sites not located in the immediate vicinity.

Admission to the program is competitive and based upon meeting application deadlines and satisfactory completion of criteria. Application deadlines vary; please refer to the specific criteria in the student brochure.

In order to give flexibility to this program's curriculum, courses may be modified from time to time to accommodate the changing nature of technology and its innovations.

# Pre-Bioscience Technology Required Courses

Background in related instruction and basic science is essential to prepare students to succeed in the Bioscience Technology program. All applicants must have completed high school biology, chemistry, and physics with a grade of "C" or above, or have equivalent college courses or be able to pass a challenge examination with a grade of "C" or above. In addition, applicants must complete the following courses with a grade of "C" or above in each course prior to applying for acceptance into the program. The course titles, numbers, and credits apply to semester courses offered at Montana State University College of Technology—Great Falls.

## **Prerequisite Courses for All Concentrations**

Course	No.	Title Crea	<u>lits</u>
BIO	209	Anatomy & Physiology I Lab	1
BIO	210	Anatomy & Physiology I	3
CHM	150	Principles of Inorganic Chemistry	3
CHM	151	Principles of Inorganic Chemistry	
		Lab	1
BST	105	Electronics Essentials	3
MATH	108**	Intermediate Algebra	4
ENGL	121**	Composition I	3
		Total	18

The prerequisite courses may be taken at Montana State University College of Technology or at any other accredited college or university with equivalent transferable courses.

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

## ANIMAL LABORATORY TECHNICIAN OPTION

## **Required Courses After Formal Acceptance**

## **Spring Semester**

1 0			
Course	No.	Title Cre	dits
BIO	211*	Anatomy & Physiology II	3
BIO	212*	Anatomy & Physiology II Lab	1
BM	106	Introduction to Business	3
BST	120	Intro to Lab Animal Science	3
CHM	152*	Essentials of Organic Chemistry	3
CHM	153*	Essentials of Organic Chemistry	
		Lab	1
CS	110	Introduction to Computers	<u>3</u>
		Total	17

## Summer Term

Course No.	Title	Credits
BST 130	Biology of Living Organisms	3
BST 131	Biology of Living Organisms	Lab 1
COMM 135	Interpersonal Communications	s 3
PSY 101	General Psychology	<u>3</u>
	Total	10

## **Fall Semester**

Course	No.	Title Cre	dits
BST	122	Laboratory Animal Technician I	4
BST	140	Hazardous Material Handling/	
		Governmental Regulations	3
BST	220	Principles of Inheritance	3
BST	222	Methods in Bioscience	
		Technology I	3
MATH	216*	Basic Statistics	<u>3</u>
		Total	16

## **Spring Semester**

Course	No.	Title	Credits
BST	124	Lab Animal Technician II	4
BST	250	Externship in Bioscience	
	Tech	nology	TBA
		Total	9

## **Estimated Total Program Credits - 70**

## INSTRUMENTATION TECHNICIAN OPTION

#### **Required Courses After Formal Acceptance**

## **Spring Semester**

Course	No.	Title C	<b>Credits</b>
BIO	211*	Anatomy & Physiology II	3
BIO	212*	Anatomy & Physiology II Lab	1
BST	110	Electronic Instrumentation	
		& Measurements I	4
BST	120	Intro to Lab Animal Science	3
CS	110	Introduction to Computers	3
MATH	130*	College Algebra	<u>4</u>
		Total	18

#### Summer Term

Course	No.	Title Cre	dits
BST	112	Electronic Instrumentation	
		& Measurements II	5
COMM	135	Interpersonal Communications 3	
PSY	101	General Psychology	<u>3</u>
		Total	11

#### **Fall Semester**

Course	No.	Title	Cred	its
BST	210	Biomedical Instrumentation I	5	
BST	214	Industrial Control Systems	4	
BST	140	Hazardous Material Handling/		
		Governmental Regulations	3	
CS	166*	Computer Operating Systems	<u>3</u>	
		Total		15

#### **Spring Semester**

Course	No.	Title	Credits
BST	212	<b>Biomedical Instrumentation</b>	П 5
BST	250	Externship in Bioscience	
		Technology	T <u>BA</u>
		Total	10

#### **Estimated Total Program Credits – 72**

## RESEARCH LABORATORY TECHNICIAN OPTION

### **Required Courses After Formal Acceptance**

## **Spring Semester**

Course	No.	Title Cre	dits
BIO	211*	Anatomy & Physiology II 3	
BIO	212*	Anatomy & Physiology II Lab 1	
BM	106	Introduction to Business	3
CHM	152*	Essentials of Organic Chemistry	3
CHM	153*	Essentials of Organic Chemistry	
		Lab	1
CS	110	Introduction to Computers 3	
MATH	130*	College Algebra	4
		Total	18

## Summer Term

Course	No.	Title Cre	edits
BST	130	Biology of Living Organisms 3	
BST	131	Biology of Living OrganismsLab	51
COMM	135	Interpersonal Communications	3
PSY	101	General Psychology	<u>3</u>
		Total	10

#### **Fall Semester**

Course	No.	Title	Credits
BST	140	Hazardous Material Handling	g/
		Governmental Regulations	3
BST	220	Principles of Inheritance	3
BST	222	Methods in Bioscience	
		Technology I	3
CS	166*	Computer Operating Systems	s 3
MATH	216*	Basic Statistics	<u>3</u>
		Total	15

#### **Spring Semester**

Title	Credits
Methods in Bioscience	
Technology II	4
Externship in Bioscience	
Technology	TBA
Total	9
	Methods in Bioscience Technology II Externship in Bioscience Technology

## **Estimated Total Program Credits - 70**

# DENTAL ASSISTANT Certificate

## Advisors: Aida Buer, Department Chairman Carmen Perry

Dental assistants perform duties in the areas of chairside, laboratory, receptionist, and expanded functions allowed by the Montana Board of Dentistry.

Helpful high school courses are biology, chemistry, accounting and computers. Keyboarding is a prerequisite for completion of this program. Introduction to Computers or equivalent must be completed before taking Business & Professional Communication (ENGL 124).

A grade of "C" or above must be achieved in all courses in order to fulfill graduation requirements.

Dental assistant students spend their third semester in dental office practice in private dental offices and at Malmstrom Air Force Base Clinic. All dental assistant students are required to sign a clinical contract before clinical office practice. Students must be current in child, infant, and adult CPR and obtain their Hepatitis B vaccine series before enrolling in MD 232 Clinical Office Practice.

Dental assisting is for people-oriented individuals who desire a professional working environment. Dental assistants should possess these desirable qualities: assertiveness, reliability, initiative, and good dexterity. It is anticipated that demands for dental assistants will increase with the growing awareness of the need for dental care. The Dental Assistant program is accredited by the American Dental Association, Council on Dental Education. The students are encouraged to take the National Certification Examination administered by the Dental Assisting National Board to become Certified Dental Assistants. Students graduating from the Dental Assistant program at Montana State University College of Technology are qualified to perform expanded functions approved by the Montana Board of Dentistry. Students are encouraged to become student members of the ADAA and must carry student liability insurance.

#### FALL ENTRY

#### Fall Semester

Course	No.	Title Cro	edits
BIO	105	Fund of Human Biology	3
COMM	135	Interpersonal Communications	3
MD	115	Oral Anatomy	3
MD	117	Dental Management	2
MD	120	Oral Radiology I	3
MD	123	Chairside I	4
00	250	Computers in Medical/Dental	1
		Total	19

#### **Spring Semester**

1 0			
Course	No.	Title Cre	<u>dits</u>
ENGL	124	Business & Professional Comm2	
MD	211	Clinical Specialties	3
MD	215	Dental Science	3
MD	222	Oral Radiology II	3
MD	223	Chairside II	4
MD	225	Preventive Dentistry	<u>3</u>
		Total	18

#### Summer Term

Course	No.	Title	Credits
MD	231	Clinical Office Seminar	1
MD	232	Clinical Office Practice	<u>9</u>
		Total	10

#### **Dental Assistant (Continued)**

#### SPRING ENTRY

(with sufficient enrollment)

#### **Spring Semester**

··· · · · ·			
Course	No.	Title C	<u>Credits</u>
BIO	105	Fund of Human Biology	3
COMM	135	Interpersonal Communications	3
MD	115	Oral Anatomy	3
MD	117	Dental Management	2
MD	120	Oral Radiology I	3
MD	123	Chairside I	4
00	250	Computers in Medical/Dental	<u>1</u>
		Total	19

#### Summer Term

Course	No.	Title	Credits
MD	215	Dental Science	3
MD	222	Oral Radiology II	3
MD	223	Chairside II	<u>4</u>
		Total	10

#### **Fall Semester**

Course	No.	Title Cre	dits
ENGL	124	Business & Professional Comm	2
MD	211	Clinical Specialties	3
MD	225	Preventive Dentistry	3
MD	231	Clinical Office Seminar	1
MD	232	Clinical Office Practice	<u>9</u>
		Total	18

**Total Program Credits - 47** 

# **EMERGENCY SERVICES** Associate of Applied Science Degree

## EMERGENCY MEDICAL TECHNICIAN PARAMEDIC (EMT-P) OPTION

Emergency Medical Services (EMS) personnel play a crucial role in providing appropriate care and transportation in emergency and nonemergency settings. Medical emergencies including automobile accidents, heart attacks, strokes, poisonings, childbirth, and substance abuse all require urgent care and transportation as well as quality care during transportation between medical facilities.

Employment opportunities for EMS personnel are expected to increase due to population growth, greater number of older people requiring care and transportation, new developments in the field of emergency medicine and changes in the healthcare field. Opportunities for EMS personnel are available in law enforcement, fire departments, private industry, search and rescue, hospitals, armed forces, ambulance services, and volunteer work.

The EMS programs and courses are offered upon sufficient demand and are designed to prepare students who successfully complete the courses for state and national registry examinations at various levels of certification. Upon successful completion of the Paramedic option, students will receive an Associate of Applied Science Degree in Emergency Services.

## Admission Requirements:

- 18 years of age prior to entering state and national certification process
- High school graduate or equivalent
- Completion of prerequisite courses
- Current certification in CPR according to the standards of the AHA Healthcare Provider or its equivalent
- Proof of immunization against measles and rubella, diphtheria/tetanus, and a negative tuberculin test or approved treatment
- Hepatitis B immunization series is strongly recommended

## Pre-Emergency Medical Technician -Paramedic (EMT-P) Option Required Courses

Background in related instruction and basic science is essential to prepare the applicant to succeed in the EMT - Paramedic program. Applicants must complete the following required courses with a grade of "C" (76%) or above in each course prior to formal acceptance into the program. The course titles, numbers, and credits apply to semester courses offered at Montana State University College of Technology—Great Falls:

- EMS 137 EMT-Basic Certification with 1 year related experience OR
- EMS 140 EMT-Defibrillation Certification with 1 year related experience OR

EMT - Intermediate Certification with 1 year related experience

## **Prerequisite Courses**

		000000	
Course	No.	Title	Credits
BIO	210	Anatomy & Physiology I	3
BIO	209	Anatomy & Physiology I Lab	<b>b</b> 1
ENGL	121**	* Composition I	3
00	185	Basic Medical Terminology	<u>4</u>
		Total	11

\*\* Placement in course(s) is determined by admission assessment

The prerequisite courses may be taken at Montana State University College of Technology—Great Falls or at any other accredited college or university with equivalent transferable courses.

Criteria for formal acceptance will include:

- Timely completion and submission of Application for Admission
- Timely completion and evaluation of admission assessment
- Completion of prerequisite courses with a grade of "C" (76%) or above
- EMS pre-admission examination
- Medical Director approval

## Program Course Requirements After Formal Acceptance

A grade of "C" (76%) or above must be attained in all of the following courses:

## **Spring Semester**

~r	10 0		
Course	No.	Title Cre	dits
AH	140	Pharmacology	2
BIO	211	Anatomy & Physiology II	3
BIO	212	Anatomy & Physiology II Lab 1	
CS	110	Introduction to Computers	3
EMS	150	Managing EMS Systems	2
EMS	152	Pre-hospital Patient Assessment	2
MATH	161	Math for Health Science	<u>4</u>
		Total	17

#### **Emergency Services (Continued)**

#### Fall Semester\*

i un Semester			
Course	No.	Title C	Credits
EMS	153	Advanced Airway Managemer	nt 1
EMS	154	Respiratory Emergencies and	
		Management	1
EMS	157	Fluids and Shock	1
EMS	158	Skill Lab I	1
EMS	159	Fluids/Shock/Emergency	
		Pharmacology	1
EMS	203	Trauma Assessment and	
		Management	2
EMS	214	Cardiac Arrest Management	1
EMS	215	Cardiovascular Assessment	
		and Management	3
EMS	216	Clinical Internship I	<u>2</u>
		Total	13

#### Spring Semester\*

Course	No.	Title Cre	dits
EMS	146	Pediatric Advanced Life Support	1
EMS	211	Crisis and Stress Management	1
EMS	226	Clinical Internship II	2
EMS	230	Skill Lab II	1
EMS	231	Ob/Gyn/Neonatal/Pediatric	
		Care	3
EMS	232	Medical Emergencies and	
		Management	3
EMS	256	Clinical Internship III	<u>6</u>
		Total	17

#### **Fall Semester**

Course	No.	Title C	redits
AH	101	Healthcare Delivery in USA	2
COMM	135	Interpersonal Communications	3
EMS	151	Rural EMS Mgt Symposium	1
HI	156	Legal and Regulatory Aspects	
		of Healthcare	2
PSY	101	General Psychology	3
		Elective	<u>3</u>
		Total	14

## **Suggested Electives**

Course	No.	Title Credi	its
AH	108	Disease Concepts	2
BM	106	Introduction to Business	3
BM	230	Management	3
CHM	150	Principles of Inorganic Chemistry	3
CHM	151	Principles of Inorganic Chemistry	
		Lab	1
COMM	130	Public Speaking	3
ENGL	124	Business & Professional Comm	2
MATH	216	Basic Statistics	3
SOC	111	Introduction to Sociology	3

#### **Estimated Total Program Credits - 72**

\* These two semesters compose the clinical track.

The following courses/programs may be taken independently of the Emergency Services degree program. These courses are offered on a demand basis in either the fall, spring, or summer semesters. Please check the class schedule publication for availability.

## Emergency Medical Technician -Intermediate (EMT-I)

The Emergency Medical Technician -Intermediate program incorporates the following courses. Please check the course schedule for availability.

Course	No.	Title Cred	its
EMS	149	EMT-I Environment/Assessment	2
EMS	153	Advanced Airway Management	1
EMS	157	Fluids and Shock	1
EMS	214	Cardiac Arrest Management 1	
EMS	216	Clinical Internship I	2
		Total	7

#### **Prerequisites:**

- High school graduate or equivalent
- Current status as an EMT-B
- A minimum of one year patient care experience
- Current certification in CPR according to AHA Healthcare Provider standards or its equivalent
- Approved for admission by the Medical Director and Program Coordinator
- Formal acceptance into the EMT I program

## EMS 130 First Responder 3 Credits

#### **Prerequisites:**

- Current status as an emergency care provider or intent to become an emergency care provider
- High school graduate or equivalent

## EMS 131 First Responder Refresher (Transition) 1 Credit

#### **Prerequisite:**

• Current status as a First Responder

## EMS 135 First Responder to EMT -Basic Bridge 4 Credits

#### **Prerequisites:**

- Current status as an emergency care provider
- High school graduate or equivalent
- Current status as a Montana First Responder or First Responder Ambulance
- Approved for admission by the Medical Advisor

#### EMS 137 Emergency Medical Technician-Basic (EMT-B) 7 Credits

#### **Prerequisites:**

- Current status as an emergency care provider or intent to become an emergency care provider
- High school graduate or equivalent
- Approved for admission by the Program Coordinator

## EMS 138 EMT - Basic Refresher (Transition) 2 Credits

#### **Prerequisites:**

- Current status as an EMT-B
- Approved for admission by the Program Coordinator

## EMS 143 EMT - Intermediate Refresher 1 Credit

#### **Prerequisites:**

- Current status as an EMT-I
- Approved for admission by the Medical Director and Program Coordinator

## EMS 145 Advanced Cardiac Life Support 1 Credit

#### **Prerequisites:**

- Current status as licensed/certified healthcare provider
- Current certification in CPR according to the standards of the AHA Healthcare Provider or its equivalent

## EMS 146 Pediatric Advanced Life Support 1 Credit

#### **Prerequisites:**

- Current status as licensed/certified healthcare provider
- Current certification in CPR according to the standards of the AHA Healthcare Provider or its equivalent

## EMS 148 Pre-Hospital Trauma Life Support 1 Credit

#### **Prerequisite:**

• Current status as an EMT-B, EMT-D, EMT-I or EMT-P

## **EMERGENCY SERVICES** Associate of Applied Science Degree

## FIRE AND RESCUE TECHNOLOGY OPTION

## Advisor: Jeff Jackson

**<u>Please note</u>:** Enrollment in this program is currently restricted to Montana firefighters who are working or volunteering in a fire service company.

Today's firefighters not only respond to fire and medical emergencies but also participate in disaster response planning, containment, and of hazardous cleanup material spills, 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 includes a paramedic option (see Paramedic Option, Pages 44 and 45) and incorporates the opportunity to transfer credits toward a four-year degree in Fire Administration.

The Fire and Rescue Technology Option is offered as a cooperative endeavor between Montana State University College of Technology—Great Falls and Montana State University Fire Services Training School–Great Falls.

Agreements for transfer of credit with other colleges in the state will allow firefighters to

complete general education degree requirements without having to relocate to Great Falls. Required technical courses are offered at locations throughout the state. Students will be required to complete an approved project to demonstrate their integration of learning in the majority of technical courses. It is strongly recommended that English Composition I be successfully completed before projects for this program are attempted.

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, and whenever available, course descriptions or syllabi. An Advisory Committee meets quarterly to review requests for transfer of technical credit and to review portfolios seeking credit for experience-based learning.

## **General Education Requirements**

a					
Course	No.	<u>Title</u> Cre	edits		
AH	150	Fitness for Life	2		
BIO	105	Fundamentals of Human Biology	y 3		
COMM	130	Public Speaking	3		
CS	110	Introduction to Computers	3		
EMS	137	EMT Basic	7		
ENGL	121**	Composition I	3		
ENGL	128*	Business & Technical Comm	3		
MATH	130**	College Algebra	4		
PHYS	130	Fundamentals of Physical Science	ce 3		
PSY	101	General Psychology	<u>3</u>		
		Total	34		

## **Technical Course Requirements**

Course	No.	Title Cre	dits
FRS	101	Firefighter I 5	
FRS	102	Firefighter II	5
FRS	112	Fire Inspection & Investigation 3	
FRS	245	Fire Service Training &	
		Safety Education	3
FRS	250	Building Construction	2
FRS	265	Incident Management & Safety3	
FRS	275	Tactical Operations	3
FRS	280	Company Management	3
FRS	285	Hazardous Materials	2
		Electives	<u>3</u>
		Total	32

## **Suggested Electives**

Course	No.	Title	Credits
FRS	241	Hydraulics & Water Supplies	s 3
PSY	109	Lifespan Development	3
SOC	111	Introduction to Sociology	3
		Wildland Fire Protection	3
		Aircraft Fire & Rescue	3
		Other Specialized Training	3

## **Estimated Total Program Credits - 66**

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

# HEALTH INFORMATION TECHNOLOGY Associate of Applied Science Degree

## **Advisor: Irene Mueller**

The Health Information Technology program is designed to prepare individuals to perform a variety of technical health information functions which include: organizing, analyzing and technically evaluating health information; compiling various administrative and health statistics; and coding diseases, operations, procedures, and other therapies. Health Information Technicians also maintain and use a variety of health information indexes; create special registries and storage and retrieval systems; input and retrieve computerized health data: and control the use and release of health information.

The program is accredited by the American Health Information Management Association and the Commission on the Accreditation of Allied Health Educational Programs, which allows graduates to sit for the national certification examination to become Accredited Record Technicians.

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

## Pre-Health Information Technology Required Courses

Background in related instruction, basic science, and computer science is essential to prepare the applicant to succeed in the health information technology curriculum. All applicants must have completed a basic computer course with a grade of "C" or above, have an equivalent college course with a grade of "C" or above, or have taken a pre-authorized challenge examination for this course. Applicants must complete the following prerequisite courses with a minimum grade of "C" in each course prior to formal acceptance into the program. The course titles, numbers, and credits apply to semester courses offered at Montana State University College of Technology—Great Falls:

#### **Prerequisite Courses**

1			
Course	No.	Title Cre	dits
AH	101	Healthcare Delivery in the US 2	
BIO	210	Anatomy & Physiology I	3
BIO	209	Anatomy & Physiology I Lab	1
HI	132	Managing the Medical Record	3
MATH	161**	* Math for Health Science	4
00	185	Basic Medical Terminology	4
		Total	17

\*\* Placement in course(s) is determined by admission assessment

The above courses may be taken at Montana State University College of Technology-Great Falls or at any other accredited college or university with equivalent transferable courses.

#### Program Course Requirements After Formal Acceptance

#### **Spring Semester**

1 8			
Course	No.	Title	<b>Credits</b>
AH	201	Medical Science	3
BIO	211	Anatomy & Physiology II	3
BIO	212	Anatomy & Physiology II La	b 1
COMM	130	Public Speaking	3
ENGL	121**	Composition I	3
HI	230	Clinical Practicum	<u>1</u>
		Total	14

# Programs of Study ALLIED HEALTH

Fall Semester				
Course			redits	
AH	194	Basic Pharmaceuticals	<u>1 1</u>	
CS	205*		3	
	203* 124*	•		
ENGL	124**		1 <i>Z</i>	
HI	130	Legal and Regulatory Aspects of Healthcare	2	
HI	210	Healthcare Information	4	
HI	215	Supervision of Medical		
		Record Personnel	3	
HI	236	Inpatient Coding	<u>3</u>	
	200	Total	$18^{\frac{3}{2}}$	
		Totul	10	
Spring	Seme	ster		
Course	No.		redits	
HI	225	Managing the Medical		
		Record Department	4	
HI	237	Outpatient Coding	3	
HI	240	Healthcare Quality	4	
HI	245	Clinical Affiliation I		
PSY	101	General Psychology or	2 3	
SOC	101	Introduction to Sociology	<u>3</u>	
300	111	Total	$\frac{3}{16}$	
		OPTIONAL	10	
тп	200		<u> </u>	
HI	200	Special Projects (Transcription)	) 2	
Summe	er Ter	m		
Course	No.		redits	
HI	290	Clinical Affiliation II		
HI	292	Topics in HIT	3	
		Total	3 <u>3</u> 6	
Sugges	ted El	ectives		
Course			redits	
MATH		Basic Statistics		
MATH	217	Intermediate Statistics	3	
00	241	Medical Office Procedures	3 3 2	
PHIL	238	Medical Ethics	3	
		tal Program Credits - 71	U	
	10			
*	Indics	ates prerequisites needed		
**		ment in course(s) is determined by	v	
		sion assessment	- 1	
	aums			

# OCCUPATIONAL THERAPY ASSISTANT Associate of Applied Science Degree

## Interim Director: Janet Bauer OTA Lab Director: Barbara Holbrook

Those trained in occupational therapy help people who are disabled developmentally, physically, emotionally, or socially to become more independent through purposeful activity. Treatment approaches include daily living tasks, manual or creative arts, exercise, work tasks, and functional activities.

As a team, the occupational therapy assistant and occupational therapist plan and carry out treatment programs, observe changes in the patient or client, and write progress reports. Rewarding employment opportunities can be found in hospitals, special schools, nursing homes, and home health agencies.

A grade of "C" or above is required in all courses to fulfill graduation requirements. Purchase of liability insurance and fees for labs are required. Student membership in AOTA and MOTA is strongly encouraged.

First Aid and CPR skills are required as prerequisites for this program. The numerous courses with labs requires the student to pay a lab fee each semester.

The students will be responsible for travel and living expenses when fieldwork placements are outside of the Great Falls area. Clinical practicums and one or two 6-week affiliations may need to be scheduled outside Great Falls. OTA students are required to complete Level II Fieldwork within 18 months following completion of academic preparation. The Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA's phone number is (301) 652-AOTA. Graduates of the program will be able to sit for the national certification examination for the occupational therapy assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). Students must be prepared to pay fees of approximately \$335 three months before the examination. After successful completion of the certification examination, the individual will be a Certified Occupational Therapy Assistant (COTA).

As in most states, Montana requires licensure in order to practice. Forms and fee amounts can be obtained from the Department of Commerce, Occupational Licensing Bureau, Helena, Montana (COTA).

## Pre-Occupational Therapy Assistant Required Courses

Background in related instruction and basic science is essential to prepare the applicant to succeed in the occupational therapy assistant curriculum. Applicants must complete the following courses with a minimum grade of "C" in each course prior to acceptance into the program. The course titles, numbers, and credits apply to semester courses offered at Montana State University College of Technology—Great Falls:

## **Prerequisite Courses**

- i ci cq		courses	
Course	No.	Title	Credits
BIO	210	Anatomy & Physiology I	3
BIO	209	Anatomy & Physiology I Lab	) 1
COMM	135	Interpersonal Communication	ns 3
CS	110	Introduction to Computers	3
ENGL	121**	Composition I	3
MATH	161**	Math for Health Science	<u>4</u>
		Total	17

The above courses may be taken at Montana State University College of Technology—Great Falls or at any other accredited college or university with equivalent transferable courses.

## Program Course Requirements After Formal Acceptance

## **Spring Semester**

··· · · ·			
Course	No.	Title C	<u>redits</u>
AH	108	Disease Concepts	2
BIO	211	Anatomy & Physiology II	3
BIO	212	Anatomy & Physiology II Lab	1
HT	101	Intro to Occupational Therapy	3
PSY	101	General Psychology	3
SOC	111	Introduction to Sociology	<u>3</u>
		Total	15

## **Fall Semester**

Course	No.	Title	Credits
HT	111	Patient Management Skills	3
HT	112	Developmental Dysfunction	3
HT	115*	Therapeutic Media I	3
PSY	109	Lifespan Development	3
PSY	292	Abnormal Psychology	<u>3</u>
		Total	15

## **Spring Semester**

Course	No.	Title	Credits
HT	201	Physical Dysfunction	3
AH	205	Human Motion & Response	4
HT	205	Psychosocial Dysfunction	3
HT	207	Therapeutic Media II	3
HT	208	Clinical Practicum I	1
HT	209	Documentation	2
		Total	16

# Summer Term

Summ		. 111	
Course	No.	Title Cr	edits
HT	210	Clinical Practicum II	1
HT	211	Eldercare	3
HT	212	Structured Assessments	2
HT	214	Practice, Theory & Techniques	3
HT	215	Work-Oriented Treatment	<u>2</u>
		Total	11

## **Fall Semester**

Course	No.	Title	Credits
HT	220*	Clinical Affiliation I	5
HT	230*	Clinical Affiliation II	5
HT	240*	Administrative Procedures	<u>2</u>
		Total	12

## **Total Program Credits - 86**

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

# PHYSICAL THERAPIST ASSISTANT Associate of Applied Science Degree

## Advisors: Christine Kowalski Jamyne Richardson

The Physical Therapist Assistant program is designed to graduate entry-level physical therapist assistants who, under the supervision of a physical therapist, assist in implementing treatment programs such as teaching patients to perform exercises and activities of daily living; coordinating treatments using special equipment and/or a variety of modalities such as heat and cold, massage, hydrotherapy, or electrotherapy; and reporting/recording the patient's progress.

A grade of "C" (76%) or above is required in each didactic course in order to progress through the program and fulfill all graduation requirements. Clinical education is also incorporated into the curriculum design. These courses require a grade of "B" (84%) or above to fulfill graduation requirements. Clinical education consists of three 2-week clinical experiences and two full-time 5-week affiliations the last semester of the program. The clinical sites for these experiences are located throughout the state of Montana, and the additional travel/living expenses are incurred by the student for clinical sites not located in the immediate vicinity.

Admission into the program is competitive and based upon meeting application deadlines and satisfactory completion of criteria. Application deadlines vary; please refer to the specific criteria in the student brochure.

Montana requires licensure prior to practicing within the state. Licensure information may be obtained from the Board of Physical Therapy Examiners, Helena MT. Montana State University College of Technology's Physical Therapist Assistant program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association (CAPTE/APTA).

## Pre-Physical Therapist Assistant Required Courses

Background in related instruction and basic science is essential to prepare students to succeed in the Physical Therapist Assistant Program. All applicants must have completed high school biology, chemistry, and physics with a grade of "C" or above, have equivalent college courses with a grade of "C" or above. In addition, applicants must complete the following courses with at least a grade of "C" or above in each course prior to applying for acceptance into the program.

The course titles, numbers, and credits apply to semester courses offered at Montana State University College of Technology—Great Falls:

Prerequisite	Courses
--------------	---------

		000000	
Course	No.	Title	Credits
BIO	210	Anatomy & Physiology I	3
BIO	209	Anatomy & Physiology I Lab	<b>)</b> 1
COMM	130	Public Speaking	3
ENGL	121*	* Composition I	3
MATH	161*	* Math for Health Science	4
PSY	101	General Psychology	<u>3</u>
		Total	17

\*\* Placement in course(s) is determined by admission assessment

The prerequisite courses may be taken at Montana State University College of Technology—Great Falls or at any other accredited college or university with equivalent transferable courses.

## Program Course Requirements After Formal Acceptance

#### **Fall Semester**

I un De	meste	-	
Course	No.	Title	Credits
BIO	211	Anatomy & Physiology II	3
BIO	212	Anatomy & Physiology II La	b 1
CS	110	Introduction to Computers	3
PSY	292	Abnormal Psychology	3
PTA	100*	Introduction to Physical	
		Therapy & Healthcare Team	n 3
SOC	111	Introduction to Sociology	<u>3</u>
		Total	16

## **Spring Semester**

No.	Title	Credits
108	Disease Concepts	2
101*	Physical Therapist Assisting I	5
102	PTA I Lab	0
205*	Motion and the Human Body'	s
	Response	4
206	Lab	0
208*	Neuroscience I	2
210*	Clinical Experience I	2
	Total	15
	108 101* 102 205* 206 208*	<ul> <li>108 Disease Concepts</li> <li>101* Physical Therapist Assisting I</li> <li>102 PTA I Lab</li> <li>205* Motion and the Human Body' Response</li> <li>206 Lab</li> <li>208* Neuroscience I</li> <li>210* Clinical Experience I</li> </ul>

# Summer Term

Course	No.	Title	<b>Credits</b>
PSY	109	Lifespan Development	3
PTA	201*	Physical Therapist Assisting	II 5
PTA	202	PTA II Lab	0
PTA	209*	Neuroscience II	<u>1</u>
		Total	9

# Fall Semester

Course	No.	Title	Credits	
PTA	200*	Issues in Physical Therapy	3	
PTA	211*	Physical Therapist Assisting	III 5	
PTA	212	PTA III Lab	0	
PTA	215*	Introduction to Orthopedics	3	
PTA	220*	Clinical Experience II	<u>2</u>	
		Total	13	

# **Spring Semester**

Course	No.	Title	Credits
PTA	225*	Procedures & Applications	3
PTA	230*	Clinical Affiliation I	5
PTA	240*	Clinical Affiliation II	<u>5</u>
		Total	13

# **Total Program Credits- 83**

\* Indicates prerequisites needed

# PRACTICAL NURSE Certificate

## Advisors: Cheryll Alt Connie MacKay Elissa Orcutt

The Practical Nurse program is designed to prepare individuals to function as entry-level practical nurses with the ability to give safe, effective nursing care using the nursing process.

The Practical Nurse program at Montana State University College of Technology is currently approved by the Montana State Board of Nursing. Upon graduation from the program, students are eligible to take the licensure examination. The length of the program is 12 months.

Current CPR and TB test is a prerequisite for entrance into the first clinical experience. 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.

Program policies and a contract for clinical performance will be signed by the students as they enter the Practical Nurse program. Courses accepted into the program must have been taken within the past five years. A grade of "C" (75%) or above must be attained in all courses. A grade of "C" must be achieved in the lecture and lab portion of Nursing Fundamentals I and Maternal Child nursing before entering the course clinicals. A grade of "C" must be achieved in to enter Medical/Surgical clinicals. If a student obtains

less than a grade of "Satisfactory" (75%) in any portion of Nursing Fundamentals I, Medical Surgical Clinicals or Maternal Child Clinicals, the entire course(s) will have to be repeated.

Nursing courses may be repeated one time. Failure to obtain a "C" and "Satisfactory" the second time will result in dismissal from the Practical Nurse program. It will then be necessary for students to repeat the entire nursing curriculum.

A limited number of students will be accepted into the program on a part-time status at the discretion of the practical nurse faculty. Full-time students will be given priority during enrollment into clinical experiences.

## Pre-Practical Nurse Required Courses

Background in related instruction and basic science is essential to prepare the applicant to succeed in the practical nurse curriculum. Applicants must complete the following courses with a minimum grade of "C" in each course prior to formal acceptance into the program. The course titles, numbers, and credits apply to semester courses offered at Montana State University College of Technology—Great Falls:

## **Prerequisite Courses**

Course	No.	Title	Credits
BIO	210	Anatomy & Physiology I	3
BIO	209	Anatomy & Physiology I Lab	) 1
COMM	135	Interpersonal Communication	ns 3
ENGL	121**	Composition I	3
MATH	161**	Math for Health Science	4
00	185	Basic Medical Terminology	<u>4</u>
		Total	18

\*\* Placement in course(s) is determined by admission assessment

The prerequisite courses may be taken at Montana State University College of Technology—Great Falls or at any other accredited college or university with equivalent transferable courses within the past five years.

# FALL ENTRY

## Program Course Requirements After Formal Acceptance

## **Fall Semester**

Course	No.	Title C	redits
AH	140	Pharmacology	2
BIO	211	Anatomy & Physiology II	3
BIO	212	Anatomy & Physiology II Lab	1
MN	141	Perspectives of Nursing	1
MN	146	Nutrition	3
MN	155	Nursing Fundamentals I	6
PSY	109	Lifespan Development	<u>3</u>
		Total	19

## **Spring Semester**

1 0			
Course	No.	Title	Credits
MN	134	Medical/Surgical Nursing	8
MN	156	Nursing Fundamentals II	4
MN	158	Medical/Surgical Clinicals	<u>6</u>
		Total	18

# Summer Term

Course	No.	Title	Credits
MN	236	Mental Health	2
MN	243	Maternal Child Nursing	7
MN	246	Nursing Issues & Trends	<u>1</u>
		Total	10

## SPRING ENTRY

#### Program Course Requirements After Formal Acceptance

## **Spring Semester**

~	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		
Course	No.	Title Ci	redits
AH	140	Pharmacology	2
BIO	211	Anatomy & Physiology II	3
BIO	212	Anatomy & Physiology II Lab	1
MN	141	Perspectives of Nursing	1
MN	146	Intro to Normal & Clinical Nut	: 3
MN	155	Nursing Fundamentals I	6
PSY	109	Lifespan Development	<u>3</u>
		Total	19
Summer Term			
Course	No.	Title Ci	redits

No.	Title	Credits
134	Medical/Surgical Nursing	8
156	Nursing Fundamentals II	<u>4</u>
	Total	12
	134	134Medical/Surgical Nursing156Nursing Fundamentals II

## **Fall Semester**

Course	No.	Title	Credits
MN	158	Medical/Surgical Clinicals	6
MN	236	Mental Health	2
MN	243	Maternal Child Nursing	7
MN	246	Nursing Issues & Trends	<u>1</u>
		Total	16

# **Total Program Credits - 65**

# **RESPIRATORY CARE** Associate of Applied Science Degree

## Advisors: Leonard Bates Greg Paulauskis

Respiratory Care is a healthcare specialty that offers a set of unique challenges in prevention, treatment, management, and rehabilitation of people with lung problems. Respiratory Care involves a wide variety of life saving, life supporting situations, working side by side with physicians, nurses, and others on the healthcare team, and treating patients ranging in age from newborns to senior citizens.

The work of respiratory care practitioners involves the administration of treatments using sophisticated medical equipment to patients with lung disorders such as asthma, emphysema, pneumonia, and bronchitis. The respiratory care practitioner also works as a member of the care in laboratories, critical team, in rehabilitation, and in home care. Excellent judgment, assessment, and communications skills are essential for the respiratory care practitioner.

The Respiratory Care Program is a two-year program designed to prepare individuals to work as respiratory therapists. It is fully accredited by the Commission on Accreditation of Allied Health Education Programs through the Committee on Accreditation of Respiratory Care Programs.

The program combines classroom, laboratory, and clinical courses taught at the College and hospitals. Upon completion the graduate will receive an Associate of Applied Science Degree and be eligible to take the National Board for Respiratory Care certification registry examinations. A grade of "C" or above must be earned in all required courses to continue in and complete the program. CPR is a prerequisite for entrance into the first clinical experience.

A contract for clinical performance must be signed by all students before beginning the clinical portion of this program.

#### Pre-Respiratory Care Required Courses

Background in related instruction and basic science is essential to prepare applicants to succeed in the Respiratory Care Program. All applicants must have completed high school chemistry with a grade of "B" or higher, computer applications courses with a "C" or higher, or have equivalent college courses with a grade of "C" or higher.

Applicants must complete the following courses with a minimum grade of "C" in each course prior to formal acceptance into the program. The course titles, numbers, and credits apply to semester courses offered at Montana State University College of Technology—Great Falls:

#### **Prerequisite Courses**

Course	No.	Title	Credits
BIO	210	Anatomy & Physiology I	3
BIO	209	Anatomy & Physiology I Lab	<b>)</b> 1
ENGL	121**	Composition I	3
MATH	161**	Math for Health Science	4
PSY	101	General Psychology	3
COMM	135	Interpersonal Communication	1s <b>OR</b> 3
COMM	130	Public Speaking	<u>3</u>
		Total	17

\*\* Placement in course(s) is determined by admission assessment

The above courses may be taken at Montana State University College of Technology—Great Falls or at any other accredited college or university with equivalent transferable courses.

## Program Course Requirements After Formal Acceptance

#### **Fall Semester**

		-	
Course	No.	Title	<b>Credits</b>
AH	140	Pharmacology	2
BIO	211	Anatomy & Physiology II	3
BIO	212	Anatomy & Physiology II Lab	<b>b</b> 1
MR	150	Respiratory Care	2
MR	155	Respiratory Physiology	3
MR	170	Respiratory Equipment I	<u>4</u>
		Total	15
		Total	15

## **Spring Semester**

Course	No.	Title Cr	edits [
MR	140	Respiratory Care Clinic I	
		(2 days/wk.)	5
MR	171	Respiratory Care Equipment II	4
MR	180	Ventilator Management	2
MR	255	Pulmonary Assessment	3
MR	275	Pulmonary Disease	<u>2</u>
		Total	16

#### **Summer Term**

Course	No.	Title	Credits
MR	141	Respiratory Care Clinic II	5
		(4 days/wk., 8 wks.)	
MR	260	Neonatal Respiratory Care	<u>2</u>
		Total	7

Fall Semester				
Course	No.	Title Cre	edits	
EMS	145	Advanced Cardiac Life Support	1	
EMS	146	Pediatric Advance Life Support	1	
MR	240	Respiratory Care Clinic III	7	
		(3 days/wk.)		
MR	245	Respiratory Care Clinical		
		Seminar I	1	
MR	250	Hemodynamic Monitoring	3	
MR	265	Pulmonary Rehabilitation	1	
MR	273	Pulmonary Function Testing	1	
		Total	15	

# **Spring Semester**

Course	No.	Title	Credits
BIO	180	Microbiology	4
MR	241	Respiratory Care Clinic IV	7
		(3 days/wk.)	
MR	246	Respiratory Care Clinical	
		Seminar II	1
MR	280	Supervisory Communication	<u>2</u>
		Total	14
T-4-11	<b>D</b>		

**Total Program Credits - 84** 

# **BUSINESS** Associate of Applied Science Degree

The Business Program prepares students to assume entry-level business roles. The students may select a option in Accounting or Business Management/Entrepreneurship.

The Accounting Option prepares students for general accounting occupations or future accounting study.

The **Business Management/Entrepreneurship Option** is designed to prepare students for employment in management positions or to operate their own small business enterprises.

Students entering the Business program are required to complete prerequisite courses with a grade of "C" or above before enrolling in the business core and area of concentration required courses. See your advisor for scheduling prerequisite and required courses.

<b>Required Skill</b> OO 107 Keyboarding I or Challenge			
Prerequisite CoursesCourseNo.TitleCOMM135Interpersonal CommunicationCS110Introduction to ComputersENGL121** Composition IMATH104** Business Mathematics Total	<u>Credits</u> 1s 3 3 <u>4</u> 13		
Business CoreCourseNo.TitleACCT101Accounting Procedures IACCT102*Accounting Procedures IIACCT190*Payroll AccountingACCT221*Financial AccountingACCT222*Managerial AccountingBM255*Legal EnvironmentCS120*Internet ICS220*Electronic SpreadsheetsMATH108**Intermediate AlgebraOO292*Career DevelopmentTotal	<u>Credits</u> 3H 3H 3H 3H 3H 1H 3H 4H <u>3</u> H 29	H * **	Indicates a grade of "C" or above must be achieved in courses Indicates prerequisites needed Placement in course(s) is determined by admission assessment

be

## **ACCOUNTING OPTION**

#### Advisor: Jon Nitschke

The Accounting Option requires satisfactory completion of the Prerequisite Courses (13 credits), the Business Core (29 credits) listed on page 56, and the following courses:

#### **Required Courses**

Course	No.	Title	Credits
ACCT	224*	Micro Accounting Application	ons 3H
ACCT	231*	Income Tax Concepts	3H
BM	106	Introduction to Business	3H
CS	205*	Database Management	3H
CS	221*	Adv Electronic Spreadsheets	3H
ENGL	124*	Business & Professional Com	nm 2H
00	173*	Electronic Calculators	2H
		Electives	<u>3</u> H
		Subtotal	22
Prerequisite/Core Totals (page 56) <u>42</u>			42
		<b>Total Program Credits</b>	64

#### **Suggested Electives**

Course	No.	Title Cre	edits
BM	230*	Management	3
BO	200	Special Projects	Var
CS	166*	Computer Systems Management	3
CS	280*	Desktop Publishing	3
MATH	130*	College Algebra	4
00	265*	WordPerfect OR	3
00	266*	Microsoft Word	3
00	185	Basic Medical Terminology	4
Н	Indica	ates a grade of "C" or above must l	be

- Indicates a grade of "C" or above must be achieved in courses
   Indicates proraquicites needed
- \* Indicates prerequisites needed
- \*\* Placement in course(s) is determined by admission assessment

#### BUSINESS MANAGEMENT/ ENTREPRENEURSHIP OPTION

## Advisor: Marilyn Besich

The Business Management/Entrepreneurship Option requires satisfactory completion of the Prerequisite Courses (13 credits), the Business Core (29 credits) listed on page 56, and the following courses:

#### **Required Courses**

Course	No.	Title	Credits	
BM	106	Introduction to Business	3H	
BM	220	Sales	3H	
BM	230*	Management	3H	
BM	235*	Marketing	3H	
BM	240*	Advertising	3H	
BM	260*	Entrepreneurship	3H	
ENGL	128*	Business & Technical Comm	n 3H	
		Electives	<u>6</u> H	
Subtotal 27				
Prerequisite/Core Totals (page 56) 42				
Total Program Credits 69				

#### **Suggested Electives**

Course	No.	Title	Credits
BM	225	Risk Management	3
BM	237*	Internet Marketing	1
BM	249	Global Marketing	3
CS	121*	Internet II	2

- H Indicates a grade of "C" or above must be achieved in courses
- \* Indicates prerequisites needed
- \*\* Placement in course(s) is determined by admission assessment

# ACCOUNTING ASSISTANT Certificate

#### Advisor: Jon Nitschke

The Accounting Assistant program is designed to prepare the student with skills to seek entrylevel employment in accounts receivable, accounts payable, payroll and general accounting.

#### **Required Courses**

Course	No.	Title	Credits
ACCT	101	Accounting Procedures I	3
ACCT	102*	Accounting Procedures II	3
ACCT	190*	Payroll Accounting	3
COMM	135	Interpersonal Communication	ns 3
CS	110	Introduction to Computers	3
CS	220*	Electronic Spreadsheets	3
ENGL	121**	Composition I	3
MATH	104**	Business Mathematics	4
00	173*	Electronic Calculators	2
00	292*	Career Development	3
		Elective	<u>3</u>
		Total Credits	33

## **Suggested Electives**

Course	No.	Title	Credits
CS	205*	Database Management	3
00	107	Keyboarding I	3
00	179	Records Management	3
00	265*	WordPerfect <b>OR</b>	3
00	266	Microsoft Word	3
00	185	Basic Medical Terminology	4

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

# FUNDAMENTALS OF BUSINESS Certificate

#### Advisor: Marilyn Besich

The Fundamentals of Business program is designed for persons seeking employment in entry-level business positions assisting small business enterprises in the functioning of accounting records, meeting the public in a sales capacity, management of office functions and marketing of the business. The Fundamentals of Business program also offers individuals needing technical business assistance courses to upgrade knowledge and skills.

#### **Required Courses**

nequi	<b>c</b> a c o		
Course	No.	Title	Credits
ACCT	101	Accounting Procedures I	3
ACCT	102*	Accounting Procedures II	3
BM	106	Introduction to Business	3
BM	220	Sales	3
BM	230*	Management	3
BM	235*	Marketing	3
COMM	135	Interpersonal Communication	s 3
CS	110	Introduction to Computers	3
ENGL	121**	Composition I	3
MATH	104**	<b>Business Mathematics</b>	4
00	107	Keyboarding I	3
00	173*	Electronic Calculators	<u>2</u>
		Total Credits	36

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

# **COMPUTER TECHNOLOGY** Associate of Applied Science Degree

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 **Microcomputer Support Option** prepares students to pursue a career in the technical support of microcomputers at the hardware/software level as well as user support and training.

The **Network Support Option** prepares students for a career in supporting a network of microcomputers with a focus on the skills required to understand and manage the operation of a computer network.

Students entering the Computer Technology program are required to complete prerequisite courses with a grade of "C" or above before enrolling in the computer technology core and area of concentration required courses. See your advisor for scheduling prerequisite and required courses.

Required Skill:	
OO 107 Keyboarding I or Challenge	
Prerequisite Courses	
Course No. Title Credits	
BM 106 Introduction to Business 3	
COMM 135 Interpersonal Communications 3	
CS 110 Introduction to Computers 3	
MATH 104** Business Mathematics 4 Total 13	
Total 13	
Technical Core	
Course No. Title Credits	
CS 120* Internet Basics 1H	
CS 121* Webpage Construction 2H	
CS 166* Computer Operating Systems 3H	
CS 205* Database Management 3H	
CS 220* Electronic Spreadsheets 3H	
CS 270* PC Troublshooting/Maint. 3H	
CS 290* Systems Analysis & Design 3H	
ENGL121** Composition I3	
ENGL 124* Business & Professional Comm 2	
MATH 108** Intermediate Algebra 4	H Indicates a grade of "C" or above must be
OO 292* Career Development 3	achieved in courses
OO 265* WordPerfect <b>OR</b> 3H	
OO 266* Microsoft Word <u>3</u> H	** Placement in course(s) is determined by
Total 33	admission assessment

## MICROCOMPUTER SUPPORT OPTION

#### Advisor: Jeff Brown

The Microcomputer Support Option requires satisfactory completion of the Prerequisite Courses (13 credits), the Computer Technology Core (33 credits) listed on page 59, and the following courses:

#### **Required Courses**

Course	No.	Title	Credits
ACCT	101	Accounting Procedures I	3
ACCT	102*	Accounting Procedures II	3
ACCT	221*	Financial Accounting	3
CS	240*	Software Integration	2H
CS	275*	Computer End-User Support	3H
		Technical Electives	<u>6</u> H
		Subtotal	20
Prerequisite/Core Totals (page 59) <u>46</u>			
Total Program Credits66			

#### **Technical Electives**

Course	No.	Title	Credits
BO	200	Special Projects	VarH
CS	160*	Intro to Programming	3H
CS	210*	Network Administration I	3H
CS	216*	Multimedia Use and Design	3H
CS	221*	Adv Electronic Spreadsheets	3H
CS	280*	Desktop Publishing	3H

- H Indicates a grade of "C" or above must be achieved in courses
- \* Indicates prerequisites needed
- \*\* Placement in course(s) is determined by admission assessment

# NETWORK SUPPORT OPTION

#### Advisor: Jeff Brown

The Network Support Option requires satisfactory completion of the Prerequisite Courses (13 credits), the Computer Technology Core (33 credits) listed on page 59, and the following courses:

#### **Required Courses**

Course	No.	Title	Credits
CS	150*	Intro to Local Area Networks	3H
CS	210*	Network Administration I	3H
CS	211*	Network Administration II	3H
CS	260*	Data & Computer Comm	3H
		Technical Electives	<u>6</u> H
		Subtotal	18
	Prerec	quisite/Core Totals (page 59)	<u>46</u>
		<b>Total Program Credits</b>	64

#### **Technical Electives**

Course	No.	Title	Credits
BO	200	Special Projects	VarH
CS	160*	Intro to Programming	3H
CS	216*	Multimedia Use and Design	3H
CS	275*	Computer End-User Support	3H

- H Indicates a grade of "C" or above must be achieved in courses
- \* Indicates prerequisites needed
- \*\* Placement in course(s) is determined by admission assessment

# COMPUTER ASSISTANT Certificate

#### Advisors: Jeff Brown

The Computer Assistant program prepares individuals for operation of software programs and a basic knowledge of managing data and files. Course work is designed to provide a solid foundation for microcomputer operation and to develop essential business and computer skills.

#### **Required Courses**

Course	No.	Title	Credits
BM	106	Introduction to Business	3
COMM	135	Interpersonal Communication	ns 3
CS	110	Introduction to Computers	3H
CS	120*	Internet Basics	1H
CS	166*	Computer Operating Systems	3H
CS	205*	Database Management	3H
CS	220*	Electronic Spreadsheets	3H
ENGL	121**	<sup>c</sup> Composition I	3
ENGL	124*	Business & Professional Con	nm 2
MATH	104**	<sup>6</sup> Business Mathematics	4
00	262*	Condensed Career Developm	ent 1
00	265*	WordPerfect <b>OR</b>	3†
00	266*	Microsoft Word	<u>3†</u>
		Total Credits	32

- H Indicates a grade of "C" or above must be achieved in courses
- \* Indicates prerequisites needed
- \*\* Placement in course(s) is determined by admission assessment

# **MEDICAL ASSISTANT** Associate of Applied Science Degree

## Advisor: Deborah Newton

The medical assistant is a professional multiskilled person who assists in all aspects of medical practice under the supervision of a physician. Performance may be separated into two distinct categories: (1) administrative responsibilities which include both routine and special tasks required to keep the medical office running smoothly, and (2)clinical responsibilities which include assistance with patient care management and clinical procedures. Medical assistants can specialize in either the administrative or clinical aspect of the job or be multi-functional. Competence requires effective communication skills, recognition and response to emergencies, adherence to ethical and legal standards. and demonstrable professional characteristics.

Prior to the clinical externship students must carry current certification in First Aid and CPR, must be vaccinated for Hepatitis B, and must purchase liability insurance when registering.

Students entering the Medical Assistant program are required to complete prerequisite courses with a grade of "C or above before enrolling in the required courses of the program. See your advisor for scheduling of prerequisite and required courses.

## **Medical Assistant**

## **Required Skill**

OO 107 Keyboarding I or Challenge

\*\* Placement in course(s) is determined by admission assessment

#### **Prerequisite Courses**

Course	No.	Title Cr	edits
ACCT	101	Accounting Procedures I	3
COMM	135	Interpersonal Communications	3
CS	110	Introduction to Computers	3
MATH	161**	Math for Health Science	4
00	185	Basic Medical Terminology	<u>4</u>
		Total	17

## **Required Courses**

Kequirea Courses				
Course	No.	Title Cred	its	
AH	140	Pharmacology	2	
AH	201*	Medical Science	3H	
BIO	210	Anatomy & Physiology I	3H	
BIO	209	Anatomy & Physiology I Lab	1H	
BIO	211	Anatomy & Physiology II	3H	
BIO	212	Anatomy & Physiology II Lab	1H	
ENGL	121**	Composition I	3	
ENGL	124*	Business & Professional Comm	2	
HI	237	Outpatient Coding	3H	
MO138	*	Clinical Procedures I	3H	
MO238	*	Clinical Procedures II	3H	
MO241	*	Clinical Review	1H	
MO242	*	Externship	4H	
00	108*	Keyboarding II	3	
00	179	Records Management	3	
00	241*	Medical Office Procedures	2H	
00	250*	Computers in Medical/Dental Off	1	
00	255*	Medical Transcription I	3H	
00	265*	WordPerfect <b>OR</b>	3	
00	266*	Microsoft Word	3	
00	295*	Administrative Office Procedures	3H	
PSY	101	General Psychology	3	
		Electives	<u>0</u>	
		Subtotal	53	
		Prerequisites	17	
		Total Program Credits   7	70	

#### **Suggested Electives**

Course	No.	Title	Credits
BM	230*	Management	3
00	292	Career Development	3
PHIL	238	Medical Ethics	3

- H Indicates a grade of "C" or above must be achieved in courses
- \* Indicates prerequisites needed

# **OFFICE TECHNOLOGY** Associate of Applied Science Degree

The Office Technology program is designed to prepare students for a variety of duties within an office. This program emphasizes in-depth training in a wide variety of office skills--oral and written communications, transcription, computer technology, telephone and mail, office management, records management and keyboarding.

The **Administrative Assistant Option** emphasizes training for the performance of advanced office duties involving decision-making responsibilities relating to work methods and procedures. Students who complete the program requirements should possess excellent written and oral communication skills and sufficient organizational abilities to supervise the completion of assigned jobs within deadlines and with accurate attention to detail. In-depth training in computer programs is emphasized.

The **Legal Secretary Option** emphasizes the ethical responsibilities, terminology, and legal procedures of a law office as well as the production of accurate legal documents. Students who complete this option will be qualified to take the Accredited Legal Secretary (ALS) examination (examination and certification provided by the National Association of Legal Secretaries).

The **Medical Secretary Option** emphasizes appropriate medical office policies, terminology, and legal responsibilities in the medical profession.

The **Medical Transcription Option** emphasizes the production of vital medical documents as well as stressing the ethical and legal standards involved in working with medical information.

Students entering the Office Technology program are required to complete prerequisite courses with a grade of "C" or above before enrolling in the office technology core and area of concentration required courses. See your advisor for scheduling prerequisite and required courses.

Requi	Required Skill:				Techr	ology Core	
00	107	Keyboarding I or Challenge		Course	No.	Title	Credits
				BM	230	Management	3
Prere	quisite	Courses				<sup>6</sup> Composition I	3
Course	No.	Title Cre	dits	ENGL	124*	Business & Professional Com	m 2
COMN	A 135	Interpersonal Communications	3H	00	108*	Keyboarding II	3Н
CS	110	Introduction to Computers	3H	00	173*	Electronic Calculators	2H
MATH		* Business Mathematics	<u>4</u> H	00	179	Records Management	3H
1012111	1 104	Total	$\frac{4}{10}$	00	260*	Machine Transcription	3H
H Ind	licates	a grade of "C" or above mus		00	265*	WordPerfect	3H
		n courses		00	266*	Microsoft Word	3H
		prerequisites needed		00	292	Career Development	3
	-	in course(s) is determined by		00	295*	Administrative Office Procedu	res <u>3</u> H
		assessment				Total	31

## ADMINISTRATIVE ASSISTANT OPTION

## Advisor: Kay Craig

The Administrative Assistant Option requires satisfactory completion of the Prerequisite Courses (10 credits), the Office Technology Core (31 credits) listed on page 63, and the following courses:

#### **Additional Prerequisite Course**

Course	No.	Title	Credits
ACCT	101	Accounting Procedures I	3H

#### **Required Courses**

Required Courses					
No.	Title	Credits			
120*	Internet I	1			
205*	Database Management	3			
220*	Electronic Spreadsheets	3			
240*	Software Integration	2H			
130	Public Speaking	3			
280*	Desktop Publishing	3			
	Elective	<u>3</u>			
	Subtotal	21			
Prerequisite/Core Totals (page 63) <u>41</u>					
-	<b>Total Program Credits</b>	62			
	No. 120* 205* 220* 240* 130 280*	No.Title120*Internet I205*Database Management220*Electronic Spreadsheets240*Software Integration130Public Speaking280*Desktop Publishing ElectiveSubtotalerequisite/Core Totals (page 63)			

#### **Suggested Electives**

Course	No.	Title	Credits
ACCT	102*	Accounting Procedures II	3
ENGL	122*	Composition II	3
00	185	Basic Medical Terminology	4
PSY	101	General Psychology	3
RELA	242H	Gender and Equality	3
RELA	244H	American Cultural Values #3	
SOC	111	Introduction to Sociology	3
00	276*	Speedwriting I	3
00	278*	Speedwriting II	3
ENGL	115	Principles of Spelling	2

- H Indicates a grade of "C" or above must be achieved in courses
- \* Indicates prerequisites needed

## LEGAL SECRETARY OPTION

## Advisors: Donna Eakman Josy Slaymaker

The Legal Secretary Option requires satisfactory completion of the Prerequisite Courses (10 credits), the Office Technology Core (31 credits) listed on page 63, and the following courses:

#### **Additional Prerequisite Courses**

Course	No.	Title	Credits
ACCT	101	Accounting Procedures I	3H
00	180	Legal Studies I	4H

#### **Required Courses**

	<b>1</b>					
Course	No.	Title	Credits			
BM	255	Legal Environment	3Н			
CS	120*	Internet I	1			
00	181*	Legal Studies II	4H			
00	285*	Legal Transcription I	3Н			
00	286*	Legal Transcription II	3H			
		Elective	<u>3</u>			
		Subtotal	24			
Prerequisite/Core Totals (page 63) <u>41</u>						
	65					

#### **Suggested Electives**

Course	No.	Title	Credits
ACCT	102*	Accounting Procedures II	3
BO	200	Special Projects	3-6
CS	205*	Database Management	3
CS	220*	Electronic Spreadsheets	3
ENGL	122*	Composition II	3
00	185	Basic Medical Terminology	4
00	276*	Speedwriting I	3H
00	278*	Speedwriting II	3H
RELA	244H	American Cultural Values #3	3

- H Indicates a grade of "C" or above must be achieved in courses
- \* Indicates prerequisites needed
- \*\* Placement in course(s) is determined by admission assessment

## Programs of Study BUSINESS & TECHNOLOGY

## **MEDICAL SECRETARY OPTION**

## Advisors: Deborah Newton Darla Dillabough

The Medical Secretary Option requires satisfactory completion of the Prerequisite Courses (10 credits), the Office Technology Core (31 credits) listed on page 63, and the following courses:

## **Additional Prerequisite Courses**

Course	No.	Title Cre	dits
ACCT	101	Accounting Procedures I	3H
00	185	Basic Medical Terminology	4H
Requir	ed Co	ourses	
Course	No.	Title Cr	edits
AH	194	Basic Pharmaceuticals	1
AH	201*	Medical Science	3H
BIO	105	Fundamentals of Human Biology	/ 3
HI	237	Outpatient Coding	3H
00	241*	Medical Office Procedures	2H
00	250*	Computers in Medical/Dental Of	f 1
00	255*	Medical Transcription I	3H
		Elective	<u>3</u>
		Subtotal	26
		Prerequisite Core	41
		Total Program Credits	67

## **Suggested Electives**

Title	Credits
Public Speaking	3
* Medical Transcription II	3
* Speedwriting I	3
<ul> <li>Speedwriting II</li> </ul>	3
General Psychology	3
	Public Speaking * Medical Transcription II * Speedwriting I * Speedwriting II

## MEDICAL TRANSCRIPTION OPTION

## Advisors: Deborah Newton Darla Dillabough

The Medical Transcription Option requires satisfactory completion of the Prerequisite Courses (10 credits), the Office Technology Core (31 credits) listed on page 63, and the following courses:

## **Additional Prerequisite Courses**

Course	No.	Title Crea	lits
00	185	Basic Medical Terminology	4H
Requir	ed Co	ourses	
Course	No.	Title Cre	dits
AH	201*	Medical Science	3H
BIO	209	Anatomy & Physiology I Lab	1H
BIO	210	Anatomy & Physiology I	3H
BIO	211	Anatomy & Physiology II	3H
BIO	212	Anatomy & Physiology II Lab	1H
00	241*	Medical Office Procedures	2H
00	250*	Computers in Medical/Dental Off	1
00	255*	Medical Transcription I	3H
00	256	Medical Transcription II	<u>3</u> H
		Subtotal	24
		Prerequisite Core	41
		<b>Total Program Credits</b>	65

- H Indicates a grade of "C" or above must be achieved in courses
- \* Indicates prerequisites needed
- \*\* Placement in course(s) is determined by admission assessment

## Programs of Study BUSINESS & TECHNOLOGY

## OFFICE SUPPORT Certificate

Office support personnel must be able to perform a variety of entry-level clerical tasks necessary for efficient functioning of the office including telephoning, information processing, calculating, managing records, scheduling appointments, processing correspondence, and handling mail. Good human relations skills are essential.

The **Dental Office Option** emphasizes performing dental office procedures and using medical terminology.

The **General Office Option** emphasizes clerical tasks including bookkeeping, transcribing, editing, and proofreading.

The **Legal Office Option** emphasizes basic legal office procedures and terminology as well as transcribing, editing, and proofreading.

The Medical Office Option emphasizes familiarity with medical office procedures and terminology.

Students entering the Office Support program are required to complete office support core and area of concentration required courses. See your advisor for scheduling required courses.

## **Required Skill**

OO 107 Keyboarding I or Challenge ENGL 120\*\*Introduction to Composition or equivalent admission assessment score

## **Office Support Core**

Course	No.	Title Cre	dits	
COMM	135	Interpersonal Communications	3	
CS	110	Introduction to Computers	3	
MATH	104**	Business Math	4	
00	108	Keyboarding II	3	
00	173*	Electronic Calculators	2	
00	179	Records Management	3	
00	265*	WordPerfect <b>OR</b>	3	
00	266	Microsoft Word	3	
00	292	Career Development	3	
00	295	Administrative Office Procedures	<u>3</u>	
		Total	27	

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

## Programs of Study BUSINESS & TECHNOLOGY

## **DENTAL OFFICE OPTION**

## Advisor: Darla Dillabough

The Dental Office Option requires satisfactory completion of the Office Support Core (27 credits) listed on page 66, and the following courses:

## **Required Courses**

Course	No.	Title	Credits
MD115	Oral	Anatomy	2
MD117	Denta	al Management	2
00	185	Basic Medical Terminology	<u>4</u>
		Subtotal	8
Offi	ice Su	pport Core Totals (page 66)	27
		Total Credits	35

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

## **GENERAL OFFICE OPTION**

## Advisor: Kay Craig

The General Office Option requires satisfactory completion of the Office Support Core (27 credits) listed on page 66, and the following courses:

## **Required Courses**

Course	No.	Title	Credits
ACCT	101	Accounting Procedures I	3
00	260*	Machine Transcription	<u>3</u>
		Subtotal	6
Off	ice Sup	port Core Totals (page 66)	27
	-	Total Credits	33

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

## **LEGAL OFFICE OPTION**

## Advisors: Donna Eakman Josy Slaymaker

The Legal Office Option requires satisfactory completion of the Office Support Core (27 credits) listed on page 66, and the following courses:

## **Required Courses**

Course	No.	Title	Credits
00	180	Legal Studies I	4
00	260	Machine Transcription	<u>3</u>
		Subtotal	7
Off	<u>27</u>		
		Total Credits	34

\* Indicates prerequisites needed

\*\* Placement in course(s) is determined by admission assessment

## **MEDICAL OFFICE OPTION**

## Advisors: Deborah Newton Darla Dillabough

The Medical Office Option requires satisfactory completion of the Office Support Core (27 credits) listed on page 66, and the following courses:

Required Courses					
Course	No.	Title	Cred	its	
00	185	Basic Medical Terminology	4	ŀ	
00	241	Medical Office Procedures		2	
00	250*	Computers in Medical/Dental	Off	1	
		Subtotal	7		
Off	ice Sup	port Core Totals (page 66)	-	27	
	-	Total Credits	34		

\* Indicates prerequisites needed

## AUTO BODY REPAIR AND REFINISHING Certificate

## Advisor: Steve Thurston

Auto body repair and refinishing offers 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 Auto Body Repair and Refinishing 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.

Montana State University College of Technology reserves the right to add, delete, modify and/or substitute courses as required to meet the needs of industry and other qualifying factors.

A grade of "C" or above must be achieved in all technical courses in order to earn a certificate.

## **Required Courses** Fall Semester

i un beinester				
Course	No.	Title Cred	its	
TB	128	Auto Shop and Equipment Safety	2	
TB	130	Basic Auto Construction	1	
TB	134	Correcting Sheet Metal	2	
TB	135	Stationary Glass Replacement	2	
TB	140	Paint Shop and Equipment Safety	3	
TB	141	Surface Preparation and Under		
		Coats	2	
TB	142	Top Coat Application (Lacquer)	2	
		Total	14	

## Spring Semester

Course	No.	Title	Credits	
TB	136	Correcting Collision Damage	; 3	
TB	138	Repairing Soft Rubber	3	
TB	150	Paint Removal	2	
TB	153	Overall Refinishing	3	
TB	154	Paint Problems	<u>2</u> 13	
		Total	13	

## **Fall Semester**

Course	No.	Title	Credits 1 -
TB	241	Fiberglass Repair	3
TB	242	Rigid Plastic Repair	3
TB	243	Panel Replacement	3
TB	248	Spot Repair and Blending	3
TB	249	Paint Formulation and Tinting	$\frac{3}{15}$
		Total	15

## **Spring Semester**

1 0			
Course	No.	Title	Credits
TB	244	Estimating Body Repair	2
TB	245	Production Body Repair	3
TB	246	Total Body Rebuilding and	
		Sectioning	3
TB	250	Production Refinishing	3
TB	253	Estimating Refinishing	2
TB	254	Specialty Finishes	<u>3</u>
		Total	16

## **Related Instruction Requirements**

Course	No.	Title	Credits	
COMM	135	Interpersonal Communication	ns 3	
ENGL		English Composition	3	
MATH	065	Pre-Algebra	3	
		OR		
MATH	104**	<b>Business Mathematics</b>	4	
		Total	9-10	)

## **Suggested Electives**

Course	No.	Title	Credits
BM	106	Introduction to Business	3
CS	110	Introduction to Computers	3
TB	133	Welding	2

## **Total Program Credits - 68**

\*\* Placement in course(s) is determined by admission assessment

## **INTERIOR DESIGN** Associate of Applied Science Degree

## Advisor: Richard Stevens

The Interior Design program has been developed to prepare students with a widevariety of skills for entry into the field as interior design technicians. The structure of courses in drafting, history, materials, color and the elements and principles of design and composition permits students to link theory and practice. Through a problem-solving approach, students will develop individual portfolios.

## **Required Courses**

Required Courses			
Course	No.	Title	Credits
BM	106	Introduction to Business	3
COMM	130	Public Speaking	3
COMM	135	Interpersonal Communication	s 3 3
CS	110	Introduction to Computers	3
DE	161	Introduction to Design	3
DE	162	Interior Design Graphics	3
DE	163*	Presentation Drawing	3
DE	164	Historic Interiors	3 3 3 3
DE	165*	Contemporary Interiors	3
DE	167	Materials of Interior Design	3
DE	168*	Space Planning I	3
DE	261*	Field Study	3
DE	262*	Studio I	4
DE	263*	Studio II	4
DE	264*	Light, Color, Lighting System	is 3
DE		Professional Practices	
DE	266*	Introduction to CAD	3 3
DE	268*	Space Planning II	3
ENGL	121**	English Composition I	3
		Business Mathematics	4
		Electives	<u>5-6</u>
		<b>Total Program Credits</b>	68
		8	

## **Suggested Electives**

Course	No.	Title	Credits
BM	220	Sales	3
BM	230*	Management	3
BM	240*	Advertising	3
BM	260*	Entrepreneurship	3
ENGL	124*	Business & Professional Com	m 2

- \* Indicates prerequisites needed
- \*\* Placement in course(s) is determined by admissions assessment

## **RELATED INSTRUCTION**

Advisors: Albert Reeves, Department Chair Mike Antila Bari Lynn Gilliard Jill Keil Esther Stinnett

Related Instruction is designed to add depth to the technical programs by offering education that will assist students in acquiring academic competencies appropriate for postsecondary programs. Studies include English, mathematics, communications, social sciences, and humanities.

Related Instruction academic skill building provides opportunities for individual instruction, study skill development, support assistance and enrichment for all areas. Credit hours vary based on entry date.

## ACADEMIC DEVELOPMENT

## Courses

Course	No.	Title	Credits
ENGL	040	Writing	3
ENGL	050	Spelling & Vocabulary	3
MATH	065	Pre-Algebra	3
RELA	020	Reading and Study Skills	3
RELA	030	Support (course assistance)	1

## COMMUNICATIONS

00111101120110					
Course	Courses				
Course	No.	Title	Credits		
COMM	130	Public Speaking	3		
COMM	135	Interpersonal Communication	is 3		
ENGL	115	Principles of Spelling	2		
ENGL		Introduction to Composition	3		
ENGL	121**	Composition I	3		
ENGL	122**	Composition II	3		
ENGL	124*	Business & Professional Com	m 2		
ENGL	127*	Technical Report Writing	2		
ENGL	128*	Business & Technical Comm	3		
ENGL	214	Literature of the West	3		
RELA	200	Special Projects	Var		
RELA	201	Special Topics	Var		
RELA	242	Gender & Equality	3		
RELA	244	American Cultural Values	3		
RELA	246	Montana's American Indians	3		

## MATHEMATICS

Cours	Courses				
Course	No.	Title	Credits		
MATH	065	Pre-Algebra	3		
MATH	101	Introductory Algebra	4		
MATH	104	<b>Business Mathematics</b>	4		
MATH	108	Intermediate Algebra	4		
MATH	130	College Algebra	4		
MATH	131	College Trigonometry	3		
MATH	161	Math for Health Science	4		
MATH	181	Calculus I	4		
MATH	182	Calculus II	4		
MATH	216	Basic Statistics	3		
MATH	217	Intermediate Statistics	3		

\* Indicates prerequisites needed

 $\mathbf{\alpha}$ 

\*\* Placement in course(s) is determined by admission assessment



## GENERAL EDUCATION CORE TRANSFER

Montana State University College of Technology-Great Falls' approved General Education Core reflects that of Montana State University-Bozeman. In order for this curriculum to be transferable to units of the Montana University System, students are required to fulfill 32 credit hours of course work within each of the following General Education Core categories. A grade of "C" or above in each course is required to satisfy core requirements. Students should consult with the intended receiving institution, however, to determine whether or not additional core courses may need to be taken to satisfy that institution's General Education Core.

## **Communications--6 credits required**

## (3 credits verbal & 3 credits written)

(5 0100	(5 creates verbar & 5 creates written)		
Course	No. Title	Credits	
COMM	130V Public Speaking	3	
ENGL	121W Composition	3	
ENGL	122W Composition II	3	

## Mathematics--3 credits required

Course	No. Title	Credits
MATH	130M College Algebra	4
MATH	131M College Trigonometry	3
MATH	161M Math for Health Science	4
MATH	181M Calculus I	4
MATH	182M Calculus II	4
MATH	216M Basic Statistics	3
MATH	217M Intermediate Statistics	3

## Fine Arts--3 credits required

Course	No.	Title	Credits
ART	101F	Intro to Visual Arts	3
ART	114F	Principles of Visual Design	3
DE	161F	Intro to Design	3
DE	164F	Historic Interiors	3
MUS	107F	History of Rock and Roll #	3
MUS	108F	History of Jazz #	3

MUS	109F Country Music #	3
MUS	212F American Music #	3
MUS	210F Music Appreciation	3

## Humanities--6 credits required

		1	
Course	No.	Title	Credits
ENGL	123H	Literary Forms	3
ENGL	210H	World Literature I#	3
ENGL	211H	World Literature II#	3
ENGL	214H	Literature of the West	3
HIST	106H	History of Western Civ I	3
HIST	107H	History of Western Civ II	3
PHIL232	2H Ba	sic Ethics	3
RELA	242H	Gender & Equality	3
RELA	244H	American Cultural Values	3

## Natural Science--8 credits required

Course	No.	Title Cred	its
BIO	105N	Fund Human Biology	3
BIO	180N	Microbiology & Comm Diseases	4
BIO	210N	Anatomy & Physiology I	3
BIO	209N	Anatomy & Physiology I Lab	1
BIO	211N	Anatomy & Physiology II	3
BIO	212N	Anatomy & Physiology II Lab	1
CHM	150N	Prin of Inorganic Chemistry	3
CHM	151N	Prin of Inorganic Chemistry Lab	1
PHYS	130N	Fundamentals Physical Science	3
PHYS	212N	Physics for Health Science 3	

## Social Sciences--6 credits required

		-	
Course	No.	Title	Credits
BM	249S	Global Marketing #	3
ECON	101S	Principles of Economics	3
ECON	102S	Economics I (Macro) #	3
ECON	201S	Economics II (Micro)	3
GEOG	105S	General Geography #	3
PSY	101S	General Psychology	3
PSY	109S	Lifespan Development	3
RELA	246S	Montana's American Indians	s# 3
SOC	111S	Introduction to Sociology	3

## # Multicultural/Global Issues--6 credits

The courses with the # behind the course title will fulfill the multicultural/global issues requirement as well as a designated core area requirement.

## **Total Credits - 32**

## Programs of Study TRANSFER

## ASSOCIATE OF SCIENCE DEGREE

The Associate of Science (A.S.) Degree is a general transfer degree. The A.S. degree indicates completion of the equivalent of the first two years of a baccalaureate degree and does not officially include a major or minor course of study.

To earn an Associate of Science degree, the following requirements must be met:

- 1. Completion of 60-66 semester credit hours, as follows:
- 2. General Education Core--32 credits, with grades of "C" or above;
  - a) Program Core--29-34 credits with grades of "C" or above. See program section (beginning on page 73) of this catalog for requirements.
- 3. Final cumulative grade point average of 2.0 or above.

## Programs of Study TRANSFER

## ASSOCIATE OF SCIENCE DEGREE TRANSFER TO MONTANA STATE UNIVERSITY-BILLINGS

The College of Business of MSU-Billings has a basic curriclum required for the freshman and sophomore years in **Economics, Finance, Management, and Marketing** and has required the following criteria be met and courses completed in order for students to be eligible for formal admission to the College of Business:

- Completion of A.S. requirements
- "C" or better in all business courses
- 2.25 minimum cumulative GPA

## **General Education Core Requirements:**

**32 credits**(including 6 credits from #Multicultural/Global)

First	Year
-------	------

Course	No	Title	Credits
ACCT	221	Financial Accounting	3
ACCT	222	Managerial Accounting	3
MATH	181	Calculus I	<u>4</u>
		Total	10

## Second Year

Course	No.	Title Crea	lits
BM	255	Legal Environment	3
BM	270	Management Systems	3
ECON	201	Economics I(Microeconomics)	3
ECON	102	Economics II(Macroeconomics)	3
ENGL	124	Business & Professional	2
		Communications AND	
ENGL	127	Technical Report Writing OR	2
ENGL	128	Business & Technical	3
		Communications	
MATH	217	Intermediate Statistics	<u>3</u>
		Total	18

## ASSOCIATE OF SCIENCE DEGREE TRANSFER TO MONTANA STATE UNIVERSITY-BOZEMAN

The College of Business of MSU-Bozeman has a basic curriculum required for the freshman and sophomore years in **Accounting**, **Finance**, **Management**, **and Marketing** and has recommended the following criteria and courses in order for students to be eligible for formal admission to the College of Business:

- 60 Credits earned
- Completion of A.S. degree requirements
- "C" or better in all business courses
- 2.50 minimum GPA cumulative

## **General Education Core Requirements:**

**32 credits** (including 6 credits from #Multicultural/Global)

First Year

## **Business Core Requirements**

Course	No.	Title	Credits
COMM	130	Public Speaking	3*
CS	110	Introduction to Computers	3
ECON	102	Economics I (Macro)	3
MATH	181	Calculus I	4
BM	106	Introduction to Business	<u>3</u>
		Total	13

\* COMM 130 may also fulfill 3 credits of the communication core requirement.

## Second Year

## **Business Core Requirements**

Course	No.	Title C	redits
ACCT	221	Financial Accounting	3
ACCT	222	Managerial Accounting	3
ENGL	127	Technical Report Writing	2
ENGL	124	Business & Professional Comm	2
ECON	201	Economics II (Micro)	3
MATH	216	Basic Statistics	3
MATH	217	Intermediate Statistics	<u>3</u>
		Total	19

## Programs of Study TRANSFER

## ASSOCIATE OF SCIENCE DEGREE TRANSFER TO MONTANA STATE UNIVERSITY-NORTHERN

The Department of Business, MSU-Northern has recommended the following criteria and basic curriculum for the freshman and sophomore years of its Business Technology major with emphasis on Accounting/Finance; Marketing and Small Business Management for transfer:

- Completion of A.S. degree requirements
- 2.0 minimum cumulative GPA

## **General Education Core Requirements:**

**32 credits** (including 6 credits from #Multicultural/Global)

## **Business Course Requirements**

Course	No.	Title	Credits
ACCT	221	Financial Accounting	3
ACCT	222	Managerial Accounting	3
BM	106	Introduction to Business	3
BM	230	Management	3
BM	255	Legal Environment	3
CS	110	Introduction to Computers	3
ECON	201	Economics II (Micro)	3
ENGL	124	Business & Professional Com	m 2
MATH	216	Basic Statistics	3
MATH	217	Intermediate Statistics	<u>3</u>
		Total	29

## BUSINESS MANAGEMENT/ ENTREPRENEURSHIP A.A.S. TRANSFER TO MONTANA STATE UNIVERSITY-NORTHERN

The Department of Business, MSU–Northern, will accept the Business Management/ Entrepreneurship A.A.S. degree for transfer into the **Small Business Management** emphasis of its Bachelor of Science degree in Business Technology. The following are the prerequisite criteria for admission by MSU–Northern:

- Associate of Applied Science degree in Business Management/Entrepreneurship from Montana State University College of Technology—Great Falls;
- Cumulative grade point average of 2.00 or above.

Interested students may contact a transfer advisor at MSU–Northern or the Business Management/Entrepreneurship Advisor at Montana State University College of Technology—Great Falls for information regarding fulfillment of the four-year degree requirements.

## RESPIRATORY CARE A.A.S. TRANSFER TO UNIVERSITY OF GREAT FALLS

The University of Great Falls will accept the Respiratory Care A.A.S. degree for transfer into its four-year degree in **Respiratory Therapy**. The following are the prerequisite criteria for admission by the University of Great Falls:

- Associate of Applied Science degree in Respiratory Care from Montana State University College of Technology—Great Falls
- A minimum of 64 earned semester credit hours with a GPA of 2.00 or above from the associate of applied science degree can be applied to lower division course requirements of the bachelor degree.

Without specifying a course-by-course equivalency, 64 lower division semester hours may be transferred to the UGF transcript of an enrolling student as follows:

Bachelor of Science electives	12 credits	
Math/Natural Science distribution	6 credits	
Major requirements	24 credits	
Distribution or general elective		
requirements	22 credits	

Students may need to demonstrate proficiency in chemistry through a placement examination.

Interested students must contact the University of Great Falls for information regarding fulfillment of degree requirements.

## ASSOCIATE OF SCIENCE DEGREE TRANSFER TO UNIVERSITY OF GREAT FALLS

Students completing the Associate of Science degree may apply for transfer admission to the College of Arts and Sciences, University of Great Falls (UGF), Bachelor Degree in **Computer Systems Integration**.

To be eligible to enter the College of Arts and Sciences as upper division students, lower division general education core, arts & humanities core, and the technical core requirements must be satisfied and are identified below.

The University of Great Falls General Education Core is 35 credits and may be completed from the College of Technology - Great Falls' General Education Core, as listed on page 71. To fulfill the UGF Core Distribution requirements the core must include 3 credits in History, 3 credits in Literature, and 3 credits in Philosophy.

## **Technical Core:**

Course No.	Title C	redits
CS 110	Introduction to Computers	3
CS 119	Concepts of Info Processing	3
CS 120	Internet	1
CS 166	Computer Operating Systems	s 3
CS 205	Database Management	3
CS 220	Electronic Spreadsheets	3
CS 233	Ethical & Legal Environment	t of
	Computing	3
OO 265	Word Perfect	3
	OR	
OO 266	Microsoft Word	3

Accounting	79
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This section includes a brief description of each credit course offered on a regular basis by Montana State University College of Technology—Great Falls.

Each listing includes a course number, course title, number of credits awarded, prerequisites, semesters offered, and course descriptions.

The following letters are used to specify the semesters each course is offered:

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

Courses offered on "Sufficient Demand" are indicated as such in the course descriptions also.

While the semesters each course is offered are shown, students should consult the Class Schedule published prior to pre-registration each semester for the most up-to-date information on course offerings.

General Education core courses are designated by a letter following the course number (e.g. Engl 121W). The following letters are used to specify the core groups:

F—Fine Arts
H—Humanities
M—Mathematics
N—Natural Sciences
S—Social Sciences
W—Written Communication
V—Verbal Communication
#— Multicultural/Global

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.

## **ACCOUNTING**

## ACCT 101 ACCOUNTING PROCEDURES I Credits: 3 Ethlma (F,S)

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. Emphasis is on manual accounting systems.

## ACCT 102 ACCOUNTING PROCEDURES II Credits: 3 (F,S) Prerequisites: ACCT 101, CS 110, or concurrent

This course is a continuation of Accounting Procedures I; additional topics covered include uncollectible accounts, depreciation of plant assets, notes and interest, basic accrual concepts, corporate procedures, the voucher system, petty cash, and inventory systems. Students use integrated accounting software; modules include the general ledger, accounts receivable, accounts payable, inventory, payroll, and financial statement analysis.

## ACCT 190 PAYROLL ACCOUNTING

Credits: 3

(F,S)

Prerequisites: ACCT 101, CS 110, MATH 104

Students will become knowledgeable in the payroll records needed 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.

## ACCT 221 FINANCIAL ACCOUNTING Credits: 3 (F,S) Prerequisites: ACCT 102, CS 110, MATH 104

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 longterm liabilities including present value concepts, corporations and stockholders equity, the statement of cash flows, and financial statement analysis.

## ACCT 222 MANAGERIAL ACCOUNTING Credits: 3 (F,S) Prerequisite: ACCT 221

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, costvolume-profit analysis, master and flexible budgeting, standard costs and variance analysis, capital budgeting and relevant costs.

## ACCT 224 MICROCOMPUTER ACCOUNTING APPLICATIONS

Credits: 3 (F,S) Prerequisites: ACCT 190, ACCT 221, CS 220

Students will complete a variety of accounting projects using microcomputer software.

## ACCT 231 INCOME TAX CONCEPTS Credits: 3

Prerequisites: ACCT 190, ACCT 221, CS 220, MATH 108

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

## <u>ALLIED HEALTH</u>

## AH 101 HEALTHCARE DELIVERY IN THE U.S.

Credits: 2

(F)

(S)

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.

#### AH 108 DISEASE CONCEPTS Credits: 2 Prerequisites: BIO 209, BIO 210

(F,S)

This course is designed to give students in the allied health field knowledge of the general mechanisms of disease and health problems. Covered are the most commonly occurring diseases of each body system (e.g. musculoskeletal, central nervous, cardiovascular, and respiratory). Manifestations of various diseases, treatment methods, and prognosis are explained.

#### AH 140 PHARMACOLOGY

Credits: 2 (F,S,SU)Prerequisite: Successful completion of prerequisite courses for specific programs, or faculty approval.

Students are prepared to safely administer medications. General principles of medication administration, terminology, drug regulation, standard references and legal responsibilities are included as well as major drug classifications and therapeutic implications.

#### FITNESS FOR LIFE AH 150

Credits: 3

(Sufficient Demand)

(F)

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 Exercise laboratory experience allows maintenance. students to apply physical fitness principles.

#### AH 194 BASIC PHARMACEUTICALS Credits: 1

The 200 most common prescribed drugs will be studied as to their purpose, benefits, and side effects.

#### AH 201 MEDICAL SCIENCE

Credits: 3 (S) Prerequisites: BIO 209, BIO 210, BIO 211, BIO 212

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

#### AH 205 HUMAN MOTION AND RESPONSE AH 206 LAB Credits: 4 (S)

Prerequisites: PTA 101, PTA 111

This course is designed to provide students with an understanding of: the human musculoskeletal system relative to the biomechanical elements of normal and abnormal human motion; physiology of exercise and its effects on movement; and osteology and arthrology in relation to muscle action and joint mechanics. The study of goniometry, manual muscle testing, joint mobilization, and athletic taping will also be presented.

## ART

#### 101F INTRODUCTION TO VISUAL ARTS ART Credits: 3 (Sufficient Demand)

This course is an introduction to the world and history of art and artists including architecture, sculpture, painting and minor arts experience via illustrated lecturediscussion and basic studio ventures.

## **BIOLOGY**

### BIO **105N FUNDAMENTALS OF HUMAN** BIOLOGY

Credits: 3

(F,S,SU)

This course is an introduction to the anatomy and physiology of the human body including fundamentals of chemistry, cytology, and histology. Particular emphasis is given to the integration of our cultural heritage with our role within the living world.

#### BIO **180N MICROBIOLOGY AND** COMMUNICABLE DISEASES

Credits: 4 (S) Prerequisite: BIO 211, BIO 212, or consent of faculty

This course is intended to introduce students to basic concepts in microbiology. Aspects of microbial life are examined in relation to growth requirements, reproduction, existence, and disease-producing capabilities. Emphasis is placed on the control of the spread of microorganisms and disease prevention. This course is designed to acquaint students with principles of infectious, communicable disease. Mechanisms of infection, disease process, epidemiology and the body's defenses are discussed.

## BIO 209N ANATOMY AND PHYSIOLOGY I LAB

Credits: 1 Corequisite: BIO 210 (F,S,SU)

This laboratory covers cytology, histology, the integumentary, skeletal, muscular, and nervous systems, excluding the sense organs.

# BIO210NANATOMY AND PHYSIOLOGY ICredits:3(F,S,SU)Prerequisite:BIO 105 or High School BiologyCorequisite:BIO 209

Anatomy and Physiology I is the first in a two-course sequence. It covers the study of the structure and function of the human body. The course includes an introduction to science; foundations of anatomy and physiology; fundamentals of chemistry; cell and some cellular physiology; a survey of the tissues; and the integumentary, skeletal, muscular, and nervous systems, excluding the sense organs.

## BIO 211N ANATOMY AND PHYSIOLOGY II

Credits: 3 (F,S,SU) Prerequisites: BIO 209, BIO 210 Corequisite: BIO 212

This course covers the sense organs and the endocrine, digestive, respiratory, cardiovascular, urinary, and reproductive systems.

BIO 212N ANATOMY & PHYSIOLOGY II LAB Credits: 1 (F,S,SU)

Corequisite: BIO 211

This laboratory covers the sense organs, endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive systems.

## **BUSINESS MANAGEMENT**

## BM106INTRODUCTION TO BUSINESSCredits:3(F,S)

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

# BM203HOSPITALITY MANAGEMENTCredits:3(Sufficient Demand)Prerequisite:BM 106

This course is designed to examine management issues related to the hospitality industries. Emphasis will be placed on customer service, handling difficult customers, and customer satisfaction.

BM 220 SALES Credits: 3 (F)

Sales is a course designed to develop students' knowledge of sales practices and procedures and to develop skills in personal persuasion. Topics covered include selling psychology, prospecting, customer relations, approaches, presentation methods, handling objections, and closing techniques.

## BM 225 RISK MANAGEMENT Credits: 3 (F)

Risk Management is a course designed to introduce the terminology and strategies of the management of personal and business risks. Emphasis will be on the use of insurance to manage risks including life, health, automobile, property, and business risk considerations.

(F,S)

(S)

# BM230MANAGEMENTCredits:3Prerequisite:BM 106

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

## BM 235 MARKETING

Credits: 3 Prerequisite: BM 106

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

#### BM 237 **INTERNET MARKETING** Credits: 1 Prerequisites: CS 110 or consent of faculty, CS 120, CS 121

This course will explore marketing opportunities on the Included in the topics discussed will be Internet. planning, selection of providers, costs, layout, examination of current users, and current developments in Internet marketing strategies.

#### 240 ADVERTISING BM

Credits: 3

Prerequisite: BM 106

This course is designed to acquaint students with the fundamentals and terminology of advertising. Topics covered are the role of advertising, demographic segmentation. advertising psychology, advertising strategies, media strengths and weaknesses, layout and design, and careers in advertising. Class participants will develop their own advertisements using a variety of media.

#### BM 249S# GLOBAL MARKETING

Credits: 3

(F,S)

(S)

(S)

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 is studied.

#### BM 250 **COOPERATIVE WORK** EXPERIENCE Credits: Variable (Sufficient Demand)

Students enrolled in business and technology programs will have the opportunity to receive on-the-job training through the cooperative work experience program. They will obtain approved positions that will be supervised by employers and the instructor/coordinator. The course will also include one hour per week of classroom work.

#### BM 255 LEGAL ENVIRONMENT

BM 106

Credits: 3 Prerequisite:

(F,S)

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.

#### BM 260 **ENTREPRENEURSHIP** Credits: 3 (S) Prerequisite: BM 106

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 business plan for a company of their choice.

#### BM **270 MANAGEMENT INFORMATION** SYSTEMS

Credits: 3

(Sufficient Demand)

This course is an introduction to computer-based information systems used in business. Topics include strategic and managerial uses of information, computer hardware and software, decision support systems, database systems, and control and security procedures. Various application software to analyze business decisions will be utilized.

#### 200 SPECIAL PROJECTS BO Credits: 3-6

Students will apply competencies learned from other accounting, microcomputer, management, or office related courses to complete independent projects. Projects will be considered advanced, work or job related. Prerequisites may be required.

## **BIOSCIENCE TECHNOLOGY**

#### BST 105 ELECTRONICS ESSENTIALS Credits: 3

Prerequisite: High School Algebra or college equivalent

This lecture/lab course provides an introduction to electronic terms and AC-DC concepts. It covers the essential physical principles of modern electronic circuitry and construction of integrated circuits. Emphasis is on the laws and formulas used to analyze circuits. Discussion of technologies, physics, and practical issues surrounding today's most important electronic instrumentation is included.

(F)

#### BST 110 **ELECTRONIC INSTRUMENTATION** AND MEASUREMENTS I Credits: 4

Prerequisites: MATH 108, BST105

(S)

(S)

(F)

This lecture/lab course provides an introduction to ordinary workshop and laboratory instrumentation. Coverage of instrumentation includes an introduction to solid state devices; basic diode and transistor circuits, including power supplies, amplifiers and switching circuits, and operational amplifiers. Information presented in this course establishes a basis for handling, interpreting and understanding the data collected by instruments. It includes practical material oriented toward various fields of measurement; electronic communication, audio, components testing, medical electronics, and servicing.

#### BST 112 ELECTRONIC INSTRUMENTATION AND MEASUREMENTS II (SU)

Credits: 5 Prerequisites: MATH 130, BST 110

This course is a continuation of BST 110 that introduces binary arithmetic, logic, logic symbols, and basic logic circuitry. Sequential logic will be discussed for use in the study of digital timing circuits, counters, registers, and arithmetic circuits used in digital systems. Coverage also includes both analog and digital meters and multimeters; inductance and capacitance measurements; instrument calibration; and low, high, and precise resistance measurements.

#### BST 120 INTRODUCTION TO LABORATORY

## ANIMAL SCIENCE

Credits: 3 Prerequisite: **BIO 210** 

BST 120 is an introduction to laboratory animal science, offering certification as a Laboratory Animal Technician. Topics include scientific fundamentals in laboratory animal science; breeding and husbandry; equipment, environment and hygiene; animal health, signs of disease, and disease prevention; and a brief discussion of surgical and research techniques.

#### 122 LABORATORY ANIMAL BST **TECHNICIAN I**

Credits: 4 Prerequisites: BIO 212, BST 120

BST 122 is an extensive course initiating potential certification as a Laboratory Animal Technologist.

Unique topics covered in this course are management; unique features of common laboratory species; genetics and breeding; infrequently used laboratory animals; quality assurance; gnotobiology and pharmacology.

#### BST 124 LABORATORY ANIMAL **TECHNICIAN II** Credits: 4 (S)

Prerequisite: **BST 122** 

This course is a continuation of BST 122 completing potential certification as a Laboratory Animal Technologist. Discussion of diagnostic techniques and common diseases and treatment of laboratory animals are included as well as anesthesia and experimental modeling and design.

#### BST 130 **BIOLOGY OF LIVING ORGANISMS** Credits: 3 (SU) Prerequisites: CHM 150, BIO 210

Corequisite: BST 131 This course is an introduction to the structural and

functional characteristics of living organisms, with consideration of the evolutionary, cellular, ecological, genetic and reproductive patterns of the five kingdoms of organisms (monera, protista, fungi, plants and animals).

#### **BIOLOGY OF LIVING ORGANISM** BST 131 LAB Credits: 1 (SU)

Corequisite: **BST 130** 

This laboratory course covers the classification and characteristics of organisms from each of the five kingdoms (monera, protista, fungi, plants and animals).

#### BST 140 HAZARDOUS MATERIAL HANDLING/GOVERNMENTAL REGULATIONS Credits: 3 (F)

Prerequisites: CHM 150, BIO 210

This course is a coverage of federal, state, and local governmental agencies responsible for determining and enforcing rules and regulations affecting pollution of the environment; laboratory work; and health and safety of people in the laboratory and industry. Discussion of good manufacturing practices (GMP), quality control (QC), clinical trials, FDA regulations, and other topics related to the handling and manufacture of biological products will be included.

## BST 210 BIOMEDICAL INSTRUMENTATION I Credits: 5

Prerequisite: BST 112

(F)

This course introduces the student to the theory of operation, testing, troubleshooting, and servicing of biomedical instrumentation circuits and instrumentation transducers. Topics of discussion include bioelectric amplifiers, electroradiographs, physiological pressure measurements, cardiac stimulation and life support equipment, respiratory instrumentation and respiratory therapy equipment.

## BST 212 BIOMEDICAL INSTRUMENTATION II Credits: 5 (S) Prerequisite: BST 210

This course is a continuation of BST 210 completing the theory of operation, testing, troubleshooting, and servicing of biomedical instrumentation circuits and instrumentation transducers. Topics of discussion include instrumentation for measuring brain parameters, intensive and coronary care units, operating rooms, medical laboratory instrumentation, medical ultrasound, electrosurgery generators, medical recorders, medical oscilloscopes, hemodialysis machines, radiology and nuclear medicine equipment, computers in biomedical equipment, and electrical safety in the medical environment.

## BST 214 INDUSTRIAL CONTROL SYSTEMS Credits: 4 (F) Prerequisite: BST 112

This course begins with an introduction to the types of transducers used in industry for monitoring and processing operations, along with their control and amplification systems. Other control system topics include instrumentation and their application. relay logic, microprocessor control system applications, and the elements which make up a control system.

## **BST 220 PRINCIPLES OF INHERITANCE** Credits: 3 (F)

Prerequisites: CHM 150, CHM 152, BST 130

BST 220 is an introduction to classical and molecular genetics of prokaryotes, eukaryotes, and viruses. Topics include transmission genetics, quantitative genetics, the study of DNA replication, transcription, translation, regulation of genes, and mechanisms of genetic change.

Core aspects of bacteriology and virology such as structure, growth, metabolism and genetics/molecular biology are emphasized.

## BST 222 METHODS IN BIOSCIENCE TECHNOLOGY I Credits: 3

Credits: 3 (F) Corequisite: BST 220

This lecture/lab course focuses on techniques in cell biology such as protein, extraction, purification, quantification, electrophoresis, enzyme assay and tissue culture.

## BST 224 METHODS IN BIOSCIENCE TECHNOLOGY II

Credits: 4 (S) Prerequisite: BST 222

This lecture/lab course focuses on techniques in molecular biology such as DNA extraction, quantification, electrophoresis, transformation and gene cloning.

## BST 250 EXTERNSHIP IN BIOSCIENCE TECHNOLOGY

Credits: 4-5 (S) Prerequisite: BST 140, consent of program director

BST 250 is an individualized assignment arranged with an agency, business or other organization to provided guided experience in the field.

## <u>CHEMISTRY</u>

## CHM 150N PRINCIPLES OF INORGANIC CHEMISTRY

Credits: 3		(Sufficient Demand)
Corequisite:	CHM 151	

This course is a systematic study of the principles of inorganic chemistry with emphasis on scientific measurement, atomic structure, chemical periodicity, chemical bonding, nomenclature, stoichiometry, chemical reactions, acid-base chemistry, electrochemistry, gas laws and nuclear chemistry.

## CHM 151N PRINCIPLES OF INORGANIC CHEMISTRY LABORATORY

Credits: 1 (Sufficient Demand) Corequisite: CHM 150

This laboratory course provides experimentation dealing with the topics covered in CHM 150.

## CHM 152 ESSENTIALS OF ORGANIC CHEMISTRY Credits: 3

Prerequisites: CHM 150, CHM 151

CHM 152 is an introduction to organic chemistry. This course surveys organic and biochemical molecules salient to organic chemistry and biochemistry. It is especially designed for students aspiring to enter a health occupation. Names, structures and functions of key organic and biochemical molecules are discussed. Some time is spent on metabolism, cellular processes, nutrition and foods.

### CHM 153 ESSENTIALS OF ORGANIC CHEMISTRY LABORATORY Credits: 1

Corequisite: CHM 152

CHM 153 is a laboratory providing experimentation dealing with topics covered in CHM 152.

## **COMMUNICATIONS**

## **COMM 130V PUBLIC SPEAKING**

Credits: 3

Tech Prep

(F,S,SU)

(S)

**(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 COMMUNICATIONS

Credits: 3

## Tech Prep (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.

## COMPUTER TECHNOLOGY

## Credits:3 INTRODUCTION TO COMPUTERS Tech Prep (F,S,SU)

This course introduces students to the concepts and terminology of computer systems and related technology and their impact on individuals and society through lecture and lab format. Hands-on overview using popular microcomputer software provides experience with computers.

## CS 119 CONCEPTS OF INFORMATION PROCESSING

(F,S)

(F,S)

(F)

Credits: 3 Prerequisite: CS 110 or concurrent

This course provides a study of the fundamental concepts of computer systems and their use in operational environments. Students survey hardware components and software programs and their relationship to basic computer operation. The course also includes discussion of current computer related issues such as artificial intelligence, robotics, and the legal aspects of computing.

## CS 120 INTERNET BASICS

Credits: 1 Prerequisites: CS 110 or faculty approval

This course will teach skills in using the Internet as an information and educational resource. Internet components explored will include the World Wide Web, Gophers, FTP, Email and basics of creating a web page.

# CS121WEBPAGE CONSTRUCTIONCredits:2

Prerequisites: CS 110, CS 120

This course focuses on the skills and concepts necessary to create effective web pages that include links, graphics, sound, tables and forms using common HTML editors. Other utilities such as image mapping and graphics editing software will also be utilized.

CS 126 CISCO ACADEMY 1 Credits: 5 (F)

This course is an introduction course in networking fundamentals with both lecture and hands-on activities. The content introduce basic network components and network design as well as OSI standards, networking topologies, IP addressing and subnetting.

## CS 150 INTRODUCTION TO LOCAL AREA NETWORKS Credits: 3 (S)

Prerequisite: CS 110

S)

This course is an overview of local area networks' concepts and terminology emphasizing the elements of a local area network, hardware and software components, topologies, connectivity, network security, current issues and uses of local area networks.

## CS 160 INTRODUCTION TO PROGRAMMING Credits: 3 (S)

Credits: 3 Prerequisites: CS 110 Corequisite: CS 166 or Faculty Approval

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

## CS 166 COMPUTER OPERATING SYSTEMS Credits: 3 (S) Prerequisite: CS 110

This course examines the role of operating system software and other user interfaces. The primary focus will be on the operation of microcompuer operating systems including both single program and multi-tasking operating systems. File management and system/diagnostic utilities will also be examined.

## CS 176 CISCO ACADEMY 2 Credits: 5 (S) Prerequisite: CS 126

This course will focus on network routing and related technologies. The course will include both lecture and hands-on activities and will provide activities in and exposure to routing protocols, router configuration, LAN switching and network wiring.

## CS 205 DATABASE MANAGEMENT Credits: 3 (F,S) Prerequisite: CS 110

This course examines the process of database design using a relation model. Use of applications software focuses on data query, report generation, multiple file relationships, interface techniques, and command file programming. Structured query language, QBE and other languages will be introduced.

## CS 210 NETWORK ADMINISTRATION I Credits: 3 (F) Prerequisite: CS 166

Emphasis is on hands-on management of a common local area network operating system. Topics and activities include product overview, installation, administration, problem resolution, configuration of security parameters and user accounts, console operations, and use of the network.

### CS 211 NETWORK ADMINISTRATION II Credits: 3 (S) Prerequisite: CS 210

This course offers hands-on management using other common local area networking operating systems with continuing focus on problem solving and network administration activities such as security configuration and account setup. Evaluation of other network operating systems, client-server and peer-to-peer networks is included.

## CS 216 MULTIMEDIA USE AND DESIGN

Credits: 3 (F) Prerequisites: CS 120, CS 166, or faculty approval

The many abilities and uses of computer multimedia are explored along with hands-on design and use of interactive programs and authoring systems. This class will also include issues regarding future impact of multimedia on current business management.

## CS 220 ELECTRONIC SPREADSHEETS

Credits: 3		Tech Phep	(F,S)
Prerequisite:	CS 110		

This course will introduce 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 database management. The course content will emphasize mastery of spreadsheet concepts and applications and development of analytical thinking skills.

## CS 221 ADVANCED ELECTRONIC SPREADSHEETS

Credits: 3 Prerequisite: CS 220

throughout all areas.

(S)

(F)

(F)

This course will introduce some of the more specialized features of spreadsheets including financial functions, advanced database management, data tables, WYSIWYG and command language. The course content will emphasize problem analysis, critical thinking, proper spreadsheet layout/design, and command language

## CS 233 ETHICAL AND LEGAL ENVIRONMENT OF COMPUTING Credits: 3 (S)

Basic ethical concepts emphasizing the relationship between ethics and law as they apply to the computing environment. The primary focus of this course is the concept of individual responsibility. This course presumes no formal learning background in ethics or law.

# CS240SOFTWARE INTEGRATIONCredits: 2(S)Prerequisites:CS 220, OO 265

This course explores the features of commonly used software suites as an integrated set of problem-solving tools. Hands-on experience in integration of word processing, spreadsheet, database, and presentation components builds skill in creating multi-application documents.

## CS 260 DATA & COMPUTER COMMUNICATIONS Credits: 3 Prerequisite: CS 150

Corequisite: CS 150

Exploration of data communication and network technologies, hardware, cabling, security, protocols, industry standards, media types, and access methods at the local and wide area network level are studied.

## CS 270 PC TROUBLESHOOTING/ MAINTENANCE Credits: 3

Prerequisites: CS 166

Hands-on training includes servicing microcomputers, basic operational concepts, identification, installation, and

configuration of microprocessors, memory, motherboards, power supplies, floppy and hard disk drives, video monitors, graphics cards, serial and parallel I/O cards, modems, and printers. System teardown and inspection and hardware and software technical service documentation are also featured.

## CS 275 COMPUTER END-USER SUPPORT Credits: 3 (S)

Prerequisites: CS 166, CS 270, Comm 135

This course provides students with training and supporting end-users, techniques for developing and delivering training modules, and techniques for providing ongoing technical support to end-users. Emphasis is on solving problems with users such as debugging, troubleshooting and interaction with users. Discussion and activities involving solving common software and hardware problems and performing routine computer maintenance activities are also addressed.

## CS 280 DESKTOP PUBLISHING Credits: 3 Prerequisite: CS 110

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

## CS 290 SYSTEMS ANALYSIS AND DESIGN Credits: 3 (S)

Prerequisites: CS 166, CS 205, CS 210

The concepts and principles of information systems development are introduced through the application of traditional systems analysis and design. Simulated business activities provide students with the opportunity to develop skills in office and business automation strategies.

## INTERIOR DESIGN

DE 161F INTRODUCTION TO DESIGN Credits: 3 (F)

Introduction to interior design, architecture, and related professions to develop an understanding and appreciation of the elements and principles of design and of the

building environment based on historical and current perspectives is provided.

DE 162 **INTERIOR DESIGN GRAPHICS** Credits: 3 Tech Prec

Interior Design Graphics provides interior design students with a basic knowledge of building structures, construction technique, and building materials. It introduces the technical skills needed to read and produce drawings used in the practice of interior design, including floor plans, interior elevations, reflected ceiling plans, and detail drawings.

#### DE 163 PRESENTATION DRAWING

Credits: 3

(S)

(F)

DE 162, or equivalent Prerequisite:

This course presents the elements of two- and threedimensional design as related to interior representational drawings. Emphasis is on one- and two-point perspective drawings. Addition of color to drawings by use of chalk and colored pencil is introduced.

#### **164F HISTORIC INTERIORS** DE

Credits: 3

(F)

(S)

This course offers exposure to stylistic variations found in interior design of the ancient world and traditional Europe. Students will become aware of how these styles have been the impetus for pre-1900 architecture and decorative arts in America.

#### DE 165 **CONTEMPORARY INTERIORS**

Credits: 3 Prerequisite: DE 164

This course is a continuation of the study of the development of the interior environment from the 19th century to the present. Difference in the basic philosophy between 19th and 20th century design is emphasized.

#### DE MATERIALS OF INTERIOR DESIGN 167 Credits: 3 (F)

The physical properties and characteristics of building materials, with emphasis on those materials used by interior designers, are examined. The course addresses the problems involved in installing and specifying these materials, including building and life safety code constraints. It includes the study of textiles as used in interiors.

#### DE 168 SPACE PLANNING I Credits: 3 F) Prerequisites: DE 161, DE 162

Space Planning I explores the physical and psychological concepts pertaining to interior spaces using the American Society of Interior Designers (ASID)-approved preparation manual for the National Council of Interior Design Qualifications (NCIDQ) test as a guide and exercise source.

#### DE 261 FIELD STUDY

Credits: 3 Prerequisite:

(Sufficient Demand) Completion of all 100-level technical courses; consent of instructor

This course gives students experience in the daily operation of an interior design firm or a related business. It provides experience in dealing with employers, clients, customers and other business persons. Students will encounter opportunities to utilize skills and knowledge acquired in previous interior design courses.

#### DE 262 STUDIO I

Credits: 4 Prerequisite: Completion of all 100-level technical courses

This course is a laboratory experience with a real-life Students will develop a complete design project. presentation, including floor plans, interior elevations, interior perspectives, color board and room finish schedule. Students will make an oral presentation to a jury of design professionals using the presentation boards to illustrate their design.

#### DE 263 **STUDIO II**

Credits: 4 (Sufficient Demand) Completion of all 100-level technical Prerequisite: courses

Studio II is an advanced laboratory experience with a more complex real-life case study. Students will develop a Emphasis is on contract complete presentation. (commercial) design.

(F)

## DE 264 LIGHT, COLOR, AND LIGHTING SYSTEMS

Credits: 3 (S) Prerequisite: Completion of all 100-level technical courses

This course is an introductory study of color theory, including human response to color. It covers the effects of various sources of lighting on color and the basic considerations when selecting lamps and fixtures. Design of lighting systems to obtain desired footcandle levels and illumination quality is included.

## DE 265 PROFESSIONAL PRACTICES

Credits: 3				(Sufficient ]	Demand)
Prerequisite:	Completion	of	all	100-level	technical
	courses; cons	sent	of in	structor	

This course is an introduction to business principles and practices as they relate 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.

## DE 266 INTRODUCTION TO CAD

Credits: 3 Prerequisite: CS 110, DE 162 (F)

This course is an introduction to the fundamentals of computer-aided drafting with emphasis on interior design and architectural applications.

# DE268SPACE PLANNING IICredits: 3(Sufficient Demand)Prerequisite:DE 168

Space Planning II continues exploration of physical and psychological concepts pertaining to interior spaces with emphasis on commercial interiors of increased complexity. Preparation of students for taking the NCIDQ examination in the future is a major objective.

## **ECONOMICS**

# ECON101SPRINCIPLES OF ECONOMICSCredits:3(Sufficient Demand)

This course acquaints students with the theoretical foundation for economic thinking, planning, and policy.

Topics include economic policies, supply and demand, monetary and fiscal policies and practice, trade and trade deficits, monopolies, government influence, and measuring the performance of the economy.

### ECON 102S# ECONOMICS I MACROECONOMICS

Credits: 3

(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.

### ECON 2018 ECONOMICS II (MICROECONOMICS)

Credits: 3

(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.

## **EMERGENCY MEDICAL SERVICES**

## EMS 130 FIRST RESPONDER

Credits: 3 (Sufficient Demand) Prerequisite: Refer to page 46

This course is the nationally recognized emergency medical entry level to the emergency services industry. The course provides didactic and practical experience concerning initial assessment and immediate management of trauma and medical patients. Successful course completion will allow the student to enter the Montana First Responder authorization process. All aspects of authorization/certification are the responsibility of the student.

## EMS 131 FIRST RESPONDER REFRESHER TRANSITION)

Credits: 1 (Sufficient Demand) Prerequisite: Refer to page 46

This training is required every two years for the First Responder to maintain state authorization. The program will review previously learned skills and update the First Responder on new and/or revised material.

## EMS 135 FIRST RESPONDER TO EMT BASIC BRIDGE

Credits: 4 (Sufficient Demand) Prerequisite: Refer to page 46

This course is designed for the currently authorized First Responder who desires to become an Emergency Medical Technician - Basic (EMT-B). The course reviews the knowledge, skills, and objectives of the First Responder. It then provides didactic and practical experience on those objectives that are part of the EMT-B course but not a part of the First Responder course. Successful completion of the course will allow the student to enter the state and national EMT-B certification process. All aspects of authorization/certification are the responsibility of the student.

## EMS 137 EMERGENCY MEDICAL TECHNICIAN BASIC (EMT-B) Credits: 7 (Sufficient Demand)

Prerequisite: Refer to page 46

This course is the nationally recommended minimum level of training for ambulance personnel and is considered the desired level of medical training by many fire departments. The course focuses on skill development in the primary responsibilities of the EMT-B which are to bring emergency medical care to victims of emergencies, to stabilize their condition, and to transport them safely and expeditiously to an appropriate facility. This course is a combination of classroom work and practical experience. Upon successful completion of the course, graduates are eligible to sit for the Montana and National Registry certification examinations. All aspects of authorization/certification are the responsibility of the student.

## EMS 138 EMT - BASIC REFRESHER (TRANSITION)

Credits: 2 (Sufficient Demand) Prerequisite: Refer to page 46

This training is required every two years for the EMT-B to maintain state and national certification. The program will review previously learned skills and update the EMT-B on new and/or revised material.

## EMS 143 EMT – INTERMEDIATE REFRESHER

Credits: 1		(Sufficient Demand)
Prerequisite:	Refer to page 47	

This training along with the EMT-B refresher is required every two years for the EMT-I to maintain state and national certification. The program will review previously learned skills and update the EMT-I on new and/or revised material.

## EMS 145 ADVANCED CARDIAC LIFE SUPPORT

Credits: 1 (Sufficient Demand) Prerequisite: Refer to page 47

This is the American Heart Association course which is considered the national standard of care for advanced providers caring for cardiac patients. The program includes didactic and skills training in cardiac anatomy and physiology, acid base balance, pharmacology, cardiac rhythm interpretation, monitor/defibrillator operation, and patient care algorithms.

## EMS 146 PEDIATRIC ADVANCED LIFE SUPPORT Credits: 1 (Sufficient Demand)

Credits: 1	
Prerequisite:	Refer to page 47

This is the American Heart Association course which is considered the national standard of care for advanced providers caring for pediatric patients in the arrest situation. The course includes didactic and skills training in pediatric anatomy and physiology, assessment, airway management, pharmacology, cardiac rhythm interpretation, monitor/defibrillator operation, and patient care algorithms.

## EMS 148 PRE-HOSPITAL TRAUMA LIFE SUPPORT

Credits: 1		(Sufficient Demand)
Prerequisite:	Refer to page 47	

This course is designed to provide the advanced EMT with trauma specific knowledge and skills. The program emphasizes rapid recognition, management, and transportation of the critical patient. Course topics include mechanism of injury, assessment, advanced airway management, respiratory injuries and management, recognition and management of shock, intravenous therapy, head injuries, spinal injuries and special situations. The program was developed by the National Association of Emergency Medical Technicians and is utilized throughout the United States.

#### EMS 149 **EMT-I ENVIRONMENT** ASSESSMENT

Credits: 2 Prerequisite:

(Sufficient Demand) Formal acceptance into the EMT-I program

Course topics include the professional role of the EMT-I, professional conduct, emergency medical services system design, communications systems, documentation, quality improvement, advanced patient assessment, and a greater understanding of human anatomy/physiology.

#### EMS 150 MANAGING EMERGENCY MEDICAL SERVICES SYSTEMS

Credits: 2 (Sufficient Demand) Prerequisite: Formal acceptance into EMT-Paramedic

This course provides an overview on the operation and management of EMS systems. Topics include history of EMS, system design, medical control, funding customer service, the components of an EMS system, and personnel issues.

#### EMS 151 RURAL EMS MANAGEMENT **SYMPOSIUM**

Credits: 1	(Sufficient Demand)
Prerequisite:	Formal acceptance into EMT-Paramedic

This 2-day course will look at ways to effectively improve rural EMS systems. Topics include controversy of rural EMS, factors of success, recruitment and retention and building communications.

#### EMS 152 PRE-HOSPITAL PATIENT ASSESSMENT

Credits: 1 (Sufficient Demand) Formal acceptance into EMT-Paramedic Prerequisite:

This course provides the EMT-Paramedic student with the knowledge and skills to assess medical and trauma patients in an out-of-hospital situation. The course will delineate the specific assessment and patient history information necessary for various types of patients and provide contrived assessment experience.

#### EMS 153 ADVANCED AIRWAY MANAGEMENT

Credits: 1	(Sufficient Demand)
Prerequisite:	Successful completion of the first semester
	of EMT-Paramedic or formal acceptance
	into the EMT-I program

This course will provide the students with an understanding of the respiratory system, assessment of the respiratory system and modalities of management. Topics include anatomy/physiology, oxygen administration, nasal airways, oral airways, positive pressure ventilation, and methods of intubation.

#### EMS 154 RESPIRATORY **EMERGENCIES** AND MANAGEMENT Credits: 1 (Sufficient Demand) Prerequisite: Successful completion of the first semester

of EMT-Paramedic, EMS 153

This course will provide the students with an extensive understanding of the respiratory system, diseases that affect the respiratory system, assessment of the respiratory system and modalities of management. Topics include anatomy/physiology, gas exchange, and principles of encompassing oxygen administration. management nebulized treatments, nasal airways, oral airways, and methods of intubation.

#### FLUIDS AND SHOCK EMS 157

Credits: 1	(Sufficient Demand)
Prerequisite:	Successful completion of the first semester
	of EMT-Paramedic or formal acceptance
	into the EMT-Intermediate program

This course provides study of the anatomy and physiology of the fluid and electrolytes in the body including types of shock, the relationship between shock and other body systems, effects of intravenous therapy, and initiation and maintenance of intravenous therapy.

#### EMS 158 SKILL LAB I

Credits: 1	(Sufficient Demand)
Prerequisite:	Concurrent with the first semester of
	EMT-Paramedic

This course provides the students with laboratory experience in the areas of assessment and history, basic and advanced airway management skills, and the initiation and management of fluid therapy.

#### EMS 159 FLUIDS/SHOCK AND EMERGENCY PHARMACOLOGY

Credits: 1 (Sufficient Demand) Prerequisites: Successful completion of the first semester of EMT-Paramedic, EMS 157

This course provides an in-depth study of the anatomy and physiology of the fluid and electrolytes in the body including acid/base balance, types of shock, the relationship between shock and other body systems, effects of intravenous therapy, initiation and maintenance of

intravenous therapy, and an introduction to emergency pharmacology including the most commonly utilized medications.

## EMS 203 TRAUMA ASSESSMENT AND MANAGEMENT

Credits: 2 (Sufficient Demand) Prerequisites: Successful completion of the first semester of EMT-Paramedic

This course will provide the students with an extensive understanding of the causes and effects of traumatic insults to the human body. The understanding of trauma will be correlated with prevention and current principles of trauma care and management. 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.

## EMS 211 CRISIS AND STRESS MANAGEMENT

Credits: 1		(Sufficient Demand)
Prerequisite:	Successful co	mpletion of the second
	semester of	EMT - Paramedic program

Students will learn to recognize and manage the short- and long-term effects of abnormal behavior on patients, themselves, and other care providers. Topics will include factors that affect behavior, types of emotional response, safety considerations, management techniques, awareness of abilities and limitations, stress management techniques, effects on relationships and activities to maintain mental health.

## EMS 214 CARDIAC ARREST MANAGEMENT

Credits: 1 Prerequisite: (Sufficient Demand) Successful completion of the first semester of EMT-Paramedic or formal acceptance into the EMT-I program

This course provides an overview of the cardiovascular system and initial methods of management for the cardiac arrest patient. Topics include anatomy/physiology, electrophysiology, assessment and history, and management through electrical interventions.

## EMS 215 CARDIOVASCULAR ASSESSMENT AND MANAGEMENT

Credits: 3 (Sufficient Demand) Prerequisites: Formal acceptance into the EMT-Paramedic program This course provides an extensive overview of the pathophysiology of the cardiovascular system and how disease processes affect the system. Topics include anatomy/physiology, electrophysiology, assessment and history, ECG interpretation, disease processes, and methods of management encompassing pharmacological and electrical interventions.

## EMS 216 CLINICAL INTERNSHIP I

Credits: 2 (Sufficient Demand) Prerequisite: Formal acceptance into EMT-I or EMT-P program

The clinical internship allows the students to integrate knowledge and skills, from the classroom setting, into actual patient care in the hospital and field domain. Students must receive a grade of "Pass" in the clinical setting, or they will be required to repeat the course.

## EMS 226 CLINICAL INTERNSHIP II

Credits: 2	(Sufficient Demand)
Prerequisite:	Successful completion of the first semester
	of EMT-Paramedic, EMS 153, EMS 157,
	EMS 214

The clinical internship allows the students to integrate knowledge and skills from the classroom setting into actual patient care in the hospital domain. Students must receive a grade of "Pass" in the clinical setting or they will be required to repeat the course.

## EMS 230 SKILL LAB II

Credits: 1	(Sufficient Demand)
Prerequisites:	Concurrent enrollment in the second
_	semester of EMT-Paramedic

This laboratory session prepares the student for the practical portion of the national registry exam.

## EMS 231 OB/GYN/NEONATAL/PEDIATRIC CARE

Credits: 1		(Sufficient Demand)		
Prerequisite:	Concurrent	enrollment	in	EMT-
	Paramedic			

This course provides an extensive overview of the female reproductive system, obstetric deliveries, neonatal, and pediatric patients. Topics will include anatomy/physiology, assessment, gynecological emergencies, complications of pregnancy, the delivery process, routine and emergency care of the neonate, and assessment and management of pediatric patients.

#### EMS 232 MEDICAL EMERGENCIES AND MANAGEMENT

Credits: 3 (Sufficient Demand) Prerequisites: Concurrent enrollment in the second semester of EMT-Paramedic

This course will investigate the diverse disease processes, environmental conditions and effects of the aging process on the human body. Assessment, history, and management issues will be discussed for each topic area. Topic areas will encompass deficits concerning the endocrine system, central nervous system, respiratory system, digestive system, and other body systems.

#### EMS 256 CLINICAL INTERNSHIP III

Credits: 6	
Prerequisites:	Su
	COT

(Sufficient Demand) ccessful completion of the second semester of EMT-Paramedic

This course is a continuation of the clinical internship that will allow the students to integrate knowledge and skills from the classroom setting into actual patient care and achieve functional competency. Students must receive a grade of "Pass" in the clinical setting, or they will be required to repeat the course.

## ENGLISH

ENGL 040 WRITING Credits: 3 (F,S)Pass/Fail Basis

As an individualized approach to the understanding and use of basic elements necessary to the appropriate structuring of sentences and paragraphs, this course includes capitalization, punctuation, and parts of speech.

#### ENGL 050 SPELLING & VOCABULARY Credits: 3 (F,S)Pass/Fail Basis

This individualized approach introduces specific techniques for spelling by visual memory, phonics, guidelines, or a combination of the three. Vocabulary knowledge and usage are expanded through the study of roots and affixes and/or specific vocationally relevant word lists.

#### ENGL 115 PRINCIPLES OF SPELLING Credits: 2 (F,S)

A study of spelling principles is investigated through a variety of methods to develop improvement and confidence in spelling.

ENGL 120 INTRO TO COMPOSITION Credits: 3 (F,S,SU)Prerequisite: Qualifying admission assessment score

Introduction to Composition offers experience with sentence construction and paragraph development and provides a review and reinforcement of principles of English grammar and punctuation. Its goal is to develop confidence in the ability to write clear and effective sentences and paragraphs.

## ENGL 121W COMPOSITION I



Credits: 3 Prerequisite: ENGL 120 or qualifying admission assessment score

English 121 offers a clearly defined sequential approach to writing the short essay and the research paper. Emphasis is placed on pre-writing skills, organizational techniques, development of ideas, word choice, sentence structure, referential skills, and patterns of writing, exposition, narration, description and argumentation. Competence in basic sentence structure and writing skills at the paragraph level are assumed.

## ENGL 122W COMPOSITION II

Credits: 3 Prerequisite:

**ENGL 121** 

(S)

Students of this advanced composition course will demonstrate an understanding and application of principles of composition learned in English 121 (Composition I). Emphasis will be placed on essay and report writing utilizing research and documentation skills.

## **ENGL 123H LITERARY FORMS**

Credits: 3

(Sufficient Demand)

This is an introductory course in the art and skill of analyzing and interpreting literature. The course will focus upon four literary genres: short story, poetry, drama, and the essay. Students will learn the strategies for analyzing each literary form in order to gain insight into the author's purpose, strategy, and style. This course includes composition practice.

## ENGL 124 BUSINESS AND PROFESSIONAL COMMUNICATIONS

Credits: 2

(F,S,SU)Prerequisites: OO 107, ENGL 120 or ENGL 121, or consent of faculty

Students of this course will develop the skills to generate clear, concise documents for the world of work. Emphasis is placed on format, tone, style, and organization of business letters, memos, and reports. Course is taught by computer assisted instruction.

## ENGL 127 TECHNICAL REPORT WRITING

Credits: Variable (Sufficient Demand) Prerequisite: Consent of faculty

Technical Report Writing can be tailored to individual and program needs. Examples of projects include instructions, equipment descriptions, feasibility studies, proposals, and manuals. Technical style, format, and graphics can be Course is taught by computer assisted included. instruction.

#### ENGL 128 **BUSINESS & TECHNICAL** COMMUNICATIONS

Credits: 3 Prerequisite: ENGL 121 (S)

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 which emphasize structure, format, and tone for a variety of professional audiences. Course is taught by computer assisted instruction.

## ENGL 210H# WORLD LITERATURE I (ANCIENT THROUGH RENAISSANCE)

Credits: 3

(Sufficient Demand)

This course presents a chronological and critical study of western world literature, in translation, within the historical milieu of ancient times through the Renaissance period.

#### ENGL 211H# WORLD LITERATURE II (17TH CENTURY TO PRESENT) Credits: 3 (Sufficient Demand)

This course presents a chronological and critical study of western world literature, in translation, from non-English and within the historical milieu.

#### ENGL 214H LITERATURE OF THE WEST Credits: 3 (Sufficient Demand)

Selected readings from the literature of the Western United States from 1850 to the present. Works range from the popular "dime" Western to A.B. Guthrie's The Big Sky and James Welch's Winter in the Blood. Poetry, drama, fiction, and essays will be included as well as exploration of "the Western" as film and televisions genre to assess the power of myth and the reality of history in our region.

## FIRE & RESCUE TECHNOLOGY

#### FRS 101 FIREFIGHTER I Credits: 5

(Sufficient Demand)

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

(Sufficient Demand)

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.

\*Firefighter III equivalencies will be accepted until Fall Semester 1999

#### FRS 112 FIRE INSPECTION AND INVESTIGATION

Credits: 3 (Sufficient Demand) 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 learning to an actual situation or problem.

#### FRS 200 SPECIAL PROJECTS Credits: 1

(Sufficient Demand)

Special projects are required to fulfill the completion of FRS 112, 245, 250, 265, 275, 280 and 285. The intent, nature, scope and duration of the project will be determined by the advisor of the Fire and Rescue Technology program.

#### FRS 245 FIRE SERVICE TRAINING AND SAFETY EDUCATION

Credits: 3

(Sufficient Demand)

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.

#### 250 BUILDING CONSTRUCTION FRS Credits: 2 (Sufficient Demand)

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. Students will complete an approved project as a demonstration of learning.

#### FRS **INCIDENT MANAGEMENT &** 265 SAFETY

Credits: 3

(Sufficient Demand)

This course provides the student with an overview of the structure, function and expandability of an Incident Management System (IMS) as well as the command skills necessary to effectively utilize an IMS, guidelines and practice in applying an IMS, resources for implementation of a departmental IMS, and techniques and approaches related to firefighter safety and survival. Students will complete an approved project to demonstrate integration of learning.

#### FRS 275 TACTICAL OPERATIONS (Sufficient Demand)

Credits: 3

This course prepares the student to conduct pre-fire planning, size up, and make tactical decisions for defensive and offensive fireground operations.

#### FRS 280 COMPANY MANAGEMENT (Sufficient Demand) Credits: 3

This course provides the student with the basic skills needed to perform effectively as a leader in the fire and rescue service environment. Subjects addressed include: problem solving, assessing employee needs, decision making, ethics, delegation, and managing the multiple roles of the company officer. Students will have the opportunity to demonstrate their learning through completion of an approved project.

#### FRS 285 HAZARDOUS MATERIALS

Credits: 2

(Sufficient Demand)

The student will learn to recognize the difference between normal fire department operations, hazardous materials operations, and the resources required to successfully mitigate an incident.

## **GEOGRAPHY**

## **GEOG 105S# GENERAL GEOGRAPHY** Credits: 3

(F)

This course presents the fundamental concepts necessary for geographic thinking and introduces the student to the cultural and physical elements of geography which influence and identify various areas of the world. Land formations, weather and climate patterns, regional contrasts, and interrelationships are also studied.

## <u>HEALTH INFORMATION</u> **TECHNOLOGY**

#### **132 MANAGING THE MEDICAL RECORD** HI Credits: 3

This course provides orientation to the medical record department and its organizational interrelationships in healthcare facilities. This course also covers the content and format of the medical record (both conventional and alternative formats); quantitative and qualitative analysis of the record according to standards; and numbering, filing, retention, storage, and destruction of records.

#### HI 156 LEGAL AND REGULATORY ASPECTS OF HEALTHCARE Credits: 2 (F)

This course covers basic knowledge of the legal, regulatory, and ethical aspects of healthcare including: legal principles and processes; state licensure and national accreditation standards; and professional requirements for personal liability, confidentiality, and documentation in the delivery of healthcare to the patient.

## HI 200 HEALTH INFORMATION TECHNOLOGY TRANSCRIPTION

Credits: Variable

Prerequisite: Enrolled in second year of Health Information Technology program

Special Projects and independent studies are available for students by special arrangement within the Health Information Technology Program and the Allied Health Department. Such projects may be classified as advanced or work/job related, and prerequisites may be required. Examples of special projects include transcription skills or specific computer applications in health information.

The intent, nature, scope and duration of the project will be determined by student/instructor collaboration.

No more than 6 Credits of special projects or independent studies may be earned by any one student.

## HI 210 HEALTHCARE INFORMATION

Credits: 4 Prerequisites: HI 132, MATH 161

Course topics include use of research, surveys, and statistical methods for developing healthcare data into information for various requesters, along with data analysis, case-mix systems, and information technologies.

## HI 215 SUPERVISION OF MEDICAL RECORD PERSONNEL

Credits: 3 Prerequisite: HI 132 (F)

(S)

(F)

Supervisory theories and techniques including organizing, directing, motivating, controlling, staffing, evaluating, and problem-solving functions at the mid-management level are the topics of this course in personnel management.

## HI 225 MANAGING THE MEDICAL RECORD DEPARTMENT

Credits: 4 Prerequisites: HI 132, HI 156, HI 215

Financial management topics including budgeting; managerial accounting; and selection, procurement, and maintenance of equipment and supplies are studied in this course. Communication with other areas of healthcare facilities is also covered, including working on committees and professional speaking and writing. Systems analysis cycles, project planning, and computer applications are also studied.

# HI230CLINICAL PRACTICUMCredits: 11Prerequisite:HI 132

(S)

(S)

This course provides students with a basic overview of the medical record department through supervised learning experiences in a simulated clinical site. This class is scheduled for 4 hours per week for 11 weeks of the semester, with 5 hours of class lecture.

## HI 236 INPATIENT CODING

Credits: 3 (F) Prerequisites: AH 201, BIO 209, BIO 210, BIO 211, BIO 212

This class covers the theory and application of ICD-9-CM principles and guidelines for coding and sequencing inpatient diagnoses and procedures. Case mix management, abstracting, and computer applications are also studied. Students code using both actual charts and lab exercises.

## HI 237 OUTPATIENT CODING Credits: 3 Prerequisite: HI 236

Coding outpatient health records using ICD-9-CM and CPT-4 is taught in this course. Topics covered include diagnoses coding guidelines, ICD-9-CM procedure coding, and CPT-4 coding principles for assigning E & M codes, modifiers, and procedure codes.

HI 240 HEALTHCARE QUALITY Credits: 4 (S)

The principles and procedures of quality assurance, utilization review, and risk management which are used to assess the quality of patient care are taught in this class. Methods for identifying variations and deficiencies for follow-up action by use of display (graph) techniques in written reports are also covered, along with the principles and techniques used in Continuous Quality Improvement (CQI).

#### HI 245 **CLINICAL AFFILIATION I**

Credits: 2 Prerequisite: (S)

Completion of all courses in first 3 semesters of program or consent of program director

This course provides students with directed clinical experience in a healthcare facility medical record department including practice of skills in record assembly, analysis, abstraction, confidentiality, retention, retrieval, and statistics. This class is scheduled for 40 hours per week for the last 2 weeks of the semester, with 25 hours of class time. (Each student will be responsible for his/her own transportation to and from the health facility.)

#### HI 290 **CLINICAL AFFILIATION II** Credits: 3 (SU) Completion of all courses in first 4

semesters of program or consent of

Prerequisite:

program director This course provides students with directed clinical experience in a healthcare facility medical record department providing the opportunity to increase technical skills in coding and DRGs, observe management and supervisory situations and apply knowledge by completing projects and solving problems. This class is scheduled for 40 hours per week for the last 3 weeks of the semester, with 15 hours of class time. (Each student will be

#### health facility.) н 292 **TOPICS IN HEALTH**

responsible for his/her own transportation to and from the

# INFORMATION TECHNOLOGY

Credits: 3 (SU) Prerequisite: Completion of all courses in first four semesters

This course provides a forum for reviewing new knowledge, regulations, and standards in the field of health information technology and discussion of classroom, laboratory, and clinical affiliation experiences. Completing job applications, preparing a resume, writing cover and follow-up letters, and job interviews (as both applicant and interviewer) are studied and practiced.

## HISTORY

#### **106H HISTORY OF WESTERN** HIST **CIVILIZATION I**

Credits: 3

(Sufficient Demand)

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.

## HIST 107H HISTORY OF WESTERN **CIVILIZATION II**

Credits: 3

(Sufficient Demand)

This course examines the major political, economic, and cultural developments of western civilization from the 17th century to the present.

## **OCCUPATIONAL THERAPY** ASSISTANT

#### HT 101 INTRODUCTION TO **OCCUPATIONAL THERAPY** (S)

Credits: 3

This course is designed to give students an overview of the field of occupational therapy through presentation of its historical unfoldment, definition, philosophy and theoretical foundations. The role of occupational therapy will be examined through studying the various populations and environments where occupational therapy is involved. A chronological review of the evolvement of the certified occupational therapy assistant will be presented. An introduction to the use of professional journals will be given. Twenty hours of volunteer work in a healthcare setting are required.

#### HT 111 PATIENT MANAGEMENT SKILLS Credits: 3 (F) Prerequisites: HT 101, AH 108

This course introduces students to patient management and training skills with instruction in body mechanics, positioning and transferring and in monitoring patient status during treatment. Application and adjustment of supportive and orthopedic devices will be practiced. Training in adaptive techniques for daily living skills is a major focus of the course.

# HT112DEVELOPMENTAL DYSFUNCTIONCredits: 3(F)Prerequisites:HT 101, AH 108

Students will be familiarized with the disabilities and treatment associated with abnormal development including cerebral palsy, mental retardation, developmental delay, autism, spina bifida, muscular dystrophy and other conditions. Focus will be placed on the needs of clients from birth through aging regarding positioning, self care, independent living, work/leisure and appropriate selection of modalities

# HT115THERAPEUTIC MEDIA ICredits: 3(F)Prerequisite:HT 101

The purpose of this course is to develop the students' technical skills in the use of tools, equipment and machinery as used for major crafts of woodworking, ceramics and sewing. Safety, operation and maintenance of power equipment will be practiced. Lab fee required.

## HT 201 PHYSICAL DYSFUNCTION

Credits: 3 (S) Prerequisite: HT 112, concurrent with HT 205, HT 208

The content of this course includes examination of diseases and conditions frequently encountered in physical disability clinics. Application of commonly used modalities such as gross/fine motor development tasks, cognitive and perceptual remediation activities, strength and endurance building exercises, as well as structured evaluations for these areas, will be discussed. Management skills of the disabled patient such as body mechanics, functional mobility, safety, self care, homemaking, energy conservation, joint preservation and splinting, as well as use of adaptive equipment and techniques, will be taught.

## HT 205 PSYCHOSOCIAL DYSFUNCTION

**(S)** 

Credits: 3	
Prerequisite:	PSY 292, concurrent with HT 208

In this course students will examine the role of the occupational therapy assistant in the psychiatric setting through the study of the history and theory of mental health and O.T.; frames of reference; O.T. process, context, and treatment methods. Experiences will include psychosocial evaluations, treatment simulation, group techniques, and documentation. Professional development

will emphasize self-responsibility, supervision, and leadership in activities programs.

# HT207THERAPEUTIC MEDIA IICredits:3(S)Prerequisite:HT 115

This course introduces students to "activity" as a purposeful and therapeutic approach as used in the practice of occupational therapy. Content includes the theory of activity analysis, adaptation, selection and teaching of activity, the use of tools and materials for minor crafts, hobbies and games, shop safety and maintenance.

### HT 208 CLINICAL PRACTICUM I Credits: 1

Prerequisites: HT 112, concurrent with HT 205

The purpose of this course is to introduce the student to the clinical settings for psychosocial dysfunction and developmental dysfunction and to initiate experiences in structured observation and supervised assistance with patient treatment, documentation, and oral reporting.

## HT 209 DOCUMENTATION

Credits: 2 Prerequisites: AH 108, HT 111 (S)

(S)

This course emphasizes the development of documentation skills required in the clinical practice of occupational therapy and as an activity director.

## HT 210 CLINICAL PRACTICUM II

Credits: 1 (SU) Prerequisites: HT 201, HT 208, concurrent with HT 211

This course provides intermediate experience in the clinical settings for physical dysfunction and eldercare with continuation of structured observation, supervised assistance with patient treatment, documentation, and oral reporting.

## HT 211 ELDERCARE

Credits: 3

Prerequisite: HT 201, concurrent with HT 210

Through this course students will acquire knowledge of the physical, emotional, psychological, and sociocultural issues of the elderly. Pathologies related to aging will be identified; the role of the occupational therapy assistant in the aging process will be defined; and environments, resources, and legal issues of the elderly will be explored.

(SU)

### HT 212 STRUCTURED ASSESSMENTS Credits: 2

Prerequisite: HT 203

(SU)

(SU)

(F)

The purpose of this course is to allow students to learn and practice methods of assessment used in the occupational therapy process. Methods for screening medical records, interviewing techniques, observation skills, and testing procedures will be taught and practiced as will methods for recording and reporting findings pertinent to the occupational therapy process. Lab fee required.

## HT 214 PRACTICE THEORY AND TECHNIQUES

Credits: 3 Prerequisites: HT 201

The second of two modalities courses, students continue to build skills in patient management with emphasis on treatment techniques. Techniques appropriate to occupational therapy in psychosocial, developmental, and physical disabilities practice will be included

## HT 215 WORK-ORIENTED TREATMENT Credits: 2 (SU)

Prerequisites: HT 201, HT 205

This course guides the OTA student in examining occupational therapy standards, roles and intervention in a variety of work-related services. Special treatment techniques, equipment and skills will be introduced.

## HT 220 CLINICAL AFFILIATION I

Credits: 5 Prerequisite: Completion of all course work and permission of program director

This is one of two six-week assignments under the supervision of a registered occupational therapist or certified occupational therapy assistant for advanced clinical experience in the pediatric or geriatric psychosocial treatment setting. Successful completion of this affiliation is required for graduation and eligibility for taking the certification examination.

## HT 230 CLINICAL AFFILIATION II

Credits: 5 (F) Prerequisite: Completion of all course work and permission of program director

This is one of two six-week assignments under the supervision of a registered occupational therapist or

certified occupational therapy assistant for advanced clinical experience in the physical dysfunction treatment setting. Successful completion of this affiliation is required for graduation and eligibility to take the certification examination.

HT240ADMINISTRATIVE PROCEDURESCredits: 2(F)Prerequisite:HT 230

The emphasis of this course is placed on professional attitude, conduct, standards of practice, code of ethics, patient rights and legal issues relative to occupational therapy practice. The leadership role of the certified occupational therapy assistant will be examined.

## LIBRARY

LIB 221 INFORMATION LITERACY Credits: 3 (1

(F)

Information is more than something you need to finish off that term paper in college. Many employers for example, value those who are able to find and use information skillfully. The term "information literate" is used to describe those who are able to access, analyze and use information to solve a problem or make a decision. Accessing information has become much more complex in recent years. Therefore, this class is designed to help you become "information literate." As a consumer of information, it is also important to be aware of and think about the social issues surrounding the Information Age, which this class will also help you do. The underlying theme of this course is to evaluate and apply critical thinking skills to information.

## **MATHEMATICS**

MATH 065 PRE-ALGEBRA Credits: 3 Pass/Fail Basis

(F,S,SU)

Basic concepts relating to fractions, decimals, ratios, proportions, percent and simple equations are offered as a review and/or preparation for further studies in mathematics.

## MATH 085 PRE-ALGEBRA

Credits: 1 (Varied) Topics include number systems, integers, fractions, decimals, percents, variable expressions, linear equations, and selected geometry topics.

## MATH 101 INTRODUCTORY ALGEBRA

Credits: 4 Prerequisite: (F,S,SU) Qualifying admission assessment score or consent of faculty

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, scientific notation, polynomials, factoring trinomials, solving equations, systems of equations, and graphing quadratic equations. 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.

## MATH 104 BUSINESS MATHEMATICS

Credits: 4 Prerequisite: (F,S,SU) Qualifying admission assessment score or consent of faculty

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.

## MATH 108 INTERMEDIATE ALGEBRA Credits: 4 (F,S)

Prerequisite: Math 101 or qualifying admission assessment score within the last 12 months

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, conic sections, and exponential and logarithmic functions.

## MATH 130M COLLEGE ALGEBRA

Credits: 4			(Suffic	ient I	Deman	d)
Prerequisite:	MATH 108 or qualifying admission					
_	assessment	score	within	the	last	12
months						

An extended study of algebra provides students with an avenue in which to solve a variety of problems logically and to prepare students for further studies in mathematics and computer science. This course includes conics, fundamental properties of real and complex numbers, exponential and logarithmic functions, matrices and determinants, mathematical induction, series and sequences, and the binomial theorem.

## MATH 131M COLLEGE TRIGONOMETRY

Credits: 3 (Sufficient Demand) Prerequisite: MATH 130 or qualifying admission assessment score within the last 12

months

An extensive look at trigonometric functions and identities, Law of Sines and Cosines, polar coordinates, inverse functions, vectors, and parametric equations.

## MATH 161M MATH FOR HEALTH SCIENCE

Credits: 4 (F,S,SU) Prerequisite: MATH 101 or qualifying admission assessment score within the last 12 months

This course prepares allied health students for the mathematics required in their profession. Topics investigated include: inductive reasoning; logic; mathematical number systems; linear, quadratic. exponential, and logarithmic functions; graphing; geometry of triangles; 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.

## MATH 181M CALCULUS I

Credits: 4 (F) Prerequisites: MATH 130, MATH 131 or qualifying admission assessment score within the last 12 months

Limits, continuous functions, derivatives of trigonometric functions, implicit differentiation, antiderivatives, mathematical modeling, analytic geometry, integration, and fractional powers are studied.

## MATH 182M CALCULUS II

Credits: 4 (S) Prerequisite: MATH 181 or qualifying admission assessment score within the last 12 months

Applications of definite integrals, transcendental functions, techniques of integration, sequences and series, polar coordinates, conic sections, vectors, lines and plans in space, parametric curves, and cylinders are studied.

#### **MATH 200** MATH SPECIAL PROJECTS Credits: Var. (Sufficient Demand)

Special projects and independent studies are available for students by special arrangements within the Related Instruction Department.

## MATH 216M BASIC STATISTICS

Credits: 3 (F,S)MATH 101 or qualifying admission Prerequisite: assessment score within the last 12 months

This course presents concepts, principles, and methods of statistics from two perspectives: descriptive and inferential. Statistical topics include organizing data, sampling, measures of central tendency, probability, correlation, random variables, hypothesis testing, confidence intervals, and inference.

### MATH 217M INTERMEDIATE STATISTICS (S)

Credits: 3

Prerequisite: MATH 216

This course studies binomial distributions, simple and multiple linear regression, confidence intervals, F tests, and one-way analysis of variance. Statistical analyses are performed using computer software packages.

## DENTAL ASSISTANT

#### MD 115 ORAL ANATOMY

Credits: 3 (F.S sufficient demand)

This course covers anatomic features of the teeth, head, and neck. It also includes oral embryology, histology, and physiology.

#### MD 117 DENTAL MANAGEMENT

(F,S sufficient demand) Credits: 2 Co-requisite: OO 250

This course exposes students to various reception procedures and duties commonly expected in a dental office. These include charting systems; patient records; insurance forms; collections; financial arrangements; and mathematics. Students will also study history, ethics, and jurisprudence as related to dental practice. MD 117 Dental Management runs concurrently with OO 250 Computer in Medical/Dental Office.

#### MD 120 **ORAL RADIOLOGY I** (F,S sufficient demand) Credits: 3 Prerequisite: MD 115, or concurrent

This course is the first of a series of two courses. Content in this course includes the history of oral radiography, radiation physics, x-ray equipment and supplies, radiation, health and safety, infection control, landmark identification and mounting, and darkroom procedures.

#### MD 123 CHAIRSIDE I

Credits: 4		(F,S sufficient demand)
Prerequisite:	MD 115	

The Chairside I course covers all aspects of a working dental practice. It includes the working knowledge of dental instruments, equipment, materials, and procedures. Occupational safety and infection control in the dental office is emphasized.

#### 211 CLINICAL SPECIALTIES MD

(F,S sufficient demand) Credits: 3 Prerequisites: MD 115, MD 223, or concurrent

The Clinical Specialties course includes an introduction to six dental specialties: oral surgery, endodontics, periodontics, pediatric dentistry, orthodontics, and prosthodontics.

#### MD 215 DENTAL SCIENCE

Credits: 3 (S,SU sufficient demand) MD 115, or concurrent Prerequisite:

This course includes an introduction to four specific science based subjects: microbiology, oral pathology, pharmacology and management of medical and dental emergencies. Emphasis will be placed on classification and transmission of microorganisms, drug classifications and inter actions, prescription writing, identifications of diseases and other abnormalities of the oral cavity and medical and dental emergencies in the dental office.

#### MD 222 ORAL RADIOLOGY II

Credits: 3		(S,SU sufficient demand)
Prerequisite:	MD 120	

Oral Radiology II is a continuation of Oral Radiology I and includes both didactic and laboratory instruction. Content in this course includes intraoral (bitewing, paralleling, and bisecting) and extraoral (occlusal, panoramic, and radiographic specialty) techniques, radiographic identifying and correcting faulty interpretation, radiographs, radiography for special patients, and patient

education. Students are required to obtain a "prescription patient" for final full mouth series.

#### MD 223 **CHAIRSIDE II**

Credits: 4 (S,SU sufficient demand) MD 123 Prerequisite:

Chairside II is a continuation of Chairside I with an emphasis on expanded functions for the dental assistant set by the Montana Board of Dentistry.

MD PREVENTIVE DENTISTRY 225 Credits: 3 (F sufficient demand, S) Prerequisite: MD 115

The Preventive Dentistry course is the study of the oral plaque diseases and the prevention of these diseases. Special sections include oral hygiene techniques, fluoride, nutrition, and patient education and motivation. Students also complete an in-depth preventive patient project as part of the requirements for this course.

#### MD 231 CLINICAL OFFICE SEMINAR

Credits: 1 (SU,F sufficient demand) Prerequisite: MD 222, MD 223, concurrent with MD 232

Clinical Office Seminar introduces students to job search strategies, preparation of personal resumes, cover and follow-up letters, interviewing techniques and completing exit interviews. Assignments for clinical rotations are also made to the students in this course. Special review attention is paid to infection control and current OSHA standards.

#### MD 232 **CLINICAL OFFICE PRACTICE**

Credits: 9 (SU,F sufficient demand) Prerequisites: MD 222, MD 223

This course includes rotated extramural clinical office experience in the dental community and Malmstrom Air Force Base Dental Clinic. Students actively participate in the operation of the dental practice as dental assistants in training.

## MODERN LANGUAGE

In this course, the student will have an opportunity to develop a basic syntactic knowledge of American Sign

conversational skills. Vital aspects of deaf culture and

community will be incorporated. The direct experience

(ASL), basic vocabulary and basic

(F,S)

#### ML 100 INTRO TO AMERICAN SIGN LANGUAGE

Credits: 3

Language

method, using ASL, will be used to enhance the learning process. Students must successfully complete this course prior to being accepted into the Interpreting and Transliterating Preparation Program.

#### ML **110 RUSSIAN CULTURE & LANGUAGE** Credits: 3 (Sufficient Demand)

This introductory course is designed to "hook" students into learning Russian while enjoying it. Appealing to one's natural curiosity, the course involves learning and practicing the alphabet, taking a new Russian name, understanding Russian customs and manners, and learning vocabulary for everyday activities. Students will be asked to consider comparisons of their own culture to that of the Russian culture. Having an instructor who is native Russian and also a teacher of English will enrich each session.

## PRACTICAL NURSE

#### MN 134 MEDICAL/SURGICAL NURSING Credits: 8 (S,SU)

Prerequisite: Faculty Approval

This course guides students through the nursing process when planning nursing care for common diseases of the urinary (including fluids and following systems: electrolytes), endocrine, integumentary, neurological, sensory, gastrointestinal, respiratory, musculoskeletal, cardiovascular, blood disorders, cancer, and sensory. The pathophysiology, etiology, signs and symptoms, treatment modalities, pharmacology, physical and psychosocial aspects as well as bioethical, cultural diversity, and discharge planning are included with each disease process.

#### 141 PERSPECTIVES OF NURSING MN Credits: 1 (F,S)

This course includes orientation to nursing, with emphasis on the history of nursing, nursing education, healthcare delivery systems, ethical/legal considerations, awareness of the working environment, an individual's responsibility in professional relationships, understanding of patients to include religious and cultural diversity and the skills required for the practical nurse in the leadership role.

#### MN 146 INTRO TO NORMAL & CLINICAL NUTRITION

Credits: 3 (F,S)Prerequisite: Faculty approval

This course is a study of the science of nutrition which includes an understanding of nutrient absorption, digestion, metabolism, transportation, utilization, and

excretion. A comprehension of community nutrition and of applied nutrition during the human life cycle for health maintenance and clinical needs during the disease state is also discussed.

#### 155 NURSING FUNDAMENTALS I MN Credits: 6 (F,S)Prerequisite: Faculty Approval

This course provides students with introduction to the nursing process using nursing diagnosis, assessment, observation, reporting, and documentation.

The students are provided basic concepts of wellness, normal laboratory values, and physiological and psychological aspects including communicable diseases and nosocomial infections. Universal precautions are stressed. Included are concepts related to bioethical considerations and cultural diversity of patient care throughout the life cycle.

Upon completion of this course students will be able to safely deliver essential basic skills and show knowledge and concern to patients in the geriatric setting.

#### MN 156 NURSING FUNDAMENTALS II

Credits: 4 Prerequisites: Faculty approval and successful completion of the first semester (S,SU)

This course provides complex nursing skills, knowledge, and attitudes necessary to care for the acutely ill patient. Students will be given the opportunity, in a lab setting, to practice these more complex nursing skills.

#### MN 158 MEDICAL/SURGICAL CLINICALS Credits: 6 $(\mathbf{F}.\mathbf{S})$

Prerequisites: Faculty Approval

This course provides advancement from in-depth to complex nursing skills, knowledge, and attitudes necessary to care for the acutely ill patient. An emphasis is placed on nursing team interrelationships, communications, and applications of the nursing process in the clinical setting. This clinical includes experiences in medical/surgical, rehabilitation/neurological, and progresses to the patient management rotation, which includes a charge nurse component. Students are also rotated to selected observational specialties (e.g., home health, surgical daycare, and ambulating care) on an individual basis. The students will also be responsible for the practical nurse role in IV therapy. The students are expected to develop competence in all areas at the practical nurse level.

If a student obtains less than a grade of "satisfactory" (75%) in any portion of this course, the entire course must be repeated.

(F,SU)

#### MN 236 MENTAL HEALTH

Credits: 2 Prerequisite: Faculty Approval

This course provides students theoretical concepts that provide a basis for understanding stressors and behaviors associated with socio/psychological disease processes. Common medical and nursing interventions employed in treatment of mental health dysfunctions are included.

MN	243	MATERNAL CHILD NURSING
Credits	s: 7	(F,SU)
Prereq	uisite:	Faculty approval and successful
		completion of previous courses in the
		Practical Nurse program.

This course is designed to assist students in learning specialized skills used in the nursing care of the woman, infant, child, and family unit. The students will gain knowledge in common disease processes of the reproductive systems; including STD's, obstetrical nursing, normal and abnormal pregnancy, labor, and delivery. The nursing care of the woman throughout pregnancy and postpartum as well as the care of the newborn will be covered. Emphasis will be placed on anticipatory guidance from newborn through adolescence and use of the nursing process in caring for the hospitalized child with common childhood disorders.

The clinical component of this course includes experiences in maternal and pediatric nursing. If a student obtains less than a grade of "satisfactory" (75%) in any portion, theory or clinical, the entire course must be repeated.

#### MN NURSING ISSUES & TRENDS 246 Credits: 1 (F,SU)Prerequisite: Students must be in the last semester or

term of the Practical Nurse program and have successfully completed all previous courses.

This course provides students with information which will enable them to function as members of the healthcare delivery system. It includes information on job application, retention, resignations, professional growth, and responsibilities. Community health agencies,

advanced educational programs, and patient management are also included. Students will take the National League of Nursing (NLN) test and receive an application for the State Board Examination.

# NURSING ASSISTANT HOME HEALTH CARE

#### NA 110 NURSING ASSISTANT Credits: 5 (Sufficient Demand)

This course offers students the opportunity to learn the basic concepts, medical terminology, and nursing procedures that contribute to the comfort, safety, and treatment of the client in the medical care setting. It consists of 70 hours in the classroom and nursing laboratory, and 24 hours of practical experience in a local nursing home. Successful completion of this course prepares the student to take the state written and skills tests, leading to certification as a nursing assistant.

# MEDICAL ASSISTANT

(S)

# MO138CLINICAL PROCEDURES ICredits:3

Prerequisite: Consent of faculty

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

#### MO 200 SPECIAL PROJECTS Credits: Variable

Special projects and independent studies are available for students by special arrangement within the Allied Health Department. Such projects will generally be classified as advanced studies, and prerequisites may be individually required. The intent, nature, scope and duration of the project will be determined by student/instructor collaboration. No more than 12 credits through special projects or independent studies may be earned by any one student.

# MO238CLINICAL PROCEDURES IICredits: 3(F)Prerequisite:MO 138

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.

### MO 241 CLINICAL REVIEW

Credits: 1 (S) Corequisite: MO 242

This seminar is designed for students participating in MO 242. It features discussions of clinical topics and situations.

### MO 242 EXTERNSHIP

Credits: 4	(S)
Prerequisite:	Consent of faculty and minimum grade of
	"C" in MO 238

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.

# **RESPIRATORY CARE**

### MR 140 RESPIRATORY CARE CLINIC I Credits: 5 (S)

Prerequisite: Consent of faculty

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.

MR 141 RESPIRATORY CARE CLINIC II Credits: 5 (SU)

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.

### MR 150 RESPIRATORY CARE Credits: 2

(F)

Respiratory Care introduces new respiratory therapist students to the field of respiratory care. Course content includes respiratory care organizations, physical principles in respiratory care, medical terminology, respiratory drugs, medical ethics, and patient communications.

### MR 155 RESPIRATORY PHYSIOLOGY Credits: 3 (F)

Respiratory Physiology covers structures and functions of the circulatory and respiratory systems. Topics studied are blood, the heart, blood vessels, respiratory structure, the physics of gas pressure, ventilation, regulation of ventilation,  $O_2$  and  $CO_2$  transport, ventilation and perfusion balance, acid-base balance, and interpretation of arterial blood gases.

### MR 170 RESPIRATORY CARE EQUIPMENT I

Credits: 4

(F)

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.

### MR 171 RESPIRATORY CARE EQUIPMENT II Credits: 4 (S) Prerequisite: MR 170

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: MA-I, MA-II, MA-II+II, 7200a, Bear I, II, III, Servo 900C, BP 200, Baby Bird, and, Bear Cub 2001 and Infant Star.

Other areas such as arterial blood gas techniques, transcutaneous gas monitoring, hyperbaric oxygen therapy, mixed gas therapy, ventilator weaning, and pressure support ventilation will also be investigated.

# MR180VENTILATOR MANAGEMENTCredits:2(S)

This course covers ventilator management of the adult patient in the intensive care setting. Content includes oxygenation and ventilation, ventilation techniques, equipment, and monitoring.

# MR240RESPIRATORY CARE CLINIC IIICredits:7(F)MR241RESPIRATORY CARE CLINIC IVCredits:7(S)

Students will be supervised in in-hospital practice of advanced therapeutic and diagnostic respiratory care procedures including pulmonary function testing, arterial blood gases, intubation, continuing education, pulmonary rehabilitation, newborn and adult intensive care, and supervisory management. These courses extend through two semesters.

MR	245	RESPIRATORY CARE CLINICAL SEMINAR I
Credits	s: 1	(F)
Prerequ	uisite:	Concurrent with MR 240
MR	246	RESPIRATORY CARE CLINICAL SEMINAR II
Credits	s: 1	(S)

These courses consist of classroom discussion of current clinical issues and student inservice presentations. They extend through two semesters.

### MR 250 HEMODYNAMIC MONITORING Credits: 3 (F)

Hemodynamic Monitoring covers the management of the circulatory system in the intensive care setting. Content includes ECG interpretation, monitoring, and management of cardiac function.

(S)

### MR 255 PULMONARY ASSESSMENT

Credits: 2 Prerequisite: Consent of faculty

This course is a study of the diagnostic techniques and procedures including interview and history taking, chest assessment, chest radiology, laboratory findings, and arterial blood gases. Information will be used to investigate pulmonary diseases.

### MR 260 NEONATAL RESPIRATORY CARE Credits: 2 (SU)

Neonatal Respiratory Care is an infant intensive care course. The student will study fetal to neonatal transition, assessment of the newborn, cardiopulmonary disorders of the newborn, and respiratory therapeutic procedures for the newborn.

MR265PULMONARY REHABILITATIONCredits: 1(F)Prerequisite:Consent of faculty

Rehabilitation for the chronic lung disease patient is stressed in this course. Areas discussed include selection of candidates, assessing pulmonary dysfunctions, rehabilitation techniques, biofeedback, home oxygen therapy, psychological factors, patient education, starting a pulmonary rehabilitation program, home care, and patient nutrition.

#### MR 273 PULMONARY FUNCTION TESTING Credits: 1 (F)

Pulmonary Function Testing is a study of pulmonary diagnostic testing. Course content includes pulmonary function normal values, lung volume tests, ventilation and ventilatory control tests, spirometry, gas distribution tests, diffusion tests, pulmonary function equipment, and quality assurance in the pulmonary function lab.

### MR 275 PULMONARY DISEASES Credits: 2 (S)

Pulmonary Diseases surveys etiology, epidemiology, diagnosis, pathology, treatment, and prognosis of diseases of the lungs and diseases which affect the lungs. Diseases studied include pneumonia, tuberculosis, fungal diseases, asthma, RDS, COPD, sleep apnea, pulmonary embolus, cystic fibrosis, lung cancer, and AIDS.

### MR 280 SUPERVISORY COMMUNICATIONS Credits: 2 (F)

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, and motivating. Practical respiratory supervisory case studies provide student participation requiring role-play in interpersonal communications, problem solving, and critical thinking.

# <u>MUSIC</u>

#### MUS 107F# HISTORY OF ROCK AND ROLL Credits: 3 (Sufficient Demand)

Study of the history, music, poetry (lyrics) and impact on American society of Rock and Roll music. Includes pre-1950 sources, the Rock and Roll era of the '50s, the Rock era of the '60s, the '70s, and the contemporary Rock styles of the '80s and '90s.

MUS108F# HISTORY OF JAZZCredits:3(Sufficient Demand)

Designed to define jazz as precisely as possible from its earliest sources to the present. Emphasis on the nature and processes of jazz, particularly on its historical background and development in the United States.

### MUS 109F# COUNTRY MUSIC

Credits: 3

(Sufficient Demand)

A survey of folk and country music in the United States from its beginnings to the present. Includes history, music, poetry (lyrics), and impact on American society.

MUS210FMUSIC APPRECIATIONCredits:3(Sufficient Demand)

A comprehensive course introducing the theory, history, and literature of music. Through guided listening, the course is designed to develop both an aural and an intellectual understanding of music

MUS 212F# AMERICAN MUSIC

Credits: 3 (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.

# **OFFICE TECHNOLOGY**

OO 107 KEYBOARDING I Credits: 3 hep (F,S)

This course is an introduction of microcomputer keyboarding techniques using the touch system. Lessons cover the keyboard, basic skills, and an introduction to common business formats.

### OO 108 KEYBOARDING II

Credits: 3

(F,S)

Prerequisites: OO 107, or challenge, OO 265/266, or concurrent

Students develop microcomputer keyboarding skills by completing drills and business formats designed to improve concentration, speed, and accuracy.

# OO 173 ELECTRONIC CALCULATORS

Credits: 2 (1/2 sem ) (F,S) Prerequisite: MATH 104

Students master the touch method of entering data on the ten-key numeric keyboard. Speed and accuracy are emphasized on desktop calculators. Machine functions are used to solve common mathematical business problems.

### OO 179 RECORDS MANAGEMENT Credits: 3 (F,S)

This increasingly comprehensive course introduces the complex management of records including setting up practical systems utilizing the four basic formats: alphabetic, subject, numeric, and geographic. Techniques in managing information and systems are discussed; advantages and disadvantages of systems are analyzed and compared; forms management is utilized; controls involving requisitioning, charging, following-up, transferring, storing, and disposing of information are studied.

### OO 180 LEGAL STUDIES I Credits: 4

Terms commonly used in the legal profession are introduced. Students will learn to define the terms and use them in legal context. In addition, students will be introduced to the legal field through the study of court structures and systems, civil litigation, and criminal and family law. This course is also designed to equip students with knowledge of procedures and with the basic attitudes, skills, and ethics required of a legal office employee.

OO 181 LEGAL STUDIES II Credits: 4 (S) Prerequisite: OO 180

Students continue their introduction to the legal field through the study of wills and probate, real estate, partnerships, corporations, bankruptcy, contracts, agency and legal research. This course is also designed to equip the students with knowledge of procedures and with the basic attitudes, skills, and ethics required of a legal office employee.

### OO 185 BASIC MEDICAL TERMINOLOGY Credits: 4 (F,S)

The goals of this course are to promote a 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. A 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 a knowledge of basic scientific and specialty areas in healthcare practice.

### OO 191 BASIC ICD-9-CM

Credits: 1 Prerequisite: OO 185, or consent of faculty

ICD-9-CM is an insurance coding system designed for those seeking basic knowledge in the classification of diseases and procedures. This system specifically is used to identify illness and disease diagnoses. Focus will be on accurate coding and will assist in developing knowledge to ensure quality coding for insurance carrier reimbursement.

### OO 192 CPT-4

(F)

Credits: 1 Prerequisite: OO 185, or consent of faculty

This course will focus on methods of accurate, quality coding using CPT-4, a coding system designed to identify medical procedures and treatments performed by medical professionals for reimbursement by insurance carriers and other third-party payers.

### OO 193 INTERMEDIATE ICD-9-CM

Credits: 1 Prerequisite: OO 185, or consent of faculty

Students will learn the coding principles and instructions for accurate ICD-9-CM coding of diagnosis and procedures in the areas of obstetrics, perinatal, injury and the use of V codes.

# OO241MEDICAL OFFICE PROCEDURESCredits: 2(F,S)Prerequisite:CS 110, OO 185,

This course will provide information on basic procedures used in the medical office. The emphasis is on medical law and ethics, insurance processing, patient billing, and the medical record. Students will be introduced to medical office software.

### OO 250 COMPUTERS IN MEDICAL/DENTAL OFFICE

Credits: 1

(F, S sufficient demand)

This course will provide dental and medical students with the opportunity to apply concepts learned in Medical Office Procedures and/or Dental Management course by utilizing a medical/dental office package. Students will work with patient records and medical databases to set up patient accounts, schedule appointments, bill patients and third party payers, process payments and adjustments, and produce a variety of reports.

### OO 255 MEDICAL TRANSCRIPTION I

Credits: 3 (F) Prerequisite: CS 110, OO 108, OO 185, or consent of faculty

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.

#### OO 256 MEDICAL TRANSCRIPTION II Credits: 3 (F)

Prerequisites: OO 255

This course is designed to increase speed and accuracy in transcribing medical data with exposure to advanced technical language on a case-by-case basis. Special attention is on speed, accuracy, production, style, and forms in medical use.

### OO 260 MACHINE TRANSCRIPTION

Credits: 3 Prerequisite: CS 110, OO 265, or concurrent

Students review and apply grammar, punctuation, formatting, and word usage rules. Proofreading and listening skills are emphasized in the transcription of mailable business documents.

(F,S)

### OO 262 MARKETING YOURSELF FOR EMPLOYMENT

Credits: 1

(Sufficient Demand)

(F,S)

(F,S)

This is an introductory course designed to help a student market him/herself to potential employers. The student will learn about assessing work skills, developing strategies to improve personal effectiveness, presenting effective employment documents, and communicating skills and aptitudes in an employment interview.

### OO 265 WORDPERFECT

Credits: 3 (F) Prerequisite: CS 110, OO 107, or consent of faculty

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, printing, headers and footers, columns, file management, graphics, math features, fonts and other print features, tables, sort and select, merges, macros, and reference tools.

# OO 266 MICROSOFT WORD Mile Credits: 3

Prerequisite: CS 110, OO 107, or consent of faculty

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.

00 276	SPEEDWRITING I
Credits: 3	(Sufficient Demand)
Prerequisite:	OO 107

The fundamental principles of speedwriting are introduced in this course. It is designed for students who have had no previous shorthand or speedwriting experience. In addition to speedwriting theory, students begin taking dictation and developing speed.

### OO 278 SPEEDWRITING II

Credits: 3 (Sufficient Demand) Prerequisites: OO 108, OO 276, OO 260, concurrent or consent of instructor

Speed in taking dictation and accuracy in transcribing mailable documents are emphasized in this course. Competencies in spelling, punctuation, and proofreading are emphasized.

# OO285LEGAL TRANSCRIPTION ICredits:3(F)Prerequisites:OO 180, OO 181, OO 260 or concurrent

Students prepare legal documents and correspondence from machine dictation involving civil litigation and family law. Competencies in transcribing, document formatting, punctuating, spelling, and utilizing legal terminology are important objectives of this course. Advanced word processing applications are emphasized.

#### OO 286 LEGAL TRANSCRIPTION II Credits: 3 (S) Prerequisite: OO 285

Students will continue to develop competency in the transcription of legal documents and correspondence from machine dictation in the areas of probate, corporations, and real estate. Emphasis is placed on spelling, punctuation, and use of reference materials. Advanced computer applications unique to law firms will be used and/or demonstrated.

### OO 292 CAREER DEVELOPMENT

Credits: 3 (F,S) Prerequisite: It is recommended that this course be taken during a student's last semester of attendance.

This course equips students with the knowledge and skills needed to locate and get a job. The student will prepare a resume and other employment documents, master job search strategies, interview effectively, identify and focus job strengths, learn and practice networking techniques, develop strategies to market self for employability, negotiate salary and benefits, use 21<sup>st</sup> century employment tools, understand job success factors. Self esteem, peak performance, professionalism, and communication are studied in relationship to the interview.

### OO 295 ADMINISTRATIVE OFFICE PROCEDURES Credits: 3

Credits: 3 (F,S) Prerequisites: OO 108, OO 265/266, or concurrent

This course is designed to equip students with a knowledge of procedures along with basic attitudes and skills required of an office employee. Units include the role of the office professional, office organization, mail processing, postal services, memory devices, public relations, telephone techniques, schedules and appointments, travel arrangements, meetings and conferences, work prioritization, supplies, business research, job enhancement, and office management. Students may use any word processing software. Windows desktop accessories and Scheduler are introduced.

# OO298LAW OFFICE MANAGEMENTCredits:3

This course deals with both tangible and intangible functions of the law office manager in dealing with personnel and facilities, including personnel management, policies, legislation, and teamwork. It also looks at timekeeping and billing procedures.

# **PHILOSOPHY**

#### **PHIL 232H BASIC ETHICS** Credits: 3

(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.

# PHIL238MEDICAL ETHICSCredits:3

(F)

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.

# PHYSICAL SCIENCE

# PHYS 130N FUNDAMENTALS OF PHYSICAL SCIENCE

Credits: 3 (Sufficient Demand)

This course is an introduction to the fundamental behavior of matter and energy. It is divided into two sections: physics and chemistry. Physics topics include: motion and patterns of motion; energy, heat and temperature; wave motions and sound; electricity and light. Chemistry topics covered are atomic structure; elements and the Periodic Table; compounds and chemical change, chemical formulas and equations; water and solutions; and some organic and nuclear chemistry. No prior work in physics or chemistry is assumed for this course.

PHYS212NPHYSICS FOR HEALTH SCIENCESCredits:3(Sufficient Demand)

This is an introductory course which will cover, with minimum mathematics, the major concepts of mechanics, atomic and nuclear physics, optics, and the modern viewpoints.

# <u>PSYCHOLOGY</u>

PSY 101S GENERAL PSYCHOLOGY Credits: 3 (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.

### PSY 109S LIFESPAN DEVELOPMENT

Credits: 3 Prerequisite: PSY 101 for OTA Students (F,S)

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.

#### PSY 292 ABNORMAL PSYCHOLOGY Credits: 3 (F) Prerequisites: PSY 101

Historical and current perspectives on the psychopathology of disordered behavior including neuroscience, behavioral, cognitive, psychodynamic, and human/existential approaches. Also studied are the diagnostic categories (DSM) and traditional and innovative approaches in diagnosis and therapy.

# PHYSICAL THERAPIST ASSISTANT

### PTA 100 INTRODUCTION TO PHYSICAL THERAPY & HEALTHCARE TEAM Credits: 3 (F)

Prerequisite: Acceptance into PTA program

This course gives the student an overview of the physical therapy profession and its association; an overview of the roles of the physical therapy staff members in the clinical setting as well as members of the healthcare team in various delivery systems; development of interpersonal communication skills relating to the profession; and an understanding of the commitment of the graduate to continued personal and professional development.

# PTA 101 PHYSICAL THERAPIST ASSISTING I

 PTA
 102
 LAB

 Credits:
 5
 (S)

 Prerequisites:
 BIO 209, BIO 210, BIO 211, BIO 212, PTA 100

This is the first of three sequential skills and procedures courses. The following topics are covered: basic principles and procedures of physical therapy; basic care skills and application techniques; use of assistive devices; introduction to range of motion (ROM); theory and application of massage; and physiological principles, indications/contraindications, and application of physical agents discussed in lecture.

# PTA111FIELD EXPERIENCECredits:1Prerequisite:PTA 101

(S)

(S)

The purpose of this field experience is to acquaint the student with a variety of clinical environments. Students will become familiar with the personnel and procedures in the facilities through participation and observation in supervised activities appropriate to their training.

# PTA200ISSUES IN PHYSICAL THERAPYCredits:3(F)Prerequisite:PTA 201, 202, 209

This course provides an overview of ethical, legal, and psychosocial issues relating to the role of the PTA in healthcare delivery. It includes such topics as the implications of chronic illness; the aging process and death/dying; client's role in health management; financing of physical therapy; regulations governing PTAs; code of ethics; and the PTA's role in departmental administration.

# PTA201PHYSICAL THERAPIST<br/>ASSISTING IIPTA202LABCredits:5(SU)Prerequisites:PTA 205, 206, 208, 210

This is the second in the series of procedures and application courses. The following topics are covered: theoretical principles and application of chest physical therapy, biofeedback, topical applications, electrotherapy, ultrasound, and ultraviolet; procedure and application of cervical and lumbar traction; gait analysis and training; theory and application of massage; measurements; and principles of therapeutic exercise.

### PTA 208 NEUROSCIENCE I

Credits: 2 Prerequisites: BIO 209 through 212, PTA 100

#### PTA 209 NEUROSCIENCE II Credits: 1 (SU)

This course is an introduction to neuroanatomy and neurology in relationship to neurological pathologies of the brain and spinal cord commonly treated by physical therapy. Structures and basic functions of the nervous system will be discussed.

### PTA 210 CLINICAL EXPERIENCE I

Credits: 1 (SU) Prerequisites: PTA 101, PTA 111 The purpose of this clinical affiliation is to provide students with an opportunity to apply skills and techniques learned in PTA 101 and PTA 201 under the appropriate supervision of the clinical instructor.

# PTA211PHYSICAL THERAPIST<br/>ASSISTING IIIPTA212LABCredits: 5(F)Prerequisites:PTA 201, 202, 209

Through this course students are introduced to neurological development: normal vs abnormal• birth through adult; disease processes and outcomes; and neurophysiological routines used for treatment along with principle and treatment of specific disabilities. Differential diagnoses of medical conditions which may effect physical therapy treatment are also introduced.

РТА	215	INTRODUCTION		то
ORTHO	PEDI	CS		
Credits:	3		(	(F)
Prerequis	ites:	PTA 201, 202, 209		

This course introduces students to pediatric and adult musculoskeletal pathologies and management of orthopedic and surgical problems commonly seen by physical therapy.

PTA220CLINICAL EXPERIENCE IICredits:1(F)Prerequisites:PTA 210, PTA 211

The students will continue to build on their clinical experiences from PTA 111 and PTA 210 and implement knowledge gained from PTA 200, PTA 211, and PTA 215.

# PTA225PROCEDURES & APPLICATIONSCredits: 3(S)Prerequisite:PTA 220

This concentrated three-week course 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 plan and physically demonstrate acquired skills/techniques used in treatment of conditions resulting from disease processes, traumatic injury, or surgical intervention.

PTA230CLINICAL AFFILIATION ICredits:5Prerequisite:PTA 220

(S)

The purpose of this course is to provide a full-time internship of practical performance and appropriate application of physical therapy procedures and techniques under supervision. This affiliation will be sufficient to ensure that the student has reached the minimum level of competency required for an entry-level physical therapist assistant in the areas of physical therapy procedures, clinical responsibilities, and supervisory relationships prior to graduation.

PTA240CLINICAL AFFILIATION IICredits: 5(S)Prerequisite:PTA 230

This is the second of the two full-time affiliations during which students develop proficiency in physical therapy procedures, understanding of clinical responsibilities, and supervisory relationships with minimum competence necessary to graduate as an entry-level physical therapist assistant and become an active participant of the healthcare team.

# <u>RELATED</u>

RELA 020 READING AND STUDY SKILLS Credits: 3 (F,S) Pass/Fail Basis

This self-paced course provides opportunities to improve reading comprehension and speed; presents instruction in note taking, time management, effective studying techniques, memory building, and test taking skills; and helps students examine their attitudes about college, setting goals, and assuming responsibility for their own learning.

### RELA 030 SUPPORT (COURSE ASSISTANCE) Credits: 1 (F,S,SU)

Pass/Fail Basis

Individualized learning opportunities on an openentry/open-exit basis are available, or will be constructed, for any academic need a particular student may have. This may include preparation and/or support for other classes.

# RELA102MASTER STUDENTCredits:2(Sufficient Demand)Pass/Fail Basis(Sufficient Demand)

This is an innovative, exciting course designed to help students develop the knowledge and skills needed to learn effectively. Strategies taught are identifying personal strengths to be successful in school and on the job; learning to believe in oneself; improving one's academic performance with note taking, text reading and test taking; handling stress; knowing how to manage time; and establishing relationships with others.

#### **RELA 000-100-200 SPECIAL PROJECTS** Credits: Variable

Special projects and independent studies are available for students by special arrangement within the Related Instruction Department. Such projects will generally be classified as advanced studies, and prerequisites may be individually required. The intent, nature, scope, and duration of the project will be determined by student/teacher collaboration.

No more than 12 credits through special projects or independent studies may be earned by one student.

# RELA 001-101-201 SPECIAL TOPICS

Credits: Variable

Workshops, seminars, and experimental courses may be offered from time to time through the Related Instruction Department. Courses may deal with topics of special interest or timely concern and may be announced in semester course schedules. Hours, credits, and prerequisites will be determined at the time of offering.

### **RELA 242H GENDER AND EQUALITY** Credits: 3

Examines the human cultural role of gender in relation to historical perspectives, business, social and familial organizations, world views, technology, and perception of self.

### **RELA 244H AMERICAN CULTURAL VALUES** Credits: 3

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.

#### **RELA 246S# MONTANA'S AMERICAN INDIANS** Credits: 3

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.

# **SOCIOLOGY**

### SOC 111S INTRODUCTION TO SOCIOLOGY Credits: 3 (F,S,SU)

This course offers exposure to key ideas, activities, and terminology's in the field 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.

# <u>AUTO BODY REPAIR &</u> <u>REFINISHING</u>

### TB 128 AUTO SHOP AND EQUIPMENT SAFETY

Credits: 2

### (F)

A departmental orientation for new students in classroom and lab policies and procedures will be conducted. Specialized tools used in the auto repair industry, shop safety, and hydraulic equipment are studied as well as the proper use and care of the students' own tools and safety equipment.

# TB130BASIC AUTO CONSTRUCTIONCredits:1(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. The theory and practice of welding thin gauge mild steel with a MIG welder will be taught.

### TB 133 WELDING

Credits: 2

(F,S)

This course is designed to teach the theory and practice of welding using oxyacetylene, arc welding, and gas metal arc welding. Students will be introduced to techniques of welding in various positions.

# TB134CORRECTING SHEET METALCredits:2(F)

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.

#### TB 135 STATIONARY GLASS REPLACEMENT Credits: 2 (F)

In this course students will learn how to remove rock chips and bulls' eyes. Demonstration and practice of the removal and installation of glued-in and gasket-type windshields will be included.

### TB 136 CORRECTING COLLISION DAMAGE

Credits: 3		(S	)
Prerequisite:	TB 135		

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.

TB138REPAIRING SOFT RUBBERCredits:3(S)

Students will learn how to repair and fill soft rubber bumpers as well as the proper application of flexible fillers, primers, and painting processes.

#### TB 140 PAINT SHOP AND EQUIPMENT SAFETY Credits: 3

A department orientation for new students in classroom and lab policies and procedures will be given. Students will study the construction and usage of air compressors, air sanders, spray booths, paint guns, the proper use and care of personal safety equipment, and the safe handling and disposal of various chemicals.

(F)

(S)

#### ТВ 141 SURFACE PREPARATION AND UNDER COATS Credits: 2 (F)

Beginning students in refinishing will be given theory and laboratory experience with metal conditioners, wax and grease removers, and primers. Students will work with lab test panels only.

#### ТВ TOP COAT APPLICATION 142 (LACQUER) Credits: 2 (F)

Students will study lacquer top coats including clearcoating, metallic colors, and sealers. Students will work with lab test panels only.

TB 1	50	PAINT REMOVAL	
Credits: 2	2	(	(S)
Prerequisi	te:	TB 142	

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.

#### ТВ 153 **OVERALL REFINISHING** Credits: 3

This course includes a comprehensive study of auto refinishing techniques. Students will work on sanding and masking operations used to properly refinish a complete automobile with acrylic enamel.

#### **154 PAINT PROBLEMS** ΤВ Credits: 2 **(S)**

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.

#### ТВ 241 FIBERGLASS REPAIR Credits: 3 (F) Prerequisite: TB 138

Students will study repairing and replacement of fiberglass panels. Students will gain practical experience in surface preparation and application of materials in various repair situations.

#### TB 242 **RIGID PLASTIC REPAIR** Credits: 3 (F)

This course covers welding procedures of rigid plastics. Students will learn to identify and repair the various types of plastics used in the construction of internal and external body panels.

#### TB 243 PANEL REPLACEMENT Credits: 3 (F)

This course will give students practical experience in removal and replacement of weld on panels, doorskins, rocker, quarter and top panels.

#### ΤВ 244 ESTIMATING BODY REPAIR Credits: 2 (S) TB 243 Prerequisite:

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

#### **PRODUCTION BODY REPAIR** TB 245 Credits: 3 (S)

In this course students' work will be compared to industry flat rate charges 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.

#### ΤВ 246 TOTAL BODY REBUILDING AND SECTIONING Credits: 3

(S)

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

# TB 248 SPOT REPAIR AND BLENDING Credits: 3 (F)

Students will have the opportunity in this course to obtain practical experience in color sanding, compounding, masking, and blending methods used in spot repairing.

Credits: 3

(F)

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 match the existing color.

TB250PRODUCTION REFINISHINGCredits: 3(S)Prerequisite:TB 249

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

**TB 253 ESTIMATING REFINISHING** Credits: 2 (S)

This course provides instruction in evaluating and estimating refinishing repairs. A study of parts catalogs, flat rate, and the preparation of repair bids will be given.

TB254SPECIALTY FINISHESCredits:3(S)

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

### TO 200 SPECIAL PROJECTS FOR TRADES AND TECHNOLOGY

Credits: Variable

Special projects and independent studies are available for students by special arrangement within the trades and technology department. Such projects will generally be classified as advanced studies, and prerequisites may be individually required. The intent, nature, scope, and duration of the project will be determined by student/teacher collaboration.

No more than 12 credits through special projects or independent studies may be earned by any one student.

# FACULTY AND ADMINISTRATIVE PERSONNEL

# **Cheryll Alt**

Practical Nursing B.S.N., California State University, San Diego

# Mike Antila

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# **Leonard Bates**

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# Kimberly A. Baumann, RRA

Health Information Technology B.A., Carroll College

# **Marilyn Besich**

Business B.A., University of Montana M.A.S., University of Montana Doctoral Candidate, Montana State University-Bozeman

# **Richard Blevins**

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# Jeff Brown

Business B.S., U.S. Military Academy, West Point M.B.A, Pacific Lutheran University Doctoral Candidate, Montana State University-Bozeman

# Aida B. Buer, CDA

Dental Assisting Department Chairman, Allied Health B.A., Montana State University-Northern M.Ed., Montana State University-Northern

# Kathryn M. Craig

Business B.S., University of Montana M.Ed., Montana State University-Northern

# Darla G. Dillabough

Office Technology B.S., Minot State University

**Kim Dunlap** New Student Services Coordinator B.S., Montana State University-Bozeman

# Donna Eakman

Office Technology B.S., Montana State University-Bozeman M.A.S., University of Montana

# **David Farrington**

Director of Admissions & Records B.A., Pepperdine University M.S., Pepperdine University

# Bari Lynn Gilliard

Related Instruction, English B.A., University of Montana M.A., University of Montana Ph.D., University of Utah

# Sarah Kaip

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### **Jill Schaefer Keil** Related Instruction,Mathematics B.S., University of Great Falls M.A.T., Mathematics, University of Montana

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### **Christine Kowalski**

Physical Therapist Assistant ProgramA.A.S., Morton CollegeB.S., National Louis UniversityM.Ad.Ed., National Louis UniversityDoctoral Candidate, National Louis University

# S. Diane Lund

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# **Connie MacKay**

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# Irene L. Mueller, RRA

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# **Deborah Newton**

Business B.S., New Mexico State University M.A., New Mexico State University Doctoral Candidate, University of New Mexico

# Jon Nitschke

Business B.S., University of Montana M.Ed., Montana State University-Northern 45 credits beyond M.Ed. in Voc. Ed. and School Administration

### Elissa Orcutt

Practical Nursing B.S.N., University of Texas at San Antonio M.S.A., Central Michigan University

# Arlene H. Parisot

Student Services Coordinator B.A., Idaho State University M.Ed., Montana State University-Northern Ed.D., Montana State University-Bozeman

### **Pamela Parsons**

Director of Public Relations B.S., Montana State Univerity-Bozeman

# Heidi Pasek

Retention Specialist B.S., Utah State University M.P.C, University of Great Falls

# **Gregory Paulauskis**

Respiratory Care A.A., Pacific Union College A.S., Butte College B.S., Loma Linda University M.Ed., Montana State University-Northern

# **Carmen Perry, CDA**

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# Al Reeves

Department Chairman, Related Instruction B.A., University of Great Falls M.Ed., Montana State University-Northern

### **Jamyne Richardson**

Physical Therapist Assistant Program B.A., University of North Dakota-Grand Forks **Brenda Sebastian,** Director of Financial Aid B.A., Carroll College

### David Simpson, D.O., FACOEP

Medical Director, Emergency Services B.A., Idaho State University D.O., Kirksville College

Josephine Slaymaker Business B.S., Montana State University-Northern

### **Richard D. Stevens**

Interior Design B. of Architecture, Montana State University-Bozeman Registered Architect

### **Esther A. Stinnett**

Related Instruction, English B.A., University of Great Falls M.A. English, University of Montana

### Thomas J. Stump

Assistant Dean for Business and Finance B.S., Montana State University-Billings

### **Steve Thurston**

Auto Body Refinishing & Repair Vocational Certification

### Margaret G. Towne

Natural Science B.S., University of Michigan M.S., University of Michigan Ed.D., Montana State University-Bozeman

### **Natalee Vick**

Senior Librarian B.A., University of Montana M.L.S., University of Washington

### **Suzanne Waring**

Director of Continuing and Community Education BS., Pittsburg State University M.A., University of Montana Ed.D., Montana State University-Bozeman

### Willard R. Weaver

Dean B.S., Montana State University-Bozeman M.S., Montana State University-Bozeman

### Diana Wyatt,

Special Services Counselor B.S., Radford University M.S., Niagara University

# ADJUNCT FACULTY

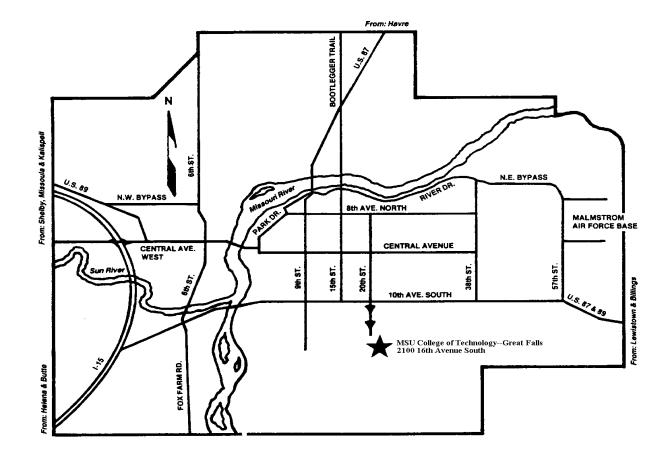
Brandon Alt Computers
Jerry AnthonyVehicular Air Conditioning
Janet BauerOTA Interim Director
Debra BelleauComputer Workshops
Theresa Blackwood Computers
Carmen BohnHosp/Bus Workshops
Joe BriggsComputer Workshops
Bob BrownComputer Vortishops
Sterling BurchComputer Workshops
Carol ByerlyComputer Seminars
Cheri Calsetta Insurance Workshops
Brian Clifton
Susan Cooper
Necha Craig Occupational Therapy Assistant
Kathleen Cronin Related Instruction, English
Diana DehneRelated Instruction, Mathematics
Teri DwyerBusiness Management
Lynn Galvas Public Speaking
Linda GnojekRespiratory Care
Bruce GottwigComputer Seminars
Karen HagelsteinMedical Terms-Bozeman
Dwain J. HamanIndustries Shop Technician
Ivan Hunt Public Speaking
Jeff Jackson Emergency Services
Cindy JohnstonComputer Seminars
Ronald JonesAmerican Sign Language
Ernest KellerBusiness
K. Kirkendall Computers
Cindy KittredgeRelated Instruction, English
Brenda Klisis Interior Design
Cheri Lambert Computers
Ray Landsiedel Computers
Vernon Larson Computers
Beverly Lay IV Therapy
Dennis Lester Economics
Doug Lineberry Computers
Kelly McKeever Emergency Services
Helen MaguireRelated Instruction, English
Sandra MaresAccounting
Stephen Mehring Computer Seminars
Sharon Mueller Computers
Cynthia MylesMedical Assistant
Paula NeifferRespiratory Care
Mary Nicholson Computers
Shaun Opp Emergency Services
Trudi PaulsonSociology
The Turbon Sociology

Dennis Rick	Computers
Becky Roberts	Related Instruction
Owen Rosenleaf	Occupational Therapy Asst.
Tim Schneibel	Computers
Bonnie Sears	Accounting
Carolyn Stone	Business, Lewistown
Larry Vaccaro	Public Speaking
Leonard Waring	Welding
Brydeen Warwood	Computers
Mark Yaeger	Construction Workshops
Annette Young	. Related Instruction, English

# SUPPORT PERSONNEL

Donna Berkhof Tech Prep Coordinator, Great Falls Public Schools
Diane BivensAdmissions Evaluator
Theresa Busch Admissions Technician
Art EnglandFirst Engineer
Joey Fowkes Customized Training Rep.
D.J. HamonLab Coordinator
Kathleen Haggart Payroll Technician
Barbara HolbrookOTA Lab Coordinator
Elaine Hyson Accounting Specialist
Diann JackowskiBookstore Assistant
Kehrin Kercher Admin. Asst. to Allied Health
Loni Klasner
Sarah KnightAdmissions Technician
Char Kuglin
Patricia Loeffler Admin. Asst. to Bus/Tech/RI
Connie McAlpinReceptionist
Patricia McFadden Administrative Assistant
Willie McGee Info Systems Support Specialist
Karen Miszler PTA Lab Coordinator
Mary OrhamAdministrative Assistant
Becky Roberts
Talent Search
Dawn RuckerFinancial Aid Specialist
Bob SchroederCafeteria Sales Clerk
Carol Shuler
Danelle Suta
Rhonda Swan
James SweatPrint Center
Susan ThomasCustodian
Jerry VanEveryPrint Center
Karen Vosen Administrative Asst., Outreach
Ken Wardinsky Computer Technician
Amy WattAccountant
John Watters Computer Technician
Vance Weckworth Employment Specialist
Monica Woelkers Cashier/Administrative Aide
Jeff WorkmanCustodian
Ronald WynegarCustodian

# MSU College of Technology Great Falls 2100 16th Avenue South Great Falls, MT 59405



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