

# Montana State University Billings

## 2017–2018 General Bulletin

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# UNIVERSITY CALENDAR

## Fall Semester 2017

Residence Halls Open.....	Sunday, September 3
Labor Day Offices Closed .....	Monday, September 4
Classes Begin.....	Wednesday, September 6
Late Registration Fee Applies (\$40.00).....	Friday, September 8

**Students who have not completed fee payment or signed a fee statement before Friday, September 8 may be disenrolled from classes and required to re-register.**

Last Day for Registering/Adding Classes.....	Thursday, September 14
Last Day for Withdrawing/Dropping Classes with a Partial Refund.....	Tuesday, September 26
Columbus Day CLASSES IN SESSION OFFICES OPEN (Exchanged for Friday, Nov 24).....	Monday, October 9
Last Day to Drop Classes Without Instructor Permission (No Refund) .....	Tuesday, October 24
Registration for Spring Semester 2018 Begins .....	Monday, November 6
Veterans Day (observed) NO CLASSES OFFICES CLOSED .....	Friday, November 10
Last Day to Apply to Graduate Spring Semester 2018.....	Friday, November 17
Last Day to Apply to Graduate Summer Semester 2018 (attending ceremony).....	Friday, November 17
Last Day to Drop a Class with Approval of Advisor and Course Instructor .....	Tuesday, November 21
Thanksgiving Holiday NO CLASSES (Offices Open Nov. 22) ..	Wednesday, November 22 thru Sunday, November 26
Final Exam Week .....	Monday, December 11 thru Thursday, December 14
Final Day to Withdraw from Fall 2017 (all classes, no refund).....	Thursday, December 14
Semester Ends .....	Thursday, December 14
Residence Halls Close .....	Friday, December 15
Grades Due in the Registrar's Office.....	12 noon, Wednesday, December 20

## Spring Semester 2018

Residence Halls Open.....	Sunday, January 14
Martin Luther King Day NO CLASSES OFFICES CLOSED .....	Monday, January 15
Classes Begin.....	Wednesday, January 17
Late Registration Fee Applies (\$40.00) .....	Friday, January 19

**Students who have not completed fee payment or signed a fee statement before Friday, January 19 may be disenrolled from classes and required to re-register.**

Last Day for Registering/Adding Classes.....	Thursday, January 25
Last Day for Withdrawing/Dropping Classes with a Partial Refund.....	Tuesday, February 6
Presidents' Day NO CLASSES OFFICES CLOSED.....	Monday, February 19
Registration for Summer Session 2018 Begins .....	Tuesday, February 20
Spring Break NO CLASSES OFFICES OPEN .....	Saturday, March 3 thru Sunday, March 11
Last Day to Drop Classes Without Instructor Permission (No Refund) .....	Wednesday, March 14
Registration for Fall Semester 2018 Begins .....	Monday, March 19
Last Day to Apply to Graduate Fall Semester 2018 .....	Friday, March 23
Last Day to Apply to Graduate Summer Semester 2018 (NOT attending ceremony).....	Friday, March 23
Spring Mini Break NO CLASSES OFFICES OPEN .....	Thursday, March 29 thru Sunday, April 1
Last Day to Drop a Class with Approval of Advisor and Course Instructor .....	Thursday, April 12
University Day NO CLASSES OFFICES OPEN.....	Friday, April 27
Final Exam Week .....	Monday, April 30 thru Thursday, May 3
Final Day to Withdraw from Spring 2018 (all classes, no refund) .....	Thursday, May 3
Semester Ends .....	Thursday, May 3
Residence Halls Close .....	12 noon, Friday, May 4
Commencement.....	Saturday, May 5
Grades Due in the Registrar's Office.....	12 noon, Wednesday, May 9

## Summer Semester 2018

*Schedule to be announced.*

# ACCESSIBILITY DATA

## For Individual Buildings on Campus

Building	General Accessibility						Restroom Facilities			
	Entrance ramped on ground level	Automatic entrance doors	Number of accessible floors	Stairs non-skid	Interior ramps available	ELEVATORS P=Passenger; F=Freight; *=Braille labels	Restroom designed for wheelchair	Entrance door width = 32"	Wall accessories below 40"/A	Access to showers and tubs
Apsaruke	yes	yes	3	yes	yes/F	P*	yes	yes	yes	
Art Annex	yes	yes	1		no		yes	yes	yes	
Cisel Hall	yes	yes	4	yes	yes	P*	yes/B	yes	yes	
College of Business (McDonald Hall)	yes	yes	3		yes	P*	yes/F	yes	yes	
College of Education	yes	yes	4	yes	no	P*	yes	yes	yes	
City College Tech Building	yes	yes	2		yes	P*	yes	yes	yes	
City College Health Sciences Building	yes	yes	2	yes	no	P*	yes	yes	no	
Facilities Services	yes		1				yes	yes	yes	
Family Housing	yes	no	1				yes	yes	yes	yes
Liberal Arts	yes	yes	8	yes	no	P*	yes/C	yes	yes	
Library	yes	yes	3	no	yes/F	P*	yes/D	yes	yes	
McMullen Hall	yes	yes	4	yes	no	P*	yes	yes	yes	
Parking Garage	yes			yes	yes	P*				
Petro Hall	yes	yes	8	no	no	P*	yes/H	yes	yes	no
Physical Education	yes	yes	2	yes	yes	P*	yes	yes	yes	yes
Rimrock Hall	yes	yes	6	no	no	E/G,P*	yes	yes	yes	yes
Science	yes	yes	3	yes	no	P*	yes	no	yes	
Security	yes		1		yes		yes	yes	yes	
Student Union	yes	yes	2	no	no	P*	yes	yes	yes	

A: In most restrooms, the sinks but not the towels are below 40"

B: Off ramp between new and old building

C: 1<sup>st</sup> floor, between Liberal Arts Building and Library/2<sup>nd</sup> & 5<sup>th</sup> floor Liberal Arts Building

D: 2<sup>nd</sup> floor, between Library doors and stairs

E: Stairs to basement

F: Wheelchair lifts

G: Freight elevator does not have automatic doors

H: Lobby area

# WELCOME

Welcome to Montana State University Billings. We are excited that you have chosen MSUB to pursue your academic, professional, and personal life goals as you continue preparing for your future in the 21st century. Our goal is to make Montana State University Billings Your University of Choice and Educational Partner for a Lifetime.

I am extremely proud of our history of excellence at MSU Billings. The faculty and students are a community of scholars dedicated to first-rate teaching and learning. Faculty will challenge you academically, share their knowledge, and provide the one-to-one mentoring you need to be successful while a student at the University.

MSUB is accredited by the Northwest Commission on Colleges and Universities. All degree programs at MSU Billings are designed to provide students with the appropriate academic preparation to enter their chosen career fully prepared to meet the demands of a changing job market and a global economy, and to pursue a path of lifelong learning.

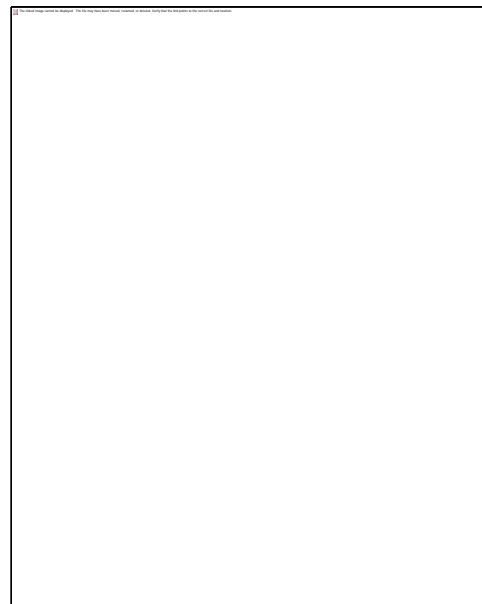
MSUB has developed several new initiatives to benefit students. These include transitioning the City College to a comprehensive community college in order to better serve the needs of the community and students and opening a downtown Billings location including classrooms and computer labs providing greater access to academic offerings and services.

While you are here, please take advantage of all the University has to offer, from Advising & Career Services, Academic Support Center, online courses, state-of-the-art computer labs, distance learning facilities, and use of other current and emerging technologies. The University also offers other enrichment experiences including an honors program and study abroad opportunities. The University encourages experiential learning through internships, cooperative education, and other field experiences which help students confirm their career interests and develop the skills beyond those learned in the classroom and needed to prepare for success in the 21st century.

I encourage you to become involved in the community-based public service learning activities and programs. For students with disabilities, please become familiar with services provided through our Disability Support Services program. If you have been out of school for an extended period of time, you will find Student Support Services extremely useful.

Again, welcome to MSUB and best wishes for an exciting and rewarding academic experience. Please accept my personal invitation and encouragement to become involved in all the University has to offer both in and out of the classroom. Above all, enjoy your journey as you enrich you mind. Please visit our University web page at [www.msubillings.edu](http://www.msubillings.edu) where you will find additional information useful to you as you pursue your academic and career goals.

Dr. Ronald Larsen  
Interim Chancellor  
Montana State University Billings



# MONTANA STATE UNIVERSITY BILLINGS

**Core Purpose:** To assure that all members of the University community reach their individual potential.

**Mission:** Montana State University Billings provides a University experience characterized by:

- Excellent Teaching
- Support for Individual Learning
- Engagement in Civic Responsibility
- Intellectual, Cultural, Social and Economic Community Enhancement

**Vision:** Montana State University Billings will be recognized as a regional leader for:

- Teaching and Learning
- Translating Knowledge into Practice
- Researching for the Future
- Accepting Leadership for Intellectual, Cultural, Social and Economic Development Beyond University Boundaries

## Core Values

**Integrity:** MSU Billings' actions are ethical and principled to assure dignity and equity for all

**Educational Excellence:** MSU Billings provides distinctive programs and challenging educational experiences for a diverse university community

**Student Achievement:** MSU Billings provides academic support and administrative services to foster academic & professional achievement of the university community

**Community of Learners:** MSU Billings respects and nurtures variety in intellectual contribution and scholarship enriching both the University and its extended community

**Meaningful Engagement:** MSU Billings supports all members of the university community in their individual growth toward confidence, individual sense of purpose and acceptance of civic responsibilities

**Responsiveness:** MSU Billings meets the changing needs of our learners with informed action and innovation based on current standards of educational & technical excellence

# 2017–2018 General Bulletin

## Montana State University Billings

1500 University Drive  
Billings, Montana 59101–0298  
(406) 657–2011  
[www.msubillings.edu](http://www.msubillings.edu)

### Important Notice to All Students

This General Bulletin is published biennially by Montana State University Billings as a guide for students, faculty and others interested in the institution. Students are expected to be familiar with the University regulations and information which are set forth in this publication. Effective date of this General Bulletin is August 2017.

The University is not responsible for cancellation of classes due to damage to campus facilities or unavailability of teaching personnel resulting from severe weather conditions, natural or man-made disasters, work stoppages or emergency situations declared by the Governor.

Advisors assist students with selection of courses and other academically related issues, but the ultimate responsibility for meeting graduation requirements belongs to students.

MSU Billings reserves the right to change the regulations and fees in this Bulletin at any time during the two-year period the publication is in effect. The institution, with the concurrence of the Board of Regents of Higher Education, also reserves the right to add or withdraw courses and degree programs at any time.

Effective dates of changes will be determined by the proper authorities and shall apply to prospective students and to those who are already enrolled.

For further information, write to the Office of Admissions and Records; Montana State University Billings; 1500 University Drive; Billings, Montana 59101-0298.

### Urban University

MSU Billings is an urban university serving a diverse constituency with diverse needs and expectations. The greatest distinction and greatest opportunity for MSU Billings literally surrounds us: the city itself. Billings is the largest medical, financial, and retail hub between Spokane, Denver, and St. Paul, Minnesota, and as an urban university, this requires building strong partnerships that are efficient and effective. Urban adult learners—full-time and part-time—are well served by the University's commitment to alternative learning modes, online options, tutoring, and other student services that help them juggle work, family, and educational responsibilities. City College at MSU Billings has specific programs with direct relationships to the community (oil refining, energy, health care) that reflect its urban mission.

### Student Learning Outcomes

MSU Billings understands that student success and student learning take place inside and outside the classroom. The ability to assess and measure that success is imperative. To assure that the University's programs continue to meet the needs of both the students and the community, MSU Billings engages in ongoing review and revision of its assessment processes. This regular review process has resulted in the revision of the university's academic programs, including the general education program, as articulated in this catalog.

### Degree Levels

Montana State University Billings offers pre-professional and certification programs and awards degrees at the associate's, bachelor's, and master's degree levels. MSU Billings also offers post-master's (non-degree) supervisor endorsement programs in Reading K-12 and Special Education K-12.

## Accreditation

Montana State University Billings is accredited by the Northwest Commission on Colleges and Universities. It is accredited by the National Council for the Accreditation of Teacher Education for preparing elementary and secondary teachers and school counselors through the Bachelor of Science and Master of Education degrees and the Master of Science in Special Education degree. Programs in the College of Business are accredited through the Association to Advance Collegiate Schools of Business (AACSB). MSU Billings is also accredited by the National Association of Schools of Music, the National Association of Schools of Art and Design, and the Council on Rehabilitation Education. City College programs are approved by the National Institute for Automotive Service Excellence and the Montana Board of Nursing. Please see the City College Catalog for accreditation information about the City College programs.

## Faculty

MSU Billings faculty have expertise in many areas and approximately ninety-one percent hold the highest degrees in their fields. They contribute a number of articles each year to academic and professional journals in their fields and they participate with their peers nationwide at conferences and seminars. Each year they receive grants ranging from Fulbrights for study abroad to those for the investigation of human and scientific information. Because the faculty is involved in research, students may also become involved in research including the presentation of findings at conferences and the publication of papers in journals. Because the faculty is involved with their peers, students are exposed to the latest information in each discipline. Because the faculty is involved in communicating with their colleagues around the country, they also continue being involved in expressing those ideas to students.

## Diversity

MSU Billings supports all members of the University community in their individual growth toward confidence, individual sense of purpose, and acceptance of civic responsibilities. MSU Billings' actions are ethical and principled to assure dignity and equity for all. MSU Billings seeks to increase staff, faculty, and student awareness, understanding, and involvement in the international community. MSU Billings is committed to providing an intellectual and social environment that supports and nurtures diversity awareness and cultural consciousness.

## Location and Campus

### The Yellowstone Region and the City of Billings

America's "last, best place" is undoubtedly an appropriate way to describe the region of the Yellowstone. Stretching from Yellowstone Park to where it joins the Missouri River, the Yellowstone River is the longest un-dammed river in the United States. Montana State University Billings shares the history, traditions, and quality of life that characterize the Yellowstone Region.

Montana State University Billings is located in the expanding city of Billings in the valley of the Yellowstone between rugged mountains and sweeping plains with a population base of approximately 100,000. The city, the largest in Montana, offers all the conveniences of modern urban life but has retained its cultural and historical Western tradition of friendliness.

Billings, the "Magic City," serves as a center for agriculture, finance, trade, medical care, education, tourism and energy-related industries for the people of central and eastern Montana and northern Wyoming. A downtown business district, well-planned shopping centers and malls, and a variety of smaller specialty stores provide ample opportunity for browsing and shopping.

MetraPark, Montana's major indoor arena, provides a number of entertainment opportunities such as major concert productions, trade shows and sporting events.

Historical sites, trout fishing streams, mountain trails and downhill ski runs are within easy driving distance from Billings. World-famous Yellowstone National Park is nearby.

Billings has a number of churches, radio and television stations, movie theaters, a performing arts center, a symphony and a community theater. Parks, tennis courts and golf courses offer recreational opportunities. The city is served by excellent transportation facilities.

Among other assets are excellent hotels, motels, restaurants, and delightful residential districts.

### The MSU Billings Campus

Montana State University Billings is comprised of two campuses: the University campus, and the City College campus. The University campus rests on ninety-two

acres nestled at the foot of majestic sandstone cliffs overlooking the city. The eighteen buildings are within a short walking distance across campus. Two residence halls connected to the Student Union Building and one family housing apartment complex provide housing to students. Rimrock has 148 rooms and Petro has 362 rooms available for occupancy. The Student Union Building (SUB) houses the Jackets & Company campus store, Campus Dining Services, Stingers Coffee Shop, and administrative offices. Home of the Yellowjackets, Alterowitz Gymnasium and the P.E. building offer a variety of recreational and instructional opportunities. The facility houses a 4,000 seat arena, a practice gymnasium, a collegiate-size swimming pool, an enclosed running track, and racquetball courts.

Although physically separated from the University campus, the City College campus, located seven miles from the university campus on the west side of Billings, is an integral part of the University. The campus consists of two buildings: the Tech building and Health Sciences building. The facilities provide ample classrooms, laboratories, and other instructional areas. A large central commons is a popular student gathering and dining area. At the front of the City College campus is the MSU Billings soccer field, used by both the women's and men's soccer teams for practice and games.

MSUB Extended Campus resides in downtown Billings. The campus offers continuing education, workforce training, and conference services.

## Academic Calendar

The academic year consists of Fall and Spring semesters. The summer term has its own calendar. Classes are also available between the fall and spring semesters in an Intersession format.

## Campus Visits

### McMullen First Floor East, (406) 657-2888

Campus tours are available through the Office of New Student Services. For information, call (406) 657-2888; or write the Office of New Student Services, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298; or visit [www.msubillings.edu](http://www.msubillings.edu). To assure the availability of staff, please contact this office to set up a campus visit.

## University Policies

This catalog contains the academic regulations governing the graduate program. The Student Affairs Handbook contains the detailed policies and procedures governing rights and responsibilities of students in the academic community. Students are referred to that handbook for details concerning use of facilities, code of conduct, student complaint procedures, regulations for student organizations, and other useful information.

## Discrimination, Harassment, Sexual Misconduct, Dating Violence, Domestic Violence, Stalking, and Retaliation Policy and Grievance Procedures

Montana State University Billings is committed to providing an environment that emphasizes the dignity and worth of every member of its community and that is free from harassment and discrimination based upon race, color, religion, national origin, creed, service in the uniformed services (as defined in state and federal law), veteran's status, sex, age, political ideas, marital or family status, pregnancy, physical or mental disability, genetic information, gender identity, gender expression, or sexual orientation. Such an environment is necessary to a healthy learning, working, and living atmosphere, because discrimination and harassment undermine human dignity and the positive connection among all people at our University. Acts of discrimination, harassment, sexual misconduct, dating violence, domestic violence, stalking, and retaliation will be addressed by the university under its Discrimination, Harassment, Sexual Misconduct, Dating Violence, Domestic Violence, Stalking and Retaliation Policy and Discrimination Grievance Procedures for Allegations of Violations of the Discrimination, Harassment, Sexual Misconduct, Dating Violence, Domestic Violence, Stalking, and Retaliation Policy.

[www.montana.edu/policy/discrimination](http://www.montana.edu/policy/discrimination)

## Title IX of the Education Amendments of 1972

Title IX and its implementing regulation, at 34 C.F.R. § 106.31 (a), provide that no person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any academic, extracurricular, research, occupational training, or other education program or activity operated by the university.



Discrimination based upon sex can include sexual harassment or sexual violence, such as sexual intercourse without consent, sexual assault, and sexual coercion. Title IX also prohibits gender-based harassment, which may include acts of verbal, nonverbal, or physical aggression, intimidation, or hostility based on sex or sex-stereotyping, even if those acts do not involve conduct of a sexual nature.

## Reporting, Filing a Complaint or Questions

Montana State University Billings affords any student, employee, applicant for employment or admissions, or person who believes he or she was discriminated against by the University, the right to file a grievance on grounds of discrimination.

Any student, faculty or staff member with questions or concerns about discrimination based on any of the protected classes listed above or who believes that he or she has been the victim of discrimination based on any of the protected classes should contact the Director & Title IX Coordinator in Human Resources Office for assistance or to file a complaint. The Director and Title IX Coordinator is available to discuss options, explain university policies and procedures, and provide education on relevant issues. Additionally, the Discrimination Grievance Procedures for Allegations of Violations of the Discrimination, Harassment, Sexual Misconduct, Dating Violence, Domestic Violence, Stalking and Retaliation Policy is found at: [www.montana.edu/policy/discrimination/procedures/](http://www.montana.edu/policy/discrimination/procedures/)

HR Director & Title IX Coordinator  
Human Resources Office  
Tel: (406) 657-2278  
Email: [discrimination@msubillings.edu](mailto:discrimination@msubillings.edu)  
Location: McMullen Hall 310

## MSU Billings

### Conflict of Interest Policy

This policy is adopted pursuant to Board of Regents Policy 770, Conflict of Interest, and applies to all 0.5 FTE or greater employees (hereafter, employees) at Montana State University Billings and Montana law, Standards of Conduct Code of Ethics, Title 2, Chapter 2, Part 1, MCA. Procedures for Conflict of Interest can be found at [www.msubillings.edu/humres/policies](http://www.msubillings.edu/humres/policies)

A consensual romantic relationship in which one party is in a position to evaluate the work of the other is a potential conflict of interest. When such a potential conflict of interest results between employees or an

employee and a student, the employee shall promptly disclose the potential conflict of interest to his or her supervisor. The supervisor and the employee shall take steps to ensure that there is no conflict of interest.

The employee's failure to promptly disclose such a potential conflict of interest may require appropriate resolution, including disciplinary action.

## Consensual Relationship

A consensual romantic relationship in which one party is in a position to evaluate the work of the other is a potential conflict of interest. When such a potential conflict of interest results between employees or an employee and a student, the employee shall promptly disclose the potential conflict of interest to his or her supervisor. The supervisor and the employee shall take steps to ensure that there is no conflict of interest.

The employee's failure to promptly disclose such a potential conflict of interest may require appropriate resolution, including disciplinary action.

## Campus Security and Crime

### The University Police Department

Under Montana Code Annotated 20-25-321, the Board of Regents has empowered the MSU Billings Chancellor to establish a Police Department for MSU Billings.

The MSU Billings Chief of Police/Safety Director is responsible for the management of the University Police Department (UPD) and reports directly to the Vice Chancellor for Administrative Services. However, all public safety services are closely coordinated with other key University administrators as well as local officials.

The Department consists of eight sworn officers, one dispatcher, two office assistants, and a revolving number of student workers (ticket writers). University Police Officers have received and maintain their Police Officer Standards and Training (POST) certification through the Montana Law Enforcement Academy. They receive their oath of office through Billings Municipal Court. The UPD has primary responsibility for law enforcement on University properties. MSU Billings and the City of Billings maintain an MOU granting the University Police jurisdiction to enforce all laws both within the City limits of Billings and within a five mile radius of the city limits. In addition, the department provides other services to the University community, which include fire safety, parking

enforcement, emergency management, fire code inspections, building safety, security, and workplace safety.

University Police officers also provide safety and security education through numerous presentations to on-campus groups and other presentations upon request.

### **Annual Security Report**

The safety and security of the entire campus community is extremely important to Montana State University Billings. The Annual Security Report (ASR) publication represents the University's information and data in compliance with the provisions of the Crime Awareness and Campus Security Act of 1990 and the Jeanne Clery Act of 1998.

Federal law mandates that this report include statistics for the previous three years concerning reported crimes that occurred on campus or on property owned or controlled by MSUB and on public property within, or immediately adjacent to and accessible from, the campus.

The ASR is available online:  
[www.msubillings.edu/police/PDF/2014\\_Annual\\_Security\\_and\\_Fire\\_Safety\\_Report.pdf](http://www.msubillings.edu/police/PDF/2014_Annual_Security_and_Fire_Safety_Report.pdf)  
and at the University Police Department – (406) 657-2147.

## **Americans With Disabilities Act of 1990 and ADA Amendment Act of 2008**

Montana State University Billings affirms its commitment to nondiscrimination on the basis of disability and its intention to comply with all laws prohibiting such discrimination including Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, and the ADA Amendments Act of 2008.

In order to ensure nondiscrimination on the basis of disability, the University will provide appropriate and reasonable accommodation for members of the public, employees and students with disabilities, as defined by these laws.

All University administrators, faculty, staff and students have a responsibility to adhere to the philosophy of equal access and opportunity which is the basis for this nondiscrimination commitment.

An individual may be required to provide relevant, written documentation in order to establish that he/she is a person with a disability and entitled to a reasonable accommodation under the law.

The University's ADA coordinators are the Director of Human Resources and the Director of Disability Support Services.

Any employee or applicant with disabilities concerned about accessibility and/or accommodation issues should contact the Human Resources, McMullen Hall 310, (406) 657-2278 (Voice/TTY).

### **Students**

Any student with disabilities concerned about accessibility and/or accommodation issues should contact Disability Support Services, COE 135, (406) 657-2283 (Voice/TTY).

Disability Support Services reviews complaints by students regarding discrimination and/or harassment on the basis of physical or mental disability relating to disability accommodations in the classroom and physical access to facilities. The full grievance policy is on the DSS website at [www.msubillings.edu/dss](http://www.msubillings.edu/dss).

# Degrees, Majors, Minors, Options

Programs marked with a ∇ are also offered in an online format.

## Associate of Arts Degree (AA)

### Programs of Study in:

Applied Psychology  
Education  
General Studies (Self-designed) ∇  
Rehabilitation and Related Services

## Associate of Science Degree (AS)

### Programs of Study in:

Allied Health  
Business Administration ∇  
Criminal Justice  
~~Drafting & Design (Program placed on moratorium)~~  
Environmental Science  
Fire Science  
General Studies (Self-designed) ∇  
Human Resources - General Applied Emphasis ∇  
Human Resources - College of Business Articulated Emphasis ∇  
Networking Technology  
Pre-Engineering

## Associate of Science in Nursing (ASN)

## Associate of Applied Science (AAS)

Accounting Technology ∇  
Automobile Collision Repair and Refinishing  
Automotive Technology  
Computer Desktop/Network Support  
Computer Programming & Application Development  
Computer Systems Technology  
Construction Management  
Diesel Technology  
~~Drafting & Design Technology (Program placed on moratorium)~~  
General Business  
Medical Administrative Assistant  
Paramedic  
Power Plant Technology  
Process Plant Technology  
Radiologic Technology  
Surgical Technology (from the Missoula College University of Montana)  
Sustainable Energy Technician  
Welding & Metal Fabrication

## Certificate Programs

Accounting Assistant ∇  
Addiction Counseling Education  
~~Assistant Drafter (Program placed on moratorium)~~  
Automobile Collision Repair  
Automobile Refinishing  
Automotive Technology  
Construction Management  
Diesel Technology  
Energy Technician  
Human Resource Management ∇  
Medical Coding and Insurance Billing ∇  
Networking Technology  
~~Office Assistant (Program placed on moratorium)~~  
Pharmacy Technician  
Practical Nurse  
Welding & Metal Fabrication Technology  
Welding for Energy Technology

## Certificate of Technical Study

Craft Brewing and Fermentation  
Energy Technician  
Medical  
Paramedic  
Trauma  
Welding and Fabrication 1

## Bachelor of Applied Science (BAS) ∇

*Thematic Concentration in Dental Hygiene*

## Bachelor of Arts Degree (BA)

Art  
Art Education: K-12  
Biology  
Communication Arts  
*Options in:*  
Mass Communication ∇  
Organizational Communication ∇  
~~Theatre (Program placed on moratorium)~~  
English  
*Option in:*  
Teaching Licensure  
Environmental Studies  
History  
*Option in:*  
Teaching Licensure  
Music  
*Options in:*  
Business  
Performance  
Teaching Licensure

Psychology  
Sociology  
Spanish

*Option in:*  
Teaching Licensure

### **Bachelor of Fine Arts in Art**

### **Bachelor of Science in Business Administration Degree (BSBA)**

Business Administration

*Options in:*  
Accounting ∇  
Finance  
General Business ∇  
*Track in Fire Science*  
Management  
Marketing ∇

### **Bachelor of Science in Liberal Studies (BSLS) ∇**

### **Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) Degree Completion Program**

### **Bachelor of Science Degree (BS)**

Biology

*Options in:*  
Environmental Sciences  
Medical Laboratory Science  
Teaching Licensure

Broadfield Science

*Option in:*  
Teaching Licensure

Chemistry

*Option in:*  
Teaching Licensure

Criminal Justice

Health Administration ∇

Health and Human Performance

*Options in:*  
Health and Wellness  
Human Performance  
Teaching Licensure  
3+2 B.S. in Health and Human Performance/M.S.  
in Athletic Training

Human Services

Mathematics

*Option in:*  
Teaching Licensure

Outdoor Adventure Leadership

Political Science

*Option in:*  
Teaching Licensure

Psychiatric Rehabilitation

Psychology

Public Relations ∇

Rehabilitation and Related Services, Extended Major

Sociology

### **Bachelor of Science in Education Degree (BSED) with Teaching Majors in the following:**

Broadfield Elementary Education

Elementary Education/Reading Double Major (K-8; K-12 Reading Endorsement)

Secondary Education/Reading Double Major (5-12 & K-12 Reading Endorsement)

Elementary Education/Special Education (P-12) Double Major

Secondary Education/Special Education (P-12) Double Major

### **Minors**

Accounting

Art

Biology

Business Administration

Chemistry

Coaching

Communication Arts

*Options in:*

Mass Communication

Organizational Communication

~~Theatre~~ (Program placed on moratorium)

Computer Science

Criminal Justice

Early Childhood Studies

Earth Science

English

*Programs of Study in:*

Professional Writing

Creative Writing

Literature

Environmental Studies

Finance

Geography

Health Education

History

Information Systems

International Studies

Marketing

Mathematics

Music

Native American Studies

Outdoor Adventure Leadership

Philosophy

*Option in:*

Religious Studies

Physics

**Political Science***Emphases in:*

General  
Public Administration  
Pre-Law

Psychology

Sociology

Spanish

Statistics

Women's Studies

**Teaching Minors**

Art (K-12)

Biology

Chemistry

Earth Science

Economics

English

Geography

Health and Physical Education (K-12)

History

Mathematics

Physics

Political Science

Psychology

Reading (K-12)

Sociology

Spanish (K-12)

Non-Endorsable Teaching Minor in Special Education  
(P-12)

**Pre-Professional Programs**

Pre-Engineering

Pre-Engineering Technology

Pre-Law

Pre-Medicine

Pre-Nursing

Pre-Pharmacy

Pre-Physical Therapy

**Endorsements**

Social Science (Broadfield)

Reading – Elementary

Reading – Secondary

Special Education (P-12)

**Graduate Degrees**

Information on Graduate programs offered by Montana State University Billings may be obtained by calling the Office of Graduate Studies (406) 657-2238 or by writing to:

Director, Graduate Studies  
Montana State University Billings  
1500 University Drive  
Billings, Montana 59101-0298

Or on the web at: [www.msubillings.edu/grad](http://www.msubillings.edu/grad)

**College of Allied Health Professions****Master of Health Administration (M.H.A.)**∇**Master of Science in Athletic Training (M.S.A.T.)****B.S. in Health and Human Performance/M.S. in Athletic Training 3+2 Option****Master of Science Interdisciplinary Studies Exercise and Sport Leadership Option****Master of Science in Clinical Rehabilitation and Mental Health Counseling (M.S.C.R.M.H.C.)**∇**College of Arts and Sciences****Certificate in Teaching Creative and Expository Writing****Master of Public Administration (M.P.A.) (Program placed on moratorium)****Certificate in Nonprofit Administration and Leadership****Master of Science in Psychology (M.S. Psyc.)****Master of Science in Public Relations (M.S.P.R.)**∇**College of Education****Master of Education Degree (M.Ed.) with Options in:**

- Curriculum and Instruction Teacher Licensure Option
- Online Instructional Technologies
- Interdisciplinary Studies (The Interdisciplinary Studies Option permits students to have flexibility to design a program in collaboration with a faculty advisor.)

- Reading
- School Counseling (K-12)

**Master of Science in Special Education Degree  
(M.S.S.E.) with Options in:**

- Advanced Studies▽
- Advanced Studies with Applied Behavior Analysis  
emphasis
- Generalist▽

**Other Programs**

**Special Education Endorsement**

**Reading Endorsement**

**School Counseling Endorsement**

**Certificate of Teaching and Learning Online▽**

**Certificate in Teaching English to Speakers of  
Other Languages (TESOL)**

**Supervisor Endorsements**

- Supervisor of Reading
- Supervisor of Special Education

**Applied Behavior Analysis Track**

**MSU Billings Online University**

Information about online and interactive television programs can be found on their website at [www.msubillings.edu/msubonline](http://www.msubillings.edu/msubonline) and may also be found on page 289.

# Admissions and Registration

McMullen First Floor West

(406) 657-2158 or 1-800-565-MSUB

[www.msubillings.edu](http://www.msubillings.edu)

Montana State University Billings believes that every student who is academically capable of successfully completing a course of study available through MSU Billings should be given the opportunity of enrolling in the University without regard to race, sex, color, national origin, religion, age, disability, or marital status.

Montana State University Billings reaches out to encourage minority students to attend the institution. Staff representatives of the Office of New Student Services make frequent visits to middle schools, high schools, community colleges, and tribal colleges to provide guidance to students as they consider and explore their educational future.

## Admissions

### New Students: How to Apply

**NOTE: Students making application to attend Montana State University Billings should be aware that the Admission Requirements may have changed since the publication of this document. Please contact the Office of Admissions and Records (406) 657-2158, 1-800-565-MSUB; or write to the Office of Admissions and Records, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298.**

**For additional information regarding admission or to obtain an application for admission, please:**

- Visit MSUB on the web at [www.msubillings.edu](http://www.msubillings.edu)
- Email [admissions@msubillings.edu](mailto:admissions@msubillings.edu)
- Contact the Office of New Student Services at (406) 657-2888, or 1-800-565-MSUB
- Write to the Office of Admissions and Records, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298.

1. Complete and submit an application for admission. Applications will be processed only for the term that the applicant indicates on the application.

2. Submit a \$30.00 nonrefundable application fee (check or money order) with the application for admission. A \$40 nonrefundable fee is assessed to new graduate students.
3. If you have not previously attended an accredited college or university, request an official transcript from your high school that includes the graduation date, final class rank, and grade point average and have it sent to the Office of Admissions and Records, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298.
4. Before enrolling for an initial term, all post-secondary students must comply with immunization requirements of ARM 37.114.701-721:
  - I. Students born in 1957 or later must provide evidence that they have received two measles and two rubella immunizations, with dose one administered at 12 months of age or later and dose two administered at least 28 days after dose one. No measles vaccination before 1967 is valid. No rubella vaccination before 1969 is valid. As an alternative, a student may supply a laboratory report from a CLIA approved laboratory indicating that the student is immune to measles and/or rubella.
  - II. Under ARM 37.114.711, the prospective pupil must receive a second dose of live measles and rubella vaccine before the beginning of the succeeding school term and no earlier than 28 days after administration of the first dose of measles and rubella vaccine.
  - III. A student may be exempt from the above requirements for medical reasons (ARM 37.114.715) providing the student supplies a statement from a physician (MD or DO) holding a license to practice in the United States or Canada stating: a) The specific immunization that is contraindicated; b) The time period the immunization is contraindicated; and c) The reasons for the contraindication.
  - IV. A student may be exempt from the above requirements for religious reasons providing the student supplies MT Department of Public Health and Human Services Form HES-113 that immunizations are contrary to the student's

religious beliefs. This document must be submitted annually by any student claiming a religious exemption (ARM 37.114.716).

## When to Apply

Students wishing to attend Montana State University Billings should apply for admission as early as possible prior to the term in which enrollment is desired.

## New First-Time Students: Admission Requirements

### General Policies: Student Responsibilities

Students must have graduated from a high school accredited by the state accrediting agency, or have completed the General Educational Development test (GED) or High School Equivalency test (HiSET) to be admitted to any campus of the Montana University System. At the discretion of the institution, for students who complete their secondary education through home schooling or at unaccredited secondary schools, this requirement may be met by “satisfactory performance” on the ACT, SAT, or a recognized testing instrument.

Students in credit-bearing continuing education courses must meet the same admission requirements and academic standards as students in regular academic courses.

### First-time Students Who Graduated from High School Within the Last Three Years

New students in this category need to follow the “All New Students: How to Apply” section. First-time students who graduated from high school within the last three years are also required to do the following:

1. All first-time applicants who enter college within three years from the date of their high school graduation or from the date when they would have graduated from high school are required to take either the American College Test (ACT) or the Scholastic Aptitude Test (SAT). One of these tests should be taken prior to making application for admission and official results sent to Montana State University Billings. The SAT or the ACT test must be taken no later than by the end of the first term of attendance at MSU Billings.
2. Students who enter college within three years from the date of their high school graduation need to complete the High School Self-Report Form (listing admission requirements and college preparatory requirements) or submit a high school transcript (reflecting graduation date) with the application for admission. This form is available from Montana high school counselors or from the Office of Admissions and Records at MSU Billings.
3. Students who have graduated from high school within the last three years must meet one of the three following Admission Requirements:
  - Have a minimum grade point average of 2.5
  - A composite score of 22 on the American College Test (ACT) or a combined score of 1540 on the SAT
  - Rank in the upper one-half of the student’s graduating class
4. Students must also meet the following **Regent’s Preparatory Requirements**:
  - Four years of English—in each year the content of the courses should have an emphasis upon the development of written and oral communication skills and study of literature.
  - Three years of mathematics, including Algebra I, Geometry, and Algebra II (or the sequential content equivalent of these courses). Students are encouraged to take a math course their senior year.
  - Three years of social studies, which shall include global studies (such as world history or world geography); American history; and government, economics, Indian history, or other third-year course.
  - Two years of laboratory science. One year must be earth science, biology, chemistry, or physics; the other year can be one of those sciences or another approved college preparatory laboratory science course.
  - Two years chosen from the following: foreign language (preferably two years of one language), computer science, visual and performing arts, or career/technical education units which meet the Office of Public Instruction guidelines.
5. Any student seeking admission to a four-year program must also satisfy the mathematics proficiency standard set out in Board of Regents Policy 301.1:
  - a. A score of 22 or above on ACT mathematics; or
  - b. A score of 27.5 or above on SAT mathematics; or



- c. A score of 3 or above on the AP calculus AB or BC subject examination or a score of 4 on the IB calculus test; or
  - d. A score of 50 or above on the CLEP subject examinations in selected topics [college algebra, college algebra-trigonometry, pre-calculus, calculus, or trigonometry]; or
  - e. Completion of a rigorous high school core including four years of mathematics in high school (Algebra I, Algebra II, Geometry & a course beyond Algebra II) and three years of laboratory science; or three years of mathematics including a course beyond Algebra II and four years of laboratory science, in addition to English, social studies, and electives as described in the regents' college preparatory program, with grades of C or better in all courses.
6. Any student seeking admission to a four-year program must also satisfy the writing proficiency standard set out in Board of Regent Policy 301.1:
- a. A score of 7 or above on the essay or 18 on the combined English/writing section of the optional writing test of the ACT; or
  - b. A score of 7 or above on the essay or 25 on the writing section of the SAT; or
  - c. A score of 3.5 or above on the Montana university system (MUS) writing assessment; or
  - d. A score of 3 or above on the AP English language or English literature examination; or
  - e. A score of 4 or above on the IB language A1 exam; or
  - f. A score of 50 or above on the (CLEP) subject examinations in composition.

A student who has not yet demonstrated the ability to meet the mathematics and/or writing proficiency standards may be admitted (without condition) to a two-year degree program or admitted provisionally to a four-year degree program on any campus of the Montana University System.

**NOTE:** Admission, college preparatory curriculum requirements, and math and writing proficiency standards **do not apply** to the following students:

1. Students who do not enter college within three years from the date of their high school graduation or from the date when they would have graduated from high school. (See "First-time Students Out of High School More than Three Years" section.)
2. Part-time students taking seven or fewer college-level semester credits.
3. Summer only students.

**NOTE:** A student less than three years from high school graduation and who does not meet the University Preparatory Requirements and/or the Admission Requirements has the following options to enter Montana State University Billings:

1. Enroll part-time during a summer session to make up any deficiency.
2. Enroll as a part-time student for seven credits or less. (To receive part-time financial aid, most students must enroll for six or more credits.)
3. Enroll as a full-time student accepted under an exemption allowed by Board of Regent Policy.
4. Enroll as a student at the MSU Billings City College.

**NOTE:** A student less than three years from high school graduation who meets Admission and University Preparatory Requirements, but does **not** meet the math and/or writing proficiency standards may prove that he/she has the appropriate proficiency in the following ways:

- Re-take one or more of the listed assessments to earn the required score
- Earn a C- grade or better in a college course that is the prerequisite to the course that satisfies the general education program requirements (See Advising & Career Services for assistance in selecting such a course).

Students who enter college within three years of the date of their high school graduation must meet the required admission criteria including the University Preparatory curriculum and math/writing proficiency standards outlined previously to be accepted for full-time status.

## First-time Students Out of High School More Than Three Years

In order to be accepted for admission to Montana State University Billings' University campus, students must meet the following requirements:

**Montana Resident Students out of high school more than three years:** Graduates of any accredited Montana high school out of high school more than three years must complete the steps for "All New Students: How to Apply" section.

**Non-Montana Resident Students out of high school more than three years:** Non-Montana resident applicants out of high school more than three years must be graduates of an accredited high school and must complete the steps for "All New Students: How to Apply" section.

[An exception to these requirements pertains to those who are not high school graduates and who have completed the General Educational Development test (GED) or High School Equivalency test (HiSET). Please see the “Non-high School Graduates” section of this catalog (page 22)].

## City College Enrollment Requirements

The City College, 3803 Central Avenue, requires students to have earned either a high school diploma from an accredited institution, a GED, or HiSET. Please contact Jacket Student Central (247-3000) for additional admission information. In an effort to meet individual needs, City College has established special admission procedures for students seeking admission to certain programs. Contact the City College for this information at (406) 247-3000, ext. 3005. The Admission application fee is \$30.00 for City College.

## Transfer Students

### How to Apply

**NOTE: Students making application to attend Montana State University Billings should be aware that Admission Requirements may have changed since the publication of this document. Please contact the Office of Admissions and Records (406) 657-2158 or 1-800-565-MSUB; or write to the Office of Admissions and Records, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298.**

Applicants who have attempted 12 or more GPA credits at another accredited college or university are considered transfer students. To be admitted to Montana State University Billings, transfer students must do the following:

1. Complete and submit an application for admission. Applications for admission may be obtained from college counselors or from the Office of Admissions and Records, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298. You may call (406) 657-2158 or 1-800-565-MSUB to have this material sent to you or apply online at [www.msubillings.edu](http://www.msubillings.edu). Applications will be processed only for the term the applicant indicates on the application.
2. Submit a \$30.00 nonrefundable application fee (check or money order) with the application for admission. A \$40 nonrefundable fee is assessed to new graduate students.

3. Transfer students must request official and complete transcripts from each college attended (foreign or domestic) or a transcript which indicates that a baccalaureate degree has been earned and transcripts from any colleges attended after the degree was earned. Transcripts must be sent from the transfer institution directly to the Office of Admissions and Records at Montana State University Billings. All transcripts must be “official” and arrive in sealed, unopened envelopes, or arrive by secure electronic transfer (not email) from the originating institution.
4. Before enrolling for an initial term, all post-secondary students must comply with immunization requirements of ARM 37.114.701-721:
  - I. Students born in 1957 or later must provide evidence that they have received two measles and two rubella immunizations, with dose one administered at 12 months of age or later and dose two administered at least 28 days after dose one. No measles vaccination before 1967 is valid. No rubella vaccination before 1969 is valid. As an alternative, a student may supply a laboratory report from a CLIA approved laboratory indicating that the student is immune to measles and/or rubella.
  - II. Under ARM 37.114.711, the prospective pupil must receive a second dose of live measles and rubella vaccine before the beginning of the succeeding school term and no earlier than 28 days after administration of the first dose of measles and rubella vaccine.
  - III. A student may be exempt from the above requirements for medical reasons (ARM 37.114.715) providing the student supplies a statement from a physician (MD or DO) holding a license to practice in the United States or Canada stating: a) The specific immunization that is contraindicated; b) The time period the immunization is contraindicated; and c) The reasons for the contraindication.
  - IV. A student may be exempt from the above requirements for religious reasons providing the student supplies MT Department of Public Health and Human Services Form HES-113 that immunizations are contrary to the student’s religious beliefs. This document must be submitted annually by any student claiming a religious exemption (ARM 37.114.716).

**Montana Resident Transfer Students** will be admitted upon receipt of an official and complete transcript from each college or university attended. A resident transfer student applicant must meet the criteria

for “good academic standing” as defined by Montana State University Billings. See page 468 of the General Bulletin.

**Non-Montana Resident Transfer Students** must meet the in-state student requirements and must also have a 2.00 cumulative grade point average for all college level work before his/her admission is approved.

## When to Apply

Transfer applicants should apply for admission as early as possible prior to the term in which enrollment is desired.

## Transfer of College-Level Credits

### Transfers from Montana University System Units, Montana Community Colleges and Montana Tribal Colleges

Montana State University Billings is committed to facilitating undergraduate transfer for students transferring from units of the Montana University System and the three publicly supported community colleges and the seven tribal colleges in Montana.

### Block Transfer

Undergraduate students who have completed, with a cumulative grade-point average of 2.0 (C) on a four-point scale, an approved general education program at one of the institutions noted above, will be deemed to have met the lower division General Education requirements of Montana State University Billings.

Special attention should be paid to Board of Regents Policy 301.5.3 on Minimum Course Grades which also applies to acceptance of transfer credit. Before Montana State University Billings will accept the courses as applicable for meeting General Education, a student will have to earn a grade of “C-” or better in each of the classes.

Depending on the major program the student selects, there may be additional lower division courses required to meet published major program prerequisites. A student may be required to take additional coursework at the upper division level that is part of the approved General Education program at Montana State University Billings.

## Associate of Arts and Associate of Science Degrees

A student who has completed an Associate of Arts or an Associate of Science degree with an approved general education component package at another unit of the Montana University System, has satisfied the requirements of this policy.

**NOTE:** Students should be aware that Associate of Arts or Associate of Science degrees ordinarily do not have a designated field of study in their title.

Special attention should be paid to Board of Regents Policy 301.5.3 on Minimum Course Grades which also applies to acceptance of transfer credit. Before Montana State University Billings will accept the courses as applicable for meeting General Education, a student will have to earn a grade of “C-” or better in each of the classes.

## Montana University System (MUS) Core Curriculum

The Montana Transferable Core Curriculum represents an agreement among community, tribal, and publicly funded colleges and universities in the State of Montana. It ensures the transfer of up to 30 semester credits for those students enrolled in courses prescribed within each of six discipline areas at a participating host institution. The six discipline areas are:

Natural Sciences (at least one with a laboratory experience) .....	6 semester credits
Social Sciences/History .....	6 semester credits
Mathematics .....	3 semester credits
Communication - written & oral .....	6 semester credits
Humanities/Fine Arts .....	6 semester credits
Cultural Diversity .....	3 semester credits
<b>Total Semester credits .....</b>	<b>30</b>

Transfer students and student advisors should also be familiar with the additional guidelines that have been adopted by the Montana Board of Regents for students who use the Montana University System Core to satisfy their lower division general education requirement. Those guidelines are entitled Operational Rules for the Montana University System Core, and can be found at [www.mus.montana.edu/transfer](http://www.mus.montana.edu/transfer). They include the following:

- In order to satisfy the MUS core, students must successfully complete at least one course that includes significant content related to the cultural heritage of American Indians. (See an academic advisor for assistance in determining which transfer courses satisfy this requirement.)

- Students must earn the minimum number of credits in each of the six (6) categories of coursework. Students can only use credit-bearing competency tests or coursework to satisfy the MUS core.
- Coursework can only be used once to satisfy the requirements of the MUS Core. It cannot be “double counted” to satisfy the requirements of more than one category.
- In order to satisfy the requirements of the Communications area, students must successfully complete a combination of courses that includes significant content in both written and oral communications.
- Students must satisfy the “minimum grade” requirements established by Board of Regents’ Policy 301.5.3, along with any exceptions to that policy that may have been established by their program of study.

The Montana University System is committed to facilitating the ease of undergraduate student transfer to its campuses. Therefore, all campuses of the Montana University System will recognize the integrity of general education programs offered by units of the Montana University System and the three publicly supported community colleges and the seven tribal colleges in Montana.

An undergraduate student who has completed courses identified as part of the Montana University System (MUS) Core courses will have general education coursework reviewed for transferability to Montana State University Billings as follows:

1. If a student has completed less than 20 general education credits, that student will be required to complete the approved General Education program at Montana State University Billings. All general education transfer credits that are part of the MUS Core will be reviewed for possible application in the approved General Education program.
2. If a student has completed 20 or more MUS core credits, but does not satisfy the block transfer policy described in the preceding section, that student may choose to complete either the MUS core or the approved General Education program at Montana State University Billings. The student should make that decision in consultation with an advisor.
3. An undergraduate student who completes postsecondary coursework in the Montana University System that does not fall within the MUS

Core will have his/her classes analyzed on a course-by-course basis to determine how those classes might satisfy the General Education program requirements at Montana State University Billings.

## Course by Course Evaluation

Students who have not completed an approved general education program will have their transcript evaluated for transfer purposes using the Statewide Core Curriculum and Community College Transfer Guide.

**Note: College-level courses shall be defined as those that are applicable to an associate of arts, associate of science or baccalaureate degree.** In advance of a student’s enrollment, Montana State University Billings will determine which courses within an associate of applied science degree program will be credited toward a given associates or baccalaureate degree. In all cases, such courses shall not include remedial or developmental courses.

Depending upon the major program the student selects, there may still be additional lower division courses required to meet published major program prerequisites.

## Minimum Course Grades

Effective Fall Semester 2005, Board of Regents policy 301.5.3 on minimum grades will apply to all students who enter or are readmitted to the Montana University System or the three (3) community colleges that semester or subsequent semesters. All students in the Montana University System and the three (3) community colleges must earn the following minimum grades in order to demonstrate their competency and preparation:

1. a “D-” or better in all classes that are used to satisfy so-called free or elective credits in an associate or baccalaureate degree program;
2. a “C-” or better in all classes that are used to satisfy a general education program;
3. a “C-” or better in all classes that are used to satisfy the pre-requisites or required courses in a major, minor, option or certificate.

Individual programs may establish grade standards that are higher than the minimums set out in paragraph A above, for some or all of the courses that are used to satisfy the pre-requisites or requirements for a major, minor, option, certificate or general education. Students will be notified of that expectation.

## All Transfers

**NOTE: By action of the Academic Senate of MSU Billings, MSU Billings will accept transfer students with completed AA or AS degrees from other regionally accredited institutions as having fulfilled their MSU Billings General Education requirements if the general education package is comparable in total credits and content. (10/7/04 memo #446 p. 1654)**

All college-level courses from regionally accredited institutions of higher education will be received and applied towards the free elective requirements of associate or baccalaureate degrees as applicable.

The Advising & Career Services (McMullen first floor west, 406-657-2240/City College Jacket Student Central, 406-247-3020) will do an evaluation of transcripts upon the request of the applicant. The student will be informed as to what transfer courses can be accepted toward the major and what courses must yet be completed for the degree. This evaluation will be processed only after an application, the admission fee, and official college transcripts are on file with the Office of Admissions and Records.

Students who transfer credit from foreign institutions or from institutions that do not have regional accreditation will have their courses evaluated on an individual basis. Policy and procedure information may be obtained in the Office of Admissions and Records.

Students transferring from institutions with candidacy status in a regional accrediting association must earn at least 20 credits at MSU Billings with a minimum 2.00 GPA before their credits from the former institution will be considered for acceptance.

Students transferring from community colleges or other two-year colleges may not use the credit transferred in lieu of upper division credits required for graduation at Montana State University Billings.

Students transferring to Montana State University Billings who have previously earned a Bachelor of Arts or Bachelor of Science degree from a regionally accredited institution of higher education are considered to have their General Education requirements completed. Only information pertaining to the degree, date, and institution conferring will be noted on the transcript, individual coursework is not transcribed.

Acceptance of credits from other institutions of higher learning does not preclude the necessity of meeting all curricular requirements of a specific program. Students

transferring to MSU Billings may have their credits evaluated on the basis of the current catalog at the time when they first entered Montana State University Billings, or they may elect to enter under the catalog for the year in which they entered any accredited institution of higher education in the United States provided they have maintained continuous, full-time enrollment (excluding summers) in good standing.

Transfer students will begin a new grade point average at MSU Billings, but for graduation with honors all previous transfer work will be calculated into GPA.

## Course Equivalency Guides

Annually, Montana State University Billings updates equivalency agreements with regional community colleges in Wyoming, North Dakota, and Montana; Montana's tribally controlled colleges; and Montana's four-year (public and private) institutions. The individual Colleges at MSU Billings also prepare program-specific transfer agreements; for instance, the College of Education has a listing of courses that students at Northwest College in Wyoming can take that will transfer directly into elementary education. Beginning with 1992, MSU Billings' equivalency agreements also highlight the Montana University System Core Curriculum. Students who attend any of these colleges and who plan to transfer to MSU Billings are encouraged to visit the MSUB website ([www.msubillings.edu](http://www.msubillings.edu)). This information will assist students in understanding how specific courses will transfer to MSU Billings and what courses individual degree programs require.

MSU Billings has Course Equivalent Guides on the MSUB website ([www.msubillings.edu](http://www.msubillings.edu)) to the following colleges:

- Blackfeet Community College
- Casper College
- Carroll College
- Central Wyoming College
- Chief Dull Knife College
- Dawson Community College
- Dickinson State University
- Flathead Valley Community College
- Aaniiih Nakoda College
- Fort Peck Community College
- Gillette Campus of Northern Wyoming Community College District
- Great Falls College
- Helena College
- Little Big Horn College
- Miles Community College
- Montana State Bozeman
- Montana State Northern

Montana Tech  
 Northwest College  
 Rocky Mountain College  
 Salish Kootenai College  
 Sheridan College of Northern Wyoming Community  
 College District  
 Stone Child College  
 University of Great Falls  
 University of Montana Western  
 University of Montana Missoula  
 University of Wyoming  
 Williston State College  
 Northern Wyoming Community College District

## Former MSU Billings Student Re-Admission

A former student of Montana State University Billings who is in good standing and who was not in attendance the preceding term will be eligible for registration after completing the following:

1. Complete and file a former student application with the Office of Admissions and Records, or re-admit online at [www.msubillings.edu](http://www.msubillings.edu) or via [myinfo@myMSUB](mailto:myinfo@myMSUB). A \$40 non-refundable fee is assessed to new graduate students.
2. Request that transcripts from institutions attended, if any, since last attending Montana State University Billings be sent to the Office of Admissions and Records.

## When to Apply

Returning students should apply for re-admission as early as possible prior to the semester in which enrollment is desired.

## Special Admission Procedures

In an effort to meet individual needs, MSU Billings has established special admission procedures for undergraduate students which pertain to non-high school graduates, home-schooled students, high school students, and non-degree applicants.

**NOTE: Students making application to attend Montana State University Billings should be aware that Admission Requirements may change at any time. Please contact the Office of Admissions and Records (406) 657-2158; or write to the Office of Admissions and Records, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298.**

Students in these categories would also complete the process of application outlined in the “All New Students: How to Apply” section as it is appropriate to their circumstances. However, the following information also applies:

## Non-High School Graduates

Non-high school graduates may be admitted on the basis of the General Education Development (GED) test, or High School Equivalency Test (HiSET). Various boards establish minimum scores for these tests or groups and students can visit with Advising and Career Services (406-657-2240/406-247-3019) for current minimums.

Scores from the ACT or SAT are still required of this group of students who enter the University less than three years from the date of their high school class would have graduated. There are no minimum scores attached to this test, but a national test score from either the ACT or SAT is required. Students may access these tests on the regularly scheduled national test dates, or the ACT Residual Test is available to students through the Testing Center at City College (call 406-247-3025 for upcoming test dates and times).

Students who enter college three or more years after the date they would have graduated from high school are exempt from this conditional status and from the Admission/University Preparatory Requirements and writing/math proficiency standards.

## High School Connections

High School Connections is a program to give high school students the opportunity to earn high school and college credits simultaneously—the same class earns credits for both. The high school dual enrollment program at MSUB is part of a statewide initiative to increase the number of students pursuing post-secondary education by smoothing the transition between secondary and post-secondary education and to help reduce college debt. High school dual enrollment is an opportunity for high school students to complete a college class within their high school schedule, with a familiar teacher and in a familiar classroom.

Credits earned are fully transferable in the Montana University System and transfer widely to other accredited colleges and universities, but please verify degree requirements and acceptance of credits.

## University Connections

University Connections is a dual credit program available to all high school and home school students across Montana. The cost for this program is approximately \$50.00 per credit. Tuition and fees are subject to change by the Montana Board of Regents of Higher Education. Additional course fees may apply. For questions regarding current tuition and fees, please contact the Business Office at 406-657-2301. There is no limit on the number of credits enrolled for each semester. High school seniors are still eligible for the University Connection program the summer following graduation. Enroll in an Online University Connection course, and the technology fee will be waived.

## Non-Degree Applicants

An applicant who wishes to pursue studies for personal growth and who does not wish to work toward a formal degree at Montana State University Billings may apply as an undergraduate non-degree student. Acceptance into this category does not constitute acceptance into a degree-granting program. All applicants should have sufficient educational background to qualify for the course or courses in which enrollment is sought and must certify on the application form that they have graduated from high school, have appropriate GED or HiSET scores or appropriate MSU Billings Readiness test scores in reading, writing, and mathematics. A maximum of 32 semester hour credits earned as a non-degree student may be applied to an undergraduate degree at Montana State University Billings if the applicant applies and is accepted into a degree program. Financial aid is not available to students in this category, nor may they qualify for the WUE (Western Undergraduate Exchange) program.

This category is not open to students currently on academic suspension from Montana State University Billings or on academic suspension from any other college or university.

No academic credentials or transcripts are required in support of the application; however, non-degree students who later wish to change to a degree program must furnish required supporting credentials and must meet all the regular admission requirements. Financial aid is not available to students in this category.

## International Students

International applicants must meet the out-of-state admission requirements in addition to the following:

1. Certified copies of all certificates, degrees and diplomas with a certified translation of the records.

If you have any post-secondary level course(s) completed outside of the U.S. or in non-English-speaking Canada to transfer to Montana State University Billings, we need a **course-by-course evaluation** completed by one of the services highlighted below:

- SpanTran
- ECE

Evaluations from all other services/agencies are subject to prior approval and acceptance for transfer. Please verify with the Office of Admissions and Records prior to requesting a credential evaluation from any other agency or service.

Note: There is substantial variety in grading scales used in secondary and post-secondary educational institutions in other countries. Conversion of any grading scale to the most common U.S. grading scale (A-to-F, four passing grades and one failing grade) is to use primary grades or grade ranges only. For this reason, plus and/or minus designations will not be used when transcribing foreign transfer credits.

2. Completed MSU Billings Financial Statement and must present evidence of sufficient funds to cover the estimated cost of tuition and fees as well as living expenses for one academic year at MSUB from a reliable financial institution, bank, or U.S. citizen who will accept responsibility for the student's financial obligations.
3. Students from non-English speaking countries must provide evidence of proficiency in English. Students can do this several ways:
  - a. Students may take the Test of English as a Foreign Language (TOEFL) and have official results sent with their applications to the Office of International Studies. TOEFL information can be accessed on the web at [www.toefl.org](http://www.toefl.org) or by calling 609-921-9000. The Montana State University Billings Institutional Code for the TOEFL and the GRE is 4298. Students scoring higher than 515 on the paper-based (pBT) TOEFL, higher than 68 on internet-based (iBT) TOEFL, or higher than a 5.5 on IELTS are assured undergraduate admission if all other

requirements are met; those scoring less will be reviewed on a case-by-case basis. Prospective graduate students need a 565 (pBT) paper-based TOEFL score, a 79 internet-based (iBT) TOEFL score, or a 6.5 IELTS score. American Cultural Exchange students who have finished level 6 will be admitted to undergraduate programs without TOEFL. Graduate students who have finished level 7 will be admitted to graduate programs without TOEFL. Students need to submit a copy of their A.C.E. program certificate and transcripts with their applications for admission to the Office of International Studies.

- b. Students with Full Admissions to an academic program is contingent upon successful completion of the IELP offered at MSUB. For more information, please visit [www.msubillings.edu/internationalstudies/IELP-Home.htm](http://www.msubillings.edu/internationalstudies/IELP-Home.htm)
  - c. In addition, a score of 40 on the American Writing Accuplacer is required.
4. Appropriate immunization records. These records must be submitted with an English translation.
  5. Proof of health insurance is required each semester. Student health insurance is available for purchase through the University. Health insurance charges will be automatically assessed to the student account if proof of personal health insurance is not provided.
  6. If a student is currently attending another U.S. school and wishes to have his/her I-20 transferred to MSUB, an I-20 Transfer Form must be completed by the student as well as the current international academic advisor.

### When to Apply

Application Deadlines:

- Fall Semester: June 1
- Spring Semester: October 1
- Summer Semester: February 1

Deferral Deadlines:

- Fall Semester: July 15
- Spring Semester: November 15
- Summer Semester: March 15

For more information on international student admission call the International Studies Office at (406) 657-1705 or email [internationaladmissions@msubillings.edu](mailto:internationaladmissions@msubillings.edu)

## International Students Enrollment and Academic Progress

International students must maintain academic status according to US immigration law and MSUB policies.

- A. To maintain an F1 visa, a student must make normal academic progress as well as abide by state and federal laws. Normal academic progress is defined as enrolling in and passing a minimum of 12 credits and achieving a minimum semester GPA of 2.0. International students must be enrolled at all times for at least 12 credits (and at least 9 in class/not online).
- B. An Incomplete or Withdraw will not count towards credits passed within a semester.
- C. It is the student's responsibility to manage his/her enrollment and abide by the rules of his/her visa. This includes updating personal information records via the myInfo, completing the MSUB Immigration Registration Form each semester, registering for classes in a timely manner, and adhering to all deadlines on the Academic Calendar (in particular late registration, withdrawal from classes, payment of fees, and monitoring academic standing).
- D. Students who are deemed "out of status" for the second semester or for failure to attend class will have their I-20 form terminated immediately and must either request reinstatement with a different university or leave the United States. There is no grace period.
- E. Being dropped for non-payment of tuition and fees is a violation of student visa status and may result in cancellation of a student's I-20.

### Agreements with International Institutions

MSU Billings has signed formal agreements for International Study Abroad. Please see the Office of International Studies for additional information on Study Abroad.

## Western Undergraduate Exchange (WUE)

Montana State University Billings participates in the Western Undergraduate Exchange (WUE), a program of the Western Interstate Commission for Higher Education and other western states. Through WUE, undergraduate students who are not residents of Montana may enroll at Montana State University Billings and pay reduced nonresident tuition and fees.



This WUE tuition rate is in-state tuition plus 50 percent of that amount. (See the Fee Schedule on page 32) Because Montana State University Billings participates, residents of Montana may enroll under the same terms in designated institutions and programs in other participating states.

Resident students from the following may participate if they meet eligibility requirements: Alaska, Arizona, Montana, California, Oregon, Colorado, Nevada, South Dakota, Hawaii, New Mexico, Utah, Idaho, North Dakota, Washington, Wyoming, and the Commonwealth of the Northern Mariana Islands (CNMI).

All degrees and programs are offered to undergraduates in WUE. This program may be subject to enrollment limits established by the Montana Board of Regents. Application forms for WUE are available at the Office of Admission and Records (406) 657-2158 or 1-800-565-MSUB.

## Veterans Certifying Official

### McMullen First Floor West, (406) 657-2158

Veterans are advised to check with the Veterans' Affairs coordinator 30-45 days prior to registration. A veteran must notify this office whenever there is a change in address, enrollment, or additional dependents.

## Graduate School Applicants

### McMullen 200, (406) 657-2238

Graduate school applicants should consult the Graduate Catalog for complete admission information. However, all applicants must submit an application for admission and a \$40.00, nonrefundable, admission fee to MSU Billings through the Office of Admissions and Records.

Note: MSU Billings graduates will also be required to pay the graduate application fee of \$40.

Additional requirements for application to the Graduate School include:

1. Completed Application to Graduate Studies
2. Required Immunizations (See "How to Apply: New Students" section)
3. Submission of GRE scores for graduate programs in the College of Education and the College of Arts and Sciences.
4. Official transcripts of all previous undergraduate and graduate coursework

5. Three letters of recommendation from individuals qualified to assess the applicant's ability to perform graduate-level academic work

All of the above must be on file in the Office of Admissions and Records and in the Office of Graduate Studies prior to registration dates or registration may be delayed and late registration fees applied.

## Falsification of Information

Each student is responsible for knowing and for complying with all regulations regarding the admission procedures. Failure to be informed or to comply does not excuse a student from responsibility or from any penalty or difficulty which may be encountered. Misrepresentation or falsification of a student's enrollment status or application for admission will be sufficient grounds to deny admission or cancel a student's current registration and to suspend the student for two semesters. It is the student's responsibility to know his/her enrollment status at his/her former institution(s).

## Denial of Admission

Under Board of Regents' policy (301), MSU Billings "may deny or condition admission, readmission, or continuing enrollment of any individual who, in the judgment of the campus, presents an unreasonable risk to the safety and welfare of the campus and persons thereon. In making such judgment, the campus may, among other things, take into account the individual's history and experience relative (a) to violence and destructive tendencies, (b) to behavior on other educational institutions, and (c) to any rehabilitative therapy the individual may have undergone."

Based on this policy and completion of the application for admission and other application materials (which may include but not be limited to the Safety Questionnaire, counselor input, advising or other student affairs interview and input), a student may be denied admission or may be given provisional admission at part-time or full-time status under the guidance of an advisor.

Reasons for denial shall be communicated to the individual in writing. Applicants may appeal their denial to the Vice Chancellor for Student Affairs.

# REGISTRATION

## First-Time Students

1. All first-time students at MSU Billings need to apply to the University and be accepted before they can register (see the Admissions Section of this *General Bulletin*, page 15).
2. After being admitted, students should check for the beginning dates for registration (see the Academic Calendar in this General Bulletin or at [www.msubillings.edu](http://www.msubillings.edu)), after which students may register at any time.
3. New Student Orientation Sessions are scheduled throughout the summer and immediately prior to the beginning of Spring Semester. **Attendance at one of the Orientations is expected.** Placement testing, course registration, processing of student identification cards, and other information necessary for a successful first semester at MSU Billings is accomplished at New Student Orientation.
4. First-time students at MSU Billings are required to visit with an academic advisor prior to registering for classes. Academic advising is provided as part of Orientation. A student's course schedule must be approved by an academic advisor before actual registration can take place. The Advising & Career Services Office is located in McMullen Hall first floor west, (406) 657-2240, or at the City College Jacket Student Central, (406) 247-3019.
5. As students are expected to complete 120 credits over an eight-semester period of time to graduate in four years, a minimum of 15 or more credits must be taken each semester. To encourage students to take a full load of 15 or more credits, a "Flat Spot" in the tuition has been created allowing students to register for 12 or more credits for the same tuition as 12 credits. Thus, whether one registers for 12, 15 or 18 credits, the same tuition applies. It is clearly to students' advantage to register for 15 credits or more a semester.
6. Once the course schedule has been approved, the student should follow registration instructions found on the web at [www.msubillings.edu](http://www.msubillings.edu)
7. Some classes may be restricted or closed and need departmental approval. Student should see department for assistance in registering for these courses.
8. Students may add courses during the first seven instructional days of the semester before permission of the instructor or department chairperson is required. Dropping a course with a partial refund is permissible through the 15th instructional day, and a course may be dropped without a grade penalty up through the 13th week of the semester (a W reflecting withdrawn will apply). With instructor and advisor approval, a course may be dropped up until 10 class days (not including finals) from semester's end. Once a course grade is submitted, the course may no longer be dropped without instructor and advisor approval. Please see Admissions and Records, Advising, or Jacket Student Central for assistance with dropping, adding, and/or withdrawing.
9. Students who have not paid their bills by the close of business on the 3<sup>rd</sup> day of classes will have late charges assessed. Student who fail to make payment arrangements in the first two weeks may be dropped from their classes.
10. If registration takes place after the third day of the semester, a late fee will be added to the registration charge.

## Registration Regulations

### Late Registration

Students are expected to complete registration within the dates stated. For any delay beyond that period, unless such delay is caused by University officials, a late registration fee will be charged. Students permitted to register late must pay the full fees. Students who fail to pay or do not have their fees arranged before the final fee payment day may have their classes deleted for that semester.

### Transcript(s) from Former School(s) and College(s)

All official records (transcripts) of former college study must be filed in the Office of Admissions and Records by new students (and by former students if they have attended other colleges since last attending MSU Billings) before their registration is considered complete. (See Non-Degree Policy and Procedures under Admissions Section.) Failure to file transcripts

with the Office of Admissions and Records within a reasonable time will result in the cancellation of a student's registration. Responsibility for securing transcripts rests with the student.

## Adding Courses

Students may add courses during the first seven instructional days of each semester. Students may add courses after the seventh instructional day and through the 15th instructional day only with the instructor's and department chairperson's approvals.

## Repeated Courses

When a course which a student has previously attempted is repeated, only the most recent course credit and grade is calculated into the student's grade point average, even if the most recent grade is lower. (Note: the original course and the grade remain on the official transcript in addition to the more recent course and grade).

No prerequisite course may be repeated if the more advanced course has been completed with a grade of "C" or better. Exception may be considered upon appeal to the chairperson of the department in which the course is offered.

## Military Credit for Prior Learning

Credit may be granted for military service and for completed military service schools based upon the recommendations of "A Guide to the Evaluation of Educational Experiences in the Armed Forces" [American Council of Education]. Inquiries about credit for military training and experience should be made at Advising & Career Services.

## Credit Recommended by the National College Credit Recommendation Service

Credit may be granted to students based on the recommendation of the National CCRS (National College Credit Recommendation Service).

## Academic Regulations

### Classification of Students

Students at Montana State University Billings are classified as full time equivalent students when enrolled in a minimum of 15 credits each semester. (Note: Financial Aid considers full time enrollment as 12 credits and MSU Billings certifies students as full time

for enrollment verifications at 12 credits). Thus, the following undergraduate student categories are designated based on credits completed:

Freshman-----	0-29 credits
Sophomores -----	30-59 credits
Juniors -----	60-89 credits
Seniors -----	90 or more credits

**Please note that students must complete an average of 15 credits each semester/30 credits each academic year in order to complete the required 120 credits to graduate in eight semesters.**

## Flat Spot

**As students are expected to complete 120 credits over an eight-semester period of time to graduate in four years, a minimum of 15 or more credits must be taken each semester. To encourage students to take a full load of 15 or more credits, a "Flat Spot" in the tuition has been created allowing students to register for 12 or more credits for the same tuition as 12 credits. Thus, whether one registers for 12, 15 or 18 credits, the same tuition applies. It is clearly to students' advantage to register for 15 credits or more a semester.**

## Graduate Student Classification

Please consult the Graduate Catalog for information regarding the classification of graduate students and credit load.

## Credit Overload

Any student not on probation may register for up to 18 credits per term. However, individual students who have a 3.00 grade point average (GPA) may register for up to 20 credits per semester without consent. Students who wish to register for a credit load in excess of 18 hours, but who have less than a 3.00 GPA must have approval of the chairperson of the department in which they are majoring. Students who have a 3.00 GPA and wish to register for a credit load in excess of 20 credits per semester must have the approval of the chairperson of the department in which they are majoring, complete a Request for Overload form, and return the form to the Office of Admissions and Records.

## Change of Major

A student who transfers from one major should consult an advisor and/or look at "what-if" scenarios through the degree audit system. A student who considers such a change is warned that the requirements of the new curriculum may make necessary the completion of additional credits if the student is to fulfill requirements for graduation. Students must visit Advising & Career

Services (McMullen Hall first floor west/City College Jacket Student Central) to obtain assistance with a change of major.

## Final Examinations

Final examinations are scheduled during the last week of each semester. A final examination schedule is available on the web at [www.msubillings.edu](http://www.msubillings.edu)

## Accelerated Coursework

Students are encouraged to decrease the time required to complete a degree by gaining credit for knowledge they have obtained which duplicates that which is taught in specific courses. Students should initiate requests for such academic credit by consulting first with their advisor or department chairperson. The following provisions indicate ways accelerated credit may be awarded.

Applicants who have taken **Advanced Placement (AP) Exams, C/T Start** and/or **International Baccalaureate (IB) Exams** should request that the official scores be sent directly to the Office of Admissions and Records. AP scores of 3 or higher and IB Exams with scores of 4 or higher will be granted college credit with a Pass (P) grade for the equivalent courses. After students successfully complete a semester at MSU Billings, the credits will be placed on their college transcripts with the indication of AP for Advanced Placement, IB for International Baccalaureate, or C/T for Career/Technical Statewide Articulations (C/T Start).

## Course Waiver

A required course may be waived if the student has previously completed equivalent work. All waivers must be approved by the academic department responsible for the requirements or course in question and must be certified by the chairperson of the appropriate academic department. In no instance will college credit 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 academic department chairperson. In no instance will a reduction be made in the number of credits required for any academic program.

## Challenging Courses

*We are currently awaiting finalization of a new state-wide Prior Learning policy which is likely to change the process outlined in the catalog below. Please check with Admissions & Records for current information.*

Each department or unit determines the courses which may be challenged. A course may not be challenged when the course is a prerequisite to a more advanced course already completed. Students are advised to check with individual departments for detailed procedures to be followed.

### Procedure for Challenging a Course

The student should obtain a recommendation from the instructor of the course being challenged and the approval of the chairperson of the department in which the course is listed. The following conditions apply to the challenging of courses for college credit:

1. The student must be currently enrolled in MSU Billings.
  2. Approval of the challenge request must be made by the chairperson of the department in which the course is listed, who will decide whether the challenge shall be by a comprehensive examination and/or by some other evidence of competence in the subject matter of the course.
  3. Challenge credit may be granted only if the grade received is "C" or higher.
  4. A course previously taken as an audit course or as a credit course may not be challenged for credit.
  5. By action of the University's Academic Senate, AP, CLEP and DANTES credits are awarded with a "P" grade. Departmental challenges may carry a letter or "P" grade.
- The Board of Regents has authorized the [American Council on Education's Guide to Educational Credit by Examination](#) and [National CCRS \(National College Credit Recommendation Service\)](#) for use to establish minimum scores and credit.
6. Currently enrolled students may receive credit on their transcript for successfully completed Advanced Placement (AP) exams, DANTES exams, College Level Examination Program (CLEP) exams or challenge exams prepared by the Academic

Department. For the credit to be applied to an MSU Billings transcript, the following procedure must be followed:

Students or departments must turn in challenge documentation to Admissions and Records after the successful challenge has been completed. Admissions and Records will enroll students for the course during a semester when they are planning to enroll in 12 or more credits. Additional tuition and mandatory fees are not charged for credits taken in the tuition “flat spot” for 12 or more credits. Challenge credits will be added up to a reasonable number/semester (generally not to exceed 24 credits/semester).

### Independent Study

Well-qualified students may undertake academic work in the form of independent study. The number of credits will be determined by the instructor and approved by the department chairperson. Courses listed in the *General Bulletin* as regularly offered courses may not be taken under the designation of Independent Study.

### Advanced Placement

Advanced placement in certain academic areas with sequential or prerequisite courses is available to students with a high degree of competency. Normally, advanced placement is made on the basis of standardized tests and other evidence of competency in the area. Should students demonstrate sufficient competency as determined by the appropriate department, they are placed at a level in the course sequence commensurate with their abilities. Satisfactory results of the advanced placement procedure are reported to the Office of Admissions and Records by the responsible department with a grade report.

### College Advance Placement Exams (AP for High School Students)

High school students who earn at least a scaled score of three on the College Entrance Examination Board’s Advance Placement exams may receive credit in approved MSU Billings courses. (See the Admission Section of this *General Bulletin* pertaining to admission of high school students.) Call Admissions and Records at (406) 657-2158 for course equivalencies or check the listing at [www.msubillings.edu](http://www.msubillings.edu)

### College Level Examination Program (CLEP)

The purpose of this program is to allow students and prospective students to take examinations which measure knowledge in a variety of subject matter areas. Evaluation of the results determines whether proficiency is equivalent to that which would be expected upon completion of a college level course in that subject. If the individual demonstrates proficiency, credits earned through CLEP may apply toward graduation requirements (See “Procedures for Challenging a Course” on page 28). A Pass (P) grade is granted upon obtaining the required examination score. Call the Office of Admissions and Records (406-657-2158) for course equivalencies or check the listing on the homepage at [www.msubillings.edu](http://www.msubillings.edu)

### Opportunities for Study Abroad

MSU Billings encourages students to seek out opportunities to study abroad. A variety of international programs varying from a summer tour to a complete junior year abroad are available. Contact the Office of International Studies (406-657-1705) for details, or visit:

[www.msubillings.edu/internationalstudies/StudyAbroad.htm](http://www.msubillings.edu/internationalstudies/StudyAbroad.htm)

### Prior Learning Assessment

#### Policies and Procedures

*We are currently awaiting finalization of a new state-wide Prior Learning policy which is likely to change the process outlined in the catalog below. Please check with Admissions & Records for current information.*

At Montana State University Billings, students may earn credit through a variety of methods including work experience and challenge tests. The University will work with the student to determine which type of experience can be translated into credit.

Note: Prior Learning Assessment guidelines and policies are currently under review with the Montana Board of Regents and are subject to change.

Several options are as follows:

1. Challenge tests, such as CLEP and DANTES, allow the student to study for and test out of equivalent college-level courses. Tests can be scheduled at the City College (406-247-3025).

2. Students may have already earned credit through work-site training or government-sponsored workshops or military experience. If students have certificates or documentation which state that the American Council on Education (ACE) or the National CCRS (National College Credit Recommendation Service) assesses that training, credit may be available for coursework for which there are equivalencies in MSU Billings' curriculum. Military credit is assessed from the DD214, DD295, or military transcript. Questions about this type of training or military credit may be directed to Advising & Career Services at (406) 657-2240.
3. In addition to the methods listed above, the University also offers students the opportunity to earn credit through Prior Learning Assessment. This assessment will take into account work experience or other learning experiences, which do not fall into the categories described above, but which can be assessed through the development of a portfolio. Up to 15 credits can be earned through Prior Learning Assessment, and this type of credit will be graded with "P" if credit is earned (Pass/No Pass credit guidelines can be found on page 49). The University offers individual instruction for students throughout the process of preparing this portfolio. For more information on Prior Learning Assessment, please call Admissions and Records at (406) 657-2158.
4. Implementation of these policies needs to be consistent with existing departmental policies and consistent with accreditation policies and practices already in place in the various colleges (NCATE, AACSB, etc.).

### Prior Learning Assessment Guidelines

- A. Prior to enrolling in this course, students must have successfully completed 12 credits of college-level coursework with a 2.50 GPA from an accredited institution within the past five years. Prior credit must also include completion of WRIT 101 or its equivalent.
- B. The student will first select the MSU Billings course the student wishes to complete through Prior Learning Assessment. Second, the student will contact the on-campus instructor for that course to determine whether the student can meet the course objectives through this method of assessment. If the student receives a positive recommendation from the instructor or department chair or dean, the

student may proceed with the portfolio process for that course; however, a positive recommendation does not guarantee the award of credit.

- C. The student's completed portfolio is examined first by the Admissions and Records Office for approval or returned to the student for additional documentation. If approved, the portfolio is forwarded to the chair of the department in which the student seeks to receive credit and to faculty member from whom the student received the recommendation. If approved by both the chair and the faculty member of record, the portfolio goes to the Academic Standards and Scholastic Standing Committee. Final action on the awarding of credit takes place in this committee. Credit awarded may not be the same as the number of credits requested by the student's portfolio.
- D. Credit recommendation and documentation for the coursework is forwarded to the Registrar if the assessment is successful. Coursework is posted on student's transcript using the course equivalent assigned by the portfolio assessment process.
- E. Up to 15 credits may be earned through this procedure and coursework will be graded Pass/ No Pass. Students may submit subsequent requests to earn credit through prior learning assessment after initial completion of the seminar course. Registration and program guidelines shall be those in force at the time of the subsequent request.

### Auditing Coursework

#### (No credit awarded)

Any person enrolled for audit will be certified as such by the Office of Admissions and Records and will not receive credit for the course nor be required to take examinations. An audit must be declared during the first seven instructional days of a semester. Currently enrolled students who elect to audit a class pay the normal credit hour fee as outlined in the student fee schedule. Any person not otherwise enrolled or registered in a course for college credit may, with instructor approval, audit the course at the cost of \$5 per credit hour. These fees are nonrefundable.

An audit is at the discretion of the course instructor. In order to audit, the student must obtain instructor's permission and instructor's signature on an audit card. This card is available from Admissions and Records (McMullen first floor west). When the student has completed the audit card with the faculty signature and cashier payment, the card is returned to Admissions and Records.

A student may not later establish credit in a course that was taken under the audit option by taking a special examination. In all cases, students who register for regular credit and pay regular fees will have priority for enrollment in a class over those students who audit the class.

## Class Attendance and Student

### Absences

Members of the faculty determine the attendance policy for their classes. Absences for official University activities are permissible providing the instructor is notified in advance of such an absence. An official University activity is an activity where a student officially represents the University through an academic department, sponsored University program, or an officially registered student organization. In all absences, the student is responsible for all requirements of the course.

Requests for absence for special events shall be submitted to the Vice Chancellor for Student Affairs on the Student Travel Authorization form. This form should be obtained from the Office of the Vice Chancellor, room 201, McMullen Hall at least one week in advance of the expected absence. This procedure will ensure students the opportunity to make up examinations given when official University activities are scheduled.

### Class Enrollment Lists

Faculty may obtain class lists each term online. Only students who are regularly registered for a course may attend class. No grade or credit will be given to students for any course in which they are not properly registered.

### Extent of Official Absence

When issued, an official absence is an excuse for time only and does not mean that a student is excused from the study assignment for that period. Each student is responsible for making up all work missed, as required by the instructor.

## Drops and Withdrawals

### Dropping a Course

Dropping a course is permitted through the seventh week, 35th day of the semester. There is no penalty for failing work through the drop period. Dropping a course is also permitted through the 13th week and up until 10 class days from the official end of the semester (not including finals) with the approval of the student's academic advisor and course instructor. Once a course grade is submitted, the course may no longer be dropped without instructor and advisor approval. After the 13th week, students may not drop courses, and the instructor will assign a letter grade. The mark "W" is assigned to any course dropped after the 15th day of class.

After the 15th class day and before the 13th week, all drops must be formal and must be recorded by the student with the Office of Admissions and Records

In all courses in which a student fails to complete all requirements and for which no formal withdrawal has been filed in the Office of Admissions and Records, the final grade for the course shall be an "F."

### Withdrawal from College

Students who withdraw from the University during a semester are required to fill out a withdrawal form and complete an exit interview with an advisor in Advising & Career Services located on McMullen Hall first floor west or City College Jacket Student Central.

Students who officially withdraw during the first fifteen days of an academic term will not have the coursework reflected on the transcript. Students who withdraw after the third week will receive a grade of "W" (Withdrawn) in all classes.

**Students who do not officially withdraw from classes will receive a letter grade (i.e., other than a "W" grade) to be determined by the instructor of each class.**

### First Time Student Checklists

New First Time, Returning, Transfer, and Adult students are available online at [www.msubillings.edu/future/Checklists.htm](http://www.msubillings.edu/future/Checklists.htm)

# Student Tuition and Fees

*The student fee information provided in this General Bulletin is based upon policies of the Board of Regents of Higher Education in effect at the date of publication. **The Board of Regents of Higher Education reserves the right to change the fees at any time without notice.** Additional information concerning fees may be obtained by contacting the Business Office, McMullen Hall ground floor west, Montana State University Billings, 1500 University Drive, Billings, Montana 59101-0298, (406) 657-2140. Check us out at [www.msubillings.edu/boffice](http://www.msubillings.edu/boffice) then select Student Account Information.*

Students are required to have adequate funds on deposit in a local bank in order to be able to write checks for the payment of tuition, room and board, books, supplies and other fees. Foreign checks are not accepted. Student enrollment is not complete until all fees have been paid or satisfactory arrangements have been made with the business office.

All undergraduate and graduate students enrolling at Montana State University Billings must pay the required fees in the fee schedule for each semester.

## Semester Tuition and Fee Schedule

Effective Fall Semester, 2017

**Tuition and fees are subject to change by authorization of the Board of Regents of Higher Education.** Questions on the current fees should be directed to the MSU Billings Business Office at (406) 657-2140 or in McMullen Hall ground floor west. Comprehensive fee and extra fee tables are available through the MSU Billings website at [www.msubillings.edu/boffice](http://www.msubillings.edu/boffice) under Student Account Information.

A student paying for 12 credits in a semester can take any additional credits for no additional tuition. This is referred to as the “flat spot” in the Tuition and Fee Schedule.

Tuition and fees for graduate studies, extended studies, summer session, workshops, and conferences may be in addition to or in lieu of the required fees. Please consult the publications pertaining to the special session, course, workshop or conference to determine those fees.

## Fee Schedule

### Required Tuition and Fees Per Semester

#### Registration Fee

A \$30.00 nonrefundable fee is assessed each enrolled student per semester.

#### Tuition Fee

Students are charged tuition each semester to pay for the delivery of the education they are receiving. Resident students are subsidized by the State of Montana and pay a reduced tuition rate.

#### Associated Students Activity Fee & Recreational Activity Fee

Students enrolled for seven credit hours or more each semester are required to pay for activities sponsored by the Associated Students of Montana State University Billings. Students enrolled for less than six credit hours pay a reduced activities fee each semester. **Online only students do not pay these fees.**

#### Academic Building Fee

The Academic Building fee varies based on the number of credit hours taken. The funds generated from this fee are used to pay a portion of the costs of repair, maintenance, and operation of the state owned buildings on campus.



### Resident and Nonresident Building Renewal and Replacement Fee

All students are charged a building fee for the building and replacement of campus structures. A reduced rate is charged to students taking less than 7 credits. In addition, a nonresident building fee is collected from all students who are not residents of the State of Montana.

### Equipment Renewal and Replacement Fee

Enrolled students are assessed an Equipment Renewal and Replacement Fee each semester. This fee is used to replace obsolete equipment with new equipment and cover costs of equipment repairs.

### Student Union Fee

Each semester students are assessed a fee pledged for the operation of the Student Union. Students enrolled for less than four credit hours pay a reduced fee.

### Computer Fee

Students are assessed a computer fee to cover the expense of student used computer equipment and labs.

### Athletic Fee

Students enrolled at MSU Billings are assessed a fee to subsidize the University's athletic department and associated activities. Students enrolled for seven credits or less pay a reduced athletic fee. **Online only students do not pay this fee.**

### Library/Assessment Fee

All students are assessed a Library/Assessment fee. Funds generated from this fee are used for the purchase of new and replacement books, periodicals, and assessment tools.

### Academic Support Center Fee

All students are assessed a per credit Academic Support Center fee.

### Technology Replacement Fee

All students are assessed a tech replacement fee. This fee is used to support the information technology infrastructure. All students accessing email or the web are utilizing and benefiting from the tech replacement fee.

## Comprehensive Health Plan

Student health coverage consists of two parts:

### Health Service

All students are entitled to services provided by the Student Health Center. Students enrolled in 7 or more credits are charged a mandatory fee. Students enrolled for six credit hours or less may have the benefits of the Health Center services by electing coverage and paying the semester fee. **Online only students do not pay this fee.**

### Health Insurance

All students enrolled in 7 or more credit hours will be automatically enrolled in the health insurance plan and assessed the health insurance premium. *Any student covered by another health plan must access the insurance waiver form via the student secure web site prior to the 15th class day and the account will be adjusted.* Students who enroll for four to six credit hours may participate in the health insurance plan upon request by enrolling in the plan, paying the insurance premium and the Health Service fee. Students taking less than four credits may petition to enroll in the health insurance plan.

## Additional Information

### Regarding Fees

### Withdrawing from All Classes and Refunds

The following refund schedule applies to the standard semester format. For courses taught in nonstandard format such as Intercession, and special workshops, there are no refunds after the first day the class meets. See the Summer Session catalog for information regarding the refund policy during summer.

1. Registration fee is nonrefundable.
2. 90 percent of all remaining mandatory fees will be refunded to the end of the fifth classroom day.
3. 75 percent of all remaining mandatory fees will be refunded to the end of the 10th classroom day.
4. 50 percent of all remaining mandatory fees will be refunded to the end of the 15th classroom day.
5. Refunds will not be made after the 15th day of classes. Exceptions to this may occur in the case of financial aid students subject to the federal pro rata refund policy.
6. Refunds are determined as of the day the student officially withdraws from college and not from the date of last class attendance.
7. Classroom days are determined by the college calendar—not by the student's class schedule.

MSU Billings students receiving Title IV funds and who officially or unofficially withdraw or are expelled, up to the 60% point of the semester, may be required to return federal funds. Students may also be entitled to a post withdrawal refund up to the 60% point of the semester. Copies of the Federal Title IV policy may be obtained at the MSU Billings Financial Aid Office. Financial aid recipients will not receive refunds until their financial aid is repaid (Pell Grant, SEOG Grant, SSIG Grant, Perkins Loan, FFEL Loans, fee waivers, and some scholarships). If the refund is insufficient to repay the financial aid programs, students will be billed for the over-awards.

Students who owe over-award repayments to any federal aid programs cannot receive future financial aid until repayment is made in full.

## **Changes in Credit Load After Payment of Fees**

Students adding classes after payment of fees are required to pay additional fees created by the change in credit load. Payment for these charges is due immediately.

Students dropping classes (but not withdrawing) will receive a 100 percent refund on classes dropped before the end of the 15th classroom day. Refunds will not be made after the 15th classroom day. Students will be assessed a \$5.00 drop fee for each class dropped.

## **Payment of Fees**

Financial Aid students must pay for fees prior to the first day of classes. The student's financial aid will be applied to the student's account with any refund being mailed to the student prior to the first day of classes. Call the Business Office at (406) 657-2140 for details, or visit us at [www.msubillings.edu/boffice](http://www.msubillings.edu/boffice).

Payment may be made by credit card (VISA, MasterCard, and Discover) in person, by mail, or via the internet by accessing the student secure website and selecting the student online payment option.

Fees may be paid after courses are selected. To avoid a \$40.00 late registration charge, fees must be paid by the date posted for each semester as indicated in the calendar. Fees may be paid by mail. To request that a fee statement be mailed to you, call (406) 657-2140.

Students may elect to pay their fees in installments. The installment payment method requires approximately 1/4 down, 1/4 within 30 days, 1/4 within

60 days, and 1/4 within 90 days. A \$30.00 administrative charge is assessed to students using the installment method. Students not paying in accordance with the terms of the deferred fee contract will be charged a \$15.00 late payment fee per installment, and may have their enrollment canceled.

If the student withdraws from the university and the installment contract is not paid in full, any refund due the student is applied first to the unpaid balance of the contract. Withdrawal from the University does not void the contract and the University refund policy will be followed.

## **Non-Payment of Fees**

No person who owes Montana State University any fees, fines or other charges will be permitted to (1) receive academic credit or grades; (2) register; (3) secure a transcript, diploma, or other record; or, (4) access any MSU Billings facilities or services, regardless of the relationship there of to the amount owed, until the full amount due has been paid or satisfactorily adjusted with Business Services. All legal means will be used to collect any unpaid loans. Collection fees may be based on a percentage at a maximum of 33% of the debt, and all other expenses, including reasonable attorneys' fees the University incur in such collection efforts. MSU Billings shall have the right to apply any portion of any amount it may owe such individual for any reason, including wages, to payment of the balance owed MSU Billings.

## **Other Fees**

### **Late Registration Fee**

A nonrefundable fee of \$40.00 is payable by all students who do not pay during the designated fee payment period unless their late payment was due to the fault of Montana State University Billings. If a bank declines payment on a check and returns it to Montana State University Billings, a late registration fee shall be charged to the student offering the check in payment of fees. The late registration fee applies to students enrolled for six credit hours or less beginning the second week of classes.

### **Audit Fee**

Students who elect to audit a course must pay the normal per credit hour fee as outlined in the student fee schedule.

**Listening Fee**

Any person not otherwise enrolled, and who does not want to register in a course for college credit, may with instructor approval enroll upon payment of a \$5.00 per credit hour fee. Listening fees are nonrefundable.

**Application Fee**

A \$30.00 nonrefundable application fee is assessed to each person applying for admission for the first time as an undergraduate student. Normally, this fee applies only to the period for which the person is making initial application at the undergraduate level. If the applicant is accepted and does not register, admission to MSU Billings is cancelled. The applicant has one calendar year from the semester of initial application to apply for readmission without paying an additional application fee. After one year, the \$30.00 application fee is assessed again. A \$40.00 application fee is assessed for a graduate program, the same restrictions being applied.

**Continuing Education Fees**

A minimum of \$70.00 per semester credit hour is charged for continuing education courses. Individual course fees vary.

**Course–Related Fees**

Several Montana State University Billings courses require additional fees. Examples of these are art classes, science labs or field trips. Some practicum and internship classes require an extra fee for professional liability insurance. A complete schedule of course related fees are available from the Business Office web site: [www.msubillings.edu/boffice](http://www.msubillings.edu/boffice)

**Electronically Mediated Course Fees**

Interactive television courses and online courses are assessed additional fees per credit hour. Electronic mediated fees are non-returnable after the 5th classroom day.

**Graduation Fee**

A nonrefundable fee is assessed per degree for each application to graduate. Please call Admissions and Records (406-657-2158) for details.

**Transcript Fee**

Students may receive one free official transcript. Each official transcript thereafter costs a minimal fee. Call Admissions and Records (406-657-2158).

**Parking Fees**

MSU Billings provides parking for students who live off campus, for a fee. All vehicles parked on university property must display a current MSU Billings parking permit on weekdays when the university is in session during the hours specified in the “MSU Billings Traffic and Parking Regulations” brochure. Students may pick up parking permits from 7:30 a.m.-5:00 p.m. Monday through Friday at the Campus Police office on the ground floor of the parking garage, southwest side and during Fee Payment week at the SUB Information Desk.

**Residence Halls Meal Plan**

All students living on campus are required to purchase a meal plan each semester. Check online at [www.msubillings.edu/dining/](http://www.msubillings.edu/dining/) for meal plans, benefits of the plan, and services.

**Western Undergraduate Exchange (WUE)**

Montana State University Billings participates in the Western Undergraduate Exchange (WUE), a program of the Western Interstate Commission for Higher Education and other western states. Through WUE, students from Alaska, Oregon, California, Colorado, Nevada, South Dakota, Hawaii, New Mexico, Utah, Idaho, North Dakota, Washington, and Wyoming may enroll in degree programs paying resident tuition plus 50 percent of that amount (plus other fees that are paid by all students). Students should be aware that the Montana Board of Regents may change regulations concerning Montana’s participation in the WUE Program. Students may contact the Office of Admissions and Records at MSU Billings, (406) 657-2158 or 1-800-565-MSUB for more information.

**Determination of Resident Fee Status**

The Montana University System classifies all applicants for admission and students as either in-state or out-of-state. The basic rules for making the classification are found in Board of Regent’s policy. It is each student’s responsibility to secure and review a copy of the policy. Failure to be aware of the rules will not be cause for granting exceptions to them. A copy of the policy is available from the Office of Admissions and Records at Montana State University Billings. Each residency determination is based on the unique set of facts found in each individual’s case. If students have questions regarding their case, they should contact the Office of Admissions and Records.

## **Dishonored Check Policy**

An administrative service charge of \$15.00 is assessed each time a check is returned by a bank. Any check tendered in payment of fees and returned by a bank may result in the postponement of a student's registration and/or the assessment of the late registration fee.

# Financial Aid and Scholarships

McMullen First Floor East, (406) 657–2188, [finaid@msubillings.edu](mailto:finaid@msubillings.edu)

[www.msubillings.edu/finaid](http://www.msubillings.edu/finaid)

The Office of Financial Aid and Scholarships at Montana State University Billings provides advice and financial assistance to students. Although families and students are expected to make a maximum effort to meet the costs of education, financial aid is available to fill the gap between family resources and educational expenses.

Financial aid consists of grants, scholarships, loans, and employment opportunities. Individual awards are based on the calculated financial need of the student and the availability of funds. The estimated financial need is the difference between the cost of attending MSU Billings and the ability of the student and/or family to contribute to those education costs as determined by the results of the Free Application for Federal Student Aid (FAFSA).

All students are encouraged to complete the Free Application for Federal Student Aid (FAFSA). This form can be completed on the web at [www.fafsa.gov](http://www.fafsa.gov). Early application is essential as some funds are limited and awarded on a first come, first serve basis until the funding has been exhausted. Priority awarding will be given to those students who have a complete FAFSA and have submitted the required documentation to the Financial Aid office by December 1st. Students should allow up to two weeks for the office to receive the FAFSA. We will then begin communications with the student regarding any additional information that needs to be submitted before we can evaluate aid eligibility. After all requested documentation has been submitted, it can take four to six weeks before an award offer is generated. The FAFSA must be filed annually, and becomes available for the upcoming academic year (Fall/Spring) on October 1st of every year.

## What Does College Cost?

To help students make an evaluation of their financial needs, each year the Office of Financial Aid & Scholarships develops a financial aid budget, called the Cost of Attendance (COA). The COA is the **ESTIMATED** cost of completing a full year at MSU Billings. It is important to note that the COA is a tool used by the Office of Financial Aid & Scholarships to

determine student eligibility for financial aid and does not reflect the actual bill that will be paid to MSU Billings. To review the COA, visit: [msubillings.edu/finaid/CostOfAttendance.htm](http://msubillings.edu/finaid/CostOfAttendance.htm)

## General Eligibility Requirements

All financial aid recipients must meet the following eligibility requirements:

- Be enrolled/accepted for enrollment in a degree or certificate program.
- Cannot be enrolled in an elementary or secondary school.
- Have a high school diploma or GED.
- Be a citizen or eligible non-citizen.
- Maintain satisfactory academic progress (see section below).
- Cannot be in default on Perkins Loans, Stafford Loans, or PLUS Loans at any institution.
- Cannot owe an overpayment of Pell or SEOG.
- If required, must register with the Selective Service.
- Cannot have borrowed in excess of loan limits.
- Have need, as defined by individual program requirements (except for unsubsidized Stafford Loans and PLUS Loans).
- Meet any other program-specific criteria.

## Aid Types

Students who apply for financial aid are considered for all aid programs for which they are eligible. The most common types of financial aid are listed below.

### Grants

#### Federal Pell Grant

Federal Pell Grants are awarded to undergraduate students who have not earned their first bachelor's degree and have not reached the Pell Grant Lifetime Eligibility limit. Pell eligibility is determined by a formula developed by the U.S. Congress and is applied consistently to all applicants using the information reported in the FAFSA.

## Federal Supplemental Education

### Opportunity Grant (FSEOG)

This grant is awarded to undergraduate students who have not earned their first bachelor's degree and have financial need. Priority is given to students who receive Pell Grants. Eligible students may receive up to \$1,000 per year depending on need.

## State & Institutional Grants

To qualify for one of the state or institutional grants, a student must be a Montana resident, be eligible for financial aid, and be enrolled or accepted for enrollment as an undergraduate student. Enrollment in at least six credits is required for most state grants, twelve credits is required for the Montana Tuition Assistance Program grant.

## Scholarships

Montana State University Billings has many scholarships available to students. Any prospective or currently enrolled student may apply for a scholarship by completing a General Scholarship Application Form available online at [www.msubillings.edu/scholarships](http://www.msubillings.edu/scholarships). Since the requirements and criteria are different for each scholarship, it is advisable for students to use the general application to be considered for all scholarships. **The Scholarship Application priority is February 1.**

## Employment

### Federal, State, and Institutional Work-Study Programs

The federal and state work-study programs at MSU Billings are need-based and funded with federal and state dollars to provide students with part-time employment on and off campus. Institutional work-study is non-need-based and can be requested in writing to the Financial Aid Office. However, the request must be reviewed and there is no guarantee the request will be approved. Off campus work-study jobs are limited to community service employment. Hourly rates of pay comply with minimum wage laws and vary with the type of work and the student's experience and responsibilities. Student employees are paid every other week, according to State of Montana payroll schedules. To view a list of available jobs, students who are approved to receive work study funding may login to their CareerLink account at [www.msubillings.edu/careers](http://www.msubillings.edu/careers)

## Student Employment

The Job Locator and Developer (JLD) assists MSU Billings students in obtaining part-time employment in the community. Area businesses list job opportunities with the Job Locator. The Job Locator Service is free to all MSU Billings students and is not based on financial need. Students who are interested in obtaining employment should refer to the Career Link ([www.msubillings.edu/careers](http://www.msubillings.edu/careers)) for available job listings.

## Loans

Loans are a major source of aid for students. Student loans must be repaid after the student graduates, withdraws from school, or drops below six credits. Interest rates, grace periods, and repayment requirements vary depending on the type of loan. For more information visit: [www.msubillings.edu/finaid/Loans.htm](http://www.msubillings.edu/finaid/Loans.htm)

## Tuition Waivers

MSU Billings has tuition waivers for veterans, senior citizens, American Indians, faculty and staff, advanced honor students, athletes, graduate students, war orphans, dependents of firemen and policemen killed in the line of duty, and students with certain majors. Eligibility and selection criteria vary. Certain waivers require a separate application form and in some cases additional documentation in order to qualify. To be eligible for Department waivers students must complete the General Scholarship Application by the February 1 priority date. Inquire at the Office of Financial Aid and Scholarships for specific information regarding tuition waivers. For more information visit: [mus.edu/Prepare/Pay/Tuition\\_and\\_Fee\\_Waivers.asp](http://mus.edu/Prepare/Pay/Tuition_and_Fee_Waivers.asp)

## Other Programs Available

### State Vocational Rehabilitation Service

Students with disabilities may qualify for educational assistance through the Montana Department of Social and Rehabilitation Service. In Billings they can be contacted at 406-248-4801.

### Veterans' Benefits

Students may apply for veterans' educational benefits through the Veterans Administration. Information can be obtained from the campus Office of Admissions and Records or the student's local office of the Veterans Administration.

## Tribal Grants

Assistance is available to many American Indian students through Tribal Higher Education Offices. The award limits are based on the student's need and the availability of funds. Further information may be obtained by contacting the student's tribe or the tribal higher education office.

## More Financial Aid Information

### Academic Year Definition

The MSU Billings Financial Aid Office defines the academic year as 30 weeks and 24 credits. Therefore, the definition of fulltime enrollment is 12 credits per semester for undergraduate students.

### Financial Aid Satisfactory

#### Academic Progress Standards

Students are expected to maintain certain academic standards and make satisfactory progress toward a degree in order to receive federal and state financial aid. In accordance with Federal and State laws and regulations, MSU Billings has established a policy to define and administer standards of academic progress for all students. Detailed information explaining the financial aid satisfactory progress standards, including the appeal and reinstatement process, is available on line at [www.msubillings.edu/finaid/SAP.htm](http://www.msubillings.edu/finaid/SAP.htm).

### Verification Process

Some students' FAFSA information will be selected by the Department of Education for verification. As a result, Financial Aid and Scholarships will request additional documentation to verify the information provided on the FAFSA is accurate and to resolve discrepant information. By signing the FAFSA, students and parents give the University permission to ask for all verification documentation. After these documents have been reviewed and the student has been determined to be eligible, a financial aid package will be offered.

### Professional Judgement

The Higher Education Act of 1992 allows financial aid administrators to make professional judgement decisions for special or unusual family or student circumstances. These circumstances must be documented and must be analyzed on a case-by-case

basis. The Financial Aid Officer can exercise professional judgement in different ways. Some examples are listed below.

- If the student or student's family (if dependent) has experienced a hardship where the income will be significantly less than the prior-year income that was reported on the FAFSA
- Dependency override (also known as an Appeal for Independent Status)

Detailed information explaining the appeal for professional judgment process is available on line at [www.msubillings.edu/finaid/Definitions.htm](http://www.msubillings.edu/finaid/Definitions.htm)

### Refund Policy

The institution's refund policy for students who withdraw from college ranges from a 90 percent refund for class days one through five; 75 percent for class days six through 10; 50 percent refund for class days 11 through 15; there are no refunds after the 15th day of classes. Students with financial aid may have to return some or all of the financial aid they received if they withdraw or if they do not begin attending classes.

### Return of Title IV Funds Policy

If a student withdraws from college, officially or unofficially, he or she may be required to REPAY all or part of the financial aid that was received. Any refund will be used to repay the financial aid before any refund will be made to the student. (Refer to Refund Policy, above.) The amount of financial aid that must be returned to the Department of Education is based on a federal formula that takes into consideration the date of the withdrawal; the amount of federal financial aid received for the term; and the amount of institutional charges for the term. For a complete review of Return of Title IV requirements, visit:

[www.msubillings.edu/finaid/pdf/Return\\_of\\_Title\\_IV.pdf](http://www.msubillings.edu/finaid/pdf/Return_of_Title_IV.pdf)

### Financial Aid – Summer Session

Summer financial aid is based on the FAFSA information used to determine eligibility for the previous fall and spring semesters. Those students who are Pell eligible should also complete the upcoming FAFSA to ensure they receive their maximum Pell grant eligibility. To determine aid eligibility for summer, students must complete and submit the Summer Award Acceptance form to the Office of Financial Aid and Scholarships. For specific information please visit:

[www.msubillings.edu/finaid/SummerFinAid.htm](http://www.msubillings.edu/finaid/SummerFinAid.htm)

## Financial Aid – Study Abroad

The Financial Aid Director will review requests for funding “Study Abroad” coursework after receiving the following information and documentation:

1. Document acceptance into the study abroad program.;
2. A copy of the course approval form;
3. A list of all necessary direct education expenses such as: tuition & fees, books, class supplies, room and board
4. A copy of the airline ticket or a letter from a travel agency listing the cost if the student is to incur airfare or travel expenses

The above information must be submitted to the Financial Aid Office **at least six weeks prior to departure**. Any adjustments to a student’s award will be based upon eligibility and available funds. Most grant and loan programs have yearly limits which cannot be exceeded. These limits could affect a student’s funding level, even if allowable expenses are documented.

## Consumer Information

In accordance with federal regulations set forth by the Higher Education Act of 1965, as amended, a summary of consumer information must be made available to all current and prospective students of Montana State University Billings. The information that must be disclosed can be obtained at:  
[www.msubillings.edu/finaid/Consumer\\_Information](http://www.msubillings.edu/finaid/Consumer_Information)

## Questions? Contact Us

Visit the Financial Aid Office on the University Campus (located on the 1<sup>st</sup> floor of McMullen Hall), or during scheduled hours at City College Jacket Student Central, or by calling (406) 657-2188, sending an email to [finaid@msubillings.edu](mailto:finaid@msubillings.edu) or visiting [www.msubillings.edu/finaid](http://www.msubillings.edu/finaid)



## Student Affairs

Montana State University Billings provides academic and student support programs and extracurricular activities that enhance and enrich the total student life of the University. A wide range of services, challenges and opportunities are available for every student including programs delivered through the Division of Student Affairs and other activities that affect student life from admission through graduation.

### MSU Billings Division of Student Affairs Mission Statement

The Division of Student Affairs provides exceptional service and cultivates an inclusive social and educational environment that enhances active student learning, engagement, development, and success.

### Student Rights, Responsibilities, and Conduct

Montana State University Billings statement regarding students' rights and responsibilities is as follows:

"Montana State University Billings is a community of scholars and members of such University communities have traditionally recognized their individual responsibilities in the development of a mature and sophisticated society. By enrolling in the University, the student neither loses the rights nor escapes the duties of a citizen. Each student should conduct his/her personal life in the context of mutual regard for the rights, property, and privileges of others. Therefore, it is expected that students will demonstrate respect for the law and for the necessity of orderly conduct in the affairs of the local and campus community. In certain circumstances where this preferred conduct fails, the University will rely upon the rules and procedures described in its **Code of Student Conduct** to hold students accountable for maintaining the responsibilities that follow.

#### Student Rights

One of the priorities of Montana State University Billings is to provide each student the opportunity to learn. Therefore, some personal freedoms and rights of students include, but are not limited to:

1. Freedom of inquiry, speech, and assembly.
2. Freedom from threats.
3. Freedom from acts of violence.
4. Freedom from unfair or obscene treatment from others.

5. Freedom from interference from others in an unreasonable and unauthorized manner while in class, activities, and public events.
6. Freedom from theft and willful destruction of personal property.
7. Right to study and learn in an atmosphere of academic freedom.
8. Right to procedural due process in University misconduct action.
9. Right to be governed by justifiable academic regulations.
10. To be informed in writing of the academic requirements determined by individual instructors.
11. Right to be informed of the regulations for academic and social conduct, and graduation requirements of the University.
12. Right to petition for redress of grievances, academic and non-academic

#### Student Responsibilities

Each student has the responsibility:

1. To respect the rights and property of others.
2. To be fully acquainted and comply with the published rules and regulations of the University.
3. To comply with all local, state, and federal laws.
4. To recognize that student activities reflect upon the individuals involved as well as upon the entire University community.
5. To recognize the University's obligation to provide a safe environment conducive for learning and academic inquiry.
6. To adhere to the academic requirements determined by individual instructors.
7. To abide by the reasonable direction of a University official acting within the legitimate scope of his or her duties."

### Student Affairs & Related

#### Phone Numbers

Academic Support Center .....	657-1641
Admissions and	
Records/Registrar/Transcripts .....	657-2158
Advising & Career Services .....	657-2240
American Indian Outreach Office .....	657-2182
Associated Students of MSUB .....	657-2365
Athletics/Yellowjacket Sports .....	657-2369
Business Services / Cashier .....	657-2140
Campus Police/Parking .....	657-2147
City College Student Services (Jacket Student	
Central) .....	247-3012

D2L Support (Online Learning) .....	247-5755
Dean of Students.....	657-1696
Disability Support Services .....	657-2283
Diversity Center.....	896-5902
Educational Talent Search .....	657-2116
Facilities Service.....	657-2306
Financial Aid and Scholarship.....	657-2188
Housing and Residential Life .....	657-2333
Information Technology (Help Desk).....	247-5755
Jackets & Company (campus store).....	657-2121
Jackets & Company City College Store .....	247-3031
New Student & Retention Services .....	657-2888
Office for Community Involvement .....	896-5815
ROTC/Military Science .....	247-5733
Student Health Services.....	657-2153
Student Support Services.....	657-2162
Student Union & Activities .....	657-2387
U-Card/ID Cards.....	657-2023
Upward Bound.....	657-2180
Vice Chancellor for Student Affairs .....	657-2307

## Advising & Career Services

**McMullen First Floor West, (406) 657-2240**

**Library 100, (406) 657-2168**

**City College Jacket Student Central, (406)**

**247-3019**

**[www.msubillings.edu/advice](http://www.msubillings.edu/advice)**

**[www.msubillings.edu/careers](http://www.msubillings.edu/careers)**

Advising & Career Services assists students in understanding academic requirements, enabling them to complete their program requirements as efficiently as possible. Through one-on-one meetings and First Year Seminar courses, advisors help students develop the skills necessary to be successful. Advising & Career Services provide career exploration and help students access part-time jobs, internships, and work-study opportunities while they are in school, and help them secure full-time employment upon graduation.

## Internships/Cooperative Education

**McMullen First Floor West, (406) 657-1717**

Cooperative Education (Co-Op) internships create educational partnerships among Montana State University Billings, the business community, and students. This unique academic experience allows students to earn academic credit while combining classroom learning with practical work experience. Learn more at

[www.msubillings.edu/careers/cooped/students.htm](http://www.msubillings.edu/careers/cooped/students.htm)

## Career Services/Job Locator

**Library 100, (406) 657-1618**

**City College Jacket Student Central, (406)**

**247-3006**

Cooperative Education (Co-Op) internships create educational partnerships among Montana State University Billings, the business community, and students. This unique academic experience allows students to earn academic credit while combining classroom learning with practical work experience.

Advising & Career Services can help you through the internship search and registration process. Students are not automatically placed in an internship, they will need to apply and interview for internships, just like applying for a job. The application process can be competitive, so students are encouraged to start their search early and have Advising & Career Services review their resume and cover letter to give them the best chance of landing the perfect spot.

Students may begin looking for internships on CareerLink, at [www.msubillings.edu/careers](http://www.msubillings.edu/careers). Students can also make an appointment with Advising & Career Services to contact those potential employers. For students who want to consider utilizing their current employer for internships, they would need to make sure at least 75% of the internship duties must be new and different from the student's day-to-day duties in their current position. For all internships, at least 80% of the job duties must be degree-related in nature.

## Associated Students of Montana State University Billings (ASMSUB)

**SUB 213, (406) 657-2365**

**[www.msubillings.edu/asmsub](http://www.msubillings.edu/asmsub)**

The Associated Students of Montana State University Billings (ASMSU Billings) are governed by a Student Senate, the functions of which are to administer and to distribute student activity fees, to act as liaison among students, faculty, and administration, to protect the privileges and the rights of students, and to act as a central agent for student opinion.

## Legal Services

The Associated Students of MSU Billings maintain an attorney on staff to assist students with legal problems.

While there is no charge to see the attorney, there may be a nominal fee charged for certain types of legal services such as divorce, wills and name change.

## Dining Services

**Student Union Building, (406) 657-2382**

**[msubillingsdining.sodexomyway.com](http://msubillingsdining.sodexomyway.com)**

Montana State University Billings Dining Services offers a dining program for students, faculty, and staff. Students living in the residence halls participate in the campus dining program by purchasing one of six meal plans consisting of dining dollars and board meals. Board meals are used for an all-you-care-to-eat meals in Rimrock Café. Dining dollars can be used in any of the dining venues including Rimrock Café, Stingers Bistro, Jazzman's, SUB Connection, and City College Café.

Dining locations on the main campus include Rimrock Café and Stingers Bistro, located in the SUB, as well as Jazzman's and SUB Connection, located in the Liberal Arts Building. City College Campus offers City College Café as well as a Seattle's Best Coffee machine and fresh food vending.

Rimrock Café offers an array of fresh daily choices that includes a complete breakfast buffet and made to order items, The Grill, cooked to order Chef's Table, from-scratch soups, a fresh salad bar that includes vegan items, Made-to-Order Deli, home-style entrees, a selection of pizzas, and assorted beverages and desserts. Stingers Bistro is proud to offer a full selection of Starbucks coffee and Frappuccinos. We are also the first Jamba Juice in the state of Montana offering a selection of fresh smoothies. Stingers menu has a great selection of paninis, wraps, and our Signature Mac and Cheese. Jazzman's and SUB Connection offer a variety of sub sandwiches, chips, and beverages, signature Jazzman's coffee, and blended beverages, as well as baked daily pastries. City College Café offers a selection of grab-n-go products, hot breakfast, a choice of grill, pizza, from-scratch soups, a fresh salad bar, and a made to order deli.

## Disability Support Services

**MSUB University Campus: College of Education 135**

**(406) 657-2283 (V)**

**(406) 545-2518 (VP)**

**City College Campus: Tech Building A008**

**(406) 247-3029 (V)**

**(406) 545-1026 (VP)**

**[www.msubillings.edu/dss](http://www.msubillings.edu/dss)**

Disability Support Services (DSS) collaborates with faculty, staff, and students to make MSUB accessible to everyone. Students are encouraged to contact DSS to identify themselves and work one-on-one with DSS staff to remove both academic and physical barriers. To learn more about the program, visit the website at [www.msubillings.edu/dss](http://www.msubillings.edu/dss)

## Diversity Center

**SUB 212, (406) 896-5902**

**[www.msubillings.edu/diversity](http://www.msubillings.edu/diversity)**

The Diversity Center is committed to providing a welcoming campus environment for all students, faculty, staff, and guests. The Diversity Center fosters social and professional opportunities, as well as advocacy for all multicultural students. The mission of this office is to ensure we are meeting the various needs of diversity and diverse population through fair and equal representation as well as increased opportunity for learning and understanding about diverse issues.

The Diversity Center offers leadership opportunities for students through clubs or organized meeting groups, such as Intertribal Indian Club and Hispanic Club. Each group is student focused and student driven with opportunities to engage in campus and community programs, events, and socials.

The Diversity Center oversees a Peer Mentor Program for minority students. The program is designed to connect successful upper-class students with new incoming freshmen during their first year at MSUB. The program helps to assist incoming students with acclimating to the higher education environment and offers academic and social support.

## Financial Aid & Scholarships

**McMullen First Floor East, (406) 657-2188**

**[www.msubillings.edu/finaid](http://www.msubillings.edu/finaid)**

Paying for education is a concern for all students. Financial aid is awarded to more than 60% of our students in the form of grants, scholarships, tuition waivers, employment and loans. This office can assist you in your search for information concerning financial aid and scholarships. Call (406) 657-2188, or see the Financial Aid section of this General Bulletin. The Office of Financial Aid and Scholarships is located on McMullen Hall first floor east.

## Housing and Residential Life

**SUB 225, (406) 657-2333**

**[www.msubillings.edu/reslife](http://www.msubillings.edu/reslife)**

### Residence Halls

Montana State University Billings provides on-campus living facilities for students who are pursuing an educational mission. The residence halls offer an environment which is desirable for those who are seriously seeking a well-rounded education. Participation in hall programming and group processes is part of the complete experience the residence hall provides.

Students living in the residence halls may select from a variety of living options. The residence halls offer a safe and fun-filled environment where students can live well, work well, and be well during their college experience. The residence hall experience includes some amazing benefits like wireless technology throughout the halls, in room sink, cable television in the floor lobby areas, laundry services (u-card and quarter accepted), and more. Visit [www.msubillings.edu/reslife](http://www.msubillings.edu/reslife) for more information about the residence hall experience.

Students with disabilities are encouraged to make arrangements for any specific needs with the Office of Housing and Residential Life and Disability Support Services prior to moving on campus.

Residence hall living is available during Fall, Spring, and Summer sessions and during break periods to those students meeting the necessary requirements.

To apply for residence hall living, call (406) 657-2333 or visit [www.msubillings.edu/reslife](http://www.msubillings.edu/reslife) to apply for housing.

## Family Housing

MSU Billings offers 10 family housing apartments for students currently enrolled in 12 or more credits. Family housing eligibility includes: married students, single parent with children, or married students with children. Family housing apartments include 6 three-bedroom apartments and 4 two-bedroom apartments. There is an application and \$25.00 application fee to place your name on the waiting list for an available apartment.

To obtain more information about family housing apartments, contact the housing office at (406) 657-2333 or visit [www.msubillings.edu/reslife](http://www.msubillings.edu/reslife)

## Housing Application

Residents who complete their online Housing Applications and pay their \$125 Non-Refundable Security Deposit to reserve a room have entered into a legally binding agreement with Montana State University Billings for the purchase of housing for the academic year. Once a student has moved into the residence halls and accepted or signed for a room key and has signed a contract, he/she is financially obligated by the contract for the entire year, and may only be released for the following reasons:

- A. Withdrawal from Montana State University Billings.
- B. Graduation from Montana State University Billings.
- C. Internship or student teaching assignment out of the area.
- D. Medical condition.
- E. Extreme financial circumstances.
- F. Marriage.
- G. Academic suspension.
- H. Disciplinary suspension.

Any student wishing to cancel a Housing Contract for an upcoming term must complete the online Contract Release Request form at least two weeks prior to the first day of classes in order to receive a full refund of fees for the semester. Room and board rates, programs, and rules and regulations governing the residence halls are subject to change without notice. An optional installment plan is available for payment of room and board through the office of Business Services. Students may pay room and board in full at the beginning of each term or select the installment plan. This selection is made in conjunction with regular fee payment.

## On-Campus Requirement

**Required to live on campus:** Traditional age student less than 3 years out of high school and under 30 credits at the start of the fall semester.

**Automatically exempt from housing if under 30 credits (no documentation is needed for the following, however completion of the form is required):**

- Students over 21 years of age, as verified through MSUB student information systems
- Military Veteran, as verified through MSUB student information systems
- Enrolled in 11 or fewer credits, as verified through MSUB student information systems
- Transfer Student, As verified through MSUB student information systems
- Online Student, as verified through MSUB student information systems
- Non-Degree Seeking Student, as verified through MSUB student information systems

### Exemptions to the live on requirement:

- Living with immediate family (legal guardian, parent, or grandparent) within the following counties: Yellowstone, Carbon, Big Horn, Stillwater, Treasure, Musselshell, Golden Valley
- Married
- Physical custody of a dependent child
- Financial hardship
- Medical related condition
- Documented disability
- Unusual circumstances

**Note:** City College students are not exempt from the live on requirement and must sign up for housing accordingly or complete an exemption request that meets any other exemption area.

All requests for exemption must be made to the Office of Housing and Residential Life two weeks prior to residence hall opening for consideration. Please contact the Housing Office, SUB 225, by calling 406-657-2333 or online at [msubillings.edu/reslife](http://msubillings.edu/reslife) for an exemption form.

For those students that do not fill out an exemption request prior to two weeks before the halls open, a double room (\$2,095) and silver meal plan (\$1,541) will be directly applied to student's account. Students will have until Move-In Day to file an exemption request form to reverse these charges, but will incur a \$75 late fee.

## Jackets and Company

**Student Union Building, (406) 657-2121**

**[www.jackets-and-company.com](http://www.jackets-and-company.com)**

Jackets and Company (the Campus Store) has two locations to provide the campus community with all required course materials and also carries a wide selection of school and office supplies, imprinted apparel, computers, software, electronics, gifts, greeting cards, and sundries at competitive prices. The Campus Store also features a convenience store along with fountain soda and a custom print shop.

Jackets and Company is located inside the Student Union Building on the University Campus and inside the Technology Building at the City College Campus.

## New Student Orientation

**McMullen First Floor West, (406) 657-2240**

**[www.msubillings.edu/fye/orientation](http://www.msubillings.edu/fye/orientation)**

Advising & Career Services at Montana State University Billings coordinates the Orientation & First Year Transition Program. This program is designed to provide first year students with an Orientation Peer Leader who is available to guide them through their first year transition into college. There are different New Student Orientation experiences that students can choose from based on their past academic background. New students starting college as a first year college student in a fall semester are required to attend a two-day overnight introduction to college life at MSUB. Adult Learners and Transfer students are highly encouraged to attend a day long Adult Learner or Transfer Learner Orientation prior to the fall semester. Students starting at MSUB in a spring or summer term should contact Advising & Career Services (406) 657-2240 or Jacket Student Central (406) 247-3019 to visit about orientation and registration options.

## Student Health Services

**Petro Hall, (406) 657-2153**

**City College, (406) 247-3027**

**[www.msubillings.edu/StudentHealth](http://www.msubillings.edu/StudentHealth)**

The Student Health Services (SHS) is an ambulatory health care facility which provides high quality, cost-effective health care and mental health counseling with an emphasis on health education and wellness initiatives to promote and enhance student success. With a staff of advanced practice professionals (contracted through St. Vincent Healthcare) nurses, mental health counselors, health educators, victim advocates, and a massage therapist, we provide health

care, immunizations, mental health counseling, Phoenix Center for sexual assault advocacy services, health education and massage therapy. SHS strives to encourage students to become responsible and knowledgeable consumers of health care. All students enrolled for seven or more credits are charged the Student Health Service fee. It is an optional fee for six or fewer credits.

## Student Health Insurance

All MSU Billings students enrolled in six or more credits are required to have some form of health insurance. A student health insurance policy is available to MSUB students. Before registering, students will be asked to elect or waive this insurance.

Students must elect or waive the health insurance before the 15<sup>th</sup> class day of fall or spring semesters.

The premiums are paid on a semester basis, along with tuition and fees. Those students electing to take the insurance for spring semester will be covered through the summer sessions whether or not they are taking summer classes. Online-only students should contact Student Health Services regarding insurance availability.

**Note: All students are eligible to use the Student Health Services, whether or not they enroll in the student health insurance.**

Insurance policy brochures are available at fee payment and at the Student Health Services office on the 2<sup>nd</sup> floor of Petro Hall and the City College, SHS 2<sup>nd</sup> floor of the Tech Building.

Full information about the student health insurance program provided by the Montana University Insurance Consortium is available at [www.bcbsmt.com](http://www.bcbsmt.com)

## Student Support Services

### (SSS/TRIO)

Library 141, (406) 657–2162

[www.msubillings.edu/sos](http://www.msubillings.edu/sos)

This federally funded program is located on the lower level of the Library. SSS/TRIO assists 258 eligible students by helping them to successfully remain in school and graduate. To be eligible, students must meet one of the following: be from a low-income background (150% of poverty level - taxable income), be a first generation college student (neither parent earned a bachelor's degree), or have a documented physical and/or learning disability. SSS/TRIO offers:

- Peer Mentoring
- Study Groups/Tutoring

- Informational and Skills Building Workshops
- Financial Aid Information
- Counseling & Referral
- Midterm Evaluations
- Newsletters
- Assistance in Graduation Preparation
- Preparation for Graduate School
- Academic Boot Camp Summer Bridge Program and more!

## Student Union Activities and Events Office

SUB 219, (406) 657–2387

[www.msubillings.edu/sub](http://www.msubillings.edu/sub)

The Student Union (SUB) is a major center for co-curricular activities and serves as the community center for the University and guests visiting the Montana State University Billings campus. The Student Union centrally located on the campus with easy access to university services and facilities.

## Offices and Programs Housed in the Student Union

In addition to Student Union and Activities, the Student Union provides space for Jackets and Company (campus store), Campus Dining Services, Stingers Bistro, ASMSU Billings, Housing and Residential Life, Office for Community Involvement, Diversity Center, Academic Support Center, Petro Theater, The Retort (campus newspaper), Student Activities Board, and student organization offices.

## Student Activities, Student Organizations, Leadership Development

[www.msubillings.edu/studentlife](http://www.msubillings.edu/studentlife)

The Student Union and Activities Office coordinates and supervises the registration of over 60 student organizations. The office provides organizations with support, consultation services, resources, and leadership development and recognition programs. The Office is also the University contact for students seeking assistance to charter and organize new student organizations on campus.

The University encourages a variety of student activities and organizations, insofar as they promote both positive activity and the objectives of the University. The nonacademic aspects of student life can prove to be immensely valuable in the balanced

development of the human personality. Many co-curricular activities are related to coursework and thus provide opportunities for applying knowledge and skills learned in the college classroom, in the studio, or in the laboratory.

## **LEAD @ MSUB**

**SUB 223, (406) 896-5815**

**[www.msubillings.edu/leadership](http://www.msubillings.edu/leadership)**

LEAD @ MSUB is a two-year (City College students) or four-year (University Campus students) leadership quest that gives students the chance to:

- create new and lasting friendships
- learn about campus and community resources
- connect as a student leader by joining a student organization
- develop personal leadership skills in a variety of ways in order to engage in campus life as student leaders
- prepare to enter the workforce upon graduation as a successful community leader

The LEAD program creates an environment for support and strategies for success, while building future student leaders. The program accepts 20 freshmen students on an annual basis.

## **Meeting and Conference Space**

**(406) 657-2387**

**[www.msubillings.edu/events](http://www.msubillings.edu/events)**

The Student Union and Events provides meeting and conference rooms, event posting and displays, and public lounges. The Student Union and Events Office coordinates the scheduling of campus space.

Petro Theater provides space for special events and theatre productions. The Department of Communication and Theatre presents student productions in the theater throughout the year.

## **Office for Community Involvement (OCI)**

**SUB 222, (406) 896-5815**

**[www.msubillings.edu/community](http://www.msubillings.edu/community)**

The Office for Community Involvement (OCI) at MSU Billings strives to connect students to the community through meaningful service and educational opportunities. We believe community involvement strengthens a sense of responsible and productive citizenship, which creates a lifelong commitment to service and leadership.

The OCI will assist students in connecting to volunteer opportunities both on campus and in the community. Students can utilize volunteerism to enhance their academic experience, to help in meeting other students, to get involved as a student and to help prepare to become a civic leader within the community following graduation. The OCI coordinates monthly Service Saturday projects, MSUB Night on the Van in partnership with the Salvation Army, Student United Way (which is a student organization centered on volunteerism and advocacy), an MSU Billings Relay for Life team and many more opportunities. Students can also utilize the OCI to connect to volunteer opportunities on an individual basis or students can access a community volunteer database at [www.youcanvolunteer.org](http://www.youcanvolunteer.org).

## **Montana Campus Compact**

The Montana Campus Compact (MTCC) is a coalition of Montana college and university presidents, chancellors, and deans committed to the civic purposes of higher education. The MTCC is committed to renewing the public purposes of higher education by promoting volunteerism, public service, and service learning on Montana's college and university campuses. The MTCC is an affiliate of Campus Compact, a national organization with a rapidly growing membership of more than 700 public and private two- and four-year colleges and universities in 41 states and the District of Columbia. The MTCC provides training, technical assistance, grants and education awards to students and faculty members engaged in community service activities. The MTCC and its programs make an immediate impact on communities, students, and institutions while developing students as lifelong citizens-leaders. For more information on the Montana Campus Compact, contact the MSU Billings Office for Community Involvement at 406-896-5828.

## **Student Activities Board**

**SUB 202, (406) 657-2257**

**[www.msubillings.edu/sab](http://www.msubillings.edu/sab)**

The Student Activities Board coordinates a balanced program of cultural, social and entertainment events appropriate to the educational goals and needs of the campus community. The board consists of 13 selected student members and two advisors. Selection of board members occurs during fall and spring.

## Upward Bound/TRIO

CI 306, (406) 657-2180

[www.msubillings.edu/upb](http://www.msubillings.edu/upb)

Upward Bound is a federally funded high school scholarship program designed to generate in participants the skills and motivation needed to enroll and graduate from a program of postsecondary education. Participants must meet federal eligibility criteria, as well as demonstrate interest and motivation to attend college. Services include: academic advising, instruction and tutoring, an on campus summer academic program, postsecondary enrollment assistance, and cultural and social experiences.

## Educational Talent Search/TRIO

CI 306, (406) 657-2116

[www.msubillings.edu/ets](http://www.msubillings.edu/ets)

Educational Talent Search (ETS) is a federally funded TRIO program designed to assist 6<sup>th</sup> to 12<sup>th</sup> grade students prepare for and attend a post-secondary institution of their choice upon high school graduation. Participants must meet federal eligibility criteria and demonstrate interest and motivation to attend college. The ETS program serves 600 eligible students in Yellowstone County. Services include academic advising, instruction and tutoring, post-secondary enrollment assistance, and cultural and social experiences.

## Veterans Affairs Certifying Official

**McMullen First Floor West (406) 657-1782**

Veterans are advised to check with the Veterans Affairs certifying official, McMullen first floor west, (406) 657-1782, 30 to 45 days before the semester begins. A veteran must notify this office whenever there is a change in status (i.e., address, enrollment, or additional dependents).

## Veterans' Upward Bound

Cisel 109, (406) 657-2075

[vubmt.com](http://vubmt.com)

The Veterans' Upward Bound Program of Montana State University-Northern maintains a program at MSU Billings to assist veterans to learn the skills that will enable them to be successful in college. Both day and evening courses are offered in areas such as English, math and computers. Call (406) 657-2075 or toll free at 877-356-8387 for assistance.



# Academic Affairs

## Scholastic Requirements

### Grading System

- A - Excellent.
- B - Good.
- C - Average.
- D - Minimally Passing.
- I - Incomplete work (not included in GPA). Work must be completed within one calendar year or the "I" grade will be converted to an "F" grade. The faculty who awards the "I" will assign all necessary academic work to convert the "I" to a letter grade. The student does NOT re-register and pay for the class. Access to D2L to finish incomplete work is arranged through Admissions and Records.
- F - Failure, grade below passing (included in GPA).
- W - Withdrawal from class without penalty (not included in GPA).
- N - No credit/Audit.
- P - Passing (not included in GPA but credits count toward graduation).
- T - Graduate work in progress. Student has 6 years to complete work and have a change of grade submitted.
- X - No Pass

### Incomplete "I" Grade

An Incomplete is given only when a student has been in attendance for at least three-fourths of the semester but has been prevented by circumstances beyond his/her control from completing all of the requirements of the course. A student must provide adequate evidence to the instructor as to the reason why he/she was unable to complete the requirements for the course. If a grade of "I" Incomplete has been given, the instructor shall advise the Office of Admissions and Records in writing what the student must do to remove the deficiency.

An Incomplete must be made up within one calendar year after the semester in which the course was first taken. An "I" grade is not included in the computation of the GPA. An "I" grade not made up in the prescribed length of time automatically becomes an "F" grade. Once the "I" grade has been converted to an "F" grade, the course must be repeated.

Access to D2L to finish incomplete work is arranged through Admissions and Records.

### Change of Grade

A change of grade may be made for error only. A change of grade may not be made to allow additional time or for additional work once the semester is completed. A change of grade is not meant to substitute for an Incomplete grade when an Incomplete cannot be justified. No grade may be changed after one full year unless approved by the instructor's Academic Dean and the Academic Standards and Scholastic Standing Committee. Once a grade has been submitted to the Admissions and Records Office, it may not be changed to a lower grade without the written approval of the Dean of the respective college.

### Pass/No Pass Grading Mode

Pass/No Pass is offered as an opportunity for undergraduate students to explore courses outside their major, minor, or option curricula and outside the Professional Core Requirements for the Educator Preparation Program or Pre-Admission Requirements for Business.

Under the grading mode, the grade of "P" is given if the students' work is judged to be the equivalent of "A," "B," or "C." The grade of "No Pass" (symbolized by "X") is awarded if the work is equivalent to "D" or "F." The students' Pass/No Pass grades do not affect overall GPA. However, "P" grades may be counted as credits earned toward a degree. Other policies concerning Pass/No Pass are as follows:

1. Courses designated by the departments are available Pass/No Pass. Certain courses are taught only with this grading mode; other courses may be excluded from Pass/No Pass grading. Therefore, students should check with their advisor for details.
2. Students may enroll in courses as Pass/No Pass up to a limit of 20 semester credit hours to be counted towards graduation. Credits earned by challenge, experiential learning assessment such as military credits, cooperative education, or internships do not count toward this 20-credit limit.
3. Students declare this grading mode at the time of registration. Students may change their grading mode to Pass/No Pass up through the last day to add at the beginning of each semester or term. After the last day to add, any request to change grading mode

(Pass/No Pass to letter grade or vice versa) must be petitioned by the student to the Academic Standards and Scholastic Standing Committee.

4. Courses taken under Pass/No Pass may be repeated for a letter grade. A course taken for a letter grade may not be repeated as Pass/No Pass.

## Grade Points (Grade Point Average)

In order to graduate with a Bachelor of Arts or a Bachelor of Science degree in the College of Arts and Sciences, and a Bachelor of Science in Psychiatric Rehabilitation degree a student must earn a minimum grade point average of 2.00 in (a) all courses attempted at Montana State University Billings; (b) the academic major; and (c) the academic minor. For BA/BS Teaching Options, students must earn a minimum grade point average of 2.65.

In order to graduate with a Bachelor of Science degree in the College of Business, a student must earn a minimum grade point average of 2.00 in (a) all courses in the College of Business; and (b) all courses attempted at Montana State University Billings.

In order to graduate with a Bachelor of Science in Education degree, a minimum grade point average of 2.65 must be earned in (a) all courses attempted at Montana State University Billings; (b) the academic major; (c) the academic minor; and (d) the Professional Education Core.

In order to graduate with a Bachelor of Science in Human Services degree, a student must earn a minimum grade point average of 2.00 in (a) all courses attempted at Montana State University Billings; and (b) all coursework completed for the Human Services major.

## Grade Reports

Students' grades are available on the web at [www.msubillings.edu](http://www.msubillings.edu). Students who wish to have their grades mailed may request a transcript.

## Mid-term Grade Reports

Mid-term grades will be issued to all freshmen students. Instructors of classes with freshmen will be required to notify each freshman student, in writing, of the student's mid-term grade before the official last day to drop classes (7th week, 35th class day).

## How to Calculate the Grade Point Average

Each grade is worth a predetermined number of grade points as indicated below. Total grade points are established by multiplying the number of credits of a course times the number of grade points of the grade received.

The grade point average is determined by dividing the number of grade points earned by the number of course credits attempted. In computing the number of grade points earned, each letter grade is assigned a certain grade point value per credit hour as follows:

Each credit hour of A .....	4 points
Each credit hour of B.....	3 points
Each credit hour of C.....	2 points
Each credit hour of D .....	1 point
Each credit hour of F .....	0 points

Effective Fall 2005 for transfer and re-admitted students, in accordance with Board of Regents policy, all campuses of the Montana University System will use the following values when determining grade point averages.

A .....	4.0
A- .....	3.7
B+ .....	3.3
B .....	3.0
B- .....	2.7
C+ .....	2.3
C .....	2.0
C- .....	1.7
D+ .....	1.3
D .....	1.0
D- .....	0.7
F.....	0.0

Grade point averages calculated before Fall Semester 2005, using the values noted above, will not be recalculated, using the new weights or values.

The new values should not be applied retroactively to grade point averages already calculated for students in the Montana University System. Decisions about those students' academic performance, including satisfactory progress, admission to limited enrollment programs, graduation and financial aid eligibility, have been made, using the grading scale in place at the time of those decisions. The decisions should not be invalidated because of a subsequent change in grade point average calculations.

## Examples

WRIT 101 is a 3 credit course. If a grade of “B” was received, multiply 3 credits times 3 grade points for a total of 9 grade points (3 credits x 3 grade points = 9 grade points).

PSYX 100 is a 3 credit course. If a grade of “C” was received, it would produce an additional 6 grade points (3 credits x 2 grade points = 6 grade points).

Add the 9 grade points from WRIT 101 and the 6 grade points from PSYX 100 for a total of 15 grade points. Then, divide the total grade points (15) by the total number of credits (6) to determine the grade point average for the two courses. In this case, the grade point average is 2.50 ( $15/6 = 2.50$ ). Remember, the total grade points divided by the total credits attempted equals the grade point average (GPA).

## Academic Honors

In recognition of scholastic achievement, the University makes public at the close of each semester an honor roll of undergraduate students who earn 12 or more credits which are not of a Pass/No Pass nature and who earn a grade point average of 3.50 or better.

## Minimal Academic Progress

Students are in good standing at Montana State University Billings as long as they have a 2.00 grade point average (GPA) although additional requirements may have to be met in specific fields (see, for example, Educator Preparation Program).

## Academic Probation

### Full-Time Students (12 or more credits attempted)

Students are placed on academic probation the first time their cumulative institutional GPA falls below the required 2.00. If they later meet the required 2.00 cumulative institutional GPA, they are removed from academic probation. Students who are on academic probation and fail to earn at least a 2.00 GPA during the next semester or have a 2.00 cumulative institutional GPA are suspended for one academic (Fall or Spring) semester. Summer does not count for the one term suspension. However, students on academic probation or continued probation who do not meet the required 2.00 cumulative institutional GPA are allowed to continue in college as long as they have a 2.00 GPA for each succeeding semester. Students on probation should not carry more than 16 credits in the

probationary period. All students on academic probation should meet with their academic advisors to review their respective course schedules.

### Part-Time Students (Less than 12 credits attempted)

Part-time students are placed on academic probation whenever they have attempted a total of 10 overall (transfer and institutional) cumulative semester credits and do not have a 2.00 cumulative institutional GPA or a 2.0 institutional term GPA. Part-time students are suspended whenever they have attempted a total of 30 overall (transfer and institutional) cumulative semester credits and do not have a 2.00 cumulative institutional GPA or a 2.00 institutional term GPA. Part-time students on academic probation are allowed to continue in college as long as they earn a 2.00 GPA in each succeeding semester.

## Veterans Receiving Educational Benefits

Veterans or other individuals who receive educational benefits from the Veterans' Administration remain eligible for those benefits as long as they remain in good academic standing at Montana State University Billings and are permitted to continue in college. All veterans eligible to receive benefits should report to the coordinator of Veterans' Affairs prior to each term of enrollment to re-certify.

## Academic Suspension

Any full-time student who has been on academic probation one semester and who did not make a 2.00 GPA during the last semester is suspended for one academic (Fall or Spring) semester; Summer does not count for the one term suspension. A student who is suspended may, however, attend Montana State University Billings during the Summer Session by meeting the requirements stated below.

Students should meet with the designated staff person (Registrar or designee) to discuss their options for attending summer semester. Students suspended from Montana State University Billings may register for no more than a total of 16 semester credits during the Summer Session without reinstatement. Students who at the end of Summer Session have earned at least a 2.00 GPA are re-admitted Fall Semester on continued probation. However, students who attend the Summer Session and fail to earn the 2.00 GPA will be suspended for an additional two semesters.

Students who are reinstated after a period of suspension must submit an application for re-admission to Admissions and Records. Upon re-admission, students are placed on continued probation and must maintain a 2.00 GPA for each successive semester of work and meet any other pertinent conditions imposed by the Academic and Scholastic Standing Committee.

Students who do not meet the stipulations set by the Committee incur automatic suspension. Upon action by the Administration, a student may also be suspended for nonacademic reasons. Such a notation will be placed in the student's conduct file.

A student who has been suspended from Montana State University Billings may apply for re-admission after one semester has elapsed. A student who has two or more suspensions is suspended for two semesters excluding summer term. The student may, however, petition the Academic Standards and Scholastic Standing Committee for reinstatement after one semester.

Exceptions to this regulation may be made for students who provide evidence to the Academic Standards and Scholastic Standing Committee that their reinstatement can be justified. Only extreme cases of extenuating circumstances may be considered by the Committee for re-admitting a student who has been suspended, or if there is evidence that the student has taken some reasonable action to correct the cause(s) for suspension. The student must have approval from his/her major department chairperson before the Academic Standards and Scholastic Committee will consider the student for reinstatement.

## Academic Dishonesty

Students at Montana State University Billings are expected to do their own work in their own words and with their own ideas. If they quote or paraphrase the words of others, they are expected to indicate whom it is they are quoting or paraphrasing. An instructor who believes that a student has claimed the work of someone else as his or her own may take what steps he or she wishes up to failing the student and referring the student to others on campus for further discipline. The Student Handbook contains more detailed information about the policy on Academic Dishonesty.

## Fresh Start Option

### (Academic Bankruptcy)

The Fresh Start option is available to undergraduate students. It is a one-time opportunity for MSU Billings students and those who transfer to MSU Billings.

Students may bankrupt up to two consecutive semesters of previous coursework in which they received poor grades. Students must not have been enrolled in any institution for a minimum of three calendar years. To be eligible for the Fresh Start option, students must have completed 15 semester credits in residence for students seeking Certificate, Associate of Applied Science, Associate of Arts/Science Degrees or 30 semester credits in residence for students seeking Baccalaureate Degrees (BS/BA/BFA/BSed) since entering or returning to MSU Billings, earning a 2.65 grade point average (GPA) or higher. The bankrupted coursework will remain on the student's academic record. The student has the option to save "A" and "B" grades or bankrupt all courses. Bankrupted credits and grades will not be carried forward into the student's cumulative GPA. Once a degree has been posted, the student academic record is final and a fresh start can no longer be processed to alter the GPA.

## Eligibility for Intercollegiate

### Athletics and Other Activities

To be eligible for intercollegiate athletics, students must meet the specific requirements of the N.C.A.A. Division II. Students should consult with the Athletic Administrator regarding these requirements. Students are eligible during a semester to represent MSU Billings in an University sponsored activity off-campus or to participate in co-curricular activities as long as the students are officially enrolled (this applies only to the activities that are not sanctioned by the N.C.A.A. Division II). Certain activities may have additional eligibility requirements that students must meet.

## Student Records

### Academic Records

Official academic records of each student's scholastic achievement are kept on file (on file may indicate electronic records) in the Office of Admissions and Records, and include the following:

1. A signed "Official Class Roll and Final Grade Report" from the instructor of each class in which the student is enrolled each semester.
2. An "Official Academic Record" for each student officially enrolled.
3. Directory information of a student currently enrolled. (See the Family Educational Rights and Privacy Act Revised.)

## Transcripts

A transcript is a copy of the complete, unabridged educational record of a student who has been or is currently enrolled. It is issued only to the student upon the student's written request. An official transcript is distinguished from an unofficial copy of the student's record in that the official transcript carries the signature of the Registrar and bears the seal of Montana State University Billings.

As often as possible, transcripts are issued immediately following receipt of the transcript request and payment of the fee. During periods of registration, changes in registration, grading periods, and Commencement, the Office of Admissions and Records staff has to devote full time to such activities. The records are necessarily incomplete, and the status of students is pending; consequently, a longer time than usual is required for the issuance of transcripts.

All current and former MSU Billings students are entitled to one free official transcript; thereafter, each official transcript request is processed only upon the receipt of the transcript fee. The student's signature and/or personal request is required for the release of any transcript except when the transcript is released to those individuals who are considered to have a legitimate educational reason to have access to the student's transcript.

## Misuse of Electronic Devices

Cellular phones, pagers, and other electronic devices shall not be used in a manner that causes disruption in the classroom, library, or within any college-owned or college-operated facility. Abuse of cellular devices with photographic capabilities, use of devices for purposes of photographing test questions or other notes and materials is prohibited. Photographing individuals in secured areas such as bathrooms, locker rooms, or other areas where there is a reasonable expectation of privacy, and/or taking photographs of any person without expressed permission is strictly prohibited.

## Appeals and Petitions for Exceptions to University Regulations

### Appeal by a Student on Academic Matters

The student should confer with the faculty member against whom the alleged problem exists. The student must confer with the department chairperson or, in the event the problem involves a department chairperson, with the appropriate dean before resorting to the formal grievance process. The student should consult the Student Resolution Officer for proper procedures.

### Petition for Exception to University Regulations

Certain problems encountered by a student may result in a request to have an exception considered to an academic standard or to an academic regulation of the University. A student may request an exception to an MSU Billings regulation by filing a special petition with the Academic Standards and Scholastic Standing Committee. The petition form may be obtained from the Office of Admissions and Records and it is to be returned there after the student has completed the form. The Office of Admissions and Records will present the petition to the committee. The student is encouraged to appear before the committee to respond to questions about the student's petition. The student will be notified in writing of the decision as soon as it is determined.

## Grade Appeal Procedure

Montana State University Billings has a set of procedures for contesting a grade which must be followed for appropriate resolution. The student must understand that they cannot appeal a grade after sixty (60) days from the official release date of those grades. All documentation must be in writing and submitted to the instructor and Student Resolution Officer (SRO). Please refer to the Student Handbook for a complete explanation of this process.

**Step I** You must meet with or attempt to make appropriate contact (email, phone, office hours, etc.) with your instructor to discuss your reasons for the grade appeal within sixty (60) days from the official start date of the next term. Documentation supporting

your claim should be made available at this meeting. The University would like to have both you and the instructor discuss the details, in a reasonable, open manner, and formulate an agreeable resolution.

**Step II** If the initial meeting (or attempt to meet) with your instructor did not provide an agreeable resolution, you must then contact the ASMSU Billings Student Resolution Officer and schedule a time for you and the SRO to meet and discuss the reasons for the appeal. The SRO can then help schedule a meeting between you and the instructor of the course you are contesting or, if Step I was not successful, can help move the appeal to Step III. You must submit any documentation supporting your claim and a copy of the course syllabus to the SRO. This information should be presented at the meeting with the instructor. The instructor will submit a formal decision to the student, in writing, within fifteen (15) University business days. A copy of the letter must be sent to the SRO.

**Step III** If no resolution is achieved at Step I or II, the dispute may be brought to the Department Chair of the relevant department (if the dispute is with the Department Chair, then refer to Step IV). All documentation and a letter of appeal must be submitted to the Department Chair within ten (10) University business days after receipt of the formal decision by the instructor. The SRO can assist with this process. A meeting will then be scheduled between you and the Department Chair. The Chair will submit a formal decision to the student, in writing, within fifteen (15) University business days. A copy of the letter must be sent to the SRO.

**Step IV** If no resolution is achieved at Step III, the dispute may be brought to the Dean of the relevant College. All documentation and a letter of appeal must be submitted to the Dean within ten (10) University business days after receipt of the formal decision by the Chair. The SRO can assist with this process. A meeting will then be scheduled between you and the Dean with the SRO present. The Dean, as the representative of the relevant College, has the authority to review all documentation, discuss the matter with the instructor and Department Chair, and formulate a resolution. The Dean will submit a formal decision to the student, in writing, within fifteen (15) University business days. A copy of the letter must be sent to the SRO.

**Step V** If no resolution is achieved at Step IV and the student wish to appeal further, the dispute may be brought before the Vice Provost for Academic Affairs. All documentation and a letter of appeal must be submitted to the Vice Provost for Academic Affairs

within ten (10) University business days after receipt of the formal decision by the Dean. The SRO can assist with this process. The Vice Provost for Academic Affairs will review all grade appeal materials, and determine if the appeal needs to be heard by a Campus Hearing Committee. The Campus Hearing Committee is comprised of a maximum of three students, chosen by the Associated Students of Montana State University Billings (ASMSUB); three faculty members, chosen by the Vice Provost for Academic Affairs from a pool of faculty members who serve on the Academic Senate Academic Standards Committee; and the Vice Provost for Academic Affairs, who shall serve as the Hearing Officer. The Hearing Officer will not vote during the proceedings except in the case of a tie vote. The Campus Hearing Committee will follow prescribed hearing procedures and make a recommendation directly to the Chancellor, who makes the final decision. The Chancellor will then have fifteen (15) University business days to send a formal and final decision to the student.

## Prior Learning Assessment Policy

At Montana State University Billings, students may earn credit through a variety of methods including work experience and challenge tests. The University will work with the student to determine which type of experience can be translated into credit. See page 29 for the policy and procedures.

## Graduation Requirements

### Graduation Guarantee

MSU Billings has created a Graduation Guarantee for Undergraduates which students may utilize as they begin study. The Guarantee includes a set of conditions that the student needs to fulfill as well as the University; the Guarantee itself is signed by the student as well as the advisor. If the student fulfills his/her conditions and the University fails to do so, postponing graduating, the student may appeal to the Academic Standards and Scholastic Standing Committee prior to the beginning of classes for the last term of the signed Guarantee. If the Committee finds the University at fault, appropriate actions will include waiving course requirements, waiving tuition and fees, or a combination of the two.

Copies of this Guarantee are available at Advising & Career Services (McMullen Hall first floor west). Students are urged to examine this Guarantee to see if it will assist them in facilitating their completion of requirements

and graduation. Advisors in the Center can explain the Guarantee and prepare appropriate plans of study for students.

### Time Limit for Degree

A student is expected to complete requirements for graduation within six years after original entrance to MSU Billings, during which time the graduation requirements are those of the catalog in effect at the time of entrance to MSU Billings, or a subsequent catalog. After six years, students are expected to meet the graduation requirements of the catalog current at that time, or the requirements of any Montana State University Billings catalog under which they have been enrolled during the six years prior to graduation. Any request for an extension of time beyond the six-year limit must be approved in writing by the Provost/Academic Vice Chancellor.

General Education requirements and the first major must be under the same catalog within the six-year period; the minor and/or second major may be under any catalog within that six-year period. The University reserves the right to make substitutions for requirements or changes in course offerings.

Students who transfer to MSU Billings from a regionally accredited institution may have their credits evaluated on the basis of the current catalog at the initial time of entry to Montana State University Billings; or students may elect to enter under the catalog that was in effect during the year in which they entered any regionally accredited institution of higher education in the United States within the six year time limit, provided they have maintained continuous, full-time enrollment (excluding summers) in good standing.

## Certificate or Associate of Applied Science Degree

City College offers certificates in a number of trades, for practical nurses, and in areas of office and accounting technology. In addition it offers associate of applied science degrees in many of these same areas. Please see the City College catalog for details about these programs and for additional information about City College.

## Associate of Arts or Science Degree Requirements

In addition to AAS degrees, City College also awards Associate of Arts (AA) and Associate of Science (AS) degrees.

AA and AS degrees can have a special focus or no particular disciplinary affiliation. These degrees require that students meet general education requirements as specified below. Students earning an associate degree with no disciplinary affiliation should work with their advisor on a plan of study but are not subject to any additional requirements other than those listed next.

1. Students must earn a minimum of 60 semester credits must be earned with a minimum grade point average of 2.00 for all coursework.
2. Students must earn a minimum of 20 semester credits with 40 grade points (2.0 grade point average) must be earned at Montana State University Billings. (see page 50)
3. Students must earn a minimum grade point average of 2.00 in (a) all college work to be applied toward the degree for which credits and grades have been received, and in (b) all courses completed with credits and grades at Montana State University Billings and applied toward the degree.
4. Students may elect a maximum of 16 semester credits on the Pass/No Pass option in lieu of regular course grades.
5. Students seeking an associate degree must satisfy the following general education requirements:

General Education Category	Credits
I. Global Academic Skills	
A. Mathematics .....	3
B. English .....	3
C. Communication & Information Literacy .....	3
II. Natural Sciences (7 credits total)	
A. Life Sciences .....	3-4
B. Physical Sciences .....	3-4
III. Social Sciences and History	
A. Social Sciences .....	3
B. History .....	3
IV. Cultural Diversity .....	3
V. Arts & Humanities	
A. Fine Arts .....	3
B. Humanities .....	3
<b>Total .....</b>	<b>31</b>

### Electives

Selected in consultation with advisor..... 29

**Total minimum credits required..... 60**

## Bachelor's Degree Requirements

### Major and Minor Requirements

Each student in the Bachelor of Arts, Bachelor of Science, or Bachelor of Science in Psychiatric Rehabilitation, degree program must complete a subject field major of at least 30 semester credits. Certain subject field majors require more than 30 semester credits. A subject field minor of at least 20 semester credits is required in selected degree programs. Subject to the approval of the appropriate department chairperson, certain courses may fulfill both major and minor course requirements, but the credits may be counted only once. Therefore, substitutions must be made to meet at least the minimum credits of both the major and the minor. Students should consult the appropriate section of this catalog to determine the specific requirements for the various majors and minors and should review their programs with their advisors.

In programs that include minors, a student may, with permission of the chairperson concerned, elect to complete an extended major instead of a minor. Specific details of the extended major program may be obtained from the academic advisor or chairperson of the academic department concerned.

### Special Major and Minor Options

1. Any major or minor in the College of Arts and Sciences may be added to a required degree program offered in the College of Business.
2. Selected majors and/or minors in the College of Arts and Sciences may be added to certain degree programs in the College of Education. Prior approval is required from the Dean of the College of Education.
3. Selected minors in the College of Education (Special Education, Health Education, and Rehabilitation and Related Services) and selected minors in the College of Business (Economics and Business Administration) may be added to or may take the place of the required minor for degree programs in the College of Arts and Sciences.
4. Students who plan to meet the requirements for two majors concurrently and who plan to apply the two majors to one degree must have the approval of the respective department chairpersons and deans.

To avoid any misunderstanding, students should seek the required approval of their advisors and of their respective deans prior to enrolling in any required courses for a specific major or minor.

### Credits Earned for Graduation

Credits earned for graduation shall mean the total number of credits for which passing grades (A, B, C, D, P) have been received in courses applicable toward graduation. If a student repeats a course in which a passing grade is earned, the last grade will be the effective grade for graduation and in no case are the credits to be counted more than once toward fulfilling the credit requirements for graduation.

For bachelor's degrees, a minimum of 120 semester credits must be earned, and a prescribed degree curriculum must be completed at Montana State University Billings. A minimum of 30 semester credits and satisfactory completion of all degree requirements in a prescribed bachelor's degree program must be earned at Montana State University Billings. This may include up to 10 semester credits of residency in the major area of study and up to six semester credits of residency in the minor area of study as determined by individual departments. Students should contact their major and/or minor department advisors to determine the major and/or minor requirements.

At least 36 semester credits must be in upper division courses (numbered 300 or above), and at least 12 semester credits of these upper division credits must be in the subject major program.

A transfer student may not use community college or other two-year college credits for or in lieu of upper division credits required at MSU Billings.

Except when used to satisfy the requirements of a specified teaching major or minor, not more than a total of eight semester credits in any combination of the following may be counted in the minimum of 120 semester credits required for graduation: music performance groups, drama and ensemble music credits, and physical education activity credits.

Not more than 20 semester credits of courses taken on a Pass/No Pass basis may be counted toward graduation.

### Early College (Dual Enrollment)

#### Student Graduation

In accordance with Board of Regents Admission Policy 301, students must have graduated from a high school accredited by the state accrediting agency, or have a high school equivalency completion assessment designated by the Montana Board of Public Education, to be admitted to any campus of the Montana University System. Early college/dual enrollment



students to MSU Billings and City College at MSU Billings are not fully admitted in accordance with this policy until these credentials are presented.

Students who are earning credits while still in high school are encouraged to submit a graduation application and participate in ceremonies if they have earned enough college level credits to do so. However conferral of a certificate of technical studies, certificate of applied science, associate of applied science, associate, or bachelor's degree(s) will only be posted to a student's transcript after receipt of these official credentials required for full admission.

## Second Degree

A student may earn a second bachelor's degree at Montana State University Billings by taking a minimum of an additional 30 semester credits in residence beyond the 120 semester credits required for the first bachelor's degree. Once the first bachelor's degree has been awarded, the student must earn an additional 30 semester credits regardless of the total number of credits earned within the first degree. Students at Montana State University Billings may earn the two degrees concurrently. In order to earn two bachelor's degrees concurrently, a student must earn a minimum of 150 semester credits. The student must meet all other requirements for the second degree. Students transferring to MSU Billings for the second degree must have earned the first degree at an institution accredited by its regional accrediting association. Montana State University Billings will not grant a student a second degree if the second degree is the same degree and from the same Montana State University Billings College that awarded the first degree.

Students who have previously earned a master's degree or a more advanced degree may be eligible to earn a bachelor's degree. The bachelor's degree must be outside of the major concentration of the advanced degree, and the student must earn no less than 30 additional semester credits at Montana State University Billings while meeting all the requirements for the bachelor's degree.

## Posthumous Degree

MSU Billings considers requests for awarding of a posthumous degree based on the following: the student was enrolled at the time of death, was in good academic standing, and had completed two-thirds of the requirements for the degree to be awarded. In the case of graduate students, the major professor, department

head, and college dean should recommend to the Graduate Committee and the University administration potential recipients of posthumous graduate degrees.

## Graduating with Honors

Graduation with honors will apply to students who earn their first and/or second bachelor's degree at MSU Billings. Students who earn a second bachelor's degree at MSU Billings will have all of the grades earned in their first degree included in the determination of the recognition of academic honors. In all cases and for all degrees or certificates, transfer credits earned elsewhere to this University must be calculated with the credits earned at MSU Billings in order to qualify for academic honors.

Depending on total academic undergraduate grade point average a student seeking a bachelor's degree may be granted graduation with the designation of academic honors: cum laude, magna cum laude, or summa cum laude. Again, these designations include all undergraduate academic work accomplished by the student, transfer work as well as academic work done at MSU Billings.

The designation of cum laude signifies a grade point average of 3.50 to 3.74 for a student's entire undergraduate academic record. Magna cum laude signifies a grade point average of 3.75 to 3.99 for a student's entire academic record. Summa cum laude signifies a grade point average of 4.00 for a student's entire academic record. These designations are awarded to bachelor degree candidates only.

The designation of honors and high honors is awarded to associate degree or certificate recipients. Honors recognizes students with a total academic grade point average of 3.50 to 3.74; high honors recognizes students with a total academic grade point average of 3.75 to 4.00. Again, this designation is for associate degree or certificate recipients and based on their total cumulative grade point average which includes transfer work as well as academic work done at MSU Billings.

Lists of students receiving academic honors are provided to academic departments and available in the Office of Admissions and Records by April 1 and are calculated using the academic grades on the student transcript at that time. Students are urged to check the list, as this is the official list used to designate honors for convocations and for Commencement.

## Commencement

Commencement is held once each year at the end of the Spring term. The date of graduation and the degree a student is to receive will be posted on the student's Official Academic Record at the end of the semester in which the student meets all requirements. The academic transcript is the official record of degree conferral. All diplomas are officially awarded at the end of each term, but are printed by an external vendor and take four to six months. Diplomas will be mailed upon receipt. Students should acquaint themselves with their specific majors' academic requirements. An advisor is assigned to every student; however, it is the student's responsibility to know and meet the requirements for graduation.

A student who intends to graduate with a master's degree, bachelor's degree, associate degree or certificate will be permitted to participate in the Spring Semester Commencement Ceremony only if the student complies with the following procedure:

1. Students are to file their Application for Graduation the semester before the semester of graduation. Application forms are available online at [www.msubillings.edu](http://www.msubillings.edu). Refer to the academic calendar for due dates. The graduation fee should be paid at the Cashier's Window and the application needs to be filed with the Office of Admissions and Records, McMullen first floor west. This application is good for one year from the date of information supplied by the student on the Application for Graduation in the blank labeled "Semester/Year Graduating." After one calendar year from that date, the application will be destroyed and the student will need to re-apply and re-pay the fee. If the fee presents a hardship, please contact Admissions and Records.

The Application for Graduation is required in order to prepare and forward the Final Evaluation for Graduation to the necessary offices for approval. A student who submits an Application for Graduation after the designated due date may have the final evaluation for graduation processed the following semester and will graduate at the end of that particular semester.

The Final Evaluation will be circulated during the student's final semester. The Final Evaluation must be completed, must have all the required signatures, and must be returned to the Office of Admissions and Records before notification of the student's graduation is posted on the student's Official Academic Record.

2. Student must meet, by the end of the Summer Session, all of the graded requirements for graduation or be enrolled in Pass/No Pass coursework (excluding student teaching) the following Fall Semester and meet all the requirements for graduation by the end of that Fall Semester.

Diplomas are generally mailed near the end of the next academic term (i.e., Fall graduates in June, Spring graduates in January).

**Please note:** Certain departments may have additional academic requirements that must be met before students will be permitted to graduate and/or participate in the commencement ceremony. Students should check with their major department for any additional departmental requirements.

The determination for honors for students who will graduate at the end of the Spring Semester or Summer Session will be calculated on the most recent semester completed. Should a student's cumulative grade point average (including any transfer work) at the end of the Spring Semester or Summer Session entitle the student to an honors designation, this recognition will be recorded on the student's Montana State University Billings academic record.

## Release of Information

In accordance with the Family Educational Rights and Privacy Act (FERPA), the Office of Admissions and Records at Montana State University Billings may disclose directory information from the educational records of a student who is in attendance at the University. If the student wishes to have all directory information excluded as public information, the student must notify the Office of Admissions and Records, McMullen Hall first floor west, within the first two weeks of the current academic year. This notice is good until revoked in writing.

A complete copy of the MSU Billings' FERPA policy is available upon request at the Office of Admissions and Records or online at [www.msubillings.edu](http://www.msubillings.edu)

## Academic Support

MSU Billings provides a number of support facilities and services on campus to help you succeed in your academic efforts. Facilities include such obvious ones as the library, computers, and presentation halls for art, drama, and music. They also include less obvious areas such as language and scientific laboratories, greenhouses, and centers for reading and the measurement of human performance.

### Library

**(406) 657-1662 Library Reference Desk**

**On the Web:** [www.msubillings.edu/library](http://www.msubillings.edu/library)

**Email:** [library@msubillings.edu](mailto:library@msubillings.edu)

*Darlene Hert, Director*

The Montana State University Billings Library, located in the heart of campus, supports the University's programs of instruction, research, and service by providing free and open access to information and ideas.

The Library is designed to help students with their information needs. Friendly and helpful staff at the Reference Desk assist students in finding books, journal articles, websites, and other resources that they need for classes. The MSU Libraries share an online catalog, which provides quick and easy access to materials in all the MSU Libraries located in Billings, Bozeman, Havre, and Great Falls, as well as the collections of Rocky Mountain College, Carroll College, Dawson Community College, Little Big Horn College, Chief Dull Knife College, and the University of Great Falls. Other databases link the Library's collections to libraries around the world. Electronic library resources are available both on- and off-campus.

Books, journals, documents, and other information in the MSU Billings Library are supplemented by a wide variety of digital resources, such as electronic journals, ebooks, databases, online indexes, and Internet resources. Interlibrary loan and document delivery services are available to provide materials from other libraries for students and faculty. The Library also has many technology tools available for checkout, including ebook readers, DVD players, and cameras.

The Information Commons is located on the first floor of the Library, with PCs for student use. The Information Commons is available at all times the Library is open and has a variety of software available

for student assignments, word processing, and Internet access, as well as research use. Copiers, printers, scanners, and microfilm readers are available for student use. Students may use U-card money for copies and printing in the Library. There are comfortable furnishings and group study areas on all floors of the Library.

The Library building has excellent access for people with disabilities. Students who need assistive technology are encouraged to use the computers with adaptive software and other equipment on computers on the Library's 2<sup>nd</sup> floor.

### Regular Library Hours

(Fall and Spring Semesters)

Monday – Thursday .....	7:30 a.m. – 10:00 p.m.
Friday .....	7:30 a.m. – 5:00 p.m.
Saturday .....	9:00 a.m. – 5:00 p.m.
Sunday .....	2:00 p.m. – 10:00 p.m.

### Summer Hours (Summer 2017)

Monday – Friday .....	7:30 a.m. – 5:00 p.m.
Saturday & Sunday .....	Closed

For specific holiday hours or changes in hours, check the MSU Billings Library website at [www.msubillings.edu/library](http://www.msubillings.edu/library), or call (406) 657-1662.

### City College Library

**(406) 247-3025**

#### Library Hours

Monday – Thursday .....	8:00 a.m. – 5:00 p.m.
Saturday & Sunday .....	Closed

The City College Library is a branch of the MSU Billings Library, and is located in the Technology Building of City College. The collection supports the wide variety of programs at City College with books, magazines, multimedia, digital resources, and an array of electronic library research databases.

Materials in the City College Library are included in the OMNI MSU system, accessible in the Library and through the MSU Billings Library web site at [www.msubillings.edu/library](http://www.msubillings.edu/library). This leads to many other digital resources and useful web sites, as well as to the shared catalog system.

Study areas and computers are available for student use in the Library. Library staff can assist students and faculty in obtaining materials from the University campus Library or from other libraries on request.

In Fall 2010, the Library joined forces with the Academic Support Center to create the Learning Commons, a one-stop location to help students obtain the tutoring and research assistance needed for classes. The Learning Commons, located in the City College Tech Building, is a great place to find tutoring and research help as well as computer and Internet access.

In Fall 2010, the MSUB Library and the Billings Public Library opened the Community Library, an area in the City College Learning Commons space where public library materials may be checked out and returned. Library users are able to place holds on public library materials and pick them up at the Community Library. Public library materials may be returned to the book drop conveniently located in the parking lot in front of the Technology Building. Computers are also available for public use.

## Copyright Warning

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or reproduction. One of these conditions is that the photocopy or reproduction is not to be “used for any purpose other than private study, scholarship or research.” If a user exceeds “fair use,” that user may be liable for copyright infringement.

Software licensing agreements are very specific, and may prohibit making copies for use by those who have not purchased the software.

Montana State University Billings reserves the right to refuse to accept a copying request, if, in its judgment, fulfillment of the request would involve violation of copyright law, licensing agreements or fair use.

## Office of Information Technology

### COE 401, (406) 247-5755

The Office of Information Technology provides computing and multi-media technology services to students, faculty, and staff. The office supports over 800 student computers across 2 campuses. Students may go to College of Education 401 to receive

assistance with using computing applications, questions accessing their student login accounts and developing special multi-media technology projects. Assistance is also available by calling (406) 247-5755.

## Student Computing Resources

### Information Commons

#### Library, (406) 247-5755

The Information Commons, an open access computer lab for MSU Billings student use, is located on the first floor of the MSU Billings Library and is available during regular Library hours. The Information Commons is operated by the Information Technology (IT) department, and has computers, scanners, and laser printers. A wide variety of software is available for student use, including Microsoft Office, Adobe Creative Cloud Suite, Macromedia Studio, ArcGIS, Mathematica, Matlab, Minitab, SPSS, iLife, Oracle, web publishing software, and specific software for various courses and programs.

Students will need money in their U-card accounts to pay for color printing and other services. People who are not current students, faculty, or staff of MSU Billings will be asked to use the open access computers located in other areas of the Library.

Access is available to the Internet, email, and the Library’s online catalog as well as other web-based Library resources. Each MSU Billings student has space to store his or her course related documents. Disability accommodation resources are available and students using the Assistive Technology Lab on the first floor of the Library have easy access to the lab and support staff.

### City College Information Commons

#### CC Commons and Health Sciences Building

Computer access is available with standard campus software, the Internet, email, and the Library’s online catalog as well as other web-based Library resources to all current MSU Billings students during City College campus hours.

### College of Education 401

#### Academic and Administrative Computing Support

#### COE 401, (406) 247-5755

COE 401, a computer lab for the design, development, and production of academic multi-media projects, is located on the fourth floor of the College of Education in room 401 and is available 8:00 a.m. to 5:00 p.m. COE 401 is operated by the Information Technology

(IT) department, and has PCs, iMacs, scanners, cameras, laser printers, and access to color printing. A wide variety of software is available for student use, including Microsoft Office, Adobe Creative Cloud Suite, Macromedia Studio, ArcGIS, Mathematica, Minitab, SPSS, iLife, Oracle, web publishing software, and specific software for various courses.

The lab is open to all current MSU Billings students; Information Technology staff are available to support students in the use of hardware and standard software and to direct them to additional help resources if needed.

Students will need money in their U-card accounts to pay for color printing and other services and preference is given to academic work.

### **eLearning and Media Services Support**

#### **COE 328, (406) 657-2192**

A new eLearning and Media Services lab is located in the College of Education room 328. Media Services provides support for media equipment and audio and video production. Other services include media transfer, video creation, live video feeds, and technical support for Desire to Learn (D2L), the online course platform. The office is available for support from 8:00 a.m. to 5:00 p.m. They can also be contacted by emailing [msubonline@msubillings.edu](mailto:msubonline@msubillings.edu).

### **Wireless Internet Access**

The campus has wireless access available to students in common study areas, academic buildings, residence halls, and dining facilities. This access is available in the Student Union, Library, Liberal Arts, College of Education, City College, Academic Support Center, and McDonald Hall. Students may bring their computers to the Information Technology Office in College of Education room 401 or to the Information Technology staff at City College for assistance with connecting to the MSUB wireless network. This provides a secure connection to the student campus resources.

## **College of Allied Health Professions**

### **Physical Education Building**

Faculty, staff, and students can draw on the facilities of the Physical Education Building. The building includes a 3,300-seat gymnasium with a varsity basketball court, a volleyball court, and a badminton court; a 25-yard swimming pool; a spectator gallery; dressing rooms for

men and women with disabilities and an elevator with direct access to the swimming pool; men's and women's locker rooms equipped with saunas; and a fitness center with free weights, exercise machines, and selectorized machines.

The facility also includes an annex which has a large gymnasium divisible by curtains into two sections, each with a high school-sized basketball court, two tennis courts, three volleyball courts, six badminton courts, four racquetball courts with glass backwalls and an instructor's gallery, and a suspended running track with 14 laps to the mile.

In 2004, a new athletic training room and a new human performance lab were added to the physical education building. The athletic training room includes a wet area complete with whirlpools and ice machines, treatment tables, and a physician exam room. The athletic training room serves Division II student athletes at Montana State University Billings as well as provides an instructional setting for students in the athletic training program. The human performance lab is complete with biomechanic, biofeedback, and exercise physiology equipment including a new pulmonary exercise system for monitoring metabolic processes.

## **College of Arts and Sciences**

### **Northcutt Steele Gallery**

The recently remodeled Northcutt-Steele Gallery, the new student gallery, and the Outer Gallery are located on the first floor of the Liberal Arts Building. The Department of Art sponsors solo and group exhibitions featuring international, national and regional artists. In addition, student art is exhibited throughout the year in graduating senior exhibitions, end-of-semester shows, and ad hoc shows organized by various student groups.

Presenting both established and emerging artists in a mix of traditional and experimental form, media and subject matter, these exhibits are offered for the benefit of both on and off-campus audiences. In effect, the exhibits provide everyday access to art—a bridge linking students, the community, and the professional art world.

Exhibits are often accompanied by related events including gallery talks, slide lectures, workshops and receptions. All the exhibits and the majority of related events are free and open to the public.

Surrounding this exhibition complex are the main Art Department offices, the Visual Resource Center, and

the studios for drawing, painting, design, printmaking, new media and photography. The Art Annex houses the ceramic and sculpture studio including foundry, welding area, and wood shop. Art history classes meet in various locations. Art education classes meet in the College of Education building.

## Music

Students perform in choirs, bands and other musical ensembles each term. Performances usually are given in Cisel Recital Hall, a 219-seat recital hall with excellent acoustics and the technology to enable recordings to be made of performances. It is also used for student recitals.

## Greenhouse

MSU Billings' Department of Biological and Physical Sciences maintains a greenhouse on campus to grow a variety of plants year-round, even in the deepest of Montana winters. The greenhouse enables both students and faculty to work on plant projects no matter the season.

## Herbarium

MSU Billings' Department of Biological and Physical Sciences maintains a herbarium on campus that is registered in Index Herbariorum (a Global Directory of Public Herbaria of the world) and is part of a multi-herbarium web-accessible database of the vascular plants from the Missouri Plateau, U.S.A. The University Herbarium is a collection of preserved plant specimens (some of which date back to early 1900's) that serve as a tool for basic research in plant systematics, ecology, phytogeography, and evolution. They are actively used in teaching and research as a resource to provide population localities for studies of a diverse nature, ranging from biological control to rare plants. The University Herbarium was originally established in 1976 when the collections from the herbaria of Eastern Montana Normal School, Eastern Montana College, Rocky Mountain College, and USDA Forest Service were consolidated. It has grown steadily to about 16,000 specimens. The collections include plants of Montana, (emphasis on eastern Montana and Beartooth Plateau), Plants of India, Venezuela, Roberson County, Texas, Brooklyn Botanical Gardens Herbarium, W.K. Kellogg Biological Field Station and vascular plants of Wisconsin, Ohio Utah, and many other places.

## Research Projects

Montana State University Billings has been approved by the National Science Foundation as an undergraduate research site, in part because of the extent to which undergraduates have been involved in faculty research in the past. Colleges which involve undergraduates in research efforts seem to have the highest success rates for training future scientists. At MSU Billings students have presented research papers at various scientific conferences, such as the Montana Academy of Sciences and others out of state, and have had papers published in professional scientific journals. Recent grants have made such studies possible for even more students.

## National Institutes of Health Program in Biomedical Research Excellence (NIH-INBRE)

MSU Billings administers a 1.8 million dollar grant from the National Institutes of Health program in Biomedical Research Excellence (NIH-INBRE). The NIH-INBRE grant supports faculty research in the molecular biology of infectious disease, student research opportunities in the biomedical sciences and the construction of new biomedical research laboratories. The NIH-INBRE grant also involves close collaborations between faculty at MSU Billings and scientists at other universities in Montana.

## College of Business

### Small Business Institute

The Small Business Institute (SBI) provides consulting services for small businesses in the Billings Montana area. Upper division business students, working under the supervision of a faculty member, gain practical experience while using their business training to solve "real world" problems. SBI cases provide assistance to clients in areas such as finance, marketing, human resource management, business operations and strategic planning. The program's value lies not only in the student's hands-on experience of assisting business people identifying and solving actual business problems, but also in the experience of working with other team members in accomplishing these objectives. Facing challenges provided in SBI casework provides insights into how businesses operate, opportunities to exercise skills learned in other parts of the program, and experience in developing creative solutions to new business problems.

## Volunteer Income Tax Assistance

### (VITA)

The Volunteer Income Tax Assistance (VITA) program provides free tax return assistance to individuals who cannot afford professional tax help. The program allows students who have taken the income tax course to get firsthand experience preparing income tax returns for low-income, elderly, and handicapped taxpayers. The VITA program has assisted over 1200 taxpayers each year for the last twelve years.

## College of Education

Completed in 1972, the College of Education (COE) building houses academic programs as well as the Montana Center for Inclusive Education. In addition, Information Technology provides technology support and services for computing, applications, multi-media production, and student computing. Construction of the two-story addition was completed in the Spring of 2000 and boasts state-of-the-art classrooms.

## Montana Center for Inclusive

### Education

The vision of the Montana Center for Inclusive Education is creation of a fully inclusive society that values diversity. To meet this vision, the Montana Center serves the diverse population of Montana and provides continuing professional development opportunities for educators and service providers.

The activities of the Center are funded by a variety of state and federal resources. The focus of these grants and contracts is to provide services both directly and through professional development.

The staff of the Montana Center has professional skills related to disability in the areas of employment, work incentives, rehabilitation counseling, transition, hearing conservation, community integration, and collaboration. The Center also maintains a wealth of research resources on their web page:  
[www.msubillings.edu/montanacenter](http://www.msubillings.edu/montanacenter)

## American Indian Outreach

LA 210, (406) 657-2144, (406) 657-2182

[www.msubillings.edu/americanindian](http://www.msubillings.edu/americanindian)

The American Indian Outreach office assists American Indian students in making academic, cultural, and social adjustments to Montana State University Billings. Activities include individualized assistance with study skills, tutoring, and creating internships for all majors

that are relevant to the American Indian community, as well as hosting cultural events each semester. The American Indian Outreach office collaborates with organizations such as Montana Indian Athletes Hall of Fame and Riverstone Health for the spring Pink Bingo. The office hosts the annual American Indian Heritage Day, Veterans Medicine Wheel, and MSUB Powwow.

This campus recognizes and has a commitment to cultural diversity that is demonstrated by the American Indian Outreach office. The staff provide advocacy for students, referral to other Student Affairs and MSU Billings programs including Native American Studies, and serves as a liaison with tribal educational representatives and other community organizations.

**Intertribal Indian Club** is open to all interested students. The Intertribal Indian Club is a student organization, established to assist Native American students in their adjustment to university life, to promote scholastic ability, and to foster pride in the cultural heritage of the Native American. The Club is involved with the planning and sponsorship of an annual Pow Wow, the largest student-sponsored campus event. Other activities include social events that are culturally appropriate to share in a campus environment such as dances, Native Games, documentary films, and Native cuisine.

## Yellowstone Public Radio

### (KEMC-FM)

406 Marbara, (406) 657-2941

From studios on the campus of Montana State University Billings, Yellowstone Public Radio provides a general adult audience with in-depth news, public affairs, and cultural programming, including classical music, jazz and blues, spoken arts and humanities programs. This station is affiliated with National Public Radio (NPR), Public Radio International (PRI), the WFMT Fine Arts Network, and American Public Media, along with other program producers and suppliers. The more than 47,000 listeners reside in Montana and northern Wyoming.

Yellowstone Public Radio consists of ten stations licensed to MSU Billings: KEMC-FM (Billings), KBMC-FM (Bozeman), KPRQ-FM (Sheridan, WY), KYPR-FM (Miles City), KYPW-FM (Wolf Point), KYPC (Colstrip), KYPB-FM (Big Timber), KYPM-FM (Livingston), KYPH-FM (Helena), and KYPF-FM (Stanford/Lewistown). YPR also operates 26 translators throughout Montana and northern Wyoming.

Yellowstone Public Radio can be heard on the web at [www.ypradio.org](http://www.ypradio.org), and on the FM dial at these frequencies:

In Montana: Billings 91.7, Ashland 89.1, Big Sky 95.9, Big Timber 89.3/90.5, Bozeman 102.1/95.9, Broadus 91.9, Chester and the Sweetgrass Hills area 100.1, Colstrip 88.5/89.9, Columbus 88.5, Conrad 91.3, Cut Bank 88.9, Emigrant & Paradise Valley 91.1, Forsyth 91.1, Gardiner & Yellowstone Park 103.9, Glasgow 91.9, Glendive 88.5, Havre 91.7, Helena 89.1, Lewistown/Stamford 89.5, Livingston 90.1/88.5, Miles City 90.7, Red Lodge 89.1, Shelby 90.3, Terry 91.9, and Wolf Point at 88.3.

In Wyoming: Buffalo 91.9, Cody 88.5, Greybull & the Big Horn Basin 91.5, Lovell 91.5, Powell 91.5/88.5, Sheridan 88.1, Worland 88.5, and in Yellowstone Park at 104.9/103.9.

## International Studies

**McD 150 (406) 657-1705**

**[www.msubillings.edu/internationalstudies/](http://www.msubillings.edu/internationalstudies/)**

Who am I? What is my place in this world? The International Studies Program seeks to engage students in a process of awakening. Through various study abroad programs and the International Studies Minor, students begin to experience the complexity of cultures and the richness of diversity. The end result produces students who are involved, lifelong learners, with a concern for the world in which we live, and an ability to become leaders who think of future generations.

More prosaically, the Office of International Studies (OIS), McDonald Hall 150, provides support services for current and prospective international students, the International Studies Club, and facilitates study abroad applications, as well as the Be a Foreign Friend (BFF) program.

Drop by the OIS today to see how your educational experiences and your career opportunities can be enriched. Learn to be a citizen of the world!

The minor in International Studies is through the Department of English, Philosophy and Modern Languages. Please see page 180.

## Intercollegiate Athletics

**Physical Education Building, (406) 657-2369**

**[www.msubsports.com](http://www.msubsports.com)**

Athletics is an integral part of the college life at MSU Billings for both men and women. All teams are

members of NCAA Division II and the Great Northwest Athletic Conference. Men's and women's teams compete on a varsity level in basketball, cross country, golf, soccer, indoor track and field, and outdoor track and field; additionally, women compete in volleyball and softball, and men compete in baseball. MSU Billings Athletics also sponsors a coed varsity cheer team. All MSU Billings students are admitted free to Yellowjacket Athletics events with a valid student ID. Schedules, news, and stats are available on the Yellowjacket Athletics website at [www.msubsports.com](http://www.msubsports.com). Follow MSUB Sports on Facebook ([www.facebook.com/pages/MSUB-Sports/143701145701497?ref=hl](https://www.facebook.com/pages/MSUB-Sports/143701145701497?ref=hl)) and Twitter ([twitter.com/MSUBsports](https://twitter.com/MSUBsports)).

## MSU Billings Booster Clubs

**PE Building, (406) 657-2369**

The Yellowjacket Booster Clubs, one for each sport, are made up of alumni and friends of the University who support the educational and athletic goals of MSU Billings and its student athletes. Booster Club members provide financial assistance to the University's athletic programs, encourage community support for academic and athletic programs, and create a solid bond between MSU Billings and its many friends nationwide. The ultimate goal of the Yellowjacket Booster Clubs is to enrich MSU Billings' Athletic Program.

## Physical Education Building

The Physical Education Building at MSU Billings includes two gymnasiums, a fitness center, a swimming pool, a racquetball court, a running track and other recreational and health facilities. During set hours each semester the facilities may be used by students and their families for swimming, workouts, etc. Use is free to students while family members pay a nominal charge.

## Recreational Activities

**PE 016, (406) 657-2881**

**[www.msubillings.edu/recactivities](http://www.msubillings.edu/recactivities)**

The Recreational Activities Program offers a wide range of activities. It provides all students, faculty and staff with recreational opportunities in competitive and noncompetitive events as well as organized and informal activities as regularly as their time and interest permit.

**Intramural Sports** Competition is scheduled for individual, dual and team sports. Participation is generally arranged in men's, women's and



coeducational divisions for each activity. These range from the traditional team sports of flag football, volleyball, basketball and softball, to the popular individual and dual sports such as racquetball, tennis and golf. Everyone is encouraged to participate regardless of experience or skill.

**Leisure Recreation** This informal activity allows those not wishing to be a part of a structured program to make use of the fine recreational facilities. The Physical Education Building includes two gymnasiums, a swimming pool, six racquetball/handball courts, a weight/exercise room, an indoor jogging track, and locker rooms.

## Montana State University Billings Foundation

**2615 Virginia Lane, (406) 657-2244**

The purpose of Montana State University Billings Foundation is to help the University achieve excellence through the solicitation, investment, and stewardship of financial support. The Foundation promotes philanthropy, campus and community partnerships, and educational opportunities.

Established in 1968, the MSU Billings Foundation is an independent, non-profit organization under Internal Revenue Service code 501(c)(3). A governing board of trustees composed of civic, business, and industry leaders guides the Foundation in achieving its mission. The Foundation staff is dedicated to helping Montana State University Billings and to serving donors, supporters, students, and faculty of MSU Billings with integrity, perseverance, stewardship, and excellence.

## MSU Billings Alumni Association

**Alumni House (2712 Normal Avenue)**

**(406) 247-5781**

**[www.msubillings.edu/alumni](http://www.msubillings.edu/alumni)**

The Office of Alumni Relations links the Alumni Association, University, and community. Graduates of MSU Billings automatically become members of the Alumni Association. The MSU Billings Alumni Association offers many engagement opportunities to our graduates both near and far. At MSUB Alumni Association, our mission is to connect and engage with alumni.

## Parking

**Parking Garage, (406) 657-1704**

Office hours: 8:00 a.m. to 5:00 p.m., M-F, except holidays.

MSU Billings parking regulations are to promote the convenience and safety of all personnel on the campuses and to facilitate efficient operations. They are part of the terms and conditions pertaining to students who are enrolled at MSU Billings, to faculty and staff who are employed by the University, and are applicable to all vehicle owners/drivers on campus, including guests and visitors. Parking on MSUB campuses is a privilege, not a right.

All vehicles parked on University property must display a current MSUB parking permit. Parking permits may be purchased online at [www.msubillings.edu/police/parkinginfo.htm](http://www.msubillings.edu/police/parkinginfo.htm) and also at the University Police & Parking office, in the southwest corner of the parking garage on Poly Drive. Parking regulations/maps are also posted online.

# Academic Support Center

University Campus: (406) 657-1641

[www.msubillings.edu/asc](http://www.msubillings.edu/asc)

City College: (406) 247-3022

[www.msubillings.edu/asccot](http://www.msubillings.edu/asccot)

The Academic Support Center provides services to support the academic success of students of MSU Billings and City College through developmental level math, reading, and English courses; Learning Labs; tutorial assistance; and workshops.

Special educational delivery requirements that need to be addressed by persons with disabilities should be directed to Disability Support Services.

## College Success Strategies

**A&SC 101 College Success Strategies** orients students to the expectations of college-level study and provides basic strategies for success as a student.

## Learning Labs

A Learning Lab for students is available on the first floor of the Student Union Building on the University campus and in the Learning Commons of the Tech Building at City College. The Learning Labs provide tutoring space, study group tables, and computers for students' school-related assignments.

## Tutoring

The Academic Support Center offers tutoring in math, writing, reading, and other general education subjects in the Learning Labs at both campuses, as well as program-specific tutoring at City College. Tutors are available to assist students but are not meant to replace classroom instruction. The Learning Lab tutors include instructors, professional tutors, and student tutors who have majors in a variety of disciplines.

## Writing Tutors

Academic Support Center tutors provide tutorial assistance for writing assignments in all undergraduate classes. Tutors help students at any stage of the writing process, but will not proofread, edit, or write work for the students. Tutors will help students master grammar and mechanics, research-writing formats and procedures, and many other writing skills. Handouts

and other reference materials are available at no charge. Graduate students should make an appointment to be seen in person.

## Math Tutors

Academic Support Center tutors provide tutorial assistance for students taking any developmental or general education math or statistics course, as well as some specific higher level courses. Tutors will help students understand mathematical concepts and assist with homework problems, but will not help with quizzes or tests.

## Specialty Tutors

Based on student need, tutoring in other subjects is available in the Learning Labs. Program-specific tutoring, such as in anatomy, drafting & design, automotive services, and computer applications, is available in the Learning Lab at City College.

## Online Tutoring

Online writing tutoring is available for students through the Academic Support Center. Undergraduate students can submit papers on the web at [www.msubillings.edu/asc/writelab/](http://www.msubillings.edu/asc/writelab/) and a writing tutor will review the paper, add comments, and return the paper. No online submissions are accepted for graduate-level papers, appointments only.

## Workshops

The Academic Support Center provides workshops on specific topics, such as APA writing style and graphing calculators. Workshops are based on student need and vary from semester to semester.

# Advising & Career Services

McMullen Hall First Floor West, (406) 657-2240

Library 100, (406) 657-2168

City College, Room A017, (406) 247-3019

Advising & Career Services assists students in understanding academic requirements, enabling them to complete their program requirements as efficiently as possible. Through one-on-one meetings and First Year Seminar courses, advisors help students develop the skills necessary to be successful. Advising & Career Services provide career exploration and help students access part-time jobs, internships, and work-study opportunities while they're in school, and help them secure full-time employment upon graduation.

New Students will receive information regarding General Education requirements, navigate their Degree Works account, and learn about program requirements related to their major and minor. Students who have not yet selected a major will be advised to begin working on General Education requirements and continue working with Advising & Career Services to explore career interests. Transfer and returning students will be able to have transcript evaluations completed and plans of study developed.

Depending on students' programs, they will be assigned to a faculty advisor in their major for planning and mentoring of upper-division coursework. Students may still maintain contact with Advising & Career Services as we continue to provide career preparation and internship assistance.

## Mandatory Advising

All first-time entering students at MSU Billings are required to see an academic advisor before registering for classes. During the initial advising session, students will receive information regarding General Education requirements and program requirements for their major and minor.

Students who plan to develop a graduation guarantee must contact Advising & Career Services and complete this agreement prior to the first semester of attendance.

Students are ultimately responsible for meeting graduation requirements, but advisors assist students with selection of courses, academic plans, and academic and career related questions.

## General Studies Students

Students who have not selected a major are registered as General Studies majors. In an effort to assist students in completing degree requirements as efficiently as possible, General Studies students are encouraged to focus on General Education requirements their first semester. Students are also encouraged to visit Advising & Career Services to explore career interests and to clarify how their academic program may support their career goals.

## Transfer Students

Students transferring to MSU Billings are required to apply for admission and submit transcripts of post-secondary institutions attended. Once these documents are submitted the advisor will be able to complete a transcript evaluation. The transcript evaluation will reflect how prior credits will apply to the degree/program the student is considering at MSU Billings. In order to give an accurate transcript evaluation, transfer students should provide copies of transcripts of all previous college level work. Although we maintain course equivalency guides for all Montana colleges and universities, it is helpful if transfer students can provide catalogs with course descriptions for coursework completed at out-of-state institutions.

## Declaring a Major

Students are encouraged to select and declare a major during their Freshman year. Students should contact Admissions and Records or Advising & Career Services to declare their major. The student will see the advisor regarding reviewing the requirements for the major selected and receive an updated major/degree work sheet and information on when they will be transferred to a faculty advisor in their selected major.

## Changing a Major

Students complete the change of major form with an advisor in Advising & Career Services. The academic advisor will clarify new program requirements, update the student's advising file with new program worksheets, and let the student know when they will be transferred to a faculty advisor. The changing of an

academic major may have significant impact on a student's long-range academic plan and graduation date. All students are encouraged to keep in close contact with their advisor through the process of changing majors.

## Pre–Nursing Students

MSU Billings has developed a very close relationship with the MSU-Bozeman Nursing Program which enables students to complete pre-nursing requirements as MSU Billings students and then transfer into the MSU-Bozeman program which is offered on the Billings campus. Advising & Career Services provides advising services through the first two years of the program and provides guidance for making application to upper-division courses.

## Pre–Professional Majors

Students planning to transfer to another college or university to complete a program not available at MSU Billings may choose to enroll in a pre-professional program. There are several important steps to take in order to coordinate a pre-professional program with the school to which one is going to transfer:

- A. Acquire a catalog from the school to which one is going to transfer
- B. Take General Education courses which match requirements of the transfer school
- C. Select other equivalent courses which will meet transfer school requirements and/or prerequisites

Many of the pre-professional programs at MSU Billings have been designed to prepare students to transfer to professional programs offered at other Montana University System units. Programs may be developed to meet the prerequisites for other pre-professional programs.

## Graduate Student Advising

Academic advising for graduate students is provided by faculty advisors in the College of the student's graduate program. Initial advising is provided through the Office of Graduate Studies with subsequent assignment to a permanent faculty advisor. The faculty advisor assists the student with the development of a plan of study and guidance in completing the requirements for the chosen degree program. Further information can be obtained by contacting the Office of Graduate Studies, McMullen 200, (406) 657-2238.

## Graduation Guarantee

MSU Billings has created a Graduation Guarantee for Undergraduates which students may utilize as they begin study. The Guarantee includes a set of conditions that the student needs to fulfill as well as the University; the Guarantee itself is signed by the student as well as the advisor. If the student fulfills his/her conditions and the University fails to do so, postponing graduating, the student may appeal to the Academic Standards and Scholastic Standing Committee prior to the beginning of classes for the last term of the signed Guarantee. If the Committee finds the University at fault, appropriate actions will include waiving course requirements, waiving tuition and fees, or a combination of the two.

Copies of this Guarantee are available from Advising & Career Services. Students are urged to examine this Guarantee to see if it will assist them in facilitating their completion of requirements and graduation. Advisors in the Center can explain the Guarantee and prepare appropriate plans of study for students.

## Assessment Testing

All entering students and transfer students who have not completed their general education requirements in English or Mathematics must take the Accuplacer placement test. Results of the Accuplacer placement tests along with ACT and/or SAT scores are used to advise students into the most appropriate math and English courses. For further information, contact Advising & Career Services at (406) 657-2240 or Jacket Student Central at (406) 247-3019.

# General Education Requirements

The baccalaureate degree includes three distinct and required areas of study: general education, concentration (major), and electives.

General Education provides for breadth of study across many areas of knowledge. All students are required to complete the General Education program as an essential component of the baccalaureate degree.

An area of concentration provides for depth of study within a chosen discipline (major). Students choose their major, but the specialized, in-depth courses they take are determined by the department which is responsible for the major.

Electives guarantee that students have the opportunity to study areas of personal interest in their own academic pursuits. Students are allowed to choose courses (electives) from any discipline that interests them.

## The Purpose of General Education

### Objectives

The objectives of General Education are to help students develop and demonstrate an understanding of humanity and what it means to be members of the global community. Students completing General Education will reflect upon the evolution of culture, and learn to identify and value responsible roles for the human being in the physical, social, and intellectual worlds.

### Structure

General Education is structured to fulfill the objectives by addressing essential components of human development: (1) Skills Development and Application, (2) Cultural Development, and (3) Intellectual Growth and Development. Specific courses applicable to General Education are arranged in categories and selected to ensure that students completing General Education are intellectually engaged in each of these areas of human development.

1. Skills Development and Application ensures that students will develop effective writing, mathematical, reading and oral communication skills.

2. Cultural Development ensures that students will develop an understanding of the evolution of human culture and social organizations, and an appreciation of cultural diversity.
3. Intellectual Growth and Development ensures that students will pursue knowledge, integrate knowledge among disciplines, apply knowledge to the identification and solving of problems, understand the importance of personal and societal ethics, and reflect on and appreciate the diversity of human endeavors.

## General Education Minimum Satisfactory Course Grade

By action of the University's Academic Senate, the minimum satisfactory grade students must earn in a General Education course is "C-" or better. However, students must earn an overall GPA of 2.0 in the General Education core. (11/10/05 memo #473 p. 1770)

## Categorization

Students will complete 31 credits of General Education with either traditional courses, discipline-specific courses, or integrated courses.

Category	Required Credits
<b>I. Global Academic Skills .....</b>	<b>9</b>
A. Mathematics .....	3
B. English .....	3
C. Communication & Information Literacy .....	3
<b>II. Natural Sciences .....</b>	<b>7</b>
A. Life Sciences .....	3-4
B. Physical Sciences .....	3-4
<b>III. Social Sciences and History .....</b>	<b>6</b>
A. Social Sciences .....	3
B. History .....	3
<b>IV. Cultural Diversity .....</b>	<b>3</b>
<b>V. Arts and Humanities .....</b>	<b>6</b>
A. Fine Arts .....	3
B. Humanities .....	3
<b>Total Required Credits .....</b>	<b>31</b>

## Category Descriptions

### Global Academic Skills

The ability to read, write, calculate, and assess sources of information are fundamental and necessary human skills. These skills are prerequisite to effective communication of ideas and the creative solving of qualitative and quantitative problems. These skills are important for their own sake but mastery of them is also required for a university graduate to be considered an educated person.

- Demonstrate the ability to communicate effectively in written form by writing papers which effectively develop and support theses, tell stories, describe events, or express personal insights or values,
- Read and evaluate research materials and incorporate them into informative, argumentative, or analytical writing and oral presentation,
- Read and evaluate problems and quantitatively solve those problems using mathematical reasoning,
- Demonstrate how mathematical modeling or statistical designs are used to obtain knowledge.

### The Natural Sciences

The diversity of species in the biosphere, including humans, interact with their environment, changing it and being changed in the process. Science is a creative human endeavor devoted to discovering the principles that rule the physical universe. The natural world is law-driven and science is limited to investigating by asking and answering questions, processes that can be observed and measured to help us understand the laws of nature and the physical universe.

- Understand the experimental basis of science and how scientists accumulate new knowledge,
- Appreciate the goals and limitations of science,
- Develop an understanding of important scientific facts and how those facts help us understand our observations and the laws that govern the natural world,
- Appreciate the role of science in the development of modern technological civilization.

### Social Sciences and History

Humans are social beings. Through their various relationships they create social life and are, in turn, influenced and transformed by the social life they create and maintain. Social sciences represent those disciplines that apply scientific methods to study the intricate and complex network of human relationships and the forms of organization designed to enable people

to live together in societies. History is the record of human activity. History presents us with an overview of this activity with the intent that past accomplishments and failures will serve to inform present issues.

- Understand the evolution of social institutions and the development and maintenance of individual and social behaviors,
- Develop perspectives about the nature of psychological and social processes and the structure of society,
- Identify and comprehend theories of human behavior and of the participation of individuals in psychological and social processes,
- Practice the basic methodologies involved in the social sciences,
- Develop a view of current social conditions and events within a chronological and historical context,
- Understand social, cultural, political and economic changes over time,
- Comprehend the international ramifications of domestic policies and how these may affect and be experienced by people in other cultures.

### Cultural Diversity

Cultural diversity presents us with an awareness and understanding of the variety of human experience, especially as manifested among cultures, both present and past.

- Understand social, cultural, political and economic changes over time,
- Comprehend the international ramifications of domestic policies and how these may affect and be experienced by people in other cultures,
- Appreciate and be sensitized to world cultures.

### Arts and Humanities

Through the arts and humanities, students will explore and experience the sensory and perceptual capacities and potentialities that are shared by people and that define us as humans. The expressive arts include visual, performing, and language-based activities in celebration of multiple perspectives. The humanities address qualitative relationships wherein judgments are made but change with time and circumstances.

- Develop an appreciation of the varied cultural artifacts of humans throughout history,
- Foster an understanding of the variety of human expressive experiences in relation to ourselves, other cultures and the physical environment,
- Utilize the basic methodologies and practices endemic to the various disciplines,

- Explore human characteristics especially considered desirable through expressive communicative systems about how to live fully.

## General Education Assessment Objectives

### I. Global Academic Skills

#### A. Mathematics

1. Demonstrate ability to solve problems quantitatively.
2. Solve problems with various mathematical methods of the discipline.
3. Communicate using mathematical terminology.

#### B. English

1. Demonstrate knowledge of and competence in the use of conventional written forms: mechanics, spelling, punctuation, syntax, grammar, etc.
2. Demonstrate ability to apply knowledge of writing strategies.
3. Demonstrate the ability to undertake and accomplish original work in written form.

#### C. Communication & Information Literacy

1. Engage in hands-on research as a process of gathering, assessing, interpreting, and using data from multiple sources to express ideas.
2. Use information effectively to accomplish a specific purpose in oral or written form.
3. Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.

### II. Natural Sciences

#### A. Life Science

1. Demonstrate an understanding of knowledge related to the life sciences.
2. Demonstrate the ability to synthesize knowledge from different subject areas concerning the life sciences.
3. Demonstrate the ability to use logical or quantitative approaches to solve problems related to the life sciences.

#### B. Physical Science

1. Demonstrate an understanding of knowledge related to the physical sciences.
2. Demonstrate the ability to synthesize knowledge from different subject areas concerning the physical sciences.

3. Demonstrate the ability to use logical or quantitative approaches to solve problems related to the physical sciences.

### III. Social Sciences and History

#### A. Social Sciences

1. Analyze human behavior, ideas, and social institutions for historical and cultural meaning and significance.
2. Gather information, analyze data, and draw conclusions from multiple hypotheses to understand human behavior.
3. Synthesize ideas and information with regard to historical causes, the course of events, and their consequences, separated by time and place.

#### B. History

1. Demonstrate an ability to use analysis of a variety of types of sources to construct historical knowledge.
2. Demonstrate an ability to organize a variety of historical sources and express them effectively in written form.
3. Demonstrate basic understanding of the historical context of events.

### IV. Cultural Diversity

1. Demonstrate an ability to identify and solve problems relating to cultural diversity within the discipline.
2. Demonstrate the ability to communicate and analyze effectively concerning cultural diversity within the discipline
3. Demonstrate a basic understanding of the importance of awareness of cultural diversity within the various disciplines.

### V. Arts and Humanities

#### A. Fine Arts

1. Demonstrate cultural awareness through fine arts at the local, regional, national, and international levels.
2. Demonstrate an awareness of the power of imagination and expression.
3. Demonstrate an appreciation for the fine arts and what that appreciation can mean as a quality of life issue.

#### B. Humanities

1. Develop an awareness of the role that the humanities play in culture, i.e., politics, philosophy, economics, science, math, etc.
2. Create an awareness of how to cross-relate/reference humanities-based information.
3. Demonstrate an awareness of issues surrounding life, death, and morality.

## General Education Courses

### I. Global Academic Skills..... 9

Regarding Global Academic Skills, students are required to take 1 course from Mathematics, 1 course from English, and 1 course from Communication & Information Literacy.

#### A. Mathematics .....3

M 105 Contemporary Mathematics .....3  
*Surveys the foundations of mathematics with an emphasis on the unity of the subject.*

M 114 Extended Technical Mathematics .....3  
*Develops and/or enhances critical thinking skills as students analyze problems and utilize mathematical skills of applied algebra, geometry, and trigonometry to solve such problems.*

M 121 College Algebra .....3  
*College algebra introduces functions and surveys the basic algebraic functions.*

M 122 College Trigonometry .....3  
*Along with College Algebra, covers the trigonometry, series, and sequences needed for the calculus series.*

M 130 Mathematics for Elementary Teachers I .....3  
*Provides an in-depth survey of the mathematics necessary to teach through eighth grade.*

M 143 Finite Mathematics.....4  
*Surveys a number of topics in discrete and continuous mathematics that are applicable in the life, management, and social sciences.*

M 161 Survey of Calculus .....3  
*A survey of basic calculus concepts and their applications.*

M 171 Calculus I .....4  
*Introduces and explores the mathematics of change.*

STAT 141 Introduction to Statistical Concepts .....3  
*Surveys the basic ideas statistics has to offer.*

STAT 216 Introduction to Statistics .....4  
*Provides an introduction to the basic practice of statistics and data analysis.*

#### B. English.....3

WRIT 101 College Writing I.....3  
*Helps students acquire the basic writing skills expected in college-level academic writing.*

WRIT 121 Introduction to Technical Writing .....3  
*Develops and/or enhances writing skills for various real-life work situations that emphasize technical fields.*

WRIT 122 Introduction to Business Writing.....3  
*Develops and/or enhances writing skills for various real-life work situations in the business world.*

WRIT 201 College Writing II.....3  
*Introduces students to the expectations, conventions, and requirements of undergraduate academic research writing.*

WRIT 220 Business & Professional Writing.....3  
*Emphasizes accurate and precise writing for the business audience.*

WRIT 221 Intermediate Technical Writing .....3  
*Introduces students to the creation and evaluation of several kinds of written technical communication.*

### C. Communication & Information Literacy ..... 3

BMIS 150 Computer Literacy..... 3  
*Explores access to, retrieval of, and organization of information in a wide variety of environments and formats.*

COMX 111 Introduction to Public Speaking ..... 3  
*This a public speaking skills acquisition course with a two-part objective: (1) improving abilities to access, retrieve, and evaluate information (2) in order that the information might be used in effective public performance.*

COMX 115 Introduction to Interpersonal

Communication ..... 3

*This is a communication skills acquisition course with a two-fold objective: identifying theories and patterns of communication within specific social contexts and improving communication competence within those social contexts.*

LSCI 125 Research in the Information Age ..... 3  
*Introduces students to the organization, retrieval, and evaluation of both electronic and print sources; covers concepts of the research process, methods, and ethics of information research, the evolving nature of information resources, and appropriate information citation.*

## II. Natural Sciences..... 7

Regarding Natural Sciences, students are required to take one course from Life Sciences and one course from Physical Sciences. **At least one course must include a corresponding laboratory.** Students can satisfy Natural Sciences by taking SCIN 101, 102, 103, and 104.

### A. Life Sciences..... 3-4

BIOB 101 Discover Biology..... 3  
*Provides students with academic foundation in major concepts of biology from a historical perspective and as they relate to contemporary issues in the world today.*

BIOB 102 Discover Biology Laboratory ..... 1  
*This course is designed to help non-majors understand basic biological concepts such as cellular biology, metabolism, genetics, and population ecology among others through hands-on laboratory exercises and demonstrations.*

BIOB 121 Fundamentals of Biology for Allied

Health ..... 3

*Provides students with academic foundation in the basic principles of biology with an emphasis on how those principles apply to the structure and function of the human body as it currently exists.*

BIOB 122 Fundamentals of Biology: Evolution,

Ecology and Biodiversity ..... 3

*Provides students with academic foundation in the basic principles of biology with an emphasis on evolution, ecology, and biodiversity.*

BIOB 123 Fundamentals of Biology: The Nature of Nutrition ..... 3

*Explores key properties of life (e.g., biological molecules, cellular function and metabolism, genetics, natural selection) from the perspective of nutrition science.*

BIOB 160 Principles of Living Systems ..... 3

*Provides students with academic foundation in major concepts of biology from a historical perspective and as they relate to contemporary issues in the world today.*



**BIOB 161 Principles of Living Systems**

Laboratory ..... 1

*Provides students exposure to major concepts of biology through hands-on lab investigations and application of the scientific method.*

**B. Physical Sciences .....3-4****ASTR 110 Introduction to Astronomy ..... 3**

*Provides students with an understanding of the historical development of astronomy and an understanding of our place in the universe.*

**ASTR 111 Introduction to Astronomy Lab ..... 1**

*Provides the students with empirical observations to corroborate astronomical theories developed in Introduction to Astronomy (ASTR 110).*

**CHMY 121 Introduction to General Chemistry ..... 3**

*This course focuses on understanding fundamental chemical principles.*

**CHMY 122 Introduction to General Chemistry**

Laboratory ..... 1

*Provides students with the opportunity to empirically verify concepts learned in Introduction to General Chemistry (CHMY 121).*

**CHMY 141 College Chemistry I ..... 3**

*Provides students with a foundation in qualitative and quantitative chemistry and relates chemistry to other academic disciplines and to everyday life.*

**CHMY 142 College Chemistry Laboratory I ..... 1**

*Provides students with the opportunity to empirically verify concepts learned in College Chemistry I (CHMY 141).*

**GEO 101 Introduction to Physical Geology ..... 3****GEO 102 Introduction to Physical Geology**

Laboratory ..... 1

**GPHY 111 Introduction to Physical Geography ..... 3****GPHY 112 Introduction to Physical Geography**

Laboratory ..... 1

**PHSX 103 Our Physical World ..... 3**

*This course develops a basic understanding of the principles of "everyday physics."*

**PHSX 104 Our Physical World Laboratory ..... 1**

*This course provides students with laboratory experience in physics.*

**PHSX 105 Fundamentals of Physical Science ..... 3**

*Demonstrate physical science awareness and an appreciation of laboratory practice.*

**PHSX 106 Fundamentals of Physical Science Lab ... 1**

*Provides students with the opportunity to empirically verify concepts learned in PHSX 105.*

**PHSX 205 College Physics I ..... 3**

*Provides students with a foundation in the physics of motion and an understanding of the consequences of forces and conservation laws.*

**PHSX 206 College Physics I Laboratory ..... 1**

*Provides the students with empirical observations to corroborate physical theories developed in College Physics I (PHSX 205).*

**A. and B. Integrated Sciences ..... 7****SCIN 101 Integrated Sciences I ..... 3**

*The first half of a two-semester integrated course in the sciences, where core principles of scientific knowledge are integrated across scientific disciplines, while also integrating applications of science into the lives of students whose very existence is impacted by science and its technological applications.*

**SCIN 102 Integrated Sciences Lab ..... 1**

*A course that complements Integrated Sciences lecture (SCIN 101).*

**SCIN 103 Integrated Sciences II ..... 3**

*The second half of a two-semester integrated course in the sciences.*

**SCIN 104 Integrated Sciences Lab II ..... 1**

*A course that complements Integrated Sciences lecture (SCIN 103).*

**III. Social Sciences and History ..... 6**

Regarding Social Sciences and History, students are required to take one course from Social Sciences and one course from History.

**A. Social Sciences ..... 3****ANTY 217 Physical Anthropology and Archeology 3**

*Surveys the structure, evolution, and history of humans as biological and cultural beings.*

**BGEN 105 Introduction to Business ..... 3**

*Surveys aspects of business using concepts and tools for business decision making.*

**COMX 106 Communicating in a Dynamic**

Workplace ..... 3

*Aims to develop students' perception and expression skills as used in a diverse workplace.*

**ECNS 201 Principles of Microeconomics ..... 3**

*The analysis of individual decisions and their impact on social organizations and structures.*

**ECNS 202 Principles of Macroeconomics ..... 3**

*The behavior of markets in the context of a national economy.*

**EDU 105 Education and Democracy ..... 3**

*This course explores democracy as a form of government, and the critical relationship between democracy and education in the United States.*

**GPYH 141 Geography of World Regions ..... 3**

*As an overview of the major continents and regions of the world, this course provides a broad survey of how globalization processes are influencing local identities, modes of life, and standards of living.*

**HTH 110 Personal Health and Wellness ..... 3**

*Covers contemporary health issues and explores individual and community based solutions.*

**PSCI 210 Introduction to American Government ..... 3**

*Covers the American political system relative to central government and institutions.*

**PSCI 220 Introduction to Comparative**

Government ..... 3

*Introduces the ideas behind the democratic and non-democratic forms of political life in the modern world.*

**PSYX 100 Introduction to Psychology ..... 3**

*Introduces students to the foundations of human psychology including topics such as the biological basis of behavior, learning, memory, problem solving, motivation, developmental process, and social behavior.*

- PSYX 231 Human Relations ..... 3  
*Applies psychological insights and principles to daily life and personal growth with an emphasis on Positive Psychology.*
- SOCI 101 Introduction to Sociology ..... 3  
*The course examines the basic elements of the relationship between self and society, the patterns of human activity, and how these are maintained.*
- SOCI 201 Social Problems ..... 3  
*Survey of contemporary social problems in the U.S.*

## **B. History..... 3**

- HSTA 101 American History I..... 3  
*Survey of United States history from the colonial era to the end of the Reconstruction.*
- HSTA 102 American History II ..... 3  
*Survey of United States history from the end of Reconstruction to the present.*
- HSTR 101 Western Civilization I..... 3  
*Survey of world history from Antiquity to the Reformation.*
- HSTR 102 Western Civilization II ..... 3  
*Survey of world history from the Italian Renaissance to the present.*
- HSTR 103 Honors Western Civilization I..... 3  
*Honors survey of western civilization from Antiquity to the Peace of Westphalia.*
- HSTR 104 Honors Western Civilization II..... 3  
*Honors survey of the history of western civilization from the Italian Renaissance to the present.*
- PSCI 230 Introduction to International Relations..... 3  
*Various dimensions of international politics.*

## **IV. Cultural Diversity ..... 3**

Regarding Cultural Diversity, students are required to take one course from the following:

- ANTY 220 Culture and Society ..... 3  
*Surveys the basis and diversity of human behavior from a multicultural perspective.*
- ARTH 160 Global Visual Culture ..... 3  
*Examines visual culture, which includes painting, sculpture, photography, the Internet, performance, cinema, advertising, and television, as our primary means of communication and of understanding our postmodern world.*
- COMX 212 Introduction to Intercultural Communication..... 3  
*Explores culture as both producer and product of communication, creating an appreciation of communication processes as essential factors in promoting positive intercultural relations.*
- GPHY 121 Human Geography ..... 3  
*This course focuses on how the cultural values and practices of people from a variety of places have shaped the various regional landscapes.*
- HTH 270 Global Health Issues..... 3  
*Explores relationships between human behavior, economics, history, culture, politics, policy formation, and the environment, while investigating the impact of these elements on the quality of health within our global community.*
- LIT 230 World Literature Survey ..... 3  
*Provides a comparative basis for understanding different cultures through their literary traditions.*

- MUSI 207 World Music ..... 3  
*Introduces students to the uses and functions of music in various cultures.*

## **NASX 105 Introduction to Native American**

- Studies ..... 3**  
*Survey course covering the cultures, sociology, and history of American Indian peoples.*

## **NASX 205 Native Americans in Contemporary**

- Society ..... 3**  
*Addresses the issues raised at the interface of Native American culture and the values with the majority culture of the United States.*

## **PHL 271 Indian Philosophies and Religions..... 3**

- Course explores, compares, and contrasts philosophies and religions of India, starting from 3000 BCE and working up to the present; exploring such subjects as scripture, art, social justice, and politics; noting how India has influenced other nations and how other nations have influenced India; and examining our own beliefs and practices through the lens of Indian philosophies and religions.*

## **PHL 272 Chinese Philosophies and Religions ..... 3**

- Course explores, compares, and contrasts philosophies and religions of China (including Tibet) and Japan from ancient history through to the present, exploring such subjects as scripture, art, social justice, and politics, noting how China has influenced other nations, most notably Japan and modern America, and examining our own beliefs and practices through the lens of Chinese philosophies and religions.*

## **REHA 201 Introduction to Diversity in**

- Counseling ..... 3**  
*The course focuses on perspectives for interacting with diverse cultures, based on understanding of cultural characteristics and differences related to disability, gender, race/ethnicity, sexual orientation, religion, geography, advanced aging, and social class.*

## **RLST 170 The Religious Quest ..... 3**

- Fosters careful and sensitive listening and thinking on diverse and other divisive religious issues.*

## **SPNS 150 The Hispanic Tradition..... 3**

- This course introduces students to various Hispanic traditions and cultures throughout history.*

## **WGSS 274 Women, Culture and Society ..... 3**

- Employs the sociological perspective to analyze the lives of girls and women in North America.*

## **V. Arts and Humanities ..... 6**

Regarding Arts and Humanities, students are required to take one course from Fine Arts and one course from Humanities.

### **A. Fine Arts..... 3**

- ARTZ 101 Art Fundamentals..... 3  
*Encourages enhancement of two- and three-dimensional artistic skills for the general student.*
- ARTZ 105 Visual Language-Drawing ..... 3  
*Introduces the beginning student to the basic fundamentals of drawing and linear perspective.*
- ARTZ 131 Ceramics for Non-Majors ..... 3  
*Develops the ability to design three-dimensional clay forms using manual dexterity.*
- CRWR 240 Introductory Creative Writing Workshop ..... 3  
*Provides students with the basic skills for self-expression.*

FILM 160 Introduction to World Cinema .....	3
<i>Examines films that speak in their own way to issues of arts appreciation, feminism, diversity, and the human condition.</i>	
LIT 270 Film & Literature.....	3
<i>Provides students with thinking and writing skills focused on a visual art form.</i>	
MART 260 Computer Presentation and Animation ..	3
<i>This course explores the arts through digital three-dimensional environments and animations.</i>	
MUSI 101 Enjoyment of Music .....	3
<i>Designed to assist students in developing the ability to effectively perceive the aesthetic and structural qualities of music.</i>	
MUSI 114 Band: MSUB Symphonic .....	1
MUSI 131 Jazz Ensemble I: MSUB .....	1
MUSI 147 Choral Ensemble: University Chorus .....	1
PHOT 154 Exploring Digital Photography .....	3
<i>Introduces technical and aesthetic ways of creating digital photographic images. Emphasis is on the production of photographic images, from acquiring them with digital cameras to manipulating them using computer software, such as Adobe Photoshop.</i>	
THTR 101 Introduction to Theatre .....	3
<i>Introduces students to the complexities of performance theory and criticism.</i>	
THTR 120 Introduction to Acting I.....	3
<i>Explores both collaborative and individual projects in the areas of comedy, tragedy, and social and political drama; students will find opportunities for personal expression, ensemble building, problem solving, and multi-cultural activities.</i>	
<b>B. Humanities.....</b>	<b>3</b>
ARTH 150 Introduction to Art History .....	3
<i>Surveys world art from prehistory through the present day with the objective of developing a critical understanding of art forms in their historical and cultural context.</i>	
HONR 111 Perspectives and Understanding.....	3
<i>This course explores classic and contemporary works of literature, art, and philosophy with an emphasis on cultural and historical contexts in order to develop critical and multi-disciplinary analytical skills.</i>	
LIT 110 Introduction to Literature .....	3
<i>Students build and expand their knowledge to the extent that reading literature is a discovery process for the engaged mind.</i>	
LIT 240 The Bible as Literature .....	3
<i>Examines the Bible as a work of literary art.</i>	
PHL 110 Introduction to Ethics: Problems of Good and Evil.....	3
<i>Students analyze divergent moral views and assess the strengths and weaknesses of these views in order to form their own point of view.</i>	
PHL 111 Philosophies of Life .....	3
<i>Students evaluate the diversity, intrinsic value, and consequences of various philosophical points of view to develop their own philosophy of life.</i>	
PHL 254 People and Politics .....	3
<i>Examines a number of the main figures, texts, and ideas in the history of western political thought, with an emphasis on the development of democracy. Analyzes the significance of issues like rights, freedoms, equality, justice, the legitimacy of the state, and the sovereign.</i>	

Students should consult with their advisors, major departments or faculty in their programs for guidance in selecting appropriate writing and experiential learning courses.

## Experiential Learning Requirement

Students who intend to graduate with a baccalaureate degree are required to take and pass at least one course of experiential learning. Examples are student teaching, internships, undergraduate research, cooperative education experiences, practica, experiences abroad, and senior projects.

# University Honors Program

COE 106 (406) 657-2908

[www.msubillings.edu/honors/](http://www.msubillings.edu/honors/)

Established in 1997, the Honors Program at Montana State University Billings provides an enhanced and supportive learning environment responsive to the educational needs of exceptionally motivated undergraduate students. This goal is accomplished through the guidance of faculty noted for excellence in teaching who offer small Honors sections of regular courses, interdisciplinary colloquia, special seminars, and increased opportunities for undergraduate research and creative endeavors. Students are challenged and supported in their efforts to take full advantage of their intellectual and personal talents. Membership is open to undergraduate students from all majors seeking enriched learning, cultural awareness, and fellowship. The program fosters an affordable small college experience while benefiting from the University's size and many degree options. As a community of scholars, faculty work enthusiastically to help students achieve the following goals:

- Develop skills in self-expression, critical thinking, information gathering, and problem solving through lively class discussions.
- Use interdisciplinary methods to investigate, research, and compose analytical or scientific papers of substantial length and depth.
- Acquire a competitive advantage for scholarships, graduate admissions, and career-building jobs.

The program is overseen by faculty members on the Honors Advisory Council. Students may also serve the program as members of the Student Advisory Board, which selects a representative for the Council. The Board also supports the program by enriching a sense of community so that social activities—such as service learning, outdoor excursions, and other special events—can increasingly flourish.

The University Honors Program is designed so that many courses contribute to satisfying General Education requirements. Students can earn the University Honors transcript designation upon graduation in one of two ways:

- ◆ University Honors Scholar—Earn at least 21 credits with a GPA of at least 3.0 in Honors courses (including 9 credits in upper-division courses)
- ◆ University Honors Graduate—Enter the Honors Program with 45 University credits earned and earn

at least 15 credits with a GPA of at least 3.0 in Honors courses, including HONR 499 Honors Capstone.

Students completing one of these two options will have their official transcripts notated: University Honors Scholar: General Honors or University Honors Graduate: General Honors.

At the heart of the Honors curriculum are courses that examine significant original texts in terms of their historical and cultural backgrounds. Honors courses are frequently offered in history, political science, integrated science, education, law and society, social science, communications, economics, and other areas.

Consult the University Honors Program website at [www.msubillings.edu/honors](http://www.msubillings.edu/honors) or contact the Director to see the specific courses scheduled for the current semester.

For acceptance into the University Honors Program, incoming freshmen must satisfy at least one of these requirements:

- have a high school GPA of at least 3.5.
- be in the upper fifth of the student's graduating class.
- have a composite ACT score of 26 or better.
- have a Chancellor's Scholarship.
- be supported by a letter from a high school teacher attesting that the student has the intellectual motivation that is expected of an honors student.

Those students who have completed at least 15 credits of higher education may be admitted to Honors courses by having one the following:

- a letter of recommendation from a university faculty member.
- a cumulative GPA of at least 3.0.

Students who earn a grade of "B" or higher in an Honors course are also eligible for admission to the program.

To learn more about what we can offer you, please contact Dr. David Craig, the Director of the University Honors Program. You can reach him by phone at (406) 657-2908 or by email at [honors@msubillings.edu](mailto:honors@msubillings.edu)

## Interdisciplinary Honors Minor

The Interdisciplinary Honors Minor consists of 21 honors credits, including 2 required courses, and a minor portfolio that represents student experience in the minor. **At least 9 credits must be 300-level or higher.**

Required Courses	Credits
HONR 111 Perspectives and Understanding.....	3
OR HONR 311 Advanced Perspectives and Understanding.....	3
^HONR 499 Honors Problem-Solving Capstone .....	3
Elective honors credits (see below) .....	15
Total.....	21

Choose the 15 elective honors credits from:

- honors sections of General Education courses,
- HONR special topic seminars,
- specially designated departmental seminars,
- honors contracts,
- honors independent study courses, and
- internships

^ A department capstone that contains the following elements may be substituted for honors capstone:

- original research or creative scholarship,
- written interpretation or analysis, and
- public presentation or a defense.

### The Minor Portfolio

After completing the minor courses, students work with their faculty advisors to compile a minor portfolio that represents their learning experience in the minor.

Typically, it will include samples of student work and a brief essay focusing on the ways in which their work has contributed to their learning experience at MSUB and toward their career objectives.

# Associate of Arts Degrees and Associate of Science Degrees

For additional A.A. and A.S. degrees, see the **City College Catalog**.

## Associate of Arts Degree (AA)

### Programs of Study in:

- Applied Psychology
- Education
- Rehabilitation and Related Services
- General Studies (Self-designed)

## Associate of Science Degree (AS)

### Programs of Study in:

- Allied Health
- Pre-Engineering
- Environmental Science
- Fire Science
- General Studies (Self-designed)

### AA/AS General Studies (Self-Designed) ▽

Requirements	Credits
General Education .....	31
Electives .....	29
Total.....	60

- Earn a minimum of 60 semester credits with a cumulative grade point average of 2.0 or better.
- Satisfy the General Education requirements of MSU Billings.
- A minimum of 20 semester credits with 40 grade points must be earned at MSU Billings.

## Associate of Arts

### Program of Study in Applied Psychology

	Credits
<b>General Education.....</b>	<b>31</b>
Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.	

### Required Courses

*PSYX 100 Introduction to Psychology .....	3
PSYX 222 Psychological Statistics.....	3
PSYX 223 Research Design and Analysis I.....	3
PSYX 224 Research Design and Analysis I Lab .....	1
<b>Total Required Courses credits .....</b>	<b>10</b>

### Restricted Electives

#### Group 1: Select one course from this group

PSYX 320/321 Research Methods III w/Lab.....	4
PSYX 350/351 Physiological Psychology w/Lab .....	4
PSYX 352/353 Comparative Psychology w/Lab .....	4
PSYX 354/355 Sensation & Perception w/Lab.....	4
PSYX 358/359 Drugs and Behavior w/Lab .....	4
PSYX 370/371 Psychology of Learning w/Lab .....	4
PSYX 380/381 Memory & Cognition w/Lab .....	4
PSYX 480 Cognitive Development .....	3
<b>Total Group 1 credits.....</b>	<b>3-4</b>

#### Group 2: Select two courses from this group

*PSYX 231 Human Relations.....	3
PSYX 330 Child Psychology .....	3
PSYX 332 Adult Psychology.....	3
PSYX 333 Psychology of Aging.....	3
PSYX 335 Psychology of Gender.....	3
PSYX 340 Abnormal Psychology.....	3
PSYX 360/SOCI 382 Social Psychology.....	3
PSYX 378 Introduction to Clinical Psychology.....	3
PSYX 385 Psychology of Personality.....	3
PSYX 410 Cognitive Learning Theories .....	3
PSYX 461 Industrial & Organizational Psychology.	3
PSYX 470 Psychological Testing .....	3
<b>Total Group 2 credits.....</b>	<b>6</b>

**Total Restricted Electives..... 9-10**

**Restricted electives selected with advisor approval..... 6**

**Electives .....** 3-4  
The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General

Education requirements and the degree requirements. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree.....60**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course description for required prerequisites.*

## Associate of Arts

### Program of Study in Education

Provides the student with the knowledge and skills to work in the capacity of a paraeducator in early childhood education and can serve as a career ladder to Elementary Education/Early Childhood Education leading to teacher licensure and other professional opportunities.

#### Credits

**General Education Requirements .....31**

General Education same as elementary program. See page 260. Students should consult with their faculty advisors to determine if specific courses are necessary in order to satisfy the General Education requirements leading to a degree in Education.

#### Required Courses

EDEC 130 Health, Safety and Nutrition in Early Childhood.....	2
EDEC 310 Child in the Family.....	3
EDEC 352 Math and Science in Early Childhood.....	3
EDEC 381 Early Childhood Curriculum and Methods .....	3
EDEC 385 Integrated Curriculum in Early Childhood Education .....	3
EDEC 430 Social/Emotional Development in Young Children .....	3
EDSP 204 Introduction to Teaching Exceptional Learners.....	3
EDU 220/220L Human Growth and Development ...	3
EDU 330 Emergent Literacy .....	3
EDU 336 Cognitive and Language Development in Young Children.....	3
<b>Total Required Credits .....</b>	<b>29</b>

**Total minimum credits required for degree.....60**

*Certain courses in this program have prerequisites; students should check the course description for required prerequisites.*

## Advising Option for AA degree in Education: Special Education

**General Education Requirements ..... 31**

Students should consult with the Special Education faculty advisors to determine if specific courses are necessary in order to satisfy the General Education requirements leading to a degree in Education or to specific employment requirements in special needs work settings.

#### Required Courses

EDEC 265 Leadership and Professionalism in Early Childhood Education .....	3
EDEC 381 Early Childhood Curriculum and Methods .....	3
EDSP 204 Introduction to Teaching Exceptional Learners .....	3
EDSP 205 Adult and Child Interaction Skills .....	3
**EDSP 294 Seminar/Workshop.....	1
^EDSP 298 Internship.....	2
EDU 220 Human Growth and Development .....	3
EDU 232 Foundations of Reading .....	3
<b>Total Required Credits.....</b>	<b>21</b>

**Restricted electives selected with advisor approval..... 6**

^Co-register with EDSP 294 Seminar/Workshop

\*\* Co-register with EDSP 298 Internship

*Certain courses in this program have prerequisites; students should check the course description for required prerequisites.*

## Associate of Arts

### Program of Study in Rehabilitation and Related Services

This program includes an emphasis in Addiction Counseling.

#### Credits

**General Education Requirements ..... 31**

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this program.

#### Required Courses

HS 345 Legal, Ethical & Professional Issues in the Human Services.....	3
HS 385 Behavioral Pharmacology and Human Services .....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention.....	3

*REHA 201 Introduction to Diversity in Counseling .....	3
REHA 301 Principles of Counseling and Group Theory .....	3
REHA 406 Assessment in Human Service and Addiction Programs .....	3
REHA 453 Case Management and Community Resources .....	3
REHA 499 Capstone: Addiction Treatment Planning and Documentation .....	2
<b>Total Required Course Credits .....</b>	<b>23</b>

**Restricted electives selected with advisor approval..... 6**

**Total minimum credits required for degree..... 60**

\*May satisfy General Education requirements.

## Associate of Science

### Program of Study in Allied Health

Credits

#### General Education

*BIOB 160 Principles of Living Systems (3)	
<b>OR</b> *BIOB 101 Discover Biology.....	3
*CHMY 121 Introduction to General Chemistry .....	3
*CHMY 122 Introduction to General Chemistry Laboratory .....	1
*PSYX 100 Introduction to Psychology (3)	
<b>OR</b> *SOCI 101 Introduction to Sociology .....	3
*STAT 141 Introduction to Statistical Concepts (3)	
<b>OR</b> *STAT 216 Introduction to Statistics .....	4
Additional General Education requirements.....	18
<b>Total Credits .....</b>	<b>31</b>

#### Required Program Courses

BIOH 301 Human Anatomy and Physiology I.....	3
BIOH 302 Human Anatomy and Physiology I Lab....	1
BIOH 311 Human Anatomy and Physiology II.....	3
BIOH 312 Human Anatomy and Physiology II Lab .1	
BIOM 250 Microbiology for Health Sciences.....	3
CHMY 123 Introduction to Organic and Biochemistry.....	3
NUTR 221 Basic Human Nutrition .....	3
<b>Total Credits .....</b>	<b>17</b>

#### Elective Program Courses

Students must take 6 credits from the following electives:

BIOB 375, 376 General Genetics with Lab .....	4
BIOM 251 Microbiology for Health Sciences Lab....	1
BIOM 360, 361 General Microbiology with Lab .....	4
*CHMY 141, 142 College Chemistry I with Lab.....	4
CHMY 143, 144 College Chemistry II with Lab .....	4
ECP 100 First Aid and CPR .....	2

*PHL 110 Introduction to Ethics: Problems of Good and Evil .....	3
*PHSX 205/206 College Physics I with Lab .....	4
PSYX 230 Developmental Psychology: Development Over the Lifespan .....	3
PSYX 340 Abnormal Psychology .....	3
Upper division Biology or Chemistry courses chosen in conjunction with advisor .....	V
<b>Total Elective Credits .....</b>	<b>6</b>

**Restricted electives selected with advisor approval..... 6**

**Total minimum credits required for degree ..... 60**

\*May satisfy General Education requirements.

*Note: The above required General Education Courses and Program Courses are minimum requirements. Students with specific career goals in the Allied Health Sciences should be aware that some disciplines require more advanced courses than those listed. Therefore, if you know your career path, or if you believe you may transfer into a B.S. program at MSU Billings or another university, it is essential that you consult with your advisor in the science department so that you proceed efficiently in your studies.*

## Associate of Science

### Program of Study in Environmental Science

Credits

<b>General Education .....</b>	<b>31</b>
*ANTY 217 Physical Anthropology and Archeology	
<b>OR</b> *ECNS 202 Principles of Macroeconomics .....	3
*ANTY 220 Culture and Society .....	3
*BIOB 160 Principles of Living Systems .....	3
*COMX 111 Introduction to Public Speaking .....	3
*GEO 101 Introduction to Physical Geology.....	3
*GEO 102 Introduction to Physical Geology Laboratory .....	1
*STAT 141 Introduction to Statistical Concepts .....	3
*WRIT 101 College Writing I	
<b>OR</b> *WRIT 221 Intermediate Technical Writing ..	3
History category.....	3
Fine Arts category .....	3
Humanities category .....	3

#### Required Courses

BIOB 170 Principles of Biological Diversity.....	3
BIOB 171 Principles of Biological Diversity Laboratory .....	1
BIOE 202 Introduction to Environmental Ecology....	3
*CHMY 141 College Chemistry I .....	3



*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II .....	1
<b>Total Required Course Credits .....</b>	<b>15</b>

**Elective Courses**

**8 credits to be chosen in consultation with advisor from the following:**

BIOE 483 Evolution and Ecology .....	3
BIOE 484 Evolution and Ecology Lab .....	1
CHMY 311 Analytical Chemistry-Quantitative Analysis .....	3
CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis .....	1
ERTH 303 Weather and Climate .....	4
GEO 205 Mineralogy .....	4
GEO 492 Independent Study .....	V 1-3
<b>Total Elective Courses Credits .....</b>	<b>8</b>

**Restricted electives selected with advisor approval.....**6

**Total minimum credits required for degree.....**60

\*May satisfy General Education requirements.

PHSX 232 Physics II and Thermo .....	3
PHSX 233 Physics II and Thermo Laboratory.....	1
<b>Total Required Credits .....</b>	<b>22</b>

**Restricted electives selected with advisor**

**approval .....**7

**Total Credits for Degree.....**60

\*May satisfy General Education requirements.

**Associate of Science**

**Program of Study in Pre-Engineering**  
Credits

**General Education**

*BIOB 160 Principles of Living Systems.....	3
*CHMY 141 College Chemistry I.....	3
*CHMY 142 College Chemistry Laboratory I .....	1
*COMX 111 Introduction to Public Speaking.....	3
*M 171 Calculus I .....	4
*WRIT 101 College Writing I.....	3
Additional General Education Requirements .....	V
<b>Total.....</b>	<b>31</b>

**Required Courses**

EGEN 105 Introduction to General Engineering.....	2
M 172 Calculus II .....	4
M 273 Multivariable Calculus .....	4
M 274 Introduction to Differential Equations .....	4
PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory.....	1

# Interdisciplinary and Degree Completion Programs

## Bachelor of Applied Science

### (BAS) ▽

The Bachelor of Applied Science (BAS) degree is limited to students with an Associate of Applied Science (AAS) degree. If a student has earned an AAS degree from a regionally accredited institution, he or she may enroll on the University campus of MSU Billings to complete General Education requirements and take upper division credits in existing areas of study which will complement the student's AAS credits already earned.

### Academic Requirements

The BAS requires completion of a minimum of 60 credits beyond the AAS degree. A maximum of 60 credits will be accepted from the AAS degrees towards the 120-credit requirement. Coursework must include completion of specified General Education courses and other upper division coursework that relates to and is supportive of the AAS degree.

### Requirements for the BAS degree are as follows:

- Completion of an AAS degree from a regionally accredited college or university.
- Satisfy the General Education Requirements at MSU Billings.
- Earn a minimum of 30 credits from MSU Billings.
- Complete a minimum of 30 upper division credits, of which at least 21 must be earned from MSU Billings.
- Complete a thematic concentration of 30 credits including at least 15 credits from one discipline. This concentration shall be prepared in collaboration with a faculty advisor and approved by the Academic Dean responsible for the majority of the courses in the Thematic Concentration.  
**Students seeking a concentration in Business are limited to 27 credits in the College of Business.**
- A grade of "C" or higher is mandatory in all courses in the thematic concentration.

## Bachelor of Science in Liberal

### Studies (BSLS) ▽

The Bachelor of Science in Liberal Studies at MSU Billings is designed to meet the following objectives:

1. Provide students with the opportunity to participate in integrated thematic programs of an interdisciplinary nature utilizing resources currently available at MSU Billings.
2. Offer students with credits from many sources the opportunity to complete a baccalaureate degree which has focus and integrity.

### Academic Requirements

Students must:

- Earn at least 120 credits with a cumulative grade point average of 2.0 or better.
- Satisfy the General Education requirements at MSU Billings.
- Earn a minimum of 30 credits from MSU Billings.
- Complete at least 36 upper division credits, of which at least 24 must be earned from MSU Billings.
- Complete a thematic concentration of 30 credits including at least 15 credits from one discipline in the College of Arts and Sciences. This concentration shall be prepared in collaboration with a faculty advisor and approved by the Dean of the College of Arts and Sciences.
- A grade of "C" or higher is mandatory in all courses in the thematic concentration.

▽ This program is also offered in an online format.

## Associate of Science/Associate of Arts Contact Information

### Admissions & Records

McMullen Hall first floor west  
406-657-2158

### Advising & Career Services

McMullen Hall first floor west  
406-657-2240

**New Student Services**

McMullen Hall first floor east  
406-657-2888

The Associate of Science (AS)/Associate of Arts (AA) degree is a 60-credit program that includes 31 credits of General Education requirements and 29 credits of electives. Students will work with an academic advisor to design an AS/AA degree. AS/AA degrees may be designed to provide a foundation for moving on to a 120-credit bachelor's degree. Contact Advising & Career Services at (406) 657-2240 for further details.

# The College of Allied Health Professions

***Dr. Diane Duin, Dean***  
***APS 119, (406) 896-5833***  
***cahp@msubillings.edu***

The College of Allied Health Professions comprises undergraduate and graduate programs that are designed to prepare individuals for the allied health professions. A broader definition of allied health is recognized and includes those academic programs in the behavioral sciences (e.g., health promotion, human services, rehabilitation), therapeutic sciences (e.g., athletic training) and support services (e.g., health administration). Academic programs in the College prepare students with the technical skills needed to work in the dynamic healthcare field. Programs also prepare students to be critical thinkers in their chosen profession, develop a historical consciousness, broaden their understanding of the diversity of the profession and individuals, and develop a defined sense of values that will guide them in their career.

The College of Allied Health Professions is comprised of the following academic departments and program area:

- Health Administration
- Health and Human Performance
- Rehabilitation and Human Services

## Academic Advising

All new, transfer, and re-admitted students are encouraged to visit Advising & Career Services in McMullen Hall first floor west to meet with an academic advisor. New students will receive information regarding General Education requirements and Plan of Study worksheets related to their major and minor programs. Transfer and re-admitted students will work with an advisor to complete a transcript evaluation and to develop a Plan of Study. Students majoring in bachelor's degree programs in the College of Allied Health Professions will be advised through Advising & Career Services until their sophomore year. At that time, students will be assigned a faculty member for advising. Although advisors are available to assist students in designing their Plan of Study, students are ultimately responsible for meeting degree requirements.

## Undergraduate Degrees and Majors

The College of Allied Health Professions offers an array of undergraduate and graduate programs in the area of allied health professions. These programs include:

**Associate of Arts** Program of Study in Rehabilitation and Related Services

### **Bachelor of Science in**

Health Administration  
Health and Human Performance with Options in:  
Health and Wellness  
Human Performance  
Health and Physical Education K-12 Teacher  
Licensure or Teacher Certification Option  
3+2 B.S. in Health and Human  
Performance/M.S. in Athletic Training  
Human Services  
Outdoor Adventure Leadership  
Psychiatric Rehabilitation  
Rehabilitation and Related Services

**Bachelor of Applied Science** with a concentration in Dental Hygiene

**Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) Degree Completion Program**

**Certificate:** Addiction Counseling Education

**Minors:** Coaching, Health Education, Outdoor Adventure Leadership

**Teaching Minor:** Health & Physical Education (K-12)

## Graduate Degrees

**Master of Health Administration:** A professional graduate degree program delivered in an online format with one two-day, on campus Professional Seminar each semester.

**Master of Science in Athletic Training:** An entry-level graduate degree program in the Department of Health and Human Performance.

**B.S. in Health and Human Performance/M.S. in Athletic Training 3+2 Option**

Master of Science Interdisciplinary Studies Exercise and Sport Leadership Option: A professional graduate degree program in the Department of Health and Human Performance.

Master of Science in Clinical Rehabilitation and Mental Health Counseling: A professional graduate degree program in the Department of Rehabilitation and Human Services (also available online).

## **Mission**

The mission of the College of Allied Health Professions is to prepare allied health professionals for their chosen field, and to meet the needs of society through education, discovery, and service. Collaborative partnerships among students, faculty, researchers, community members, and industry leaders for the purpose of health improvement provide a foundation from which to serve the educational needs of a growing allied health professions workforce. The goals of the College are to ensure a seamless curricular articulation among diverse health related programs and create an environment that fosters excellence in student instruction, research, and community services.

## **Clinical and Field–Based Experiences**

The College of Allied Health Professions provides a number of supervised clinical and field-based experiences designed to prepare students for work in the allied health professions. The major aim of these experiences is to allow students to apply principles and theories from the professional knowledge base in the supervised environments. Whereas each degree program has different expectations for clinical and field-based experience, students should clarify expectations with the faculty advisor prior to registration.

## The Department of Health Care Services

***Deborah Peters, Chairperson***

***APS 116, (406) 896-5832***

**Deborah.peters2@msubillings.edu**

Director, Health Administration Program: Deborah Peters

Director, Interprofessional Education: Dr. Paul Cook

Coordinator, RN to BSN Degree Completion Program: Rebecca Anglin

Academic advising services for all students are provided through Advising & Career Services in McMullen Hall first floor west. Once students have declared Health Administration as their degree program, they will be assigned to a Health Administration faculty member for advising. Advising files for all Health Administration students are maintained by the Program. *Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for planning and meeting degree requirements.*

## Undergraduate Degrees and Majors

### **Bachelor of Science in Health Administration (BSHA)**

BSHA Concentrations are offered in Business, Health Information Technology, and Long Term Care Management

### **Bachelor of Applied Science (BAS), Health Administration Concentration**

### **Bachelor of Applied Science (BAS), Dental Hygiene Concentration**

### **Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) Degree Completion Program**

## **Graduate Degree**

**Master of Health Administration (MHA)▽**

## **Advising Information**

Students are encouraged to meet with their advisor each semester to confirm that their Plan of Study is accurate and complete. If necessary, changes and updates should be made in order to ensure that Program requirements can be completed in a timely manner. Faculty advisors work with students to explore appropriate internships that will support the student's interests and career objectives.

## Bachelor of Applied Science Dental Hygiene Thematic Concentration

The Bachelor of Applied Science (BAS) degree with Thematic Concentration in Dental Hygiene is designed for individuals who are graduates of Associate of Applied Science (AAS) degree programs in Dental Hygiene which are accredited by the Commission on Dental Accreditation of the American Dental Association.

Students will complete six advanced Dental Hygiene courses and six courses in Health Administration or other supporting coursework, in addition to general education requirements. All classes will be offered online with two on-campus meetings at MSUB: one at the beginning of the Fall semester and the other at the end of Spring semester. This one-year curriculum will enable the graduate to improve career opportunities and achieve personal and professional growth.

### Required Courses

DENT 305 Introduction to Dental Hygiene Research .....	3
DENT 360 Educational Methods in Dental Hygiene .....	3
DENT 380 Contemporary Issues in Dental Hygiene .....	3
DENT 470 Leadership in Dental Hygiene .....	3
DENT 499 Capstone .....	3

### Supporting Coursework

Students may take the following courses or other supporting coursework approved by their advisor.	
HADM 305 Survey of the U.S. Healthcare System...	3
HADM 307 Health Informatics .....	3
HADM 325 Principles of Marketing for Healthcare Organizations .....	3
HADM 335 Health Law and Ethics.....	3
HADM 450 Health Policy and Politics.....	3

### General Education Requirements

For students with an AAS-DH degree from the Montana University System:

Cultural Diversity (3 credits)

Fine Arts (3 credits)

Humanities (3 credits)

*Students will consult with their advisors to determine what courses will satisfy the General Education requirements for this degree.*

### Suggested Plan of Study

#### Fall Semester

DENT 305 (first half semester) .....	3
DENT 360 (second half semester) .....	3
HADM 305 .....	3
HADM 335 (first half semester) .....	3
HADM 450 (first half semester) .....	3
<b>Total .....</b>	<b>15</b>

#### Spring Semester

DENT 380 (first half semester) .....	3
DENT 470 (second half semester) .....	3
DENT 499 .....	3
HADM 307 .....	3
HADM 325 (first half semester) .....	3
^FILM 160 .....	3
<b>Total .....</b>	<b>18</b>

#### Summer Session

^NASX 105 or ^NASX 205 .....	3
^ARTH 150 or ^PHL 110 .....	3
<b>Total .....</b>	<b>6</b>

^Students may choose other courses to meet General Education Requirements.

## Registered Nurse (RN) to Bachelor of Science in Nursing Degree Completion Program

The Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) Degree Completion program advances nurses' careers by preparing nurses for a range of practice environments, for administrative duties, and for graduate education. The online RN to BSN Degree Completion program allows nurses who have an associate of science degree in nursing and an unencumbered RN license to obtain the BSN in a minimum of three semesters. The program is designed to build upon the ASN's credentialed clinical education and practical experience to strengthen clinical reasoning and to provide a broad integrative understanding of the current healthcare system and apply that knowledge in relevant nursing practice settings, especially in community, public health, and administrative settings. The content and learning will be delivered in an online format with two practice-oriented clinicals in each student's own facility or community.

	Credits
<b>Required Nursing Courses</b>	
NRSG 301 Nursing in the Community .....	5
NRSG 302 Nursing in the Community – Clinical .....	1
NRSG 320 Nursing Informatics .....	3
NRSG 322 Health Promotion and Education .....	3
NRSG 325 Health Assessment .....	3
NRSG 326 Complex Healthcare Needs.....	3
NRSG 344 Family Nursing .....	3
NRSG 361 Global Nursing.....	3
NRSG 424 Nursing Research and Evidence-Based Practice.....	3
NRSG 463 Leadership and Management for the RN .....	5
NRSG 464 Leadership and Management for the RN – Clinical.....	1
<b>Total .....</b>	<b>33</b>

### Other Required Courses

*One course chosen from the Humanities category of Gen Ed, in consultation with an advisor .....	3
PHL 326 Death, Dying and Medical Ethics.....	3
PSYX 230 Developmental Psychology: Development Over the Lifespan ....	3
*STAT 216 Introduction to Statistics .....	4
WRIT 321 Advanced Technical Writing.....	3
<b>Total .....</b>	<b>16</b>

**Total for Degree Completion .....** **49**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## SUGGESTED PLAN OF STUDY

### *RN to BSN Degree Completion Program*

#### Fall Semester

NRSG 320	3
NRSG 322	3
NRSG 325	3
STAT 216	4
WRIT 321	3
<b>Total</b>	<b>16</b>

#### Spring Semester

NRSG 301	5
NRSG 302	1
NRSG 424	3
NRSG 326	3
PHL 326	3
PSYX 230	3
<b>Total</b>	<b>18</b>

#### Summer Semester

NRSG 344	3
NRSG 463	5
NRSG 464	1
NRSG 361	3
Humanities	3
<b>Total</b>	<b>15</b>



## The Health Administration Program

healthadministration@msubillings.edu

### Faculty

Faraz S. Ahmed, DSc; Margo L. Aldrich, MSPR; Christopher Besser, PhD; Paul R. Cook, MD; Bethany Fatupaito, MPH; Catherine Grott, PhD; Lenette Kosovich, RN, MHA; Roland B. Loudenburg, MPH; Mary Helen McSweeney, PhD; Theresa Parker, MA; Vu Pham, JD, MHA; Deborah Peters, MS; Jason P. Richter, PhD; Lyle M. Seavy, PhD; Matthew Slater, MHA; Lynn I. Ward, MHA, RHIA

### Mission of the Program

The mission of the Health Administration Program at Montana State University Billings is to educate and prepare individuals to be health care leaders who can meet the challenges of health care in our region, advance the quality of care delivered to all, and meet anticipated workforce needs in a variety of positions in health administration. All courses in the undergraduate degree programs are available online. The Program enhances the depth and quality of education at MSU Billings through internships and research partnerships in the health community.

### Student Learning Outcomes

At the completion of the BSHA Program, graduates should be able to demonstrate the following competencies:

1. Communications: Communicate appropriately, accurately, and professionally in oral and written communications in a health management environment.
2. Critical Thinking: Objectively evaluate their own and others' ideas.
3. Management and Leadership: Understand and apply general management concepts regarding the organization of work, finance, economics, and decision-making by working with and through people to achieve organizational goals.
4. Professionalism: Interact professionally and be respectful of all.

### Admission to the BSHA Program

All students seeking admission to the Bachelor of Science in Health Administration degree program are required to file an application for admission to the program. All students must meet the following

requirements for admission to the Health Administration major:

- a. a minimum of **40** credits completed
- b. a minimum **2.5** grade point average
- c. satisfactory completion of **\*WRIT 101, \*M 143, ACTG 201, \*ECNS 201, HADM 305**, or their equivalents.

\*May satisfy General Education requirements.

Student application materials are available from the Health Administration Program (APS 107, 406-896-5830) or online at [www.msubillings.edu/hadm/](http://www.msubillings.edu/hadm/).

### Careers in Health Administration

Health Administration is one of the fastest growing professions in the United States. Careers in health administration include a wide range of management and administrative positions in health-related organizations and health service delivery systems. They include hospitals, ambulatory care, physician group practices, laboratories, pharmacies, social service agencies, long term care facilities, rehabilitation centers, home health organizations, managed care plans, regulatory agencies, and health insurance companies. The Program is designed to meet the rapidly evolving demands of a dynamic industry.

### Health Administration Internships

The Bachelor of Science in Health Administration requires an internship in which students observe and participate in the field of health administration. The purpose of the internship is for the health manager-in-training to apply the conceptual foundation and competencies learned in the classroom and develop skills in areas such as communications, critical thinking, management and leadership, and professionalism.

### Program Graduation Requirements

In order to graduate with a Bachelor of Science in Health Administration, students are required to earn a grade of C- or better in all required courses.

Health Administration students whose cumulative GPA falls below 2.5 will be counseled about raising their grades or choosing another major, and will be unable to continue in the program until their cumulative GPA is 2.5 or better.

## Bachelor of Science Degree

### Major in Health Administration ▽

#### General Education Requirements ..... 31

The following General Education courses also satisfy requirements in the major: ECNS 201, and M 143. Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.

#### Required Health Administration Core

HADM 305 Survey of the U.S. Healthcare System.....	3
HADM 307 Health Informatics .....	3
HADM 310 Healthcare Economics .....	3
HADM 325 Principles of Marketing for Healthcare Organizations .....	3
HADM 335 Health Law and Ethics.....	3
HADM 405 Evidence in Research and Evaluation.....	3
HADM 422 Operations, Outcomes, and Quality .....	3
HADM 425 Financial Management and Budgeting in Healthcare .....	3
HADM 440 Managerial Epidemiology and the Public's Health .....	3
HADM 445 Managing Healthcare Organizations .....	3
HADM 450 Health Policy and Politics.....	3
HADM 498 Cooperative Education/Internship .....	3
HADM 499 Capstone .....	3
<b>Total Required Courses .....</b>	<b>39</b>

#### Required Business Core

ACTG 201 Principles of Financial Accounting.....	3
BFIN 322 Business Finance .....	3
BMGT 329 Human Resource Management .....	3
BMGT 335 Management and Organization .....	3
*ECNS 201 Principles of Microeconomics .....	3
<b>Total.....</b>	<b>15</b>

#### Required Statistics

*STAT 216 Introduction to Statistics .....	4
--	---

#### Restricted Electives

**Choose 9 credits from the following courses with approval of an advisor:**

AHMS 144 Medical Terminology .....	3
CHTH 250 Introduction to Public Health.....	3
CHTH 317 Health Behavior Theories .....	3
CHTH 355 Theory and Practice of Community Health Education .....	3
CHTH 450 Worksite Health Promotion .....	3
COMX 320 Principles of Organizational Communication.....	3
COMX 426 Leadership and Communication .....	3
COMX 480 Health Communication .....	3
GPHY 380 Principles of GIS.....	3
HADM 365 Managing the Continuum of Long-Term Care Services.....	3
HADM 409 Aging in America and Long-Term Care.....	3
HADM 452 Case Management .....	3
HADM 462 Supervision in Healthcare.....	3
HADM 494 Seminar/Workshop .....	3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Health Administration*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Science in Health Administration degree program. Due to course availability, schedule changes and staff assignments, students may not be able to follow this suggested plan exactly. Students should consult with their advisor to plan classes before registering each term. Students are expected to work with their advisors to develop a plan of study specific to their needs and interests.

#### First Year – Fall Semester

WRIT 101	3
BIOB 101	3
BIOB 102 (one lab required)	1
HSTR 101 or 102	3
ECNS 201	3

#### First Year - Spring Semester

M 143	4
COMX 111	3
PHSX 103	3
PHSX 104 (one lab required)	1
Cultural Diversity	3

#### Second Year - Fall Semester

Fine Arts	3
HADM 305	3
HADM 325	3
Elective	3

#### Second Year - Spring Semester

PHL 110	3
HADM 307	3
HADM 310	3
BFIN 322	3
ACTG 201	3
Restricted Elective	3

#### Third Year - Fall Semester

BMGT 335	3
HADM 335	3
HADM 422	3
HADM 440	3
Restricted Elective	3

*HTH 270 Global Health Issues.....	3
HTH 435 Health and Wellness across the Lifespan .....	3
SOCI 352 Diseases & Society .....	3
SOCI 380 Sociology of Health and Medicine .....	3
<b>Total Restricted Electives.....</b>	<b>9</b>

### **Electives ..... V 0-21**

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill the General Education requirements, the major requirements, and the minor requirements. Electives should be chosen in consultation with an academic advisor.

**Total Requirements for Degree ..... 120**

\*May satisfy General Education requirements.

▽ This program is also offered in an online format.

### **Business Concentration (Optional Business Minor)**

A student may choose to concentrate in business. There are 15 credits required for this concentration which will also fulfill the requirements for a Business Minor.

ACTG 202 Principles of Managerial Accounting .....	3
BMGT 322 Operations Management .....	3
BMIS 311 Management Information Systems .....	3
BMKT 325 Principles of Marketing.....	3
*ECNS 202 Principles of Macroeconomics .....	3
<b>Total.....</b>	<b>15</b>

### **Health Information Technology Concentration**

A student may choose to concentrate in Health Information Technology by completing the following online courses through Great Falls College MSU. There are 13 credits required for this concentration.

HIT 265 Electronic Health Record in Medical Practice .....	3
AHMS 108 Healthcare Data Content and Structure .....	3
AHMS 280 Overview Health Informatics Systems.....	4
HIT 101 Introduction to Healthcare Informatics .....	3
[Substitute HADM 307 Health Informatics]	
<b>Total.....</b>	<b>13</b>

### **Long-Term Care Management Concentration (Optional Long-Term Care Management Certificate) ▽**

A student may choose to concentrate in Long-Term Care Management. There are 15 credits required for this concentration:

HADM 335 Health Law and Ethics.....	3
HADM 365 Managing the Continuum of Long-Term Care Services.....	3
HADM 409 Aging in America and Long-Term Care.....	3
HADM 425 Financial Management and Budgeting in Healthcare.....	3
HADM 445 Managing Healthcare Organizations .....	3
<b>Total.....</b>	<b>15</b>

### **Third Year – Spring Semester**

BMGT 329	3
HADM 405	3
HADM 425	3
HADM 445	3
Restricted Elective	3

### **Fourth Year – Fall Semester**

HADM 450	3
Elective or optional conc	3
Elective or optional conc	3
Elective or optional conc	3
Elective or optional conc	3

### **Fourth Year – Spring Semester**

HADM 498	3
HADM 499	3
Elective or optional conc	3
Elective or optional conc	3
Elective or optional conc	3

# The Department of Health and Human Performance

**PE 120, (406) 657-2370**

Assistant Professors: Culp, Fitzgerald, Hughes, Nynas, Shafer

Professor Emeritus: Gabel, Lord, Shaw

## Undergraduate Degrees and Majors

### **Bachelor of Science Degree in Health and Human Performance**

#### **Options in:**

Health and Wellness

Human Performance

Teacher Licensure (Health and Physical Education K-12)

3+2 B.S. in Health and Human Performance/M.S. in Athletic Training

### **Bachelor of Science Degree in Outdoor Adventure Leadership**

### **Teaching Minor in Health and Physical Education (K-12)**

### **Minor in Coaching**

### **Minor in Health Education**

### **Minor in Outdoor Adventure Leadership**

## Graduate Degrees

### **B.S. in Health and Human Performance/M.S. in Athletic Training 3+2 Option**

### **Master of Science in Athletic Training**

### **Master of Science Interdisciplinary Studies Exercise and Sport Leadership Option**

For details covering the graduate degrees, see the Graduate Catalog. Graduate Catalogs may be obtained from the Office of Graduate Studies, McMullen 200, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298, (406) 657-2238 ([www.msubillings.edu/grad](http://www.msubillings.edu/grad)).

A student pursuing a Bachelor of Science degree from the **Department of Health and Human Performance** can choose one of the four options:

- Health and Wellness
- Human Performance

- Outdoor Adventure Leadership
- Teacher Licensure HPE K-12

The Health and Wellness option prepares health professionals to seek employment in a variety of agencies, such as local, state, national, international non-profit and corporate wellness programs. Through experiences in courses, research, laboratories, and internships, the Human Performance option prepares students with the understanding of human movement. The Outdoor Adventure Leadership option develops leadership skill, group dynamics awareness, facilitation methods, and effective communication techniques. For students interested in teaching, the K-12 Teacher Licensure option prepares them to become licensed in health, physical education, and wellness for public and private school employment.

An option with undergraduate and graduate level components is the Bachelor of Science in Health and Human Performance and Master of Science degree in Athletic Training (3+2 option). Within three years, students complete requirements for general education, health and human performance, and prerequisites for the graduate Athletic Training Program. Students then begin athletic training specific coursework and after successful completion of the fourth year, students are eligible to graduate with a bachelor's degree. If successful in completing the fifth year, students are eligible to take the national Board of Certification examination for athletic trainers and earn a Master of Science degree.

Graduates from the Health and Human Performance Department succeed in professional positions as health educators; as teachers and coaches; as outdoor reaction directors and adventure guides; as health and fitness professionals; as athletic training professionals; and in a wide variety of health, outdoor, and exercise science programs. Program options also prepare students as successful applicants to graduate programs in athletic training, physical therapy, occupational therapy, nursing, and physician assistantships.

## Advising Information

Each student meets with his or her advisor every semester to confirm an accurate and complete Plan of Study. If necessary, changes should be made to ensure that the Plan of Study can be completed in a timely manner. Faculty advisors work with students to explore appropriate internships, cooperative education, and experiential learning opportunities. Advisors also

provide assistance in selecting elective courses that support the student's interests, career goals, and professional development.

First year students can utilize advisors in Advising and Career Services located in McMullen Hall; however, students are highly encouraged to establish a relationship with department faculty as early as possible. During their second year, students will be assigned a HHP or OAL advisor for advice to advance through their respective Plan of Study. Advising files are transferred to the department and remain until graduation. All candidates who plan to be recommended for a State of Montana licensure must be admitted to and meet all the Educator Preparation Program requirements. Students are ultimately responsible for meeting their chosen degree requirements.

## General Education Requirements

The General Education requirements must be fulfilled by majors and minors. General Education classes should be taken during the first two years of college.

## Activity Courses

The Department of Health and Human Performance offers an array of physical education activity courses and recreation skills development courses for both majors and non-majors wishing to develop competencies in the specific area of study.

### Performance Area I – Team Athletics

ACT 113 Beginning Softball  
ACT 140 Beginning Basketball  
ACT 180 Beginning Volleyball

### Performance Area II – Aquatics

ACT 170 Beginning Swimming  
ACT 270 Intermediate Swimming  
ACT 271 Swimming for Fitness  
ECP 103 Basic Lifeguard Training  
ECP 111 Water Safety Instructor

### Performance Area III – Racquet Sports

ACT 109 Beginning Racquetball  
ACT 153 Beginning Badminton  
ACT 169 Beginning Tennis  
ACT 269 Intermediate Tennis

### Performance Area IV – Lifetime Activities and Outdoor Skills Courses

ACT 104 Beginning Bowling  
ACT 110 Beginning Weight Training  
ACT 146 Beginning Golf

ACT 150 Beginning Yoga  
ACT 155 Beginning Judo  
ACT 235 Introduction to Belly Dancing  
ACT 236 Belly Dancing II  
ACT 250 Pilates  
ACT 254 Self Defense  
REC 119 Nordic Skiing I  
REC 120 Fundamentals of Backcountry Travel  
REC 122 Alpine Skiing I  
REC 123 Telemark Skiing I  
REC 125 Snowboarding I  
REC 130 Fly Fishing I  
REC 150 Low Element Challenges  
REC 155 Rappelling/Belaying  
REC 160 Shooting Sports I  
REC 178 Canoeing I  
REC 181 Basic Navigation/Orienteering  
REC 185 Winter Survival Skills  
REC 187 Basic Survival in the Outdoors  
REC 210 Environment/Leave No Trace  
REC 220 Alpine Skiing II  
REC 225 Snowboarding II  
REC 230 Fly Fishing II  
REC 255 Rock Climbing I  
REC 257 Rock Climbing II  
REC 260 Shooting Sports II  
REC 275 Kayaking I  
REC 276 Kayaking II  
REC 277 Rafting I  
REC 278 Rafting II  
REC 285 Scuba Diving I  
REC 287 Archery I  
REC 288 Archery II

**Due to the course content and environmental requirements, a significant number of REC classes will be held off of the MSU Billings main campus. Courses may meet on weekends and/or during semester breaks. Some courses require a special fee that covers, but is not limited to: transportation, food, gear, lift tickets, and certifications.**

## Bachelor of Science Degree

### Major in Health and Human Performance – Health and Wellness Option

The Health and Wellness Option will prepare health professionals to seek employment in a variety of agencies such as local, state, national, international non-profit and corporate wellness programs.

The Student Learning Outcomes for this option include:

1. Assess, plan, implement and evaluate individual and community health and wellness needs.
2. Plan evidence-based, health and wellness programs in healthcare, worksite and community settings.
3. Correctly interpret, apply and conduct research in health and wellness.
4. Effectively communicate to diverse constituencies.

The Health and Wellness Option is designed to address the seven areas of responsibilities for the health education profession as recommended by the National Commission for Health Education Credentialing (NCHEC). The seven areas of responsibility are:

- Assess Individual and Community Needs for Health Education
- Plan Health Education Strategies, Interventions, and Programs
- Implement Health Education Strategies, Interventions, and Programs
- Conduct Evaluation and Research Related to Health Education
- Administer Health Education Strategies, Interventions, and Programs
- Serve as a Health Education Resource Person
- Communicate for Health and Health Education

The health and wellness curriculum will prepare students to: develop a strong background in human behavior and behavior modification; effectively plan, implement, and evaluate wealth and wellness programs; increase leadership skills; and become familiar with the latest research and developments within the field.

Internship opportunities may be explored at local, regional, and national agencies/organizations that qualify students for employment in that field.

Health and wellness graduates will find employment opportunities as community health educators, health promotion coordinators, health promotion consultants, prevention specialists, community health outreach workers, and worksite health promotion specialists.

A grade of C- or higher is mandatory in all health and human performance courses satisfying the major requirements.

### Admission Requirements for Health and Human Performance – Health and Wellness Option

All students desiring admission to the Health and Wellness Option are required to file an application for admission.

1. Each applicant also must complete 18 credits from the approved list of prerequisite courses with a GPA of at least 3.0 (see application for list of courses).
2. Applications will be accepted when the student has completed a minimum of 23 credits from the General Education category requirements at Montana State University Billings, or at another regionally accredited institution of higher education, earning a minimum grade point average of 3.0. Courses taken on a pass/no pass or credit/noncredit basis will not be used to calculate the GPA requirement. Students should consult with their academic advisor.
3. Applications for admission to the Health and Wellness Option may be obtained online at [www.msubillings.edu/hhp](http://www.msubillings.edu/hhp) or from the Department of Health and Human Performance Office in the Physical Education Building, Room 120. The application should be submitted to the faculty advisor for review and approval, signed by the advisor and the Department Chairperson. A current **working copy** of the transcript will be attached to the application form.
4. Applications are handled on a rolling admissions basis. Students will be notified of the status of their application within 15 working days of submitting the complete application. Enrollment in some major courses is limited to students admitted to the program.
5. No student will be allowed to register for restricted upper division courses in Health and Human Performance without formal admission to the Health and Wellness Program.

## Major in Health and Human Performance – Health and Wellness Option Degree Requirements

### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

### Health and Wellness Requirements

ACT 498 Internship .....	3
CHTH 250 Introduction to Public Health .....	3
CHTH 317 Health Behavior Theories .....	3
CHTH 355 Theory and Practice of Community Health Education .....	3
CHTH 435 Human Response to Stress .....	3
CHTH 450 Worksite Health Promotion .....	3
ECP 120 Emergency Medical Responder .....	3
+HADM 440 Managerial Epidemiology and the Public's Health .....	3
HEE 340 Methods of Health Education .....	3
*HTH 270 Global Health Issues .....	3
KIN 105 Foundations of Exercise Science .....	3
KIN 106 Foundations of Exercise Science Lab .....	1
KIN 320 Exercise Physiology .....	3
KIN 321 Exercise Physiology Lab .....	1
KIN 322 Kinesiology .....	3
KIN 323 Anatomical Kinesiology Lab .....	1
<b>OR</b>	
KIN 325 Biomechanics .....	3
KIN 328 Biomechanics Lab .....	1
KIN 364 Research Methods in Health and Human Performance .....	3
KIN 415 Advanced Exercise Testing and Prescription .....	3
^NUTR 411 Nutrition for Sports and Exercise .....	3
#PSYX 222 Psychological Statistics .....	3
<b>Total .....</b>	<b>54</b>
^Prerequisite NUTR 221	
#Prerequisite STAT 141	
+Prerequisite HADM 305	

### Health and Wellness Electives

Select **at least 17 credits** with advisor assistance. This list is illustrative but not definitive. Students may choose a minor in lieu of electives.

ACT 499 Senior Thesis .....	3
CHTH 410 High Level Wellness Through Decision Making .....	3
HADM 305 Survey of the U.S. Healthcare System .....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
HTH 425 Health and Sexuality .....	3
HTH 435 Health and Wellness across the Lifespan .....	3
PSYX 333 Psychology of Aging .....	3
PSYX 370/371 Psychology of Learning w/Lab .....	4
SOCI 380 Sociology of Health and Medicine .....	3
<b>Total .....</b>	<b>17</b>

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Health and Human Performance – Health and Wellness Option*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Science in Health and Human Performance – Health and Wellness Option. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

First Year	F	S
KIN 105/106	4	
WRIT 101	3	
BIOB 101/102	4	
STAT 216	4	
CHMY 121/122		4
CHTH 250		3
General Education		6
<b>Total</b>	<b>15</b>	<b>13</b>

Second Year	F	S
General Education	3	3
KIN 364	3	
BGEN 105	3	
BIOH 301/302	4	
ECP 120	3	
NUTR 221		3
HTH 270		3
BIOH 311/312		4
PSYX 222		3
<b>Total</b>	<b>16</b>	<b>16</b>

Third Year	F	S
Electives	6	3
CHTH 355	3	
HTH 435	3	
BIOM 250/251	4	
CHTH 317		3
HEE 340		3
CHTH 435		3
CHTH 450		3
<b>Total</b>	<b>16</b>	<b>15</b>

**Required Interdisciplinary Core**

*BGEN 105 Introduction to Business .....	3
BIOH 301 Human Anatomy and Physiology I.....	3
BIOH 302 Human Anatomy and Physiology I Lab.....	1
BIOH 311 Human Anatomy and Physiology II.....	3
BIOH 312 Human Anatomy and Physiology II Lab .....	1
BIOM 250 Microbiology for Health Sciences.....	3
BIOM 251 Microbiology for Health Sciences Lab.....	1
BMKT 325 Principles of Marketing.....	3
<b>Total.....</b>	<b>18</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
KIN 320/321	4	
KIN 325/328		4
KIN 415	3	
NUTR 411	3	
BMKT 325	3	
ACT 498		3
CHTH 440		3
Electives	3	3
<b>Total</b>	<b>16</b>	<b>13</b>

**Total Minimum Credits Required for Degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*



## Bachelor of Science Degree

### Major in Health and Human Performance – Human Performance Option

Through coursework, research, laboratory, and internship experiences, the Human Performance Option prepares students with a thorough understanding of human movement. Students in this option are well prepared for work in professional positions in medical, community, corporate, or school settings (i.e., medical sales, rehabilitation programs, fitness centers, strength and training facilities, etc.). Students are equally well-equipped for graduate study in any of the diverse disciplines that deal with human movement (i.e., physical therapy, occupational therapy, athletic training, exercise physiology, kinesiology, etc.) and physician assistant programs.

Coursework involves study in multiple disciplines and emphasizes the broad scientific basis on which sound clinical insight and understanding is based, while research, laboratory work, and internships provide students with valuable experience applying their understanding of human movement. Students are expected to develop a thorough understanding of human movement across the wide range of its physiological, neurological, mechanical, and nutritional dimensions, enabling them to serve as effective practitioners in the diverse, expanding and evolving fields related to human movement.

The Student Learning Outcomes for this option include:

1. Accurately assess, plan, supervise, and evaluate a person's health and fitness performance.
2. Critically and ethically evaluate human movement and performance.
3. Develop, implement and evaluate evidence-based interventions in health and fitness activities.
4. Correctly interpret, apply and conduct exercise science research.
5. Effectively communicate to diverse constituencies.

A grade of C- or higher is mandatory in all health and human performance courses satisfying the major requirements.

### Admission Requirements for Health and Human Performance – Human Performance Option

Enrollment in several major courses is dependent upon Admission to the Human Performance program and admission to the program is separate from enrollment at the University. Students are encouraged to explore their interest and skill in lower division courses but must realize that admission to the program, which allows access to several majors courses, is selective. The application process is outlined below and applications are available at [www.msubillings.edu/hhp](http://www.msubillings.edu/hhp).

1. All applicants must complete a minimum of 23 credits from the General Education requirements, including specific courses, at Montana State University Billings, or at another regionally accredited institution of higher education, earning a minimum grade point average of 3.0. Courses taken on a pass/no pass or credit/noncredit basis will not be used to calculate the GPA requirement. Students should consult with their academic advisor.
2. Each applicant also must complete 18 credits from the approved list of prerequisite courses with a GPA of at least 3.0 (see application for list of courses).
3. Each applicant must receive a letter advocating for his/her admission to the program from (a) a member of the Health and Human Performance Department and (b) a faculty member in the Biological and Physical Sciences Department.
4. Each applicant must submit a letter of application in which he/she provides a statement as to how the program serves his/her personal goals and how he/she intends to contribute to the program. The applicant's faculty advisor must approve this letter.
5. Each application must be approved by the Chairperson of the Department.
6. Applications for admission to the Human Performance Option can be obtained online at [www.msubillings.edu/hhp](http://www.msubillings.edu/hhp) or from the Department of Health and Human Performance Office in the Physical Education Building, Room 120. The application should be submitted to the faculty advisor for review and approval, signed by the advisor and the Department Chairperson. A current **working copy** of the transcript will be attached to the application form in addition to the materials mentioned above.

7. Since admission to the Human Performance Option is selective, applications are to be submitted as soon as the student meets the requirements. Applications are handled on a rolling admissions basis. Students will be notified of the status of their application within 15 working days of submitting the complete application. Enrollment in some majors courses is limited to students admitted to the program.

If application to the Human Performance Option is initially unsuccessful, the student should meet with his/her advisor to address any shortcomings and applicants have the right to appeal the decision to the Human Performance Committee of the Department. The Department Chairperson serves as chair of the appeals committee.

No student will be allowed to register for upper division courses in Health and Human Performance without formal admission to the Human Performance Option.

## Major in Health and Human Performance – Human Performance Option Degree Requirements

**Credits**

**General Education Requirements ..... 31**

(See page 69) The following General Education courses also satisfy requirements in the Interdisciplinary Core: PSYX 100, BIOB 101/102, STAT 216, and CHMY 121/122. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

### Human Performance Major Core

ACT 498 Internship .....	3
ACT 499 Senior Thesis .....	3
ECP 120 Emergency Medical Responder.....	3
KIN 105 Foundations of Exercise Science .....	3
KIN 106 Foundations of Exercise Science Lab .....	1
KIN 320 Exercise Physiology .....	3
KIN 321 Exercise Physiology Lab .....	1
KIN 322 Kinesiology.....	3
KIN 323 Anatomical Kinesiology Lab.....	1
KIN 325 Biomechanics .....	3
KIN 328 Biomechanics Lab .....	1
KIN 330 Motor Learning and Control.....	3
KIN 331 Motor Learning and Control Lab.....	1
KIN 364 Research Methods in Health and Human Performance .....	3
KIN 415 Advanced Exercise Testing and Prescription .....	3
KIN 462 Evidence Based Assessment and Treatment.....	3
^NUTR 411 Nutrition for Sports and Exercise.....	3
<b>Total .....</b>	<b>41</b>

^Prerequisite NUTR 221.

### Interdisciplinary Core

*BIOB 101 Discover Biology .....	3
*BIOB 102 Discover Biology Laboratory .....	1
BIOH 301 Human Anatomy and Physiology I.....	3
BIOH 302 Human Anatomy and Physiology I Lab.....	1
BIOH 311 Human Anatomy and Physiology II.....	3
BIOH 312 Human Anatomy and Physiology II Lab .....	1
*CHMY 121 Introduction to General Chemistry .....	3
*CHMY 122 Introduction to General Chemistry Laboratory.....	1

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Health and Human Performance – Human Performance Option*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Science in Health and Human Performance – Human Performance Option. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
General Education	3	6
BIOB 101/102	4	
WRIT 101	3	
STAT 216		4
KIN 105/106	4	
CHMY 121/122		4
PSYX 100		3
<b>Total</b>	<b>14</b>	<b>17</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
General Education		6
BIOH 301/302	4	
Electives	6	6
BIOH 311/312		4
ECP 120	3	
KIN 330/331	4	
<b>Total</b>	<b>17</b>	<b>16</b>

*PSYX 100 Introduction to Psychology.....	3
*STAT 216 Introduction to Statistics .....	4
<b>Total .....</b>	<b>23</b>

**Electives**

Select **25** credits in consultation with an advisor. The following list is illustrative and not limiting. Students may structure electives to earn a minor.

AHAT 210 Prevention and Care of Athletic Injuries .....	3
AHMS 144 Medical Terminology .....	3
*CHMY 141/142 College Chemistry I with Lab.....	4
CHTH 435 Human Response to Stress.....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
HTH 435 Health and Wellness across the Lifespan .....	3
NUTR 221 Basic Human Nutrition .....	3
*PHSX 205/206 College Physics I with Lab.....	4
PHSX 207/208 College Physics II with Lab.....	4
PSYX 222 Psychological Statistics .....	3
PSYX 223/224 Research Design and Analysis I with Lab .....	4
PSYX 320/321 Research Methods III with Lab .....	4
PSYX 350/351 Physiological Psychology with Lab.....	4
PSYX 360 Social Psychology .....	3
PSYC 520 Human Neuropsychology .....	3
<b>Total Electives.....</b>	<b>25</b>

**Human Performance Option Credits..... 89**

**Total Minimum Credits Required for Degree..... 120**

*Students who intend to pursue a Physical Therapy program should take CHMY 141 College Chemistry I and CHMY 142 College Chemistry I Lab as a substitution for CHMY 121 and 122 in the Interdisciplinary Core. If CHMY 121/122 are already completed, students may take CHMY 141/142 as a Related Elective.*

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

<b>Third Year</b>	<b>F</b>	<b>S</b>
Electives	3	7
KIN 320/321	4	
KIN 322/323	4	
KIN 325/328		4
KIN 364	3	
NUTR 411		3
<b>Total</b>	<b>14</b>	<b>14</b>
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
Electives	6	12
ACT 498		3
KIN 415	3	
KIN 462	3	
ACT 499	3	
<b>Total</b>	<b>15</b>	<b>15</b>

## **Bachelor of Science Degree**

### **Major in Health and Human Performance – Teacher Licensure Option**

#### **(Health and Physical Education K–12)**

The degree program in Health and Human Performance Teacher Licensure Option prepares the pre-service professional to teach physical education and health education in a variety of school settings, grades K-12. The program has been designed to provide a comprehensive, sequential professional preparation combining liberal arts, professional education and specialty studies. Extensive fieldwork enables the student to apply skills in a supervised setting. The degree program provides teaching competencies in:

- personal health education
- community health and safety
- health prevention and intervention
- motor learning, physiology and kinesiology
- individual, dual and team sports
- rhythm, dance, and physical fitness
- outdoor education
- organization and administration of health and physical education programs.

The Student Learning Outcomes for this option include:

1. Demonstrate safe and effective teaching methods in fitness, motor skills, adventure activities and health enhancement to diverse student populations.
2. Apply scientific principles of kinesiology, exercise physiology, nutrition and motor learning in teaching.
3. Plan, organize and implement management plans for equipment and space for teaching.
4. Effectively assess self and peer teaching strategies used in techniques and methods courses.
5. Demonstrate successful learning outcomes in students taught.

### **Admission Requirements for Health and Human Performance – Teacher Licensure Option (H&PE K–12)**

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### **Degree Requirements**

The General Education requirements for secondary and K-12 education majors have been designed to prepare pre-service educators in a liberal arts curriculum which stimulates scholarship; promotes a critical understanding of human concepts; fosters individual fulfillment; nurtures the development of free, rational, and responsible professions; cultivates an appreciation for the values associated with life in a free, democratic society; develops intellectually competent, imaginative and vigorous educators; and encourages an analysis of values inherent in foreign cultures, the variety of American ethnic cultures, and Native American cultures with an aim toward developing a clearer understanding of other peoples. The General Education program for secondary and K-12 education majors is similar to the General Education program established for all students at Montana State University Billings. A complete description is contained on page 69. Students should select General Education courses in consultation with their academic advisors in the subject area and education. A grade of “C” or higher is mandatory in all health and human performance courses satisfying the major requirements.

### **First Aid Competency**

Health and Human Performance students who are completing the teacher licensure option are required to demonstrate current competency in first aid, CPR and AED. Presentation of certification documents for First Aid, current

Adult/Child/Infant CPR and Automatic External Defibrillation will be accepted as proof of this competency if met through the following organizations:

**First Aid**

- American Academy of Orthopedic Surgeons
- American Red Cross
- National Safety Council

**CPR**

- American Academy of Orthopedic Surgeons
- American Heart Association
- American Red Cross
- National Safety Council

Students can also achieve First Aid, Adult/Child/Infant CPR and AED certification through successful completion of ECP 100 First Aid and CPR.

## Major in Health and Human Performance – Teacher Licensure Option (Health and Physical Education K–12)

### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

### Professional Core (see page 266) ..... 35

Includes HEE 308 Methods of Physical Education K-12

**Required Courses**

ECP 100 First Aid and CPR .....	2
HEE 303 Methods of Lifetime Fitness Activities .....	3
HEE 305 Methods of Teaching Movement Exploration .....	3
HEE 306 Methods of Conditioning Activities .....	3
HEE 310 Methods of Adapted Health Enhancement .....	2
HEE 340 Methods of Health Education .....	3
HTH 201 Health Issues for Educators .....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
HTH 435 Health and Wellness Across the Lifespan .....	3
KIN 105 Foundations of Exercise Science .....	3
KIN 106 Foundations of Exercise Science Lab .....	1
KIN 205 Foundations in HHP .....	3
KIN 320 Exercise Physiology .....	3
KIN 321 Exercise Physiology Lab .....	1
KIN 322 Kinesiology .....	3
KIN 323 Anatomical Kinesiology Lab .....	1
<b>OR</b>	
KIN 327 Kinesiology and Biomechanics .....	3
KIN 328 Biomechanics Lab .....	1
KIN 330 Motor Learning and Control .....	3
KIN 331 Motor Learning and Control Lab .....	1
NUTR 221 Basic Human Nutrition .....	3
<b>Total</b> .....	<b>47</b>

**Restricted Electives**

Select two courses from the following:

CHTH 435 Human Response to Stress .....	3
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*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Health and Human Performance – Teacher Licensure Option (Health & Phys Ed K–12)*

This sample schedule is a suggested plan for students to follow in completing the four-year Teaching Major in Health and Physical Education (K-12). Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each semester to assure that all prerequisites and General Education requirements are met, and to plan for student teaching.

<b>First Year</b>	<b>F</b>	<b>S</b>
EDU 105	3	
KIN 105		3
KIN 106		1
BIOB 101/102	4	
CHMY 121/122		4
HTH 201		3
WRIT 101	3	
General Education	6	6
<b>Total</b>	<b>16</b>	<b>17</b>
<b>Second Year</b>	<b>F</b>	<b>S</b>
EDU 220	3	
NUTR 221		3
KIN 205	3	
EDU 221		3
EDSP 204		3
ACT 170 or 270		1
Restricted Elective	3	

*HTH 270 Global Health Issues.....	3
HTH 391 Special Topics .....	3
HTH 425 Health and Sexuality.....	3
KIN 364 Research Methods in Health and Human Performance .....	3
KIN 415 Advanced Exercise Testing and Prescription .....	3
<b>Total.....</b>	<b>6</b>

**Select one REC course from the following .....2-3**

REC 200 Foundations of Outdoor Adventure Leadership.....	3
REC 280 Challenge Course Fundamentals.....	2
REC 309 People and the Environment .....	3

**Select one course from the following.....1**

ACT 170 Beginning Swimming .....	1
ACT 270 Intermediate Swimming.....	1

**Total Major Credits.....56-57****Total minimum credits required for degree..... 123**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

REC Elective		3
General Education	6	3
<b>Total</b>	<b>15</b>	<b>16</b>

**Third Year F S**

ECP 100		2
KIN 330/331	4	
KIN 320/321		4
EDU 333	3	
HEE 310		2
HEE 305	3	
EDU 380	3	
HEE 303		3
HTH 435	3	
Restricted Elective		7
<b>Total</b>	<b>16</b>	<b>18</b>

**Fourth Year F S**

KIN 322/323 or 327/328	4	
HEE 308	3	
EDU 406		3
EDU 495A		9
HEE 340	3	
HTH 411	3	
Restricted Elective	3	
**Praxis Exam		
<b>Total</b>	<b>16</b>	<b>12</b>

\*\*Students are required to pass  
Praxis II Health Enhancement

## Bachelor of Science Major in Health and Human Performance/Master of Science in Athletic Training 3+2 Option

The 3+2 between Health and Human Performance and Athletic Training Program (ATP) allows students to obtain both a Bachelor's degree in Health and Human Performance (HHP) and Master's degree in Athletic Training (AT) within five years, which is extremely beneficial to the student financially and effectively decreases time spent working towards a degree. Students are required to complete three years in the undergraduate HHP major, obtaining general education requirements as well as prerequisite courses for the ATP. During the third year, the student applies for acceptance into the ATP (February 1). If not accepted, the student may reapply to the ATP and continue to work on coursework for the HHP degree. If accepted, the student will begin specific ATP coursework in the beginning of the fourth year, with coursework beginning in June. After successful completion of the fourth year, students are eligible for graduation with the bachelor's degree. At the successful completion of the fifth year, students are eligible for graduation with the master's degree as well as eligible to take the Board of Certification (BOC) examination.

The Student Learning Outcomes include:

1. Students will meet or exceed minimal requirements for professional certification.
2. Students will ascertain and demonstrate the required skills for all NATA Athletic Training Education competencies and clinical integration proficiencies.
3. Students will display critical thinking skills and formulate sound clinical decisions in their clinical field experiences.
4. Students will establish professional relationships with medical and allied health care providers.
5. Students will develop, design, and execute independent research projects.

### Admission Requirements

1. Undergraduate GPA of at least 3.0. However a GPA below a 3.0 may be considered.
  2. A standardized graduate admission test (GRE or equivalent) must be on record.
  3. Three letters of recommendation from academic and professional references concerning the candidate's potential to succeed in graduate school. At least one letter must be from a certified athletic trainer.
  4. It is recommended but not required to obtain a minimum of 25-50 contact hours with a certified athletic trainer.
  5. Official transcripts from each institution attended.
  6. An essay stating why the student wants to be an athletic trainer, career goals, and the attributes possessed that will make the student successful in life and athletic training.
  7. Completed application form and submission of application fee. The application deadline is February 1.
- Students will be required to participate in an internet or phone based interview with faculty from the ATP

### Provisional Acceptance

Once a student has met all admission criteria and is admitted into the ATP, that student will receive provisional acceptance. In order to gain full acceptance the student will have to successfully complete the following:

1. Technical Standards
2. Criminal Background Check
3. Prerequisite Courses. If a student does not have all the prerequisite courses and has met all other criteria for admission into the ATP, a student will be allowed one (1) year to successfully complete prerequisite courses and to gain admission.

*Degree requirements on next page.*

## Degree Requirements

### General Education Requirements ..... 31

Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

### Interdisciplinary Core

*BIOB 101 Discover Biology .....	3
*BIOB 102 Discover Biology Laboratory .....	1
*CHMY 121 Introduction to General Chemistry .....	3
*CHMY 122 Introduction to General Chemistry Laboratory .....	1
*PSYX 100 Introduction to Psychology .....	3
*STAT 216 Introduction to Statistics .....	4

### Bachelor Requirements

ACT 498 Internship .....	3
AHAT 210 Prevention and Care of Athletic Injuries .....	3
AHMS 144 Medical Terminology .....	3
BIOH 301 Human Anatomy and Physiology I .....	3
BIOH 302 Human Anatomy and Physiology I Lab .....	1
BIOH 311 Human Anatomy and Physiology II .....	3
BIOH 312 Human Anatomy and Physiology II Lab .....	1
CHTH 317 Health Behavior Theories .....	3
ECP 120 Emergency Medical Responder .....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
HTH 435 Health and Wellness across the Lifespan .....	3
KIN 105 Foundations of Exercise Science .....	3
KIN 106 Foundations of Exercise Science Lab .....	1
KIN 320 Exercise Physiology .....	3
KIN 321 Exercise Physiology Lab .....	1
KIN 322 Kinesiology .....	3
KIN 323 Anatomical Kinesiology Lab .....	1
KIN 325 Biomechanics .....	3
KIN 328 Biomechanics Lab .....	1
KIN 330 Motor Learning and Control .....	3
KIN 331 Motor Learning and Control Lab .....	1
KIN 364 Research Methods in Health and Human Performance .....	3
KIN 415 Advanced Exercise Testing and Prescription .....	3
KIN 462 Evidence Based Assessment and Treatment .....	3
NUTR 221 Basic Human Nutrition .....	3
*WRIT 201 College Writing II .....	3
Elective selected in consultation with advisor .....	3
ACT or REC elective in consultation with advisor .....	2
Suggested:	
ACT 110 Beginning Weight Training	
ACT 150 Beginning Yoga	
ACT 155 Beginning Judo	
ACT 294 Seminar/Workshop	
REC 155 Rappelling/Belaying	
REC 285 Scuba Diving I	
<b>Total .....</b>	<b>69</b>

\*May satisfy General Education requirements.

*Continued...*

## PLAN OF STUDY

### *BS in Health & Human Performance/MS in Athletic Training 3+2 Option*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Science Degree Major in Health and Human Performance/Master of Science in Athletic Training 3+2 Option. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

#### Fall Year 1

BIOB 101/102 .....	4
WRIT 101 .....	3
PSYX 100 .....	3
Gen Ed History/Cul. Diversity .....	3
Gen Ed Arts & Humanities .....	3
<b>Total .....</b>	<b>16</b>

#### Spring Year 1

CHMY 121/122 .....	4
KIN 105/106 .....	4
AHMS 144 .....	3
Gen Ed Comm. & Info Lit. ....	3
Gen Ed History/Cul. Diversity .....	3
<b>Total .....</b>	<b>17</b>

#### Fall Year 2

BIOH 301/302 .....	4
ECP 120 .....	3
NUTR 221 .....	3
AHAT 210 .....	3
Gen Ed Arts & Humanities .....	3
ACT/REC Elective .....	2
<b>Total .....</b>	<b>18</b>

#### Spring Year 2

BIOH 311/312 .....	4
WRIT 201 .....	3
STAT 216 .....	4
CHTH 317 .....	3
Elective .....	3
<b>Total .....</b>	<b>17</b>

#### Fall Year 3

KIN 322 .....	3
KIN 323 .....	1
KIN 320 .....	3
KIN 321 .....	1



**Master Requirements**

ATEP 534 Athletic Training Techniques I .....	3
ATEP 535 Athletic Training Techniques II.....	3
ATEP 540 Practicum in Athletic Training I .....	1
ATEP 541 Practicum in Athletic Training II.....	1
ATEP 542 Lower Extremity Assessment .....	3
ATEP 544 Upper Extremity Assessment.....	3
ATEP 546 General Medical Assessment.....	3
ATEP 550 Practicum in Athletic Training III.....	1
ATEP 551 Practicum in Athletic Training IV .....	1
ATEP 566 Therapeutic Modalities .....	3
ATEP 572 Therapeutic Exercise.....	3
ATEP 574 Manual Therapy Techniques .....	3
ATEP 578 Organization and Administration in Athletic Training .....	3
ATEP 580 Pharmacology for the Healthcare Professional .....	3
HHP 502 Research in Exercise and Sport Science .....	3
HHP 550 Psychological Principles .....	3
NUTR 411 Nutrition for Sports and Exercise.....	3
Elective selected in consultation with advisor .....	3
 HHP 598 Research Project .....	3
<b>OR</b> HHP 599 Thesis.....	6
<b>Total .....</b>	<b>49-52</b>
<b>Total Minimum Credits Required.....</b>	<b>151</b>

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

KIN 330	3
KIN 331	1
HTH 435	3
ACT 498	3
<b>Total.....</b>	<b>18</b>

**Spring Year 3**

KIN 364	3
KIN 325	3
KIN 328	1
KIN 462	3
KIN 415	3
HTH 411	3
<b>Total.....</b>	<b>16</b>

**Summer Year 4**

ATEP 534	3
ATEP 542	3
<b>Total.....</b>	<b>6</b>

**Fall Year 4**

ATEP 544	3
ATEP 540	1
ATEP 566	3
NUTR 411	3
<b>Total.....</b>	<b>10</b>

**Spring Year 4**

HHP 502	3
ATEP 572	3
ATEP 541	1
ATEP 580	3
<b>Total.....</b>	<b>10</b>

Graduate with B.S. at 128 credits.

**Summer Year 5**

ATEP 546	3
ATEP 574	3
<b>Total.....</b>	<b>6</b>

**Fall Year 5**

HHP 599 Thesis or Elective	3
ATEP 550	1
ATEP 578	3
ATEP 535	3
<b>Total.....</b>	<b>10</b>

**Spring Year 5**

HHP Thesis or	
HHP 598 Research Project	3
HHP 550	3
ATEP 551	1
<b>Total.....</b>	<b>7</b>

## Bachelor of Science Degree

### Major in Outdoor Adventure Leadership

The Outdoor Adventure Leadership (OAL) degree develops leadership skills, facilitation methods and effective communication techniques. This degree combines the study of educational and leadership theory and practice with technical outdoor travel and adventure. Students will acquire and enhance environmental skills and knowledge related to a variety of populations including senior citizens and youth-at-risk. They will also explore issues ranging from ethical controversies and risk management to program design. In addition, the ability to safely engage in and provide outdoor activities and effectively teach skills in outdoor and indoor settings are central to the degree.

Outdoor Adventure Leadership prepares students for careers in a wide variety of leadership. The Outdoor Adventure Leadership degree allows the student to teach outdoor skills, safely oversee outdoor activities, and design programs for corporate and community organizations. Students are prepared for professions with agencies that have a natural resource foundation and public and private entities utilizing the outdoors. OAL graduates pursue careers in many different areas. Options include employment with specialty outdoor training schools, recreation and environmental education centers, municipal park and recreation departments, land management agencies, military programs, student recreation in higher education, and commercial guiding operations, among others.

The Student Learning Outcomes for this option include:

1. Demonstrate safe and effective leadership in the skill areas encompassed in the program, consistent with professional standards, including risk management.
2. Plan, implement, and evaluate adventure experiences in areas encompassed in the program.
3. Determine and evaluate participant learning outcomes in outdoor adventure experiences.
4. Professionally communicate knowledge, demonstrate skills, and evaluate participant performance in adventure activities and programming.

A grade of C- or higher is mandatory in all health and human performance courses satisfying the major requirements.

### Admission Requirements for Outdoor Adventure Leadership

All students desiring admission to the Outdoor Adventure Leadership program are required to file an application for admission. Applications for admission to the Outdoor Adventure Leadership program can be obtained online at [www.msubillings.edu/hhp](http://www.msubillings.edu/hhp) or from the Department of Health and Human Performance Office in the Physical Education Building, Room 120. The application should be submitted to the faculty advisor for review and approval, signed by the advisor and the Department Chairperson. Each applicant must:

1. Complete 15 credit hours of required general education courses with a minimum GPA of 2.75 (see application for list of courses).
2. Have completed 18 or more credit hours from the list of prerequisite courses (see application for list of courses), including at least 4 credit hours of Skills courses with minimum GPA of 2.75 (no more than 4 credit hours of skills courses count toward the 18 credit hours).
3. Be aware that courses taken on a pass/no pass or credit/noncredit basis will not be used to calculate the GPA requirement. Students should consult with their academic advisor.
4. Attach a current working copy of the transcript to the application form.
5. Submit a letter to the student's Outdoor Adventure Leadership academic advisor explaining how the degree fits with his or her long term personal and professional goals, why he or she should be accepted into the program, and how he or she intends to enrich the program.
6. Be aware that applications are handled on a rolling admissions basis. Students will be notified of the status of their application within 15 working days of submitting the complete application. Enrollment in some major courses is limited to students admitted to the program.
7. Be aware that no student will be allowed to register for restricted upper division courses in Outdoor Adventure Leadership without admission to the Outdoor Adventure Leadership program.

## Major in Outdoor Adventure Leadership Degree Requirements

### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

### Degree Core

^ECP 312 Wilderness Medicine .....	4
REC 120 Fundamentals of Backcountry Travel .....	2
REC 181 Basic Navigation/Orienteering .....	1
REC 200 Foundations of Outdoor Adventure Leadership .....	3
REC 210 Environment/Leave No Trace .....	2
REC 280 Challenge Course Fundamentals .....	2
REC 306 Outdoor Living Skills .....	3
^Or evidence of current Wilderness First Responder Certification.	

REC 308 Winter Outdoor Living Skills .....	2
REC 309 People and the Environment .....	3
REC 310 Adventure Leadership .....	3
REC 411 Adventure Guiding and Instructing .....	3
REC 466 Ethical/Legal Aspects in Outdoor Adventure Leadership .....	2
REC 470 Adventure Program Planning and Development .....	3
REC 498 Internship .....	6
<b>Total .....</b>	<b>39</b>

### Required Courses

BGEN 105 Introduction to Business .....	3
BMKT 325 Principles of Marketing .....	3
ECP 120 Emergency Medical Responder .....	3
HEE 310 Methods of Adapted Health Enhancement .....	2
KIN 105 Foundations of Exercise Science .....	3
KIN 106 Foundations of Exercise Science Lab .....	1

KIN 330 Motor Learning and Control .....	3
KIN 331 Motor Learning and Control Lab .....	1
<b>OR</b> KIN 320 Exercise Physiology .....	3
KIN 321 Exercise Physiology Lab .....	1
<b>Total .....</b>	<b>19</b>

### Skills Area Level I

#### Choose 6 credits from:

REC 119 Nordic Skiing I .....	1
REC 122 Alpine Skiing I .....	1
REC 123 Telemark Skiing I .....	2
REC 125 Snowboarding I .....	1
REC 130 Fly Fishing I .....	1
REC 150 Low Element Challenges .....	2
REC 155 Rappelling/Belaying .....	2
REC 160 Shooting Sports I .....	1
REC 178 Canoeing I .....	1

Continued...

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Outdoor Adventure Leadership*

Students should visit with their faculty advisor each semester prior to registration. The following suggested schedule provides a general overview of courses and work that will enable the student to progress through the degree in an orderly and timely manner.

First Year	F	S
WRIT 101	3	
REC 200	3	
REC 181	1	
Skills	2	2
General Education	6	6
REC 120		2
ECP 120		3
BGEN 105		3
<b>Total</b>	<b>15</b>	<b>16</b>

Second Year	F	S
REC 210	2	
KIN 105/106	4	
Skills	3	4
General Education	6	9
REC 280		2
HEE 310		2
<b>Total</b>	<b>15</b>	<b>17</b>

Third Year	F	S
REC 306	3	
REC 310	3	
BMKT 325	3	
KIN 330/331 or 320/321	4	
General Education	3	6
Skills	2	4
REC 308		3
REC 309		3
<b>Total</b>	<b>18</b>	<b>16</b>

Fourth Year	F	S
REC 411	3	
REC 466	3	
Rescue	3/4	
Electives	3	
REC 498	3	3
Skills		3
ECP 312		4
REC 470		3
<b>Total</b>	<b>15/16</b>	<b>13</b>

REC 255 Rock Climbing I.....	1
REC 275 Kayaking I.....	1
REC 277 Rafting I.....	1
REC 287 Archery I.....	1
<b>Total.....</b>	<b>6</b>

**Skills Area Level II****Choose 12 credits from:**

REC 182 Advanced Navigation.....	2
REC 185 Winter Survival Skills.....	2
REC 187 Basic Survival in the Outdoors .....	2
REC 220 Alpine Skiing II.....	2
REC 225 Snowboarding II.....	2
REC 230 Fly Fishing II .....	2
REC 233 Skiing/Snowboarding Instructor Development.....	2
REC 257 Rock Climbing II .....	2
REC 260 Shooting Sports II .....	2
REC 276 Kayaking II .....	2
REC 278 Rafting II.....	2
REC 288 Archery II.....	2
REC 389 Mountaineering .....	3
REC 480 Challenge Course Skills and Facilitation .....	3
<b>Total.....</b>	<b>12</b>

**Rescue Skills****Choose one:**

REC 356 Search and Rescue .....	3
REC 357 Ropes Rescue .....	3
REC 358 Swift Water Rescue.....	3
REC 359 Backcountry Avalanche Forecasting and Rescue .....	4
<b>Total.....</b>	<b>3-4</b>

**Total major credits .....79-80**

**Electives .....9-10**

**Total minimum required credits for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

**Due to the course content and environmental requirements, a significant number of REC classes will be held off of the MSU Billings main campus. Courses may meet on weekends and/or during semester breaks. Some courses require a special fee that covers, but is not limited to: transportation, food, gear, lift tickets, and certifications.**

## Teaching Minor in Health and Physical Education (K–12)

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### First Aid Competency

Health and Human Performance students who are completing the teacher licensure option are required to demonstrate current competency in first aid, CPR and AED. Presentation of certification documents for First Aid, current Adult/Child/Infant CPR and Automatic External Defibrillation will be accepted as proof of this competency if met through the following organizations:

- First Aid
  - American Academy of Orthopedic Surgeons
  - American Red Cross
  - National Safety Council
- CPR
  - American Academy of Orthopedic Surgeons
  - American Heart Association
  - American Red Cross
  - National Safety Council

Students can also achieve First Aid, Adult/Child/Infant CPR and AED certification through successful completion of ECP 100 First Aid and CPR.

### Credits

#### Required Courses

CHTH 317 Health Behavior Theories .....	3
HEE 308 Methods of Physical Education K-12 .....	3
HEE 340 Methods of Health Education .....	3
KIN 105 Foundations of Exercise Science .....	3
KIN 106 Foundations of Exercise Science Lab .....	1
KIN 205 Foundations in HHP .....	3
KIN 320 Exercise Physiology	
OR KIN 327 Kinesiology and Biomechanics.....	3

#### Select two (2) of the following teaching techniques courses:

HEE 303 Methods of Lifetime Fitness Activities.....	3
HEE 305 Methods of Teaching Movement	
Exploration.....	3
HEE 306 Methods of Conditioning Activities.....	3

**Total minimum credits required for minor.....25**

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Coaching

The Coaching Option is offered to enhance preparation of individuals wishing to serve as coaches in K-12 settings. This is a non-teaching minor and does not qualify as an area of endorsement.

### First Aid Competency

Health and Human Performance students who are completing the teacher licensure option are required to demonstrate current competency in first aid, CPR and AED. Presentation of certification documents for First Aid, current Adult/Child/Infant CPR and Automatic External Defibrillation will be accepted as proof of this competency if met through the following organizations:

- First Aid
  - American Academy of Orthopedic Surgeons
  - American Red Cross
  - National Safety Council
- CPR
  - American Academy of Orthopedic Surgeons
  - American Heart Association
  - American Red Cross
  - National Safety Council

Students can also achieve First Aid, Adult/Child/Infant CPR and AED certification through successful completion of ECP 100 First Aid and CPR.

### Credits

#### Required Courses

AHAT 210 Prevention and Care of Athletic Injuries.....	3
COA 205 Introduction to Coaching .....	3
COA 409 Psychology of Coaching .....	3
ECP 100 First Aid and CPR.....	2
KIN 320 Exercise Physiology.....	3
KIN 321 Exercise Physiology Lab.....	1
KIN 327 Kinesiology and Biomechanics.....	3
KIN 328 Biomechanics Lab.....	1

#### Select two from the following:

##### (all include a one credit practicum)

COA 240 Coaching Volleyball .....	3
COA 242 Coaching Football.....	3
COA 245 Coaching Basketball .....	3
COA 246 Coaching Softball/Baseball.....	3
COA 256 Coaching Track/Field .....	3
COA 260 Coaching Gymnastics .....	3
COA 291 Special Topics: Coaching (Current Sport).....	3

**Total minimum credits required for minor ..... 25**

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Outdoor Adventure Leadership

A C- must be maintained in all minor courses.

	Credits
<b>Required Courses</b>	
REC 120 Fundamentals of Backcountry Travel .....	2
REC 200 Foundations of Outdoor Adventure Leadership .....	3
REC 210 Environment/Leave No Trace .....	2
REC 310 Adventure Leadership .....	3
REC 466 Ethical/Legal Aspects in Outdoor Adventure Leadership .....	2
<b>Total .....</b>	<b>12</b>

### Choose one course:

ECP 120 Emergency Medical Responder .....	3
ECP 312 Wilderness Medicine .....	4

### Choose one course:

REC 306 Outdoor Living Skills .....	3
REC 308 Winter Outdoor Living Skills .....	2

### Choose one course:

REC 411 Adventure Guiding and Instructing .....	3
REC 470 Adventure Program Planning and Development .....	3

**Total electives .....**8-10

### Skills Areas

In consultation with OAL advisor, choose at least 4 skills/rescue courses in at least 2 different disciplines (e.g., climbing, fly fishing, skiing, etc.) from the following:

#### Skills Area Level I

REC 119 Nordic Skiing I .....	1
REC 122 Alpine Skiing I .....	1
REC 123 Telemark Skiing I .....	2
REC 125 Snowboarding I .....	1
REC 130 Fly Fishing I .....	1
REC 150 Low Element Challenges .....	2
REC 155 Rappelling/Belaying .....	2
REC 160 Shooting Sports I .....	1
REC 178 Canoeing I .....	1
REC 181 Basic Navigation/Orienteering .....	1
REC 255 Rock Climbing I .....	1
REC 275 Kayaking I .....	1
REC 277 Rafting I .....	1
REC 287 Archery I .....	1

#### Skills Area Level II

REC 182 Advanced Navigation .....	2
REC 185 Winter Survival Skills .....	2

REC 187 Basic Survival in the Outdoors .....	2
REC 220 Alpine Skiing II .....	2
REC 225 Snowboarding II .....	2
REC 230 Fly Fishing II .....	2
REC 257 Rock Climbing II .....	2
REC 260 Shooting Sports II .....	2
REC 276 Kayaking II .....	2
REC 278 Rafting II .....	2
REC 288 Archery II .....	2
REC 389 Mountaineering .....	3
REC 480 Challenge Course Skills and Facilitation .....	3

### Rescue Skills

REC 356 Search and Rescue .....	3
REC 357 Ropes Rescue .....	3
REC 358 Swift Water Rescue .....	3
REC 359 Backcountry Avalanche Forecasting and Rescue .....	4

**Skills Areas minimum total credits .....** 4

**Total minimum credits for minor .....** 24

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Health Education

Credits

### Required Courses

CHTH 317 Health Behavior Theories .....	3
HEE 340 Methods of Health Education .....	3
*HTH 110 Personal Health and Wellness	
<b>OR</b> HTH 101 Opportunities in the Health Professions .....	3
HTH 391 Special Topics .....	3

### Choose 4 courses from those listed below:

CHTH 410 High Level Wellness through Decision Making .....	3
CHTH 435 Human Response to Stress .....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
HTH 425 Health and Sexuality .....	3
HTH 435 Health and Wellness across the Lifespan .....	3
KIN 320 Exercise Physiology .....	3
KIN 415 Advanced Exercise Testing and Prescription .....	3
NUTR 411 Nutrition for Sports and Exercise .....	3

**Total minimum credits for teaching minor .....** 24

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

# The Department of Rehabilitation and Human Services

***Dr. Terry Blackwell, Chairperson***

***APS 116, (406) 896-5830***

***tblackwell@msubillings.edu***

Professor: Blackwell

Associate Professor: Dell

Assistant Professors: Giles, Masood

University Lecturer: Nichols

Emeritus: Schulz

## Undergraduate Degrees and Majors

### **Bachelor of Science Majors**

Human Services

Psychiatric Rehabilitation

Rehabilitation and Related Services, Extended Major

### **Associate of Arts Program of Study in:**

Rehabilitation and Related Services

### **Certificate**

Addiction Counseling Education

## Graduate Degrees

### **Master of Science in Clinical Rehabilitation and Mental Health Counseling (MSCRMHC)▽**

For details concerning the graduate degrees, see the Graduate Bulletin. Graduate Bulletins may be obtained from the Office of Graduate Studies, McMullen 200, Montana State University Billings, 1500 University Drive, Billings, MT 59101-0298.

## Bachelor of Science Degree Major in Human Services or Rehabilitation Admission Requirements

All students desiring admission to the Human Services or Rehabilitation Programs are required to file an application for admission. The application must be completed during the semester following the completion of 40 semester hours of credit, or, in the

case of a transfer student, during the first semester of residence after the student has attained sophomore level.

1. A minimum of 40 semester credits is to be completed prior to admission to the Human Services Program.
2. A minimum cumulative grade point average of 2.00 is required in all courses completed.
3. All applicants must complete the General Education category requirements at Montana State University Billings, or at another regionally accredited institution of higher education, earning a minimum grade point average of 2.00. Courses taken on a pass/no pass or credit/noncredit basis will not be accepted to fulfill the requirements. Students should consult with their academic advisor.
4. A minimum grade of B in HS 345
5. The application should be accompanied by a background check and a working copy of the student's transcript. The application should be submitted to the faculty advisor for review and approval and signed by the advisor.
6. No internship can be completed without prior acceptance to the HS or REHA programs.

Students not accepted are encouraged to apply for admission during the next application period. It is the responsibility of each student to ensure that a completed application is submitted by the deadline. It is suggested that applications be submitted at least three (3) weeks prior to the end of the semester during which application is made. If admission to the Human Services or Rehabilitation Programs is denied, the applicant may appeal the decision to the Rehabilitation & Human Services Committee of the Department. The Department Chair serves as chair of the appeals committee.

## Bachelor of Science Degree Human Services

Graduates of the B.S. in Human Services program have found employment in state agencies, community based rehabilitation and mental health centers, rehabilitation facilities, and public social service organizations. The B.S. in Human Services is a venerable program that has been preparing professionals for a wide range of positions in the fields of case management and social work related employment since the 1980's.

The program is one of the few that broadly focuses on the field of human services in Montana, which is closely related to the field of social work. However, students focus more specifically on concentrations that include serving populations in mental health, disability, and family systems.

Although this degree is meant to prepare most graduates for employment primarily as professionals capable of casework with a diverse population, in an effort to expand employment opportunities for graduates, a concentration in Substance Abuse Counseling was recently added. The addiction counseling emphasis adds addiction assessment and treatment classes to increase the student's knowledge of addiction and their eventual employability in the community.

## **Bachelor of Science Degree Rehabilitation and Related Services**

Rehabilitation is defined as the restoration, re-adaptation, or re-education to fullest physical, mental, social, vocational, and economic usefulness following a disabling injury or disease, which also includes addictions. Thus the role of the rehabilitation counselor involves aiding adult clients with disabilities through the techniques of job development and placement, case management, vocational counseling and assessment, and effective counseling. The aim of the treatment program is to allow clients to overcome mental, physical, or emotional disabilities and become self-sufficient and productive citizens.

The rehabilitation curriculum is focused on preparing professionals for employment in rehabilitation settings. Graduates have found employment in state and private rehabilitation offices, supported employment programs, Veterans Administration, community-based vocational programs, hospitals, chemical dependency programs, mental health centers, schools, centers of independent living, insurance companies, manufacturing firms, and other commercial enterprises.

## **Bachelor of Science Degree Psychiatric Rehabilitation**

This degree focuses primarily on rehabilitation as it relates to addiction counseling. Students can use these courses towards meeting the educational requirements to become a Licensed Addiction Counselor (LAC).

## **Associate of Arts Degree Program of Study in Rehabilitation and Related Services**

This is a paraprofessional training program leading to an Associate of Arts Degree and preparing graduates for entry-level employment in rehabilitation and related settings. The focus of this paraprofessional degree is on chemical dependency education. However, it does not meet all of the educational requirements to become a licensed addiction counselor (LAC). For those students interested in becoming an LAC and meeting these requirements, see the Certificate in Counseling Education and B.S. in Psychiatric Rehabilitation programs in this department.



## Bachelor of Science Degree Major in Human Services

### General Education Requirements ..... 31

(See page 69) Students should consult with the Academic Advisor to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

### Core Requirements

HS 201 Survey of the Human Services .....	3
HS 335 Introduction to Counseling .....	3
HS 345 Legal, Ethical and Professional Issues in the Human Services.....	3
HS 394 Professional Seminar I in Human Services.....	1
HS 395 Supervised Field Experience I in the Human Services .....	3
HS 481 Abuse, Neglect in the Family and the Helping Process in Human Services .....	3
HS 494A Professional Seminar II in Human Services .....	1
HS 494B Professional Seminar III in the Human Services .....	1
HS 495A Supervised Field Experience II in Human Services.....	3
HS 495B Supervised Field Experience III in the Human Services.....	3
*REHA 201 Introduction to Diversity in Counseling.....	3
<b>Total Core Requirement credits.....</b>	<b>27</b>

### Math and Science Requirements

The Degree Program in Human Services requires three (3) semester credit hours in Mathematics and three (3) semester credit hours in Sciences in addition to the General Education Math/Science requirements.

### Science Course ..... 3

The Science course should relate to some aspect of the human condition and is to be selected in consultation with the advisor.

### Math Course..... 3

Choose one:

\*STAT 141 Introduction to Statistical Concepts .....

PSYX 222 Psychological Statistics .....

Any equivalent course selected in consultation with the student's advisor ....

**Total..... 6**

### Professional Skills Development for the Human Services

Choose four (4) courses from below for a total of 12 credits.

REHA 216 Introduction to Rehabilitation and Related Services.....

REHA 301 Principles of Counseling and Group Theory.....

REHA 406 Assessment in Human Service and Addiction Programs .....

REHA 418 Counseling for Loss and Bereavement .....

REHA 425 Psychiatric Rehabilitation and Co-Occurring Disorders.....

REHA 453 Case Management and Community Resources.....

**Total..... 12**

\*May satisfy General Education requirements.

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Human Services*

Students should talk with their faculty advisors prior to registration for classes. It is a good practice to visit with the faculty advisor each semester. The following suggested schedule provides a general overview of courses and work that will enable the Human Services major to progress through the degree in an orderly and timely manner.

<b>First Year</b>	<b>F</b>	<b>S</b>
General Education	15	15
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
General Education	3	4
Math Requirement	3	
Science Requirement		3
HS 201*^	3	
Professional Skills	6	6
<b>Total</b>	<b>15</b>	<b>13</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
HS 335*	3	
HS 345*	3	
HS 395/394		4
Concentrations	9	12
<b>Total</b>	<b>15</b>	<b>16</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
REHA 201	3	
HS 481*	3	
HS 495A/494A*	4	
HS 495B/494B*		4
Concentrations	3	6
Electives	3	5
<b>Total</b>	<b>16</b>	<b>15</b>

\*Offered during both fall and spring semesters.

^Offered online

## Human Services Concentration Areas

One (1) major concentration and two (2) minor concentrations. A minimum of four (4) courses must be completed in the major concentration chosen, and at least three (3) courses must be selected from the two (2) minor concentration areas for a minimum total of thirty (30) credits.

A course selected in one concentration cannot be used to satisfy the requirements in another concentration, skills development, General Education or core requirements. Certain courses in each concentration have prerequisites; students should check course descriptions for prerequisite requirements.

The Student Learning Objectives for this program include:

1. Assess and evaluate community resources related to human service delivery
2. Apply ethical principles into the professional settings
3. Integrate general counseling theory and techniques into practice

### 1. Mental Health Systems and Applied Psychology

PSYX 294 Seminar: Child Psychology .....	3
PSYX 330 Child Psychology.....	3
PSYX 340 Abnormal Psychology .....	3
PSYX 360 Social Psychology .....	3
PSYX 378 Introduction to Clinical Psychology .....	3
PSYX 382 Forensic Psychology.....	3
PSYX 494 Seminar: Industrial/Organizational Psychology .....	3

### 2. Chemical Addictions and Treatment in Human Services

HS 385 Behavioral Pharmacology and Human Services.....	3
HS 483 Introduction to Addiction Counseling .....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
REHA 406 Assessment in Human Service and Addiction Programs .....	3
REHA 494 Seminar: Gambling Assessment and Treatment .....	2
REHA 499 Capstone: Addiction Treatment Planning and Documentation...	2

### 3. Social Issues Across the Lifespan

EDEC 310 Child in the Family.....	3
EDEC 430 Social/Emotional Development in Young Children.....	3
*NASX 205 Native Americans in Contemporary Society.....	3
NASX 332 Montana Indians: Cultures, Histories, Current Issues.....	3
NASX 406 History of American Indian Women.....	3
*SOCI 201 Social Problems .....	3
SOCI 327 Sociology of Deviance.....	3
SOCI 330 Juvenile Delinquency .....	3
SOCI 380 Sociology of Health and Medicine .....	3
SOCI 382 Social Psychology and Social Structure .....	3
SOCI 431 Sociology of Gender Roles.....	3

**Total for Concentrations..... 30**

**Total minimum credits required for major..... 75**

**Restricted electives selected with advisor approval..... 6**

**Electives..... 8**

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Science Degree

### Major in Psychiatric Rehabilitation

This program includes an emphasis in addiction counseling. Those seeking to meet the academic requirements to become a Licensed Addiction Counselor (LAC) can do so through this program. Students should be aware that licensure is controlled by the Montana Department of Labor and Industry, not the College of Allied Health Professions. Students who wish to pursue licensure should use the coursework listed below and consult with the academic requirements established by the Montana Department of Labor and Industry.

#### Credits

#### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

#### Core Requirements

HS 345 Legal, Ethical and Professional Issues in the Human Services.....	3
*REHA 201 Introduction to Diversity in Counseling.....	3
REHA 301 Principles of Counseling and Group Theory.....	3
REHA 406 Assessment in Human Service and Addiction Programs .....	3
REHA 498 Internship .....	5
REHA 494 Seminar .....	1
<b>Total .....</b>	<b>18</b>

#### Rehabilitation-Addiction Counseling Emphasis

HS 335 Introduction to Counseling.....	3
HS 385 Behavioral Pharmacology and Human Services.....	3
HS 483 Introduction to Addiction Counseling .....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
REHA 425 Psychiatric Rehabilitation and Co-Occurring Disorders.....	3
REHA 499 Capstone: Addiction Treatment Planning and Documentation...	2
<b>Total .....</b>	<b>17</b>

#### Restricted Electives..... 12

A minimum of 12 credits—at least one course from each of the following areas—must be selected in consultation with the advisor.

#### Rehabilitation

REHA 216 Introduction to Rehabilitation and Related Services.....	3
REHA 418 Counseling for Loss and Bereavement .....	3
REHA 453 Case Management and Community Resources.....	3
REHA 498 Internship .....	6

#### Psychology

PSYX 332 Adult Psychology .....	3
PSYX 333 Psychology of Aging .....	3
PSYX 340 Abnormal Psychology .....	3
PSYX 370/371 Psychology of Learning w/Lab.....	4

#### Sociology

SOCI 344 Sociology of Race and Ethnicity .....	3
SOCI 380 Sociology of Health and Medicine .....	3
<i>Continued...</i>	

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Psychiatric Rehabilitation*

This sample schedule is a suggested plan for students completing the four-year Bachelor of Science in Psychiatric Rehabilitation degree program. Due to course schedule changes and staffing assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each semester.

First Year	F	S
WRIT 101	3	
General Education Math	3	
General Education	6	9
Restricted Electives	3	3
Minor		3
<b>Total</b>	<b>15</b>	<b>15</b>

Second Year	F	S
WRIT 201		3
REHA 201	3	
REHA 301		3
General Education	6	3
General Education w/Lab		4
Minor/Restricted Electives	6	3
<b>Total</b>	<b>15</b>	<b>16</b>

Third Year	F	S
REHA 406	3	
HS 345		3
REHA 483		3
REHA 498 (Community)		5
REHA 494		1
Minor/Restricted Electives	6	3
Electives	6	
<b>Total</b>	<b>15</b>	<b>15</b>

Fourth Year	F	S
REHA 499	2	
HS 385	3	
REHA 425	3	
Minor/Restricted Electives	6	3
Electives		6
HTH 411		3
HS 335		3
<b>Total</b>	<b>14</b>	<b>15</b>

SOCI 382/PSYX 360 Social Psychology and Social Structure .....	3
*WGSS 274 Women, Culture and Society .....	3

**Total minimum credits required for major.....47**

**Minor .....20-30**

The minor is to be selected from the following areas in consultation with the faculty advisor:

- Business Administration
- Communication and Theatre
- Health and Physical Education
- Native American Studies
- Outdoor Adventure Leadership
- Psychology
- Sociology
- Spanish

**Restricted electives selected with advisor approval.....6**

**Unrestricted electives .....6-16**

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

The Student Learning Objectives for this program include:

1. Assess and evaluate community resources related to human service delivery
2. Apply ethical principles into the professional settings
3. Integrate general counseling theory and techniques into practice

## Bachelor of Science Degree Major in Rehabilitation and Related Services Extended

Credits

### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

### Core Requirements

HS 345 Legal, Ethical and Professional Issues in the Human Services.....	3
*REHA 201 Introduction to Diversity in Counseling.....	3
REHA 216 Introduction to Rehabilitation and Related Services.....	3
REHA 301 Principles of Counseling and Group Theory.....	3
REHA 406 Assessment in Human Service and Addiction Programs .....	3
REHA 425 Psychiatric Rehabilitation and Co-Occurring Disorders .....	3
REHA 494 Seminar: Rehabilitation Agency .....	1
REHA 498 Internship .....	5
REHA 494 Seminar: Community Agency.....	1
REHA 498 Internship .....	5
<b>Total Required Course credits .....</b>	<b>30</b>

### Additional Required Courses for Extended Major

HS 335 Introduction to Counseling .....	3
HS 481 Abuse, Neglect in the Family and the Helping Process in Human Services .....	3
PSYX 230 Developmental Psychology: Development over the Lifespan .....	3
REHA 418 Counseling for Loss and Bereavement .....	3
REHA 453 Case Management and Community Resources.....	3
<b>Total Additional Required Credits .....</b>	<b>15</b>

### Restricted Rehabilitation Electives

A minimum of **30 credits** and at least one course from each of the following areas must be selected in consultation with the faculty advisor.

### Health and Human Performance

CHTH 250 Introduction to Public Health.....	3
HTH 435 Health and Wellness Across the Lifespan .....	3

### Human Services

HS 452 Human Services Management .....	3
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### Psychology

PSYX 294 Seminar/Workshop .....	3
PSYX 332 Adult Psychology .....	3
PSYX 335 Psychology of Gender .....	3
PSYX 340 Abnormal Psychology .....	3
PSYX 360 Social Psychology .....	3
PSYX 378 Introduction to Clinical Psychology .....	3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Rehabilitation and Related Services, Extended*

This sample schedule is a suggested plan for students completing the four-year Bachelor of Science in Rehabilitation and Related Services (Extended) degree program. Due to course schedule changes and staffing assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each semester.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
General Education Math	3	
General Education	3	9
Restricted Electives	3	3
Unrestricted Electives		3
<b>Total</b>	<b>12</b>	<b>15</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
REHA 201	3	
REHA 216		3
General Education	6	3
General Education w/Lab		4
Restricted Electives	3	3
Unrestricted Electives	3	
<b>Total</b>	<b>15</b>	<b>13</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
REHA 301	3	
HS 345		3
REHA 418	3	
REHA 498 (Community)		6
EDSP 461	3	
Minor/ Unrestricted Electives	5	6
<b>Total</b>	<b>14</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
HS 335	3	
HS 452	3	
REHA 406	3	
REHA 425	3	
REHA 453		3
REHA 498 (Rehab Agency)		6
EDSP 405		3
Unrestricted Electives		6
<b>Total</b>	<b>15</b>	<b>15</b>

**Sociology and Native American Studies**

*NASX 205 Native Americans in Contemporary Society.....	3
NASX 332 Montana Indians: Cultures, Histories, Current Issues.....	3
NASX 406 History of American Indian Women.....	3
*SOCI 201 Social Problems .....	3
SOCI 221 Criminal Justice System .....	3
SOCI 327 Sociology of Deviance.....	3
SOCI 330 Juvenile Delinquency .....	3
SOCI 380 Sociology of Health and Medicine .....	3
SOCI 382 Social Psychology and Social Structure .....	3
SOCI 431 Sociology of Gender Roles .....	3

**Total Restricted Elective credits..... 30**

**Total minimum credits required for major..... 75**

**Unrestricted Electives..... 14**

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

The Student Learning Objectives for this program include:

1. Assess and evaluate community resources related to human services
2. Apply ethical principles into the professional settings
3. Integrate general counseling theory and techniques into practice

## Associate of Arts Degree Program of Study in Rehabilitation and Related Services

This program includes an emphasis in Addiction Counseling.

### Credits

#### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this program.

#### Required Courses

HS 345 Legal, Ethical & Professional Issues in the Human Services .....	3
HS 385 Behavioral Pharmacology and Human Services .....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
*REHA 201 Introduction to Diversity in Counseling .....	3
REHA 301 Principles of Counseling and Group Theory .....	3
REHA 406 Assessment in Human Service and Addiction Programs .....	3
REHA 453 Case Management and Community Resources .....	3
REHA 499 Capstone: Addiction Treatment Planning and Documentation .....	2
<b>Total Required Course Credits .....</b>	<b>23</b>

**Restricted electives selected with advisor approval..... 6**

**Total minimum credits required for degree..... 60**

\*May satisfy General Education requirements.

The student Learning Objectives for this program include:

1. Assess and evaluate the application of addictions treatment services
2. Integrate general addiction counseling theory and techniques into practice
3. Demonstrate continuing professional development\*  
\* Coursework may be used in preparation for becoming a Licensed Addictions Counselor (LAC).

## Certificate in Addiction Counseling Education

The Certificate for Addiction Counseling Education is documentation that the student has completed courses that can be counted toward the educational component of the Montana Licensed Addiction Counseling credential. For students who are completing the required classes for the B.S. in Rehabilitation, B.S. in Human Services, or other academic majors at MSU Billings who may also be completing a B.S. or B.A. degree, the following are additional courses that can be counted toward the educational requirements for the LAC (based on changed in educational requirements by the State Legislature in 2013). The additional clinical experience required by the State of Montana will be arranged by the student with an LAC supervisor in the community and not through MSU Billings. For specific information, long onto the Montana Licensed Addiction Counseling website ([bsd.dli.mt.gov/license/bsd\\_boards/lac\\_board/board\\_page.asp](http://bsd.dli.mt.gov/license/bsd_boards/lac_board/board_page.asp)).

**Due to changes in State of Montana law in 2015, there are two additional courses that are required to meet educational licensure: REHA 216 and REHA 201. Please contact the Department of Rehabilitation & Human Services for more information.**

#### Required Courses

HS 335 Introduction to Counseling.....	3
HS 345 Legal, Ethical and Professional Issues in the Human Services.....	3
HS 385 Behavioral Pharmacology and Human Services .....	3
HS 483 Introduction to Addiction Counseling.....	3
HTH 411 Alcohol, Tobacco and Other Drug Prevention.....	3
REHA 301 Principles of Counseling and Group Theory .....	3
REHA 406 Assessment in Human Service and Addiction Programs.....	3
REHA 425 Psychiatric Rehabilitation and Co-Occurring Disorders .....	3
REHA 494 Seminar: Gambling Assessment and Treatment.....	2
REHA 499 Capstone: Addiction Treatment Planning and Documentation.....	2
<b>Total .....</b>	<b>28</b>

# The College of Arts and Sciences

***Dr. Christine Shearer, Dean***

***LA 427, (406) 657-2177***

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The liberal arts and sciences are the core of a complete college education, stimulating our spirit, deepening our understanding, and broadening our horizons. They cultivate clear and imaginative thinking, effective communication, critical evaluation of ideas, and effective adaptation of knowledge. Students experienced in liberal arts and sciences become informed, inquiring, critical, and concerned, while building strong foundations for future career opportunities.

In all of its programs, Montana State University Billings places great emphasis upon the liberal arts and sciences as the foundation of each student's General Education. Upper-division courses in those areas also fill an important role in the education of students across campus.

## Academic Advising

All new, transfer, and re-admitted students are encouraged to visit Advising & Career Services on McMullen Hall first floor west to meet with an academic advisor. New students will receive information regarding General Education requirements and Plan of Study worksheets related to their major and minor programs. Transfer and readmitted students will work with an advisor to complete a transcript evaluation and to develop a Plan of Study. After the initial contact with Advising & Career Services, students who have declared a specific major will be assigned a faculty advisor in their major department.

General Studies majors will work with Advising & Career Services until a specific academic program has been selected and a Plan of Study has been developed.

## Undergraduate and Graduate Degrees and Majors

The College of Arts and Sciences offers both the Bachelor of Arts and the Bachelor of Science degrees in the following majors:

**Bachelor of Arts degree:** Majors in Applied Science, Art, Biology, Communication Arts (options in Mass Communication, Organizational Communication), English, Environmental Studies, History, Music, Psychology, Sociology, and Spanish.

### Bachelor of Fine Arts Major in Art

**Bachelor of Science degree:** Majors in Biology, Broadfield Science, Chemistry, Criminal Justice, Liberal Studies, Mathematics, Political Science, Psychology, Public Relations, and Sociology.  
**Medical Lab Science and Environmental Science Options are available in the Biology Major.**

**Teaching Licensure Options:** Available in the following Arts and Sciences Majors: Art (K-12), Biology (Secondary), Broadfield Science (Secondary), Chemistry (Secondary), English (Secondary), History (Secondary), Mathematics (Secondary), Music (K-12), Political Science, and Spanish (K-12).

**Associate of Arts:** Program of Study in Applied Psychology

**Associate of Science:** Programs of Study in Allied Health, Environmental Science, and Pre-Engineering.

**Minors:** Art, Biology, Chemistry, Communication Arts (options in Mass Communication and Organizational Communication), Computer Science, Criminal Justice, Earth Science, English (Programs of Study in Professional Writing, Creative Writing, and Literature), Environmental Studies, Geography, History, International Studies, Mathematics, Music, Native American Studies, Philosophy (Option in Religious Studies), Physics, Political Science (Options in General, Public Administration, and Pre-Law), Psychology, Sociology, Spanish, Statistics, and Women's Studies.



**Teaching Minors:**

**For students who are gaining teacher licensure in a content major, the following minors lead to endorsement:** Art (K-12), Biology, Chemistry, Earth Science, English, Geography, History, Mathematics, Physics, Political Science, Psychology, Sociology, and Spanish (K-12).

**Licensure: Social Science (Broadfield) Endorsement**

These degree programs and other programmatic options are described in the specific discipline areas in this General Bulletin. Information about programs and options approved subsequent to the publication of this Bulletin may be obtained from Advising & Career Services and the individual department offices.

See the Academic Support section, page 59, for some of the resources and opportunities the College of Arts and Sciences provides students and the public.

**Graduate Education**

**Master of Science in Psychology:** A professional graduate degree and doctoral preparation degree in the Department of Psychology.

**Master of Science in Public Relations:** A professional graduate degree in the Department of Communication and Theatre. ▽

**Mission Statement**

The mission of the College of Arts and Sciences is to serve the educational needs of the people of Montana through:

- a General Education program providing a foundation of liberal education to all students;
- selected undergraduate degree programs in the arts, humanities, sciences, and social sciences;
- selected pre-professional programs; and
- various graduate, continuing education, and non-conventional learning opportunities consistent with the mission of the University.

Through these learning experiences, the College seeks to provide knowledge and cultivate skills to allow a student to select realistic future directions for study and/or employment. These learning experiences should be of high quality and be consistent with the mission and resources of the University. With its inherent diversity, the College serves as an intellectual and cultural resource for all students, faculty, and staff of the University, and for the larger community and region which it serves.

**Career Areas**

The liberal arts and sciences provide the basic background which is essential for careers in many areas. Some examples are listed below:

Actuarial Science	Advertising
Agriculture	Architecture
Business Management	College Teaching
Dentistry	Engineering
Forestry	Government Service
Health Services	Home Economics
Law	Library Science
Medicine	Nursing
Pharmacy	Scientific Research
Social Work	Veterinary Medicine
Wildlife Management	

The baccalaureate degree is sufficient preparation to begin a career in many such areas. For others, graduate or professional training after the baccalaureate degree is necessary. Montana State University Billings does not offer baccalaureate degrees in all of these areas, but information concerning career opportunities in specific areas and the kinds of college degrees and specializations that employers look for in a student's preparation for a career is available through the various academic departments and the Office of Career Services.

**Requirements for Bachelor of Arts and Bachelor of Science Degrees**

Candidates for the Bachelor of Arts and the Bachelor of Science degree are subject to all of the general academic regulations set forth in this *General Bulletin*. The following is a summary of degree requirements:

**I. General Education – 31 credits**

A complete listing of General Education requirements is included in the Academic Affairs section (see page 69). Note: Students seeking a Bachelor's degree at Montana State University Billings must take WRIT 101 and an advanced writing class. Advanced writing classes for the College of Arts and Sciences vary. Students should consult with their advisors.

## II. Degree Requirements in Language

### Definition of “Language”

Any spoken or written language (excluding sign and computer languages) for which a measuring instrument is available or for which a valid measuring technique can be devised may be used to meet the proficiency requirement. Proficiency, advanced placement, and equivalency credit are determined by the Department of English, Philosophy and Modern Languages. (In the case of American Indian Languages, the evaluation is done in conjunction with the appropriate faculty in the Department of Social Sciences and Cultural Studies.) Language credits used for fulfillment of the degree requirement may also apply toward an appropriate language major or minor offered by the University.

Language requirements are different for different degrees and are described in the section with the degree.

#### A. B.A. Degree Language Requirement

In Bachelor of Arts degrees requiring foreign language, the language requirement is satisfied by demonstrating proficiency in a language other than English equivalent to satisfactory completion of second-year college-level work in that language or languages courses number 101-102 and 201-202 in the same language (maximum of 14 credits). Language requirements may be different for some B.A. degrees and are described in the section with the degree.

#### B. B.S. Degree Language Requirement

The language requirement for the Bachelor of Science degree is satisfied by demonstrating proficiency in a language other than English equivalent to satisfactory completion of first-year college-level work in that language or language courses numbered 101-102 in the same language (maximum of 8 credits).

## III. Degree Requirements in

### Mathematics

The mathematics requirement for the Bachelor of Science degree is satisfied in one of two ways:

A. Taking two (2) approved mathematical sciences courses (Mathematics, Statistics, or Computer Science) in addition to the course taken to satisfy the General Education requirement in Mathematics.

B. Taking \*M 171 Calculus I to satisfy the General Education requirement in Mathematics, and completing one (1) additional approved

mathematical sciences course (M 172 Calculus II is recommended).

Students should consult their major department to determine the mathematical sciences courses recommended for their major.

\*May satisfy General Education requirements.

## IV. Majors and Minors

- A. An academic major is required for graduation. Majors as listed in the disciplines consist of 30 or more credits.
- B. An academic minor is required in many departments. Minors as listed in the disciplines consist of 20 or more credits.
- C. In lieu of the major-minor combination, some disciplines offer extended majors. Extended majors consist of 40 or more credits, and with this type of major a minor is not required.

## V. Electives

In addition to the above requirements, elective courses are necessary to make a total minimum of 120 semester credits for the degree or, in the case of the major with a teaching licensure option 128 credits. At least 36 semester credits must be in upper division courses (numbered 300 or above), and at least 12 semester credits of these upper division credits must be in the subject major program.

## Bachelor of Science in Liberal Studies

Requirements for the BSLS are listed in the Interdisciplinary Degree section (see page 82). This program is also offered in an online format.

## Bachelor of Applied Science Degree

Requirements for the BAS Degree are listed in the Interdisciplinary Degree section (see page 82). This program is also offered in an online format.

## Associate of Arts and Associate of Science Degree Programs

Requirements for the Associate of Arts and Associate of Science degrees are listed in the Associate of Arts & Associate of Science Degrees section (see page 78), as well as within each department.

## The Department of Art

***Dr. Patricia Vettel–Becker,***  
***Chairperson***

***LA 106, (406) 657–2324***

***pvbecker@msubillings.edu***

Professor: Vettel-Becker

Assistant Professors: Earnhart, Gilbertson, Lightner,  
O'Brien, Pierce, Rhoades

Gallery Director: Gilbertson

Professor Emeritus: Cast, Jussila, Pollock, Selsor

## Undergraduate Degrees and Majors

**Bachelor of Arts, Major in Art**

**Bachelor of Arts, Major in Art Education: K-12**

**Bachelor of Fine Arts in Art**

**Minor and Teaching Minor: Art**

## Mission of the Department

The mission of the Department of Art at Montana State University Billings is to educate students in the understanding, production, and analysis of visual art and culture. This educational process includes the development of technical, conceptual and art historical awareness; the development or furtherance of visual and tactile insight; the development of appropriate verbal and written skills; and the fostering of professional attitudes and goals. The curriculum is designed to prepare students to face the challenges and diverse career opportunities that exist within the discipline and to give students the knowledge, practical skills, and maturity of critical thinking that is necessary to embark on study at higher levels.

This mission is accomplished through classes in various studio media; in art history, theory, and criticism; through individual advisement and assistance from a concerned faculty; through exhibitions in the Northcutt Steele Gallery, the Yellowstone Art Museum, and other

museums and galleries in the area; through the activities of the Art Students' League and Et Vasa Ordinem; through the visiting artist programs; and through career advisement.

Coursework in art history, ceramics, drawing, new media, painting, photography, printmaking, and sculpture lead to a Bachelor of Arts (BA) degree in Art or a Bachelor of Fine Arts (BFA) degree in Art.

The BA in Art is a liberal arts degree that focuses on art in the context of a broad program of general studies. Students choose an Area of Emphasis in studio art or art history with the option to complete a minor in another academic discipline.

The BA in Art Education is designed for the student seeking licensure (K-12) in the extended major teaching field of art.

The BFA in Art is considered the professional undergraduate degree in studio art and is designed to provide students with a thorough grounding in fundamental principles and techniques with opportunities for emphasis in one or more specific studio art areas. Students may also obtain teaching licensure with a BFA, but the coursework extends beyond the minimum credits required for the BA in Art Education.

Students planning to pursue a graduate degree in Art Therapy are advised to complete the BA in Art degree with an Area of Emphasis in studio art and a minor in Psychology.

## Learning Outcomes

Students in all art major and minor programs will:

- Demonstrate knowledge of formal elements and principles, artistic genres, stylistic categories, materials and techniques and contextual factors.
- Exhibit proficiency with a range of media in creating two- and three-dimensional artworks.
- Demonstrate research, analysis, and organizational abilities in relation to artworks.
- Articulate art concepts in appropriate oral and written professional presentations.

## Career Opportunities

Many careers require the expressive, communicative and imaginative skills of individuals educated in the visual arts. According to various reports, career possibilities in the visual arts are more diversified now than ever before. Whether designing one's own art career or following an already existing path, exciting opportunities exist for artists and art educators. Basic preparation for professional studio artist and art teacher careers can be supplemented with consideration of the following: positions in a museum, gallery or center as director, manager, curator, conservator; art historian; art librarian; illustrator; designer; architect; therapist; personnel connected to public and private art granting and government agencies, among many others.

## Accreditation

The Department of Art is accredited by NASAD (National Association of Schools of Art and Design).

## Auditing Courses

Studio classes, including Practicum and Workshop classes as designated in the General Bulletin, **may not** be audited. Art History and Seminar classes may be audited with instructor permission and following University policies.

## Advising Information

Students are required to meet with their advisor each semester to confirm that their Plan of Study is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner. Faculty advisors work with students to explore appropriate internships, cooperative education placements and/or experiential learning opportunities which will enhance the student's academic program. In addition, advisors provide assistance in selecting elective courses which support the student's interests, career plans and Plan of Study.

Academic advising services for all freshmen Arts and Sciences majors are provided through Advising & Career Services on McMullen Hall first floor west. Upon declaring a specific major, Arts and Science majors will be assigned to a faculty advisor in their department for upper division advising. Advising files for all upper-division students are maintained in the departmental office of the program in which the student is majoring. Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

**A grade of "C" or higher is mandatory in all Art classes satisfying major and minor requirements.**

## Location of the Art Facilities

The Department of Art is housed in various campus locations. The Liberal Arts Building houses the main Art office, Visual Resource Center, the Northcutt Steele Gallery, the Outer Gallery and the Student Gallery. Studios for drawing, design, digital photography, darkroom photography, new media, painting and printmaking are in the same location. Art history courses meet in various buildings with multimedia classrooms. Studio spaces for ceramics and sculpture are in the Art Annex. Art Education classes meet in the College of Education building.

## Gallery Complex

The Department of Art coordinates everyday access to the Northcutt Steele Gallery located in the Liberal Arts Building. The gallery features a variety of exhibitions including the annual art faculty exhibition, juried student exhibition, and individual artist exhibitions of national, regional, and area significance. The Student Gallery and Outer Gallery are dedicated to the exhibition of student work. Four other art collections are maintained and shown at various times: Permanent Art Collection, Opal Leonard Collection of Chinese and Japanese Art, Andy Warhol Photographic Collection, and the Helen and Paul Covert Collection of Fine Art.

## Explanation of Credits in Art

The Department of Art offers two types of classes: 1) classes which meet one hour per week for each earned credit hour referred to as "Lecture" (Lec), and 2) classes which are a combination of studio, recitation and discussion referred to as "Studio" (Stu). "Studio" classes meet one hour per week for each credit hour designated as recitation/discussion (Rct) and two hours per week for each credit hour designated as Studio (Stu). Students should plan to study on their own for an additional two hours for each credit earned. The designation of a course as lecture (Lec), recitation/discussion (Rct) or studio (Stu) can be found in Course Terms and Definitions.

## Studio Use

Unscheduled studio classrooms are available for art student use during the day. Students should avail themselves of the open studios at these times. In addition, an adopted "After Hours Studio Use Policy" is posted in each classroom for other hours.

## Bachelor of Arts Degree Major in Art

### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses in General Education also satisfy requirements in this major.  
NOTE: A grade of “C” or higher is mandatory in all Art courses satisfying major and minor requirements

### Language Requirement (see page 122) ..... 14

### Writing Requirement

WRIT 201 College Writing II ..... 3

### Required Art Courses

*ARTH 150 Introduction to Art History .....	3
ARTH 352 Visual Theory and Criticism .....	3
ARTZ 104 Studio Safety .....	1
*ARTZ 105 Visual Language-Drawing .....	3
ARTZ 106 Visual Language-2-D Foundations.....	3
ARTZ 108 Visual Language-3-D Foundations.....	3
ARTZ 209 Introduction to Professional Practices .....	1
ARTZ 409 Advanced Professional Practices.....	1
ARTZ 499 Senior Project/Capstone .....	1
<b>Total.....</b>	<b>19</b>

### Studio Art Requirements

Select one course from each of the following three areas:

#### Area One

ARTZ 258 New Media I.....	4
ARTZ 271 Printmaking I.....	4
ARTZ 273 Printmaking I-Lithography.....	4
ARTZ 284 Photography I-Techniques and Processes .....	4

#### Area Two

ARTZ 211 Drawing I .....	4
ARTZ 221 Painting I .....	4

#### Area Three

ARTZ 231 Ceramics I .....	4
ARTZ 251 Sculpture I .....	4
<b>Total.....</b>	<b>12</b>

### Art History Requirement

Select one course from each of the following two areas:

#### Area One

ARTH 321 Renaissance and Baroque Art .....	3
ARTH 342 Modern Art .....	3

#### Area Two

ARTH 435 Art of the United States.....	3
ARTH 436 The History of Women in Art.....	3
ARTH 439 American Indian Art .....	3
ARTH 451 Contemporary Art .....	3
ARTH 494 Seminar .....	3
<b>Total.....</b>	<b>6</b>

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts, Major in Art*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts Major in Art. Students may not be able to follow the plan exactly. Students must consult with their advisors to plan classes before registering each term.

First Year	F	S
ARTZ 106	3	
ARTZ 104		1
ARTZ 108		3
ARTZ 105		3
ARTH 150	3	
WRIT 101	3	
WRIT 201		3
General Education	6	6
<b>Total</b>	<b>15</b>	<b>16</b>

Second Year	F	S
200-level Studio Art	8	4
ARTZ 209	1	
Foreign Language	4	4
General Education	3	7
<b>Total</b>	<b>16</b>	<b>15</b>

Third Year	F	S
Area of Emphasis	4	4
ARTH 352	3	
Minor	6	3
300-level Art History		3
Foreign Language	3	3
<b>Total</b>	<b>16</b>	<b>13</b>

Fourth Year	F	S
ARTZ 409	1	
ARTZ 499		1
400-level Art History		3
Area of Emphasis	4	
Minor	6	6
Electives	3	3
<b>Total</b>	<b>14</b>	<b>13</b>

**Area of Emphasis**

Select one of the two areas listed below:

**Studio Art**

300- and 400-level courses in Studio Art ..... 12

**Art History**

300- and 400-level courses in Art History ..... 12

**Area of Emphasis total** ..... 12

**Total minimum credits required for major** ..... 49

**Optional Minor** ..... V

This degree qualifies as an extended major because it requires at least 40 credits in art. Therefore, a minor in another discipline is optional.

**Electives** ..... 3-8

The total number of elective credits will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree** ..... 120

\*May satisfy General Education requirements.

There is a lab fee for most studio classes, payable at registration.

*Certain courses in this program have prerequisites; others are offered only in alternate years. Students should check course descriptions for required prerequisites.*

## Bachelor of Arts Degree

### Major in Art Education: K–12

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

**General Education Requirements ..... 31**  
**ARTH 150 is designated as a General Education course and is required for the major. EDU 105 is designated as a General Education course and is required in the Professional Core.** Students should consult with their faculty advisors to ensure proper selection of General Education courses (see page 69).

**Note:** A grade of “C” or higher is mandatory in all Art courses satisfying major and minor requirements.

**Teaching Licensure Option Professional Core (see page 266) ..... 35**  
 (includes ARTZ 402 Teaching Art I—K-12, 3 credits)

**Writing Requirement**  
 WRIT 201 College Writing II ..... 3

**Required Art Courses**  
 \*ARTH 150 Introduction to Art History ..... 3  
 ARTH 352 Visual Theory and Criticism ..... 3  
 ARTZ 104 Studio Safety ..... 1  
 \*ARTZ 105 Visual Language-Drawing ..... 3  
 ARTZ 106 Visual Language-2-D Foundations ..... 3  
 ARTZ 108 Visual Language-3-D Foundations ..... 3  
 ARTZ 209 Introduction to Professional Practices ..... 1  
 ARTZ 409 Advanced Professional Practices ..... 1  
 ARTZ 499 Senior Project/Capstone ..... 1  
**Total ..... 19**

**Studio Art Requirements**  
 ARTZ 211 Drawing I ..... 4  
 ARTZ 221 Painting I ..... 4  
 ARTZ 231 Ceramics I ..... 4  
 ARTZ 251 Sculpture I ..... 4  
 ARTZ 258 New Media I ..... 4  
 ARTZ 271 Printmaking I ..... 4  
**OR** ARTZ 273 Printmaking I-Lithography ..... 4  
 ARTZ 284 Photography I-Techniques and Processes ..... 4  
 300- and 400-level Studio Art courses ..... 8  
**Total ..... 36**

**Art History Requirements**  
 ARTH 321 Renaissance and Baroque Art ..... 3  
 ARTH 342 Modern Art ..... 3  
 400-level Art History course ..... 3  
**Total ..... 9**

*Continued...*

## SUGGESTED PLAN OF STUDY

### *B.A., Major in Art Education: K–12*

The following suggested schedule provides a general overview of courses and work that will enable the Art Education student to progress through the degree in an orderly and timely manner. Students *must* consult with their advisors to plan classes before registering each term.

First Year	F	S
WRIT 101	3	
WRIT 201		3
ARTZ 104	1	
ARTZ 106	3	
ARTZ 108	3	
ARTZ 105		3
ARTH 150		3
EDU 105	3	
EDSP 204		3
EDU 220		3
General Education	3	3
<b>Total</b>	<b>16</b>	<b>18</b>
Take PPST Spring Semester		

Second Year	F	S
ARTZ 284	4	
ARTZ 209	1	
ARTZ 231		4
ARTZ 258	4	
ARTZ 211	4	
ARTZ 221		4
ARTH 321	3	
EDU 221		3
General Education		6
<b>Total</b>	<b>16</b>	<b>17</b>
Apply for Admission to Educator Preparation Program		

Third Year	F	S
ARTZ 251		4
ARTZ 271 or 273		4
ARTH 352	3	
Upper Division Studio Art	4	
EDU 333	3	
ARTH 342		3
HTH 412		1

**Electives .....0-5**

**Total minimum credits for degree..... 128**

\*May satisfy General Education requirements.

There is a lab fee for most studio classes, payable at registration.

*Certain courses in this program have prerequisites; others are offered only in alternate years. Students should check course descriptions for required prerequisites.*

General Education	7	6
<b>Total</b>	<b>17</b>	<b>18</b>
Apply to Student Teach		
Apply to Graduate		
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
Upper Division Studio Art	4	
ARTZ 409	1	
ARTZ 499	1	
400-level Art History	3	
EDU 380	2	
ARTZ 402	3	
EDU 406		3
EDU 495C		9
<b>Total</b>	<b>14</b>	<b>12</b>
Apply for licensure Spring Semester.		



## Bachelor of Fine Arts Degree

### Major in Art

**General Education Requirements** ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses in General Education also satisfy requirements in this major. NOTE: A grade of “C” or higher is mandatory in all Art courses satisfying major and minor requirements

#### Writing Requirement

WRIT 201 College Writing II ..... 3

#### Admittance to Degree Candidacy

All students initially enter as Bachelor of Arts (B.A.) candidates. Students interested in earning the Bachelor of Fine Arts Degree (B.F.A.) must apply for candidacy and undergo a portfolio and transcript review no later than the end of the first half of the degree program. Students not admitted to the B.F.A. program in their first application may continue as B.A. candidates or may reapply to the B.F.A. program the following semester.

#### Required Art Courses

\*ARTH 150 Introduction to Art History ..... 3  
 ARTH 321 Renaissance and Baroque Art ..... 3  
 ARTH 342 Modern Art ..... 3  
 ARTH 352 Visual Theory and Criticism ..... 3  
 ARTH 451 Contemporary Art ..... 3  
 ARTZ 104 Studio Safety ..... 1  
 \*ARTZ 105 Visual Language-Drawing ..... 3  
 ARTZ 106 Visual Language-2-D Foundations ..... 3  
 ARTZ 108 Visual Language-3-D Foundations ..... 3  
 ARTZ 209 Introduction to Professional Practices ..... 1  
 ARTZ 211 Drawing I ..... 4  
 ARTZ 221 Painting I ..... 4  
 ARTZ 231 Ceramics I ..... 4  
 ARTZ 251 Sculpture I ..... 4  
 ARTZ 258 New Media I ..... 4  
 ARTZ 271 Printmaking I ..... 4  
**OR** ARTZ 273 Printmaking I-Lithography ..... 4  
 ARTZ 284 Photography I-Techniques and Processes ..... 4  
 ARTZ 406 Gallery Professional Practices ..... 3  
 ARTZ 409 Advanced Professional Practices ..... 1  
 ARTZ 499 Senior Project/Capstone ..... 1  
**Total** ..... 59

#### Restricted Art Electives

Select one course from this group:

ARTH 435 Art of the United States ..... 3  
 ARTH 436 The History of Women in Art ..... 3  
 ARTH 439 American Indian Art ..... 3  
 ARTH 455 Art and the Environment ..... 3  
 ARTH 494 Seminar/Workshop (Art History) ..... 3  
**Total** ..... 3

Continued...

## SUGGESTED PLAN OF STUDY

### *Bachelor of Fine Arts, Major in Art*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts Major in Art. Students may not be able to follow the plan exactly. Students must consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
ARTZ 106	3	
ARTZ 104		1
ARTZ 108		3
ARTZ 105	3	
ARTH 150		3
WRIT 101	3	
WRIT 201		3
General Education	6	6
<b>Total</b>	<b>15</b>	<b>16</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
ARTZ 209	1	
ARTZ 211	4	
ARTZ 221		4
ARTZ 231	4	
ARTZ 251		4
ARTZ 258		4
ARTZ 271 or 273		4
ARTZ 284	4	
ARTH 321	3	
<b>Total</b>	<b>16</b>	<b>16</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
ARTH 352	3	
ARTH 342		3
Area of Concentration Art Studio Upper Division	4	
Art Studio Upper Division	4	4
General Education	4	6
ARTZ 406		3
<b>Total</b>	<b>15</b>	<b>16</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
ARTZ 409	1	
ARTZ 499		1
Area of Concentration Art Studio Upper Division	4	4
Art Studio Upper Division	4	4
ART 400-level History	3	
ARTH 451		3
<b>Total</b>	<b>12</b>	<b>12</b>

**Upper Division Studio Art ..... 28**

Twenty-eight hours of upper division studio art credits to include a minimum of 12 credits in one Area of Concentration (Ceramics, Drawing and Painting, New Media and Photography, or Sculpture).

**Electives ..... 2****Total minimum credits required for degree..... 120**

***NOTE: ARTH 150 and ARTZ 105 double count in General Education and the major, so the credits total 120.***

\*May satisfy General Education requirements.

There is a lab fee for most studio classes, payable at registration.

*Certain courses in this program have prerequisites; others are offered only in alternate years. Students should check course descriptions for required prerequisites.*

## Minor in Art

*ARTH 150 Introduction to Art History .....	3
ARTH 352 Visual Theory and Criticism .....	3
*ARTZ 105 Visual Language-Drawing .....	3
ARTZ 106 Visual Language-2-D Foundations.....	3
ARTZ 108 Visual Language-3-D Foundations.....	3
Art Electives .....	8-9
<b>Total minimum credits required for minor ....</b>	<b>23-24</b>

Other specific minors are available. Please speak with your faculty advisor.

\*May satisfy General Education requirements.

## Teaching Minor in Art (K–12)

For students gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### Required Courses

*ARTH 150 Introduction to Art History .....	3
ARTH 352 Visual Theory and Criticism .....	3
*ARTZ 105 Visual Language-Drawing .....	3
ARTZ 106 Visual Language-2-D Foundations .....	3
ARTZ 108 Visual Language-3-D Foundations .....	3
ARTZ 258 New Media I .....	4
^ARTZ 402 Teaching Art I—K-12 .....	3
<b>Total .....</b>	<b>22</b>

^ARTZ 402 is required in the Professional Core.

### Select one course from the following:

ARTZ 211 Drawing I .....	4
ARTZ 221 Painting I .....	4
ARTZ 271 Printmaking I .....	4
ARTZ 273 Printmaking I-Lithography .....	4
ARTZ 284 Photography I-Techniques and Processes .....	4
<b>Total .....</b>	<b>4</b>

### Select one course from the following:

ARTZ 231 Ceramics I .....	4
ARTZ 251 Sculpture I .....	4
<b>Total .....</b>	<b>4</b>

**Total minimum credits required for minor ..... 30**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; others are offered only in alternate years. Students should check course descriptions for required prerequisites.*

# The Department of Biological and Physical Sciences

***Dr. Kurt Toenjes, Chairperson***

***Sci 139, (406) 657-2031***

**ktoenjes@msubillings.edu**

Analytical Chemistry: Queen  
Anatomy & Physiology: Castles  
Biochemistry: Butler  
Cell & Molecular Biology: Toenjes  
Ecology/Zoology: Barron  
Geology: Friedman  
Inorganic Chemistry: Tayer  
Microbiology: Lewis  
Nutrition: McMullen  
Organic Chemistry: Dillman  
Physics: Snyder, Wiles  
Professor Emeritus: Grant, Khaleel, Schoenthal, Wiatr, Zwick

## Sciences at MSU Billings

Biology, Chemistry, Physics and Earth Science are core programs in the sciences at MSU Billings. Biology is the study of living organisms. Biologists study interactions among and within organisms in order to understand processes characteristic of life. Chemistry, Physics and Earth Science are physical sciences exploring the composition, structure, properties and interactions of matter. Chemistry is the study of differences and similarities of elements in order to understand how they interact to produce diverse molecules. Physics examines the properties of atoms and laws governing the makeup of matter. Earth Science is the study of minerals and soils, their origin, change, and distribution. Geography is an all-encompassing discipline that foremost seeks to understand the Earth and all of its human and natural complexities—not merely where objects are, but how they have changed and come to be.

## Research

Science faculty at MSU Billings encourage undergraduate students to participate in research. Every student is given the opportunity to explore a research problem in the sciences under the guidance of a faculty sponsor. Faculty conduct research in molecular genetics, microbiology, animal physiology, organic chemistry, analytical chemistry, topics in laser

spectroscopy, plant physiology, plant systematics, geology, and ecology and evolution. Active involvement in research with faculty is an important part of student success in the sciences at MSU Billings.

## Undergraduate Degrees and Majors

### Bachelor of Arts

**Major:** Biology

### Bachelor of Science

**Major:** Biology

**Options:** Environmental Science, Medical Laboratory Science, Teaching Licensure

**Major:** Broadfield Science

**Option:** Teaching Licensure

**Major:** Chemistry

**Option:** Teaching Licensure

**Minors:** Biology, Chemistry, Earth Science, Geography, Physics

**Teaching Minors:** Biology, Chemistry, Earth Science, Geography, Physics

**Pre-Professional Programs:** Medicine, Dentistry, Pharmacy, Physical Therapy, Pre-Engineering, Veterinary Medicine

**Associate of Science Programs of Study in:** Allied Health, Environmental Science, Pre-Engineering.

## Program Outcomes

Programs offered through the Department of Biological and Physical Sciences share many outcomes. Upon program completion students will:

- Understand the basic principles and laws governing our world and have a global awareness of their discipline.
- Demonstrate basic competency in laboratory, field and computer skills related to the sciences.
- Be familiar with accessing and interpreting the scientific literature.
- Be proficient in written and oral communication in the sciences.
- Understand scientific methodology, and conduct scientific investigations using it.

- Be prepared to participate in professional activities.

## Career Opportunities

Most students who graduate from MSU Billings in the sciences typically receive a Bachelor's degree in Biology or Chemistry. In some instances our graduates directly enter the job market. For example, our Biology and Chemistry teaching licensure programs allow students to enter the teaching profession with appropriate expertise and licensure to teach in Montana. Our program in Medical Laboratory Science allows students to achieve national certification for a career in clinical/medical laboratory science. Students seeking jobs with private industry, state (e.g. Fish, Wildlife & Parks) or federal (e.g. FBI) agencies have also been successful. Alternatively, many of our graduates choose to continue their training beyond a four year undergraduate program. They have been accepted in professional programs in the health sciences (medical, dental, pharmacy & veterinary medicine) and major university graduate programs leading to a master's degree or Ph.D. in Biology, Chemistry and Physics.

## Advising Information

Academic advising for all freshmen Arts and Sciences majors is initially provided through Advising & Career Services on campus. Science majors are then assigned a faculty advisor in the Sciences with expertise matched to their interest. Students meet with their faculty advisor each semester to review their progress and make any changes required for a complete and accurate Plan of Study to satisfy program requirements in a timely manner. Faculty advisors also work with students to explore internships, cooperative education placements and opportunities in research to enhance the student's academic program. In addition, faculty advisors provide assistance in selecting elective courses which support the student's interests, career plans and Plan of Study. Students are ultimately responsible for meeting degree requirements, and science faculty at MSU Billings believe very strongly that academic advising is a vital component to ensuring student success.

## Biology

Biology programs available at MSU Billings include (1) the Biology Major (2) the Biology Minor, and (3) the Biology Teaching Minor. The biology major also has several options and plans of study to allow students to specialize in an area of interest. The biology curriculum is designed to provide biology students with the opportunity for the best possible undergraduate

education in biology. In addition to the transmission of factual information, the biology curriculum places emphasis on the development of critical thinking skills in contemporary areas of biology. This is accomplished through a combination of lecturing, experimental laboratory exercises, independent learning by data analysis, research and field projects, seminars, incorporation of extensive writing, library research, and use of computers in data analysis.

MSU Billings' program in biology begins with a two-year core curriculum emphasizing the broad scope of biology through coursework in biological principles, biological diversity, cell biology and genetics. Other required advanced courses and electives are taken in the junior and senior year. While building a solid foundation in biology, the program allows students to match their interests with professional requirements.

Students in biology at MSU Billings have an opportunity to focus on specific areas in biology through a variety of options and plans of study. Options available to students include Environmental Sciences, Biology Teaching Licensure, and Chemistry Teaching Licensure. The Environmental Sciences Option offers in-depth specialization to include an area of biology having regional and global importance. Specialization in biology is possible with the choice of an appropriate plan of study and in consultation with the faculty advisors who can provide students with the best educational experience at MSU Billings.

All students in the Biology program also take a Capstone seminar course in their senior year. This course is designed to ensure a standard of excellence in knowledge of basic biological concepts, and integration of those concepts with other areas in Science.

A maximum of five semester credits of BIOB 490, 492, 494, 495, and 498 can be applied to the BA or BS degree as unrestricted biology electives. Excess credits earned in these courses may still be applied to graduation as unrestricted electives.

## Chemistry

Chemistry programs at MSU Billings include (1) the Chemistry Major (2) the Chemistry Minor and (3) the Chemistry Teaching Minor. Students taking the first two years in a chemistry program will have a well-rounded background in organic and inorganic chemistry. Students majoring in chemistry will receive additional training in physical chemistry, quantitative chemistry, instrumentation, biochemistry and advanced organic or inorganic chemistry.

The chemistry program is designed to be flexible enough to meet individual interests of students and comprehensive enough to be competitive nationally. A chemistry major can expect to find employment in private, state, or federal laboratories ranging from research and development to quality control. Course selection and/or selection of a minor can open additional choices in other fields such as biology, geology, business, or health sciences. Graduate education is encouraged as an avenue to expand career opportunities.

## Earth Science

Earth Science programs available at MSU Billings include (1) the earth science minor with an emphasis in Geology and (2) the Earth Science Teaching Minor which covers a broader field of the earth sciences leading to teacher licensure.

The Earth Science Minor with a geology emphasis provides opportunities for study in the areas of: landform development, igneous, sedimentary and metamorphic rocks, crystallography, earth history, earth structures, and independent research. Students completing this program may find employment in the geological, engineering and environmental areas as well as employment as interpreters with park systems, nature centers and museums.

The Earth Science Teaching Minor provides opportunity for study in a broader area of earth sciences including geology, meteorology and astronomy. This broader field of study leads to an earth science teaching endorsement in the State of Montana. Students completing this track of study would be predominantly employed by educational systems.

## Broadfield Science

The Broadfield Science program offers students a broad-based foundation in the sciences through coursework in Biology, Chemistry, Earth Science and Physics. The program provides graduates with the knowledge and skills necessary to qualify for positions requiring a broad-based foundation in all sciences.

The Broadfield Science Degree with Teaching Endorsement is especially attractive to students interested in teaching science because they will have a strong foundation in biology, chemistry, earth science, and physics. With additional Professional Core requirements met for teacher licensure, students

entering this program would be regarded as “highly qualified” according to national standards, and thus qualify for K-12 teaching opportunities in broadfield science.

## Geography

Geography programs available at MSU Billings include (1) a Geography Minor and (2) a Geography Teaching Minor.

Students seeking a Geography Minor will be provided with an opportunity to study the phenomena, events and physical properties on the Earth’s surface, including their interrelationships with human beings. Students in the program will learn specific geographic techniques and their applications to regional, national and global levels. Technical skills in mapping, computer applications and survey research will be presented. Students completing this program may find employment with planning, interpretative and governmental agencies.

The Geography Teaching Minor will provide education majors with the necessary skills to obtain a teaching endorsement in geography. The student will be provided with an opportunity to study both the physical and cultural aspects of geography. However, the greater emphasis is on the cultural aspects of geography and their application to educational instruction. Students completing this program would be prepared to seek employment in regional, state and federal educational programs.

## Physics

Physics programs available at MSU Billings include (1) the Physics Minor, (2) the Physics Teaching Minor, and (3) the Pre-engineering program. Physics is the study of matter, energy, and their interactions; this includes all physical structures and phenomena. Experiments and observations in physics have shown that the operation of the universe at all levels is based on a few fundamental laws. The study of physics is the study of these laws and their applications.

Requirements for the pre-engineering program and physics teaching minor are listed under the Pre-Professional Program and College of Education sections, respectively. It is recommended that chemistry teaching majors complete their teaching minors in physics, since many high schools require the teaching of physics and chemistry by the same individual. Chemistry and math majors should also consider a minor in physics.

## Medical Laboratory Science Program

Students wishing to become medical/clinical lab scientists may choose the Medical Laboratory Science option in the Biology Program.

Additional credits are required because a fifth year of clinical experience is required in this program. Professional training programs approved by the National Accrediting Agency for Clinical Laboratory Science (NAACLS, [www.naacls.org](http://www.naacls.org)) are 12 months in duration. In the fourth year, students apply for an internship consisting of 37 credits of clinical experience during the summer, fall, and winter semesters in an approved training program at one of the following institutions: MSU Bozeman; University of North Dakota, Grand Forks; Sacred Heart School of Medical Technology, Spokane, Washington; The Colorado Center for Medical Laboratory Sciences, Aurora. Upon completion of the internship, students will be qualified to take a national registry examination administered by the American Society for Clinical Pathologists or the National Certification Agency.

For additional information, contact Dr. Rhonda Dillman at (406) 657-2031 or [rdillman@msubillings.edu](mailto:rdillman@msubillings.edu)

## Pre-Medical Sciences

Students interested in professional programs in medical sciences such as medicine, dentistry, veterinary medicine, physician assistant, physical therapy and pharmacy must obtain a Bachelor's degree in preparation for most of these professional programs. No specific undergraduate major is required for most of these health professions, but a strong academic background in biology and chemistry is expected for admission to these programs.

Medical science programs look for students who are well-rounded. Individual plans of study can be designed in consultation with a faculty advisor to provide the student with the maximum opportunity for pursuing goals. Students seeking admission to a medical science program apply to an appropriate professional school before graduation from MSU Billings. Biology and Chemistry faculty assist and advise the student in arranging these applications.

## Pre-Engineering

Students interested in a career in Engineering may pursue a two-year course of study at MSU Billings, culminating in an Associate of Science Degree (A.S.) with a Program of Study in Pre-Engineering. This two-year course of study allows students to complete their general education requirements as well as the prerequisites for further engineering study including introductory engineering courses in statics, dynamics, and strength of materials. Students are also required to participate in a two-credit introduction to general engineering course during their first year to help them refine their career goals through the exploration of a variety of engineering disciplines. This program can be tailored for specific engineering disciplines or can be pursued as a general course of study in pre-engineering. Ultimately, students wishing to further their engineering education will transfer into an engineering bachelor's program in the discipline of their choosing at an accredited university.

In order to complete the requirements for an A.S. Program of Study in Pre-Engineering in two years, it is generally necessary to carry 16-18 credit hours per semester.

## Bachelor of Arts Degree Major in Biology

Credits

**General Education Requirements** ..... 31

The following General Education courses also satisfy requirements in the major: BIOB 160, BIOB 161, CHMY 141, M 171, and STAT 216. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

**NOTE:** 10 credits will be filled with requirements below, leaving 21 credits needed in General Education.

**Language Requirement (see page 122)** ..... 8

### Biology Requirements

\*BIOB 160 Principles of Living Systems ..... 3  
 \*BIOB 161 Principles of Living Systems Laboratory ..... 1  
 BIOB 170 Principles of Biological Diversity ..... 3  
 BIOB 171 Principles of Biological Diversity Laboratory ..... 1  
 BIOB 260 Cellular and Molecular Biology ..... 3  
 BIOB 261 Cellular and Molecular Biology Laboratory ..... 1  
 BIOB 375 General Genetics ..... 3  
 BIOB 376 General Genetics Lab ..... 1  
 BIOB 425 Advanced Cell and Molecular Biology ..... 3  
 BIOB 426 Advanced Cell and Molecular Biology Lab ..... 1  
 BIOB 490 Undergraduate Research ..... 2  
 BIOB 499 Senior Thesis/Capstone ..... 1  
 BIOE 370 General Ecology ..... 3  
 BIOE 371 General Ecology Laboratory ..... 1  
 Unrestricted Biology electives ..... 15  
     Selected in consultation with advisor. At least 7 credits should be in upper division courses.

**Biology Total** ..... 42

### Chemistry Requirements

\*CHMY 141 College Chemistry I ..... 3  
 \*CHMY 142 College Chemistry Laboratory I ..... 1  
 CHMY 143 College Chemistry II ..... 3  
 CHMY 144 College Chemistry Laboratory II ..... 1  
 CHMY 211 Elements of Organic Chemistry ..... 3  
 CHMY 212 Elements of Organic Chemistry Laboratory ..... 1  
 BCH 380 Biochemistry ..... 3  
 BCH 381 Biochemistry Lab ..... 1  
**Chemistry Total** ..... 16

### Mathematics or Statistics Requirement

(choose one of the following)

\*M 171 Calculus I ..... 4  
 \*STAT 216 Introduction to Statistics ..... 4  
**Mathematics/Statistics Total** ..... 4

\*May satisfy General Education requirements.

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts in Biology*

First Year	F	S
BIOB 160/161	4	
BIOB 170/171		4
CHMY 141/142	4	
CHMY 143/144		4
General Education	V	V
Elective	V	V
<b>Total</b>	<b>15</b>	<b>15</b>

Second Year	F	S
BIOB 260/261	4	
BIOB 375/376		4
CHMY 211/212		4
Math	4	
General Education	V	V
<b>Total</b>	<b>15</b>	<b>15</b>

Third Year	F	S
BIOE 370/371	4	
Language	4	4
Biology Electives	4	4
General Education	V	V
Electives	V	
<b>Total</b>	<b>15</b>	<b>15</b>

Fourth Year	F	S
BCH 380/381	4	
BIOB 425/426		4
BIOB 490	2	
BIOB 499		1
Biology Electives	4	3
General Education	V	V
Electives	V	V
<b>Total</b>	<b>15</b>	<b>15</b>



**Total minimum credits required for major ..... 62**

**Restricted electives selected with advisor approval ..... 6**

**Electives ..... 23**

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. For students taking the minimum number of upper division credits in the natural sciences, at least 10 of the elective credits must be 300-level or higher. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree ..... 120**

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Science Degree Major in Biology

### General Education Requirements ..... 31

The following General Education courses also satisfy requirements in the major: BIOB 160, BIOB 161, CHMY 141, and either M 171 or STAT 216. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

**NOTE:** 10 credits will be filled with requirements below, leaving 21 credits needed in General Education.

### Biology Requirements

*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory .....	1
BIOB 170 Principles of Biological Diversity .....	3
BIOB 171 Principles of Biological Diversity Laboratory .....	1
BIOB 260 Cellular and Molecular Biology.....	3
BIOB 261 Cellular and Molecular Biology Laboratory .....	1
BIOB 375 General Genetics .....	3
BIOB 376 General Genetics Lab .....	1
BIOB 425 Advanced Cell and Molecular Biology .....	3
BIOB 426 Advanced Cell and Molecular Biology Lab .....	1
BIOB 490 Undergraduate Research .....	2
BIOB 499 Senior Thesis/Capstone .....	1
BIOE 370 General Ecology.....	3
BIOE 371 General Ecology Laboratory .....	1
BIOM 360 General Microbiology .....	3
BIOM 361 General Microbiology Lab .....	1
Upper Division Biology Electives selected in consultation with advisor .....	17
<b>Biology Total .....</b>	<b>48</b>

### Chemistry Requirements

BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
*CHMY 141 College Chemistry I.....	3
*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II .....	1
CHMY 321 Organic Chemistry I .....	3
CHMY 322 Organic Chemistry Laboratory I.....	1
CHMY 323 Organic Chemistry II .....	3
CHMY 324 Organic Chemistry Laboratory II.....	1
<b>Chemistry Total .....</b>	<b>20</b>

### Mathematics or Statistics Requirement

Choose two of the following:

*M 171 Calculus I .....	4
M 172 Calculus II .....	4
PSYX 223/224 Research Design and Analysis I with Lab .....	4
*STAT 216 Introduction to Statistics .....	4
<b>Mathematics/Statistics Total.....</b>	<b>8</b>

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Biology*

First Year	F	S
BIOB 160/161	4	
BIOB 170/171		4
CHMY 141/142	4	
CHMY 143/144		4
M 171 or STAT 216	4	
M 172 or PSYX 223/224		4
General Education	V	V
<b>Total</b>	<b>15</b>	<b>15</b>
Second Year	F	S
BIOB 260/261	4	
BIOB 375/376		4
CHMY 321/322	4	
CHMY 323/324		4
General Education	V	V
<b>Total</b>	<b>15</b>	<b>15</b>
Third Year	F	S
BCH 380/381	4	
BIOB 425/426		4
BIOE 370/371	4	
PHSX 205/206 or 220/221	4	
PHSX 207/208 or 232/233		4
Biology Electives	3	4
Gen Ed or Electives	V	V
<b>Total</b>	<b>15</b>	<b>15</b>
Fourth Year	F	S
BIOM 360/361	4	
BIOB 490	2	
BIOB 499		1
Biology Electives	6	4
Gen Ed or Electives	V	V
<b>Total</b>	<b>15</b>	<b>15</b>

**Physics Requirements**

Choose one Physics sequence.

\*PHSX 205 College Physics I ..... 3

\*PHSX 206 College Physics I Laboratory ..... 1

PHSX 207 College Physics II ..... 3

PHSX 208 College Physics II Laboratory ..... 1

**OR**

PHSX 220 Physics I ..... 3

PHSX 221 Physics I Laboratory ..... 1

PHSX 232 Physics II and Thermo ..... 3

PHSX 233 Physics II and Thermo Laboratory ..... 1

**Physics Total ..... 8**

**Total minimum credits required for major ..... 74**

**Unrestricted Electives..... 15**

Recommended electives:

CHMY 311 Analytical Chemistry-Quantitative Analysis ..... 3

CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis..... 1

**Total minimum credits required for degree..... 120**

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. Electives should be chosen in consultation with an academic advisor.

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Science Degree

### Major in Biology

#### Environmental Sciences Option

Credits

**General Education Requirements ..... 31**

The following General Education courses also satisfy requirements in the major: BIOB 160, BIOB 161, CHMY 141, M 171, and STAT 216. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

**NOTE:** 10 credits will be filled with requirements below, leaving 21 credits needed in Gen Ed.

**Biology Requirements**

*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory .....	1
BIOB 170 Principles of Biological Diversity .....	3
BIOB 171 Principles of Biological Diversity Laboratory .....	1
BIOB 260 Cellular and Molecular Biology .....	3
BIOB 261 Cellular and Molecular Biology Laboratory .....	1
BIOB 375 General Genetics .....	3
BIOB 376 General Genetics Lab .....	1
BIOB 490 Undergraduate Research	
<b>OR</b> BIOB 498 Internship/Cooperative Education .....	2
BIOB 499 Senior Thesis/Capstone .....	1
BIOE 370 General Ecology .....	3
BIOE 371 General Ecology Laboratory .....	1
BIOM 360 General Microbiology .....	3
BIOM 361 General Microbiology Lab .....	1
Upper Division Biology Electives selected in consultation with advisor .....	11
<b>Total Biology .....</b>	<b>38</b>

**Chemistry Requirements**

*CHMY 141 College Chemistry I.....	3
*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II .....	1
CHMY 211 Elements of Organic Chemistry.....	3
CHMY 212 Elements of Organic Chemistry Laboratory .....	1
<b>Total .....</b>	<b>12</b>

**Chemistry Electives**

Choose 8 credits of Chemistry electives from:

BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
CHMY 311 Analytical Chemistry-Quantitative Analysis .....	3
CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis.....	1
CHMY 421 Advanced Instrument Analysis .....	3
CHMY 422 Advanced Instrument Analysis Laboratory .....	2
<b>Total .....</b>	<b>8</b>

*Continued...*

**SUGGESTED PLAN OF STUDY**

### *Bachelor of Science in Biology Environmental Sciences Option*

<b>First Year</b>	<b>F</b>	<b>S</b>
BIOB 160/161	4	
BIOB 170/171		4
CHMY 141/142	4	
CHMY 143/144		4
GEO 101/102	4	
M 171 or STAT 216	4	
M 171 or STAT 216		4
General Education		V
<b>Total</b>	<b>16</b>	<b>15</b>

<b>Second Year</b>		
BIOB 260/261	4	
BIOB 375/376		4
GPHY 282	3	
CHMY 211/212		4
GEO 205	3	
General Education	V	V
<b>Total</b>	<b>15</b>	<b>13</b>

<b>Third Year</b>		
Biology Elective		4
CHMY 311/312	4	
GEO 309	3	
Earth Science Elective		3
BIOE 370/371	4	
PHSX 205/206 or PHSX 220/221	4	
General Education		V
Electives	V	3
<b>Total</b>	<b>14</b>	<b>16</b>

<b>Fourth Year</b>		
Biology Elective	3	4
BIOM 360/361	4	
BIOB 490	1	1
BIOB 499		1
CHMY 421/422		4
Earth Science Elective	3	
General Education	V	V
Electives		4
<b>Total</b>	<b>14</b>	<b>17</b>

**Mathematics/Statistics Requirements**

\*M 171 Calculus I ..... 4

\*STAT 216 Introduction to Statistics ..... 4

**Mathematics/Statistics Total..... 8****Physics Requirements**

Choose one Physics course with lab.

\*PHSX 205 College Physics I ..... 3

\*PHSX 206 College Physics I Laboratory ..... 1

**OR**

PHSX 220 Physics I ..... 3

PHSX 221 Physics I Laboratory ..... 1

**Total ..... 4****Earth Science and Geography Requirements**

\*GEO 101 Introduction to Physical Geology ..... 3

\*GEO 102 Introduction to Physical Geology Laboratory ..... 1

GEO 205 Mineralogy ..... 4

GPHY 282 Mapping Techniques..... 3

Upper Division Earth Science Electives to be chosen from courses in GEO,  
ERTH, or GPHY ..... 9**Total ..... 20****Total minimum credits required for major..... 90****Electives ..... 8**

Recommended course:

ENST 385 Environmental Impact and Policy Analysis..... 3

**Total Degree Requirements ..... 120**

\*May satisfy General Education requirements.

## Bachelor of Science Degree

### Major in Biology

#### Medical Laboratory Science Option

Students with a 2.5 GPA or higher can apply for a fifth year of professional training to earn a degree in Biology/Medical Laboratory Science Option from MSU Billings. Total credits for graduation are 128. Additional credits are required in this option because students take an additional three semesters of courses. These additional semesters are necessary because professional training programs approved by the National Accrediting Agency for Clinical Laboratory Science (NAACLS, [www.naacls.org](http://www.naacls.org)) are 12 months in duration.

All students desiring to become a certified Clinical Laboratory Scientist must take a national certification examination upon completion of the year of professional training.

	<b>Credits</b>
<b>General Education Requirements .....</b>	<b>31</b>
The following General Education courses also satisfy requirements in the major: BIOB 160, BIOB 161, CHMY 141, and STAT 216. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.	
<b>Professional Medical Lab Training Core .....</b>	<b>37</b>
<b>Biology Requirements</b>	
*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory .....	1
BIOB 260 Cellular and Molecular Biology .....	3
BIOB 261 Cellular and Molecular Biology Laboratory .....	1
BIOB 375 General Genetics .....	3
BIOB 376 General Genetics Lab .....	1
BIOB 410 Immunology .....	3
BIOB 499 Senior Thesis/Capstone .....	1
BIOH 301 Human Anatomy and Physiology I .....	3
BIOH 302 Human Anatomy and Physiology I Lab .....	1
BIOH 311 Human Anatomy and Physiology II.....	3
BIOH 312 Human Anatomy and Physiology II Lab .....	1
BIOH 405 Hematology.....	3
BIOH 406 Hematology Laboratory .....	1
BIOM 250 Microbiology for Health Sciences.....	3
BIOM 251 Microbiology for Health Sciences Lab.....	1
BIOM 400 Medical Microbiology .....	3
BIOM 401 Medical Microbiology Lab.....	1
BIOM 427 General Parasitology .....	2
Unrestricted Biology Elective.....	2
<b>Biology Total .....</b>	<b>40</b>

*Continued...*

## SUGGESTED PLAN OF STUDY

### *BS in Biology*

#### *Medical Laboratory Science Option*

#### Start Even Year

##### **First Year Fall Even**

BIOB 160/161  
CHMY 141/142  
General Education

##### **First Year Spring Odd**

CHMY 143/144  
BIOM 250/251  
General Education

##### **Second Year Fall Odd**

BIOB 260/261  
BIOH 301/302  
General Education

##### **Second Year Spring Even**

CHMY 211/212  
BIOB 375/376  
BIOH 311/312

##### **Third Year Fall Even**

BCH 380/381  
STAT 216  
General Education

##### **Third Year Spring Odd**

BIOM 427  
BIOB 410  
Biology Elective  
General Education

##### **Fourth Year Fall Odd**

PHSX 205/206  
BIOB 499  
General Education

##### **Fourth Year Spring Even**

BIOM 400/401  
BIOH 405/406  
General Education

##### **Fifth Year**

Professional Training

**Chemistry Requirements**

*CHMY 141 College Chemistry I.....	3
*CHMY 142 College Chemistry Laboratory I.....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II.....	1
CHMY 211 Elements of Organic Chemistry.....	3
CHMY 212 Elements of Organic Chemistry Laboratory.....	1
^CHMY 311 Analytical Chemistry-Quantitative Analysis.....	3
^CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis.....	1
BCH 380 Biochemistry.....	3
BCH 381 Biochemistry Lab.....	1
<b>Chemistry Total.....</b>	<b>16</b>

^Highly recommended but not required.

NOTE: Students wishing to obtain a minor in Chemistry will need to take CHMY 311, 312, 321, 322, 323, 324 instead of CHMY 211, 212.

**Mathematics/Statistics Requirement**

Choose one:

*STAT 216 Introduction to Statistics.....	4
STAT 217 Intermediate Statistical Concepts.....	4
<b>Mathematics/Statistics Total.....</b>	<b>4</b>

**Physics Requirements**

Choose one Physics course with lab.

*PHSX 205 College Physics I.....	3
*PHSX 206 College Physics I Laboratory.....	1
<b>OR</b>	
PHSX 220 Physics I.....	3
PHSX 221 Physics I Laboratory.....	1
<b>Physics Total.....</b>	<b>4</b>

**Upper Division Science electives..... 6**

**Total minimum credits required for major..... 70**

**Total minimum credits for degree..... 128**

Courses in the professional training core (BIOH 470 Summer Clinical Laboratory, BIOH 471 Professional Training I Fall Semester and BIOH 472 Professional Training II Spring Semester) will be taught at an affiliated institution, which include Montana State University Bozeman; University of North Dakota, Grand Forks; Sacred Heart School of Medical Technology, Spokane, Washington; or the Colorado Center for Medical Laboratory Science, Aurora ([www.MedLabEd.org](http://www.MedLabEd.org)). The training and credits from all four programs will allow students to fulfill the requirements needed to take the national examinations to become certified clinical laboratory scientists or medical technologists. All students enrolled at each training program site will remain MUS students at their respective institutions.

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

**Start Odd Year****First Year Fall Odd**

BIOB 160/161  
CHMY 141/142  
General Education

**First Year Spring Even**

CHMY 143/144  
BIOM 250/251  
General Education

**Second Year Fall Even**

BIOB 260/261  
BIOH 301/302  
General Education

**Second Year Spring Odd**

CHMY 211/212  
BIOB 375/376  
BIOH 311/312

**Third Year Fall Odd**

BCH 380/381  
STAT 216  
General Education

**Third Year Spring Even**

BIOM 400/401  
BIOH 405/406  
General Education

**Fourth Year Fall Even**

PHSX 205/206  
BIOB 499  
General Education

**Fourth Year Spring Odd**

BIOM 427  
BIOB 410  
Biology Elective  
General Education

**Fifth Year**

Professional Training

## Bachelor of Science Degree Major in Biology Teaching Licensure Option

Credits

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### General Education Requirements ..... 31 (Secondary & K-12 majors)

The following General Education courses also satisfy requirements in the major: BIOB 160, BIOB 161, CHMY 141, EDU 105, and either M 171 or STAT 216. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

### Professional Core (see page 266) ..... 34

### Biology Requirements

*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory .....	1
BIOB 170 Principles of Biological Diversity .....	3
BIOB 171 Principles of Biological Diversity Laboratory .....	1
BIOB 260 Cellular and Molecular Biology.....	3
BIOB 261 Cellular and Molecular Biology Laboratory .....	1
BIOB 375 General Genetics .....	3
BIOB 376 General Genetics Lab.....	1
BIOB 498 Internship/Cooperative Education.....	2
BIOB 499 Senior Thesis/Capstone .....	1
BIOE 370 General Ecology .....	3
BIOE 371 General Ecology Laboratory .....	1
Biology electives selected in consultation with an advisor.....	22
<b>Biology Total .....</b>	<b>45</b>

### Chemistry Requirements

*CHMY 141 College Chemistry I.....	3
*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II.....	1
CHMY 211 Elements of Organic Chemistry.....	3
CHMY 212 Elements of Organic Chemistry Laboratory .....	1
CHMY 311 Analytical Chemistry-Quantitative Analysis .....	3
CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis.....	1
BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
<b>Chemistry Total .....</b>	<b>20</b>

**NOTE:** Students wishing to obtain a minor in Chemistry will need to take CHMY 321, 322, 323, 324 instead of CHMY 211, 212.

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science Degree Teaching Licensure Option in Biology*

<b>First Year</b>	<b>F</b>	<b>S</b>
BIOB 160/161	4	
BIOB 170/171		4
CHMY 141/142	4	
CHMY 143/144		4
Professional Core	3	3
General Education	V	V
<b>Total</b>	<b>17</b>	<b>17</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
BIOB 260/261	4	
BIOB 375/376		4
CHMY 211/212		4
General Education	V	V
Professional Core	V	V
<b>Total</b>	<b>16</b>	<b>14</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
BIOE 370/371	4	
BCH 380/381	4	
CHMY 311/312	4	
Biology Electives	4	4
Professional Core		V
General Education		V
<b>Total</b>	<b>16</b>	<b>16</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
BIOB 499	1	
BIOB 498	1	1
Biology Electives	4	4
General Education	V	
Professional Core	V	V
<b>Total</b>	<b>16</b>	<b>12</b>



**Mathematics and Statistics Requirements**

*M 171 Calculus I .....	4
*STAT 141 Introduction to Statistical Concepts .....	3
<b>OR</b> *STAT 216 Introduction to Statistics .....	4
<b>Mathematics/Statistics Total.....</b>	<b>7-8</b>

**Physics Requirements**

Choose one Physics course with lab.

*PHSX 205 College Physics I .....	3
*PHSX 206 College Physics I Laboratory .....	1
<b>OR</b>	
PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory .....	1
<b>Physics Total .....</b>	<b>4</b>

**Total minimum credits required for major.....76-77**

**Total minimum credits for degree..... 128**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites*

## Minor in Biology

### Credits

#### Biology Requirements

*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory.....	1
BIOB 170 Principles of Biological Diversity .....	3
BIOB 171 Principles of Biological Diversity Laboratory.....	1
BIOB 260 Cellular and Molecular Biology.....	3
BIOB 261 Cellular and Molecular Biology Laboratory.....	1
BIOB 375 General Genetics .....	3
BIOB 376 General Genetics Lab .....	1

BIOE 370 General Ecology & BIOE 371 General Ecology Laboratory .....

**OR**

BIOE 202 Introduction to Environmental Ecology ...3  
**Biology Total .....**19-20

#### Chemistry Requirements

*CHMY 141 College Chemistry I.....	3
*CHMY 142 College Chemistry Laboratory I.....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II.....	1
<b>Chemistry Total.....</b>	<b>8</b>

**Total minimum credits required for minor ....27-28**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Teaching Minor in Biology

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### Credits

#### Biology Requirements

*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory.....	1
BIOB 170 Principles of Biological Diversity .....	3
BIOB 171 Principles of Biological Diversity Laboratory.....	1
BIOB 260 Cellular and Molecular Biology.....	3
BIOB 261 Cellular and Molecular Biology Laboratory.....	1
BIOB 375 General Genetics .....	3

BIOB 376 General Genetics Lab .....	1
BIOE 370 General Ecology .....	3
BIOE 371 General Ecology Laboratory.....	1
<b>Total Biology course credits.....</b>	<b>20</b>

#### Chemistry Requirements

*CHMY 141 College Chemistry I .....	3
*CHMY 142 College Chemistry Laboratory I.....	1
CHMY 143 College Chemistry II .....	3
CHMY 144 College Chemistry Laboratory II .....	1
<b>Total Chemistry course credits.....</b>	<b>8</b>

EDU 397G Methods: 5-12 Science .....

**Total minimum credits required for minor ..... 30**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Associate of Science Program of Study in Allied Health

### Credits

#### General Education

*BIOB 160 Principles of Living Systems <b>OR</b> *BIOB 101 Discover Biology .....	3
*CHMY 121 Introduction to General Chemistry.....	3
*CHMY 122 Introduction to General Chemistry Laboratory .....	1
*PSYX 100 Introduction to Psychology (3) <b>OR</b> *SOCI 101 Introduction to Sociology.....	3
*STAT 141 Introduction to Statistical Concepts (3) <b>OR</b> *STAT 216 Introduction to Statistics.....	4
Additional General Education requirements .....	18
<b>Total Credits.....</b>	<b>31</b>

#### Required Program Courses

BIOH 301 Human Anatomy and Physiology I .....	3
BIOH 302 Human Anatomy and Physiology I Lab ..	1
BIOH 311 Human Anatomy and Physiology II .....	3
BIOH 312 Human Anatomy and Physiology II Lab ..	1
BIOM 250 Microbiology for Health Sciences .....	3
CHMY 123 Introduction to Organic and Biochemistry .....	3
NUTR 221 Basic Human Nutrition.....	3
<b>Total Credits.....</b>	<b>17</b>

**Elective Program Courses**

Students must take 6 credits from the following electives:

BIOB 375, 376 General Genetics with Lab .....	4
BIOM 251 Microbiology for Health Sciences Lab....	1
BIOM 360, 361 General Microbiology with Lab .....	4
*CHMY 141, 142 College Chemistry I with Lab .....	4
CHMY 143, 144 College Chemistry II with Lab .....	4
ECP 100 First Aid and CPR .....	2
*PHL 110 Introduction to Ethics: Problems of Good and Evil .....	3
*PHSX 205/206 College Physics I with Lab .....	4
PSYX 230 Developmental Psychology: Development Over the Lifespan.....	3
PSYX 340 Abnormal Psychology .....	3
Upper division Biology or Chemistry courses chosen in conjunction with advisor .....	V
<b>Total Elective Credits.....</b>	<b>6</b>

**Restricted electives selected with advisor approval.....6**

**Total minimum credits required for degree.....60**

\*May satisfy General Education requirements.

*Note: The above required General Education Courses and Program Courses are minimum requirements. Students with specific career goals in the Allied Health Sciences should be aware that some disciplines require more advanced courses than those listed. Therefore, if you know your career path, or if you believe you may transfer into a B.S. program at MSU Billings or another university, it is essential that you consult with your advisor in the science department so that you proceed efficiently in your studies.*

## Associate of Science Program of Study in Environmental Science

**Credits****General Education**

*ANTY 217 Physical Anthropology and Archeology	
<b>OR</b> *ECNS 202 Principles of Macroeconomics ....	3
*ANTY 220 Culture and Society .....	3
*BIOB 160 Principles of Living Systems.....	3
*COMX 111 Introduction to Public Speaking.....	3
*GEO 101 Introduction to Physical Geology .....	3
*GEO 102 Introduction to Physical Geology Laboratory.....	1
*STAT 141 Introduction to Statistical Concepts .....	3
*WRIT 101 College Writing I	
<b>OR</b> *WRIT 221 Intermediate Technical Writing ...	3

History category .....	3
Fine Arts category .....	3
Humanities category .....	3
<b>Total .....</b>	<b>31</b>

**Required Courses**

BIOB 170 Principles of Biological Diversity.....	3
BIOB 171 Principles of Biological Diversity Laboratory .....	1
BIOE 202 Introduction to Environmental Ecology...	3
*CHMY 141 College Chemistry I .....	3
*CHMY 142 College Chemistry Laboratory I.....	1
CHMY 143 College Chemistry II .....	3
CHMY 144 College Chemistry Laboratory II .....	1
GPHY 282 Mapping Techniques .....	3
<b>Total .....</b>	<b>18</b>

**Elective Courses ..... 11**

11 credits to be chosen in consultation with advisor from the courses offered by the Science Department.

**Total minimum credits required for degree ..... 60**

\*May satisfy General Education requirements.

## Associate of Science

### Program of Study in Pre– Engineering

#### Credits

#### General Education

*BIOB 160 Principles of Living Systems.....	3
*CHMY 141 College Chemistry I.....	3
*CHMY 142 College Chemistry Laboratory I.....	1
*COMX 111 Introduction to Public Speaking.....	3
*M 171 Calculus I.....	4
*WRIT 101 College Writing I.....	3
Additional General Education Requirements .....	V
<b>Total .....</b>	<b>31</b>

#### Required Courses

EGEN 105 Introduction to General Engineering.....	2
M 172 Calculus II.....	4
M 273 Multivariable Calculus .....	4
M 274 Introduction to Differential Equations .....	4
PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory.....	1
PHSX 232 Physics II and Thermo.....	3
PHSX 233 Physics II and Thermo Laboratory .....	1
<b>Total Required Credits .....</b>	<b>22</b>

#### Restricted electives selected with advisor

approval.....	7
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<b>Total Credits for Degree .....</b>	<b>60</b>
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\*May satisfy General Education requirements.

## Bachelor of Science Degree Major in Chemistry

	Credits
<b>General Education Requirements</b> .....	<b>31</b>
*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory .....	1
<b>NOTE:</b> 6 credits will be filled with requirements below, leaving 24 credits needed in General Education.	

### Chemistry

*CHMY 141 College Chemistry I .....	3
*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II .....	1
CHMY 311 Analytical Chemistry-Quantitative Analysis .....	3
CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis.....	1
CHMY 321 Organic Chemistry I .....	3
CHMY 322 Organic Chemistry Laboratory I .....	1
CHMY 323 Organic Chemistry II .....	3
CHMY 324 Organic Chemistry Laboratory II.....	1
CHMY 371 Physical Chemistry-Quantum Chemistry and Spectroscopy .....	3
CHMY 372 Physical Chemistry Laboratory I .....	1
CHMY 373 Physical Chemistry-Kinetics and Thermodynamics .....	3
CHMY 374 Physical Chemistry Laboratory II.....	1
CHMY 401 Advanced Inorganic Chemistry .....	3
CHMY 402 Advanced Inorganic Chemistry Laboratory.....	1
CHMY 421 Advanced Instrument Analysis .....	3
CHMY 422 Advanced Instrument Analysis Laboratory .....	2
CHMY 490 Undergraduate Research .....	2
CHMY 494 Seminar/Workshop .....	1
CHMY 498 Internship/Cooperative Education .....	1
BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
BCH 480 Advanced Biochemistry I .....	3
BCH 481 Advanced Biochemistry I Lab .....	1
<b>Total</b> .....	<b>49</b>

### Chemistry Electives

Choose 9 credits from:

CHMY 411 Advanced Organic Chemistry.....	3
CHMY 412 Advanced Organic Chemistry Laboratory .....	1
CHMY 490 Undergraduate Research .....	V1-5
CHMY 491 Special Topics.....	3
CHMY 498 Internship/Cooperative Education .....	V1-5
<b>Total</b> .....	<b>9</b>

**Total Chemistry credits**..... **58**

### Mathematics

*M 171 Calculus I .....	4
M 172 Calculus II .....	4
*STAT 216 Introduction to Statistics .....	4
<b>Total Mathematics credits</b> .....	<b>12</b>

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science Degree in Chemistry*

#### **STARTING IN FALL OF EVEN YEAR**

##### **First Year Fall (even)**

CHMY 141/142	4
M 171	4
BIOB 160/161	4
Electives	3
<b>Total</b>	<b>15</b>

##### **First Year Spring (odd)**

CHMY 143/144	4
M 172	4
STAT 216	4
Electives	3
<b>Total</b>	<b>15</b>

##### **Second Year Fall (odd)**

CHMY 321/322	4
PHSX 220/221	4
Electives	7
<b>Total</b>	<b>15</b>

##### **Second Year Spring (even)**

CHMY 323/324	4
PHSX 232/233	4
Electives	7
<b>Total</b>	<b>15</b>

##### **Third Year Fall (even)**

BCH 380/381	4
CHMY 311/312	4
CHMY 498	1
Electives	6
<b>Total</b>	<b>15</b>

##### **Third Year Spring (odd)**

BCH 480/481	4
CHMY 421/422	5
Electives	6
<b>Total</b>	<b>15</b>

##### **Fourth Year Fall (odd)**

CHMY 371/372	4
CHMY 490	1
CHMY 411/412^	4
Electives	6
<b>Total</b>	<b>15</b>

##### **Fourth Year Spring (even)**

CHMY 373/374	4
CHMY 401/402	4
CHMY 491^	3
CHMY 490	1
CHMY 494	1
Electives	2
<b>Total</b>	<b>15</b>

^Strongly suggested to fulfill required upper division chemistry elective credits.

**Physics**

PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory.....	1
PHSX 232 Physics II and Thermo.....	3
PHSX 233 Physics II and Thermo Laboratory .....	1
<b>Total Physics credits.....</b>	<b>8</b>

**Science electives selected with advisor approval.....5**

**Total minimum credits required for major.....83**

**Electives..... V**

Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

**STARTING IN FALL OF ODD YEAR****First Year Fall (odd)**

CHMY 141/142	4
M 171	4
BIOB 160/161	4
Electives	3

**Total 15**

**First Year Spring (even)**

CHMY 143/144	4
M 172	4
STAT 216	4
Electives	3

**Total 15**

**Second Year Fall (even)**

CHMY 321/322	4
CHMY 311/312	4
PHSX 220/221	4
Electives	3

**Total 15**

**Second Year Spring (odd)**

CHMY 323/324	4
PHSX 232/233	4
Electives	7

**Total 15**

**Third Year Fall (odd)**

CHMY 371/372	4
CHMY 411/412^	4
CHMY 498	1
Electives	6

**Total 15**

**Third Year Spring (even)**

CHMY 373/374	4
CHMY 401/402	4
CHMY 491^	3
Electives	4

**Total 15**

**Fourth Year Fall (even)**

BCH 380/381	4
CHMY 490	1
Electives	10

**Total 15**

**Fourth Year Spring (odd)**

BCH 480/481	4
CHMY 421/422	5
CHMY 490	1
CHMY 494	1
Electives	4

**Total 15**

^Strongly suggested to fulfill required upper division chemistry elective credits.

## Bachelor of Science Degree Major in Chemistry Teaching Licensure Option

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

	Credits
<b>General Education Requirements .....</b>	<b>31</b>
*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory .....	1
<b>NOTE:</b> 9 credits will be filled with requirements below, leaving 22 credits needed in General Education.	
<b>Professional Core (see page 266) .....</b>	<b>34</b>
*EDU 105 Education and Democracy required.	
<b>Chemistry</b>	
*CHMY 141 College Chemistry I .....	3
*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II .....	1
CHMY 311 Analytical Chemistry-Quantitative Analysis .....	3
CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis.....	1
CHMY 321 Organic Chemistry I .....	3
CHMY 322 Organic Chemistry Laboratory I .....	1
CHMY 323 Organic Chemistry II .....	3
CHMY 324 Organic Chemistry Laboratory II.....	1
CHMY 371 Physical Chemistry-Quantum Chemistry and Spectroscopy .....	3
CHMY 372 Physical Chemistry Laboratory I .....	1
CHMY 373 Physical Chemistry-Kinetics and Thermodynamics .....	3
CHMY 374 Physical Chemistry Laboratory II.....	1
CHMY 498 Internship/Cooperative Education .....	2
BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
<b>Total Chemistry credits.....</b>	<b>34</b>
<b>Chemistry Electives</b>	
Choose 9 credits from:	
CHMY 401 Advanced Inorganic Chemistry .....	3
CHMY 402 Advanced Inorganic Chemistry Laboratory.....	1
CHMY 411 Advanced Organic Chemistry.....	3
CHMY 412 Advanced Organic Chemistry Laboratory .....	1
CHMY 421 Advanced Instrument Analysis .....	3
CHMY 422 Advanced Instrument Analysis Laboratory .....	2
CHMY 490 Undergraduate Research .....	V1-5
CHMY 491 Special Topics.....	3
BCH 480 Advanced Biochemistry I .....	3
BCH 481 Advanced Biochemistry I Laboratory .....	1
<b>Total .....</b>	<b>9</b>

Continued...

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science Degree*

### *Teaching Licensure Option in Chemistry*

<b>First Year</b>	<b>F</b>	<b>S</b>
CHMY 141/142	4	
CHMY 143/144		4
BIOB 160/161	4	
M 171	4	
M 172		4
Professional Core	V	V
General Education	V	V
<b>Total</b>	<b>17</b>	<b>17</b>
<b>Second Year</b>	<b>F</b>	<b>S</b>
CHMY 321/322	4	
CHMY 323/324		4
ASTR 110/111		4
PHSX 220/221	4	
PHSX 232/233		4
Professional Core	V	V
General Education	V	V
<b>Total</b>	<b>17</b>	<b>17</b>
<b>Third Year</b>	<b>F</b>	<b>S</b>
BCH 380/381	4	
CHMY 311/312	4	
CHMY 371/372	4	
CHMY 373/374		4
Professional Core	V	V
General Education	V	V
<b>Total</b>	<b>16</b>	<b>V</b>
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
CHMY 498	1	1
PHSX 343	3	
Chemistry Elective	4	5
Professional Core	3	12
<b>Total</b>	<b>11</b>	<b>13</b>

**Mathematics**

*M 171 Calculus I .....	4
M 172 Calculus II .....	4
*STAT 216 Introduction to Statistics .....	4
<b>Total Mathematics credits .....</b>	<b>12</b>

**Physics**

*ASTR 110 Introduction to Astronomy .....	3
*ASTR 111 Introduction to Astronomy Lab .....	1
PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory .....	1
PHSX 232 Physics II and Thermo .....	3
PHSX 233 Physics II and Thermo Laboratory .....	1
<b>Total Physics credits .....</b>	<b>12</b>

**Science electives selected with advisor approval.....4**

**Total minimum credits required for major.....71**

**Total minimum credits required for degree..... 127**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check course descriptions for required prerequisites.*



## Bachelor of Science Degree Major in Broadfield Science

**Credits**

**General Education Requirements ..... 31**

Note: 10 credits will be filled from below – 7 Natural Science and 3 Mathematics – leaving 21 needed here.

### Biology

*BIOB 160 Principles of Living Systems.....	3
*BIOB 161 Principles of Living Systems Laboratory .....	1
BIOB 170 Principles of Biological Diversity .....	3
BIOB 171 Principles of Biological Diversity Laboratory .....	1
BIOB 260 Cellular and Molecular Biology.....	3
BIOB 261 Cellular and Molecular Biology Laboratory .....	1
BIOB 375 General Genetics .....	3
BIOB 376 General Genetics Lab .....	1
BIOE 370 General Ecology .....	3
BIOE 371 General Ecology Laboratory .....	1
<b>Total Biology .....</b>	<b>20</b>

### Chemistry

*CHMY 141 College Chemistry I.....	3
*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II.....	3
CHMY 144 College Chemistry Laboratory II .....	1
CHMY 321 Organic Chemistry I .....	3
CHMY 322 Organic Chemistry Laboratory I.....	1
CHMY 323 Organic Chemistry II .....	3
CHMY 324 Organic Chemistry Laboratory II.....	1
BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
<b>Total Chemistry .....</b>	<b>20</b>

### Earth Science

*GEO 101 Introduction to Physical Geology .....	3
*GEO 102 Introduction to Physical Geology Laboratory .....	1
GEO 205 Mineralogy .....	4
GEO 211 Earth History and Evolution .....	3
GEO 212 Earth History and Evolution Laboratory .....	1
GEO 309 Sedimentation and Stratigraphy.....	3
<b>Choose one course from the following:</b>	
ERTH 303 Weather and Climate .....	4
ERTH 401 Geologic Field Methods .....	4
ERTH 491 Special Topics .....	3
<b>Total Earth Science .....</b>	<b>18-19</b>

### Physics

*ASTR 110 Introduction to Astronomy .....	3
*ASTR 111 Introduction to Astronomy Lab .....	1
PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory.....	1

Continued...

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science Degree in Broadfield Science*

<b>First Year</b>	<b>F</b>	<b>S</b>
BIOB 160/161	4	
BIOB 170/171		4
CHMY 141/142	4	
CHMY 143/144		4
M 171	4	
M 172		4
General Education	V	V
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
BIOB 260/261	4	
BIOB 375/376		4
CHMY 321/322	4	
CHMY 323/324		4
GEO 101/102	4	
GEO 211/212		4
General Education	V	V
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
BIOE 370/371	4	
GEO 205	4	
PHSX 220/221	4	
PHSX 232/233		4
PHSX 343	3	
General Education		V
Elective	3	3
<b>Total</b>	<b>18</b>	<b>16</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
ASTR 110/111		4
BCH 380/381	4	
GEO 309	3	
Earth Science Elective		3
PHSX 391	3	
PHSX 491		3
General Education	V	
Elective	3	3
<b>Total</b>	<b>16</b>	<b>14</b>

PHSX 232 Physics II and Thermo .....	3
PHSX 233 Physics II and Thermo Laboratory .....	1
PHSX 343 Modern Physics .....	3
PHSX 391 Special Topics .....	3
PHSX 491 Special Topics .....	3
<b>Total Physics .....</b>	<b>21</b>

**Electives in Biological or Physical Sciences. At least 3 credits must be upper division..... 12**

**Total Science Credits.....84-85**

**Mathematics**

*M 171 Calculus I .....	4
M 172 Calculus II .....	4
<b>Total Mathematics credits .....</b>	<b>8</b>

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check course descriptions for required prerequisites.*

## Bachelor of Science Degree Major in Broadfield Science Teaching Licensure Option

**Credits**

**General Education Requirements ..... 31**

Note: 13 credits will be filled from below: 7 Natural Science, 3 Mathematics, and 3 EDU 105 – leaving 24 needed here.

**Professional Core Requirements ..... 34**  
Includes EDU 397G Methods: 5-12 Science

### Math and Stats Requirements

Choose two, one from each rubric:

\*M 171 Calculus I ..... 4  
M 172 Calculus II ..... 4  
\*STAT 141 Introduction to Statistical Concepts ..... 3  
\*STAT 216 Introduction to Statistics ..... 4  
STAT 217 Intermediate Statistical Concepts ..... 4  
**Total Math/Stats credits ..... 7**

### Biology

\*BIOB 160 Principles of Living Systems ..... 3  
\*BIOB 161 Principles of Living Systems Laboratory ..... 1  
BIOB 170 Principles of Biological Diversity ..... 3  
BIOB 171 Principles of Biological Diversity Laboratory ..... 1  
BIOB 260 Cellular and Molecular Biology ..... 3  
BIOB 261 Cellular and Molecular Biology Laboratory ..... 1  
**Total Biology ..... 12**

### Chemistry

\*CHMY 141 College Chemistry I ..... 3  
\*CHMY 142 College Chemistry Laboratory I ..... 1  
CHMY 143 College Chemistry II ..... 3  
CHMY 144 College Chemistry Laboratory II ..... 1  
CHMY 211 Elements of Organic Chemistry ..... 3  
CHMY 212 Elements of Organic Chemistry Laboratory ..... 1

#### OR

CHMY 321 Organic Chemistry I ..... 3  
CHMY 322 Organic Chemistry Laboratory I ..... 1

**Total Chemistry ..... 12**

### Earth Science

\*GEO 101 Introduction to Physical Geology ..... 3  
\*GEO 102 Introduction to Physical Geology Laboratory ..... 1  
GEO 205 Mineralogy ..... 4  
GEO 211 Earth History and Evolution ..... 3  
GEO 212 Earth History and Evolution Laboratory ..... 1  
**Total Earth Science ..... 12**

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science Degree Major in Broadfield Science Teaching Licensure Option*

<b>First Year</b>	<b>F</b>	<b>S</b>
BIOB 160/161	4	
BIOB 170/171		4
CHMY 141/142	4	
CHMY 143/144		4
Professional Core	3	3
General Education	V	V
<b>Total</b>	<b>17</b>	<b>17</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
BIOB 260/261	4	
CHMY 211/212		(4)
OR CHMY 321/322	(4)	
M 171	4	
STAT 141		3
Professional Core	V	V
General Education	V	V
<b>Total</b>	<b>17</b>	<b>17</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
ASTR 110		3
Physics sequence	4	4
GEO 101/102	4	
GEO 211/212		4
Science concentration	4	4
Professional Core		V
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
GEO 205	3	
General Education	V	V
Professional Core	V	V
Science concentration	4	3
Elective		4
<b>Total</b>	<b>15</b>	<b>15</b>

**Physics**

Choose either the 205, 207 series or the 220, 232 series

*PHSX 205 College Physics I .....	3
*PHSX 206 College Physics I Laboratory .....	1
PHSX 207 College Physics II .....	3
PHSX 208 College Physics II Laboratory .....	1
PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory .....	1
PHSX 232 Physics II and Thermo .....	3
PHSX 233 Physics II and Thermo Laboratory .....	1
*ASTR 110 Introduction to Astronomy .....	3
<b>Total Physics .....</b>	<b>11</b>

**Concentration – Choose from I or II below:****I. Concentration in Biology**

Choose 4 courses (minimum of 2 with labs)

BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
BIOB 315 Animal Development .....	3
BIOB 375 General Genetics .....	3
BIOB 376 General Genetics Lab .....	1
BIOB 425 Advanced Cell and Molecular Biology .....	3
BIOB 426 Advanced Cell and Molecular Biology Lab .....	1
BIOB 498 Internship/Cooperative Education .....	2
BIOE 370 General Ecology .....	3
BIOE 371 General Ecology Laboratory .....	1
BIOM 360 General Microbiology .....	3
BIOM 361 General Microbiology Lab .....	1
BIOO 412 Animal Physiology .....	3
BIOO 433 Plant Physiology .....	3
BIOO 434 Plant Physiology Laboratory .....	1
BIOO 435 Plant Systematics .....	2
BIOO 436 Plant Systematics Lab .....	2
BIOO 437 Plant Development .....	3
BIOO 438 Plant Development Lab .....	1
BIOO 450 Vertebrate Zoology .....	3
BIOO 451 Vertebrate Zoology Lab .....	1
<b>Minimum electives for Biology concentration .....</b>	<b>16</b>

**II. Concentration in Chemistry**

Choose 4 courses (minimum of 2 with labs)

BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
BCH 480 Advanced Biochemistry I .....	3
BCH 481 Advanced Biochemistry I Lab .....	1
CHMY 311 Analytical Chemistry-Quantitative Analysis .....	3
CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis .....	1
CHMY 323 Organic Chemistry II .....	3
CHMY 324 Organic Chemistry Laboratory II .....	1
CHMY 371 Physical Chemistry-Quantum Chemistry and Spectroscopy .....	3
CHMY 372 Physical Chemistry Laboratory I .....	1
CHMY 401 Advanced Inorganic Chemistry .....	3
CHMY 402 Advanced Inorganic Chemistry Laboratory .....	1
CHMY 421 Advanced Instrument Analysis .....	3

*Continued...*

CHMY 422 Advanced Instrument Analysis Laboratory .....	2
CHMY 498 Internship/Cooperative Education .....	2
<b>Minimum electives for Chemistry concentration.....</b>	<b>16</b>
<b>Restricted electives selected with advisor approval.....</b>	<b>6</b>
<b>Total minimum credits required for degree.....</b>	<b>128</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check course descriptions for required prerequisites.*

## Minor in Chemistry

	Credits
*CHMY 141 College Chemistry I .....	3
*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II .....	3
CHMY 144 College Chemistry Laboratory II .....	1
CHMY 311 Analytical Chemistry-Quantitative Analysis .....	3
CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis .....	1
CHMY 321 Organic Chemistry I .....	3
CHMY 322 Organic Chemistry Laboratory I .....	1
CHMY 323 Organic Chemistry II .....	3
CHMY 324 Organic Chemistry Laboratory II .....	1
BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
<b>Total minimum credits required for minor .....</b>	<b>24</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check course descriptions for required prerequisites.*

## Teaching Minor in Chemistry

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

	Credits
<b>Required Courses</b>	
*CHMY 141 College Chemistry I .....	3
*CHMY 142 College Chemistry Laboratory I .....	1
CHMY 143 College Chemistry II .....	3
CHMY 144 College Chemistry Laboratory II .....	1
CHMY 311 Analytical Chemistry-Quantitative Analysis .....	3
CHMY 312 Analytical Chemistry Laboratory-Quantitative Analysis .....	1
CHMY 321 Organic Chemistry I .....	3
CHMY 322 Organic Chemistry Laboratory I .....	1
CHMY 323 Organic Chemistry II .....	3
CHMY 324 Organic Chemistry Laboratory II .....	1
EDU 397G Methods: 5-12 Science .....	2
<b>Total Required Courses .....</b>	<b>22</b>

### Elective Courses

Upper division Chemistry courses selected from the following in consultation with advisor:

BCH 380 Biochemistry .....	3
BCH 381 Biochemistry Lab .....	1
CHMY 371 Physical Chemistry-Quantum Chemistry and Spectroscopy .....	3

CHMY 372 Physical Chemistry Laboratory I .....	1
CHMY 411 Advanced Organic Chemistry .....	3
CHMY 412 Advanced Organic Chemistry Laboratory .....	1
<b>Total Elective Credits .....</b>	<b>4</b>

**Total minimum credits required for minor ..... 26**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Earth Science

	Credits
<b>Required Courses</b>	
*GEO 101 Introduction to Physical Geology .....	3
*GEO 102 Introduction to Physical Geology Laboratory .....	1
GEO 205 Mineralogy .....	4
GEO 211 Earth History and Evolution .....	3
GEO 212 Earth History and Evolution Laboratory ...	1
GPHY 282 Mapping Techniques .....	3
<b>Total .....</b>	<b>15</b>

### Electives

Choose two courses from among the upper division EARTH or GEO courses offered by the Department.

**Total ..... 7-8**

**Total minimum credits required for minor ... 22-23**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check course descriptions for required prerequisites.*

## Teaching Minor in Earth Science

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

	Credits
<b>Required Courses</b>	
*ASTR 110 Introduction to Astronomy .....	3
EDU 397G Methods: 5-12 Science .....	2
*GEO 101 Introduction to Physical Geology .....	3
*GEO 102 Introduction to Physical Geology Laboratory .....	1
GEO 205 Mineralogy .....	4
GEO 211 Earth History and Evolution .....	3

GEO 212 Earth History and Evolution Laboratory ...	1
*GPHY 111 Introduction to Physical Geography .....	3
*GPHY 112 Introduction to Physical Geography Laboratory .....	1
<b>Total minimum credits required for minor .....</b>	<b>21</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
students should check the course descriptions for  
required prerequisites.*

## Minor in Geography

Credits

### Required Courses

*GPHY 111 Introduction to Physical Geography .....	3
*GPHY 112 Introduction to Physical Geography Laboratory .....	1
*GPHY 121 Human Geography .....	3
*GPHY 141 Geography of World Regions .....	3
GPHY 282 Mapping Techniques .....	3
GPHY 380 Principles of GIS .....	3
<b>Total .....</b>	<b>16</b>

### Electives

Any two of the following upper division courses:

GPHY 440 Geography of Montana .....	3
GPHY 484 Applied GIS/Spatial Analysis .....	3
GPHY 485 Internet GIS .....	3
GPHY 487 Remote Sensing/Raster GIS .....	3
GPHY 494 Seminar/Workshop .....	3
<b>Total .....</b>	<b>6</b>

**Total minimum credits required for minor .....** 22

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
students should check course descriptions for required  
prerequisites.*

## Teaching Minor in Geography

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

Credits

### Core Requirements

EDU 497A Methods: 5-12 Social Studies .....	2
*GPHY 111 Introduction to Physical Geography .....	3
*GPHY 112 Introduction to Physical Geography Laboratory .....	1

*GPHY 121 Human Geography .....	3
*GPHY 141 Geography of World Regions .....	3
GPHY 282 Mapping Techniques .....	3
<b>Total .....</b>	<b>15</b>

### Geography Electives

Select two courses from the following:

GPHY 380 Principles of GIS .....	3
GPHY 440 Geography of Montana .....	3
GPHY 484 Applied GIS/Spatial Analysis .....	3
GPHY 485 Internet GIS .....	3
<b>Total .....</b>	<b>6</b>

**Total minimum credits required for minor .....** 21

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
students should check the course descriptions for  
required prerequisites.*

## Minor in Physics

Credits

### Required Courses

PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory .....	1
PHSX 232 Physics II and Thermo .....	3
PHSX 233 Physics II and Thermo Laboratory .....	1
PHSX 343 Modern Physics .....	3
Physics electives selected in consultation with advisor .....	9
<b>Total minimum credits required for minor .....</b>	<b>20</b>

**NOTE:** All courses in this minor have physics or math prerequisites. Check the course descriptions for prerequisites (see page 296).

## Teaching Minor in Physics

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

Credits

### Required Courses

*ASTR 110 Introduction to Astronomy .....	3
*ASTR 111 Introduction to Astronomy Lab .....	1
EDU 397G Methods: 5-12 Science .....	2
*M 171 Calculus I .....	4
M 172 Calculus II .....	4
PHSX 220 Physics I .....	3
PHSX 221 Physics I Laboratory .....	1

PHSX 232 Physics II and Thermo .....	3
PHSX 233 Physics II and Thermo Laboratory .....	1
PHSX 343 Modern Physics .....	3
<b>Total minimum credits required for minor .....</b>	<b>25</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
students should check the course descriptions for  
required prerequisites.*



# The Department of Communication and Theatre

*Curriculum includes COMX, FILM, JRNL, and THTR courses*

***Dr. Stephen Coffman,***

***Chairperson***

***LA 600, (406) 657-2178***

***scoffman@msubillings.edu***

Professors: S. Coffman, Gross, Keller  
Assistant Professors: Boehm, Boerboom  
Lecturer: Tilton  
Professor Emeritus: Boden, V. Coffman

## Undergraduate and Graduate Degrees and Majors

In order to make student-advising meetings more effective, students are encouraged to review the Undergraduate Catalogue/Bulletin on the MSU Billings website, the Communication & Theatre links to majors and degree programs on the department website, and review the Plan of Study for the major of their choice.

### **Bachelor of Arts Degree**

**Major:** Communication Arts

**Options:** Mass Communication ∇, Organizational Communication ∇, ~~Theatre~~ **(Program placed on moratorium)**

*Students with a Communication and Theatre Major are not required to have a minor.*

### **Bachelor of Science Degree**

**Major:** Public Relations ∇

**Minor:** Communication Arts

**Options:** Mass Communication, Organizational Communication, ~~Theatre~~ **(Program placed on moratorium)**

### **Master of Science Degree in Public Relations ∇**

Please see the Graduate Catalog for details.

∇ This program is also offered in an online format.

The Department of Communication and Theatre offers exciting options for students interested in the communication discipline as it relates to secondary education.

## Advising Information

Students are strongly encouraged to meet with their advisor early each semester or prior to the semester they are planning to attend to confirm that their Advising Worksheet is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner. Faculty advisors work with students to explore appropriate internships, cooperative education placements, and/or experiential learning opportunities that will enhance the student's academic program. In addition, advisors provide assistance in selecting elective courses that support the student's interests, career plans, and Advising Worksheets.

Academic advising services for all freshman Arts and Sciences majors are provided Advising & Career Services on McMullen Hall first floor west. Upon declaring a specific major, Arts and Sciences majors will be assigned to a faculty advisor in their department for upper-division advising. Advising files for all upper-division students are maintained in the departmental office of the program in which the student is majoring. Although advisors are available to assist students in designing their Advising Worksheets, students are ultimately responsible for meeting degree requirements.

## Degree Language Requirement

Bachelor of Arts Majors in Communication & Theatre are encouraged to consider taking two years of a foreign language.

The Department of Communication and Theatre offers the following four options for the foreign language requirement:

1. Complete the standard language requirement for a Bachelor of Arts for a total of 14 credits.
2. Complete the 101-102 active skills sequence in one foreign language plus six credits of cultural studies courses selected from List One (below) for a total of 14 credits.
3. Complete 101-102 active skills sequence in one foreign language and six credits in statistical and research method selected from List Two (below) for a total of 14 credits.

4. Complete six credits in statistical and research methods selected from List Two (below) along with nine credits selected from List One for a total of 15 credits.

### List One

\*SPNS 150 The Hispanic Tradition  
 \*ANTY 220 Culture and Society  
 \*PHL 271 Indian Philosophies and Religions  
 \*PHL 272 Chinese Philosophies and Religions  
 RLST 303 Greek and Roman Mythology  
 HSTR 330 History of Mexico  
 NASX Select from offerings  
 Other Cultural Studies in consultation with Advisor

### List Two

SOCI 318 Sociological Research Methods  
 \*STAT 141 Introduction to Statistical Concepts  
 \*STAT 216 Introduction to Statistics  
 STAT 341 Introduction to Probability & Statistics  
 Other statistical and methods courses in consultation with Advisor

\*May satisfy General Education requirements.

## Bachelor of Arts Degree Major in Communication Arts▽

**The Mass Communication Option** is designed to examine the nature of the mass media through theoretical grounding and applied knowledge with a concentration in (1) the construction and delivery of media messages and (2) the effects of mediated messages and the structures and practices of the media industries on culture, society, politics, the economy, and individual attitudes and behavior. This approach prepares students for careers as trained media professionals as well as to be critical consumers of media messages. The study of message construction and analysis is offered in a variety of contexts including news gathering and reporting, public relations, video production, and advertising. In each context theoretical perspectives are combined with skills training related to print and electronic media. Career options in the field of Mass Communication include public relations, marketing, broadcast news, corporate communications, and advertising.

**The Organizational Communication Option** is designed to educate students entering the fields of business and social service as managers, trainers, human resource officers, and corporate communication staff. This option also provides excellent preparation

for graduate study in communication as well as law. The programs in Organizational Communication enable the student (1) to acquire a mature understanding of communication issues in organizational situations; (2) to improve the ability to contribute to productive organizational performance; (3) to increase personal effectiveness related to technical communication concerns; and (4) to apply learning to real-life organizational settings.

## Bachelor of Arts in Communication Arts

### Program Outcomes

Upon successful completion of the program, students will be able to demonstrate:

1. writing skills
2. speaking skills
3. critical thinking skills
4. and theoretical approaches to the practice of communication arts.

## Bachelor of Science Degree in Public Relations▽

The Public Relations degree is designed to prepare students to serve as public communicators in a variety of settings including (but not limited to) corporate, non-profit, government, healthcare, and education. The program curriculum is devised to provide students with significant communication training and internship opportunities. Students will learn essential writing, speaking, and critical thinking skills. Additionally, students will be exposed to a variety of theoretical approaches to the practice of public relations. The curriculum is modeled on the Public Relations Society of America's Undergraduate Education recommendations.

Certain courses in these programs have prerequisites; students should check the course descriptions for required prerequisites.

## Bachelor of Science in Public Relations

### Program Outcomes

Upon successful completion of the program, students will be able to demonstrate

1. writing skills
2. speaking skills
3. critical thinking skills
4. and theoretical approaches to the practice of public relations.

▽ This program is also offered in an online format.

## Bachelor of Arts Degree

### Major in Communication Arts

### Mass Communication Option

Credits

**General Education Requirements ..... 31**

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

**Mass Communication Core Requirements**

COMX 200 Exploring Communication Studies .....	3
COMX 211 Advanced Public Speaking .....	3
COMX 330 Principles of Media Studies .....	3
COMX 331 Theories of Media and Society .....	3
COMX 341 History and Theory of Persuasion.....	3
COMX 351 Principles of Public Relations.....	3
COMX 400 Communication Theory .....	3
COMX 499 Capstone .....	3
JRNL 270 Reporting.....	3
<b>Total.....</b>	<b>27</b>

**Critical Media & Society Courses****Choose 4 courses from the following, with advisor's approval:**

COMX 340 Visual Rhetoric .....	3
COMX 431 Communicating Online.....	3
COMX 434 Political Communication .....	3
COMX 435 Media Criticism .....	3
COMX 436 Popular Culture and Cultural Studies .....	3
COMX 438 Multicultural Mass Communication .....	3
<b>Total.....</b>	<b>12</b>

**Mass Communication Supplemental Courses****Choose 3 courses from the following, with advisor's approval:**

COMX 210 Communication in Small Groups.....	3
COMX 320 Principles of Organizational Communication.....	3
COMX 426 Leadership and Communication .....	3
COMX 429 The Law of Public Communication.....	3
COMX 431, 434, 435, 436, or 438 <b>if not taken above</b> .....	3
COMX 452 Issues in Public Relations .....	3
COMX 456 Case Studies in Public Relations.....	3
COMX 457 Public Relations Ethics .....	3
COMX 480 Health Communication .....	3
COMX 481 Media for Social Change .....	3
COMX 491 Special Topics.....	3
COMX 494/498 Internship or Seminar/Workshop.....	3
<b>Total.....</b>	<b>9</b>

**Total minimum credits required for major..... 48****Language Requirement (see page 161) .....14-15***Continued...***SUGGESTED PLAN OF STUDY**

### *B.A. Major in Communication Arts Mass Communication Option*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts programs in Communication & Theatre. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. This suggested plan is not a substitute for careful advising by Departmental faculty. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
COMX 115	3	
COMX 111		3
COMX course		3
Foreign Language	4	4
General Education	6	3
<b>Total</b>	<b>16</b>	<b>13</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
COMX 200	3	
COMX 330	3	
COMX 211		3
Foreign Language	3	3
General Education w/Lab	4	
General Education	3	6
<b>Total</b>	<b>16</b>	<b>15</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
COMX 331	3	
COMX 351	3	
COMX 341		3
COMX courses	3	6
General Education	3	3
<b>Total</b>	<b>12</b>	<b>12</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
COMX Courses	9	6
Electives	6	6
<b>Total</b>	<b>15</b>	<b>12</b>

▽ This program is also offered in an online format.

<b>Restricted electives selected with advisor approval.....</b>	<b>6</b>
<b>Electives .....</b>	<b>18-19</b>
<b>Total minimum credits required for degree.....</b>	<b>120</b>

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

Note: Substitutions between options can be made with advisor or consent. Students must earn a grade of “C” or above in courses used to satisfy major or minor requirements in the Communication and Theatre Department. The Department of Communication and Theatre offers a BA in Communication & Theatre online. Check the university website for details at [www.msubillings.edu](http://www.msubillings.edu)

## Bachelor of Arts Degree

### Major in Communication Arts

### Organizational Communication Option<sup>∇</sup>

Credits

**General Education Requirements ..... 31**

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

**Organizational Communication Core Requirements**

COMX 200 Exploring Communication Studies .....	3
COMX 210 Communication in Small Groups.....	3
COMX 211 Advanced Public Speaking .....	3
COMX 320 Principles of Organizational Communication .....	3
COMX 330 Principles of Media Studies .....	3
COMX 331 Theories of Media and Society .....	3
COMX 340 Visual Rhetoric .....	3
COMX 341 History and Theory of Persuasion.....	3
COMX 400 Communication Theory .....	3
COMX 414 Communication in Personal Relationships .....	3
COMX 420 Issues in Organizational Communication .....	3
COMX 426 Leadership and Communication .....	3
COMX 494 Seminar: Digital Technology .....	3
COMX 499 Capstone .....	3
JRNL 270 Reporting .....	3
<b>Total minimum credits required for major .....</b>	<b>45</b>

**Language Requirement (see page 161) ..... 14-15****Electives ..... 29-30****Total minimum credits required for degree..... 120**

Note: Substitutions between options can be made with advisor or consent. Students must earn a grade of “C” or above in courses used to satisfy major or minor requirements in the Communication and Theatre Department. The Department of Communication and Theatre offers a BA in Communication & Theatre online. Check the university website for details at [www.msubillings.edu](http://www.msubillings.edu)

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

<sup>∇</sup> This program is also offered in an online format.

**SUGGESTED PLAN OF STUDY**

### *B.A. Major in Communication Arts Organizational Communication Option*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts programs in Communication & Theatre. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. This suggested plan is not a substitute for careful advising by Departmental faculty. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
COMX 110	3	
COMX 130		3
Foreign Language	4	4
General Education	6	6
<b>Total</b>	<b>16</b>	<b>13</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
COMX 200	3	
COMX 210	3	
COMX 230		3
Foreign Language	3	3
General Education w/Lab	4	
General Education	3	9
<b>Total</b>	<b>16</b>	<b>15</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
COMX 310	3	
COMX 320		3
COMX 330		3
COMX courses	3	6
General Education	3	
Electives	6	3
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
COMX Courses	9	9
Electives	6	3
<b>Total</b>	<b>15</b>	<b>12</b>

***\*Program placed on moratorium\****

**Bachelor of Arts Degree  
Major in Communication Arts  
Theatre Option**

**Credits**

**General Education Requirements ..... 31**

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

**Required Courses**

COMX 200 Exploring Communication Studies .....	3
COMX 210 Communication in Small Groups.....	3
*COMX 212 Introduction to Intercultural Communication .....	3
COMX 330 Principles of Media Studies .....	3
COMX 340 Visual Rhetoric .....	3
COMX 341 History and Theory of Persuasion.....	3
*THTR 101 Introduction to Theatre .....	3
THTR 102 Introduction to Theatre Design.....	3
*THTR 120 Introduction to Acting I.....	3
THTR 205 Theatre Workshop II .....	3
THTR 302 Theatre Design and Technology.....	3
THTR 305 Theatre Workshop III .....	3
THTR 375 Directing I .....	3
<b>Total minimum credits required for major.....</b>	<b>48</b>

**Language Requirement (see page 161) ..... 14-15**

**Restricted electives selected with advisor approval..... 6**

**Electives ..... 20-21**

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

Note: Substitutions between options can be made with advisor or consent. Students must earn a grade of “C” or above in courses used to satisfy major or minor requirements in the Communication and Theatre Department.

It is recommended that students with a Theatre Option take at least one elective course in THTR 205/305 Theatre Workshop in Theatre Production.

Since a Communication and Theatre major has 48 credits and is therefore by definition an extended major, students with a Communication and Theatre major are not required to complete a minor.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

**SUGGESTED PLAN OF STUDY**

***Bachelor of Arts  
Majors in  
Communication Arts***

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts programs in Communication & Theatre. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. This suggested plan is not a substitute for careful advising by Departmental faculty. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
WRIT 201		3
COMX 115	3	
COMX 111		3
COMX course		3
Foreign Language	4	4
General Education	6	3
<b>Total</b>	<b>16</b>	<b>16</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
COMX 200	3	
COMX 210	3	
COMX 211		3
Foreign Language	3	3
General Education w/Lab	4	
General Education	3	6
<b>Total</b>	<b>16</b>	<b>15</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
COMX 330	3	
COMX 340	3	
COMX 341		3
COMX courses	3	6
General Education	3	3
Electives	3	3
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
COMX Courses	9	6
Electives	6	6
<b>Total</b>	<b>15</b>	<b>12</b>

## Minor in Communication Arts Options

### Minor in Communication Arts Mass Communication Option

Credits

**Required courses**

COMX 200 Exploring Communication Studies .....	3
COMX 330 Principles of Media Studies .....	3
COMX 331 Theories of Media and Society .....	3
COMX 340 Visual Rhetoric .....	3
COMX 341 History and Theory of Persuasion.....	3
JRNL 270 Reporting.....	3
<b>Total.....</b>	<b>18</b>

**Choose two of the following three:**

COMX 435 Media Criticism .....	3
COMX 436 Popular Culture and Cultural Studies ....	3
COMX 438 Multicultural Mass Communication .....	3
<b>Total.....</b>	<b>6</b>

**Total credits required for minor .....24**

### Minor in Communication Arts Organizational Communication Option

Credits

**Required courses**

*COMX 111 Introduction to Public Speaking.....	3
COMX 200 Exploring Communication Studies .....	3
COMX 210 Communication in Small Groups.....	3
COMX 320 Principles of Organizational Communication.....	3
COMX 341 History and Theory of Persuasion.....	3
COMX 400 Communication Theory .....	3
COMX 420 Issues in Organizational Communication.....	3
COMX 426 Leadership and Communication .....	3
<b>Total credits required for minor .....</b>	<b>24</b>

\*May satisfy General Education requirements.

### *\*Program placed on moratorium\**

### Minor in Communication Arts Theatre Option

Credits

**Required courses**

*THTR 101 Introduction to Theatre .....	3
THTR 102 Introduction to Theatre Design .....	3
*THTR 120 Introduction to Acting I .....	3
THTR 205 Theatre Workshop II.....	1-5
THTR 302 Theatre Design and Technology .....	3
THTR 305 Theatre Workshop III .....	1-5
THTR 375 Directing I.....	3
<b>Total credits for minor .....</b>	<b>26-34</b>

**Note**

Substitutions between options can be made with advisor or consent. Students must earn a grade of "C" or above in courses used to satisfy major or minor requirements in the Communication and Theatre Department. The Department of Communication and Theatre offers a communication minors in Communication & Theatre online. Check the university website for details at [www.msubillings.edu](http://www.msubillings.edu)

\*May satisfy General Education requirements.

## Bachelor of Science Degree Major in Public Relations▽

**General Education Requirements** ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

### Public Relations Core Requirements

COMX 200 Exploring Communication Studies .....	3
COMX 210 Communication in Small Groups.....	3
COMX 320 Principles of Organizational Communication .....	3
COMX 330 Principles of Media Studies .....	3
COMX 341 History and Theory of Persuasion.....	3
COMX 351 Principles of Public Relations .....	3
COMX 400 Communication Theory .....	3
COMX 429 The Law of Public Communication .....	3
COMX 452 Issues in Public Relations .....	3
COMX 456 Case Studies in Public Relations.....	3
COMX 457 Public Relations Ethics .....	3
COMX 499 Capstone .....	3
JRNL 270 Reporting.....	3
*STAT 216 Introduction to Statistics .....	4
<b>Total</b> .....	<b>43</b>

### Public Relations Electives Supplemental Courses

Following advisor's consultation, select 2 courses (6 credits) from the following:

COMX 211 Advanced Public Speaking .....	3
COMX 331 Theories of Media and Society .....	3
COMX 340 Visual Rhetoric .....	3
COMX 431 Communicating Online.....	3
COMX 438 Multicultural Mass Communication .....	3
COMX 480 Health Communication .....	3
COMX 481 Media for Social Change .....	3
COMX 482 Women, Media, and Society.....	3
<b>Total</b> .....	<b>6</b>

**Total minimum credits required for major**..... 49

**Restricted electives selected with advisor approval**..... 6

**Electives**..... 34

**Total minimum credits required for degree**..... 120

Note: Substitutions between options can be made with advisor or consent. Students must earn a grade of "C" or above in courses used to satisfy major or minor requirements in the Communication and Theatre Department. The Department of Communication and Theatre offers a BS in Communication & Theatre online. Check the university website for details at [www.msubillings.edu](http://www.msubillings.edu)

\*May satisfy General Education requirements.

## SUGGESTED PLAN OF STUDY

### Bachelor of Science Degree Major in Public Relations

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Science Degree Major in Public Relations. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. This suggested plan is not a substitute for careful advising by Departmental faculty. Students should consult with their advisors to plan classes before registering each term.

First Year	F	S
WRIT 101	3	
STAT 141		3
COMX 111		3
General Education	9	6
COMX 115	3	
<b>Total</b>	<b>15</b>	<b>12</b>
Second Year	F	S
COMX 200		3
COMX 210	3	
STAT 216		4
JRNL 270	3	
General Education	9	9
<b>Total</b>	<b>15</b>	<b>16</b>
Third Year	F	S
COMX 320	3	
COMX 330	3	
COMX 351	3	
COMX 341		3
General Education w/Lab	4	
PR Elective		3
Elective	6	6
<b>Total</b>	<b>15</b>	<b>16</b>
Fourth Year	F	S
COMX 452	3	
COMX 456		3
COMX 457		3
COMX 429	3	
COMX 400	3	
COMX 499		3
PR elective	3	
Electives	3	5
<b>Total</b>	<b>15</b>	<b>14</b>

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

▽ This program is also offered in an online format.



# The Department of English, Philosophy and Modern Languages

***Ms. Tami Haaland, Chairperson***  
***LA 437/400, (406) 657-2348***  
**thaaland@msubillings.edu**

## English

Professors: Dillon, Haaland, Quetchenbach, D. Schaffer, R. Schaffer  
Assistant Professor: Nurmi  
Professor Emeritus: Acton, Healey, Kamowski, Utroske, Willett

## Philosophy

Professor: Kemmerer  
Assistant Professor: Diaz  
Professor Emeritus: Gulick, Karnos

## Modern Languages

Associate Professor: Regele  
Professors Emeritus: Jensen

## Undergraduate Degrees and Majors

### Bachelor of Arts

**Majors:** English, Spanish

**Option:** Teaching Licensure

**Minors:** English (Programs of Study: Professional Writing, Creative Writing, Literature), International Studies, Philosophy (Option: Religious Studies), Spanish

**Teaching Minors:** English, Spanish (K-12)

## Graduate Program

**Certificate in Teaching Creative and Expository Writing**

For details, see the Graduate Catalog.

## Department Mission Statement

In English, the Department's mission is to provide students with an understanding and appreciation of the development and aesthetic achievement of literature primarily reflecting English and American cultural, linguistic, and historical influences, as well as world literatures. Creative writing and linguistics are additional areas of emphasis for students. The Department's mission includes providing students with the tools necessary to become practiced writers.

In Modern Languages, the Department's mission is to provide students with critical skills in the use of the Spanish language and familiarity with the cultures and literatures of that language, both Peninsular and Latin American. The Department also offers French, German, and other languages.

In Philosophy, the Department provides students with diverse ethical, philosophical, religious and cultural perspectives.

In all areas the Department seeks to provide excellent instruction and challenging content.

## Learning Outcomes

Students who attend class regularly, complete the required courses, and work diligently will achieve the following outcomes:

- Students in English will demonstrate skills in writing expressive, literary, referential, and persuasive discourse.
- Students in English will demonstrate knowledge of the grammar, structure, development and use of the English language.
- Students in English will demonstrate an understanding of the critical approaches to and development of American, British, and World literature.

Students in philosophy will demonstrate an understanding of basic philosophical and ethical approaches to life across cultures.

Students in Spanish will be able to use their language skills in daily life as well as possess:

- a general understanding (historical and contemporary) of the culture(s) of that language;

- an acquaintance with the literature of that language;
- a general understanding of the grammar of that language;
- (for teaching majors and minors) an acquaintance with traditional and current methodology for teaching modern languages and familiarity with on-going issues in modern languages

## Advising Information

Students are encouraged to meet with their advisor each semester to confirm that their Plan of Study is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner. Faculty advisors work with students to explore appropriate internships, cooperative education placements and/or experiential learning opportunities which will enhance the student's academic program. In addition, advisors provide assistance in selecting elective courses which support the student's interests, career plans and Plan of Study.

Academic advising services for all freshmen Arts and Sciences majors are provided through Advising & Career Services on McMullen Hall first floor west. Upon declaring a specific major, Arts and Science majors will be assigned to a faculty advisor in their department for upper-division advising. Advising files for all upper-division students are maintained in the departmental office of the program in which the student is majoring. Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

## English

Satisfactory achievement of the student's professional goals depends, in large part, on careful planning. In order to help students majoring in English to develop programs of studies that best reflect their professional goals, the faculty in the Department of English, Philosophy and Modern Languages requires students to participate in a strong program of academic advisement. The close personal and professional relationships of such a program can strengthen both students and faculty. Certain courses in the Bachelor of Arts and Bachelor Arts with Teaching Licensure programs have prerequisites, and students should check with their advisors for courses in the catalog with required prerequisites.

By the end of the second year of study, Bachelor's degree candidates should have developed, in consultation with their advisors, a program of studies designed to meet individual goals. In addition, students

should supplement requirements in the major with coursework in related academic disciplines. The student's faculty advisor will help select related courses that best supplement a program of studies.

Some students who major in English continue their professional education beyond the baccalaureate degree. Law school is an example of a professional school which recommends English as an undergraduate major for applicants. Areas of employment open to English graduates with Bachelor of Arts degrees include journalism, public relations, technical writing and editing positions, and other career fields which require the ability to use language effectively. Graduates in Education with majors in English most often enter the teaching profession at the secondary level.

## Philosophy

Philosophy and Religious Studies courses are fundamentally inquisitive, interactive, and critical in nature, inviting students to ponder the meaning of life and their place in the larger world using a rich heritage of religious and philosophical thoughts from around the world and through time. Philosophy and Religion courses tend to develop important skills, such as critical thinking, self-expression, inquisitiveness, self-examination, and breadth of perspective. Key topics tend to be both personal and universal.

Philosophy and Religious Studies courses are particularly helpful for those seeking careers in law, business, education, ministry, medicine, social work, and/or those who simply want a richer life experience.

Students seeking positions immediately after college often find that philosophy, combined with another area of expertise, equips them with attitudes and critical skills essential to their careers.

## Modern Languages

Foreign languages, as currently taught in colleges and universities, take as their province the oral and written tradition and the culture, both old and new, of particular national groups. Culture is an integral part of every foreign language course, from elementary to advanced courses in literature, civilization, and business. Recorded and computerized material and tutorial programs provide the "on location" experience of cultural authenticity via computer access to the world's major newspapers, universities, museums and archives.

The ability to communicate in a language other than one's mother tongue has historically been the mark of an educated and successful person. Rapid communication has made neighbors of distant peoples, and the need for language study is greater than ever before if we intend to participate in the political, economic, scientific and cultural leadership of the planet.

The Bachelor of Arts degree in Spanish is available for those interested in careers in government, companies with overseas branches, and international agencies.

## Credit Examinations

Those students who have had previous training in a foreign language or who are native speakers of a language other than English may receive credit for their level of proficiency through a credit examination. Depending on proficiency, students may receive from one semester to three years credit in a language. High school study of a foreign language may provide immediate college credit to students who have applied themselves in high school.

Upon request, the department will grant credit in a language other than those taught at MSU Billings. Students must provide a qualified interpreter. They must show oral proficiency for first year credit, and generally both oral and reading proficiency for second year credit. This credit is awarded under the LANG prefix. Credit for Native American languages is handled through the Native American Outreach Office.

Prior to graduation, students must enroll in the course for which the credits will be awarded. Students may elect to enroll in the course in the semester after the challenge exam is taken, or they may enroll for the course in any semester after the successful completion of the challenge exam.

## Sequence Course Procedures

Courses in first and second year French, German and Spanish must be taken in sequence, that sequence being 101, 102, 201, 202.

## Study Abroad

The University offers Spanish students the opportunity to live and learn in Spain, Costa Rica and other countries. Other fully accredited summer session, semester, and academic-year abroad programs may be arranged in cooperation with other American colleges

and universities. Students should inquire at the departmental office or at the Office of International Studies (McD 150, 406-657-1705).

## Internships

Internships (some paid) are available for students of French, German and Spanish, and students majoring or minoring in a foreign language are encouraged to participate in one of these programs.

## Bachelor of Arts Degree Major in English

### General Education Requirements ..... 31

(See page 69) The Department of English, Philosophy and Modern Languages imposes specific requirements within the broad General Education requirement. WRIT 095, WRIT 101, & LIT 110 cannot be counted toward an English major or minor. English majors must consult with their advisors to determine which courses are necessary to satisfy the General Education requirements within this major. Bachelor of Arts majors in English are required to take WRIT 101 and LIT 230 to satisfy specific General Education requirements. Substitutions must be approved in writing by the chairperson.

### Required Courses

LING 210 Introduction to Language and Linguistics .....	3
LIT 201 Introduction to Literary Studies .....	3
LIT 300 Literary Criticism .....	3
LIT 312 Advanced American Literature I .....	3
LIT 313 Advanced American Literature II .....	3
LIT 320 Advanced British Literature I .....	3
LIT 321 Advanced British Literature II .....	3
LIT 322 Advanced British Literature III .....	3
LIT 499 Thesis/Capstone: Portfolio .....	3
WRIT 396 Peer Tutoring .....	1
<b>Total Required Courses .....</b>	<b>28</b>

### Restricted Elective

Choose 6 credits from:

CRWR 491 Special Topics .....	1-3
LING 491 Special Topics .....	1-3
LIT 432 Major Writers .....	3
LIT 437 Studies in Genres .....	3
LIT 460 Studies in British Literature .....	1-3
LIT 461 Studies in American Literature .....	1-3
LIT 463 Studies in Contemporary Literature .....	1-3
LIT 464 Studies in Medieval Literature .....	1-3
<b>Total .....</b>	<b>6</b>

### Areas of Emphasis ..... 12

English courses to be chosen in consultation with advisor.

### Area I Literature

ENST 335 The Environmental Vision .....	3
*LIT 230 World Literature Survey .....	3
*LIT 240 The Bible As Literature .....	3
*LIT 270 Film & Literature .....	3
LIT 305/NASX 340 Literature by and about Native Americans .....	3
LIT 307/SPNS 314 Latino Literature .....	3
LIT 327 Shakespeare .....	3
LIT 335 Women & Literature .....	3
LIT 342 Montana Writers .....	3
LIT 370 Science Fiction .....	3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts Major in English*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts Major in English. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
LIT 201		3
LIT 230		3
Foreign Language	4	4
General Education	9	
General Education w/Lab		4
<b>Total</b>	<b>16</b>	<b>14</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
LING 210	3	
LIT 312	3	
LIT 313		3
LIT 320	3	
LIT 321		3
Foreign Language	3	3
General Education	3	6
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
LIT 300	3	
LIT 322		3
English Electives	6	3
Minor	3	6
Electives	3	3
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
WRIT 396		1
LIT 499	3	
English Electives	6	3
Minor	6	7
Electives		4
<b>Total</b>	<b>15</b>	<b>15</b>

LIT 381 Young Adult Literature .....	3
LIT 432 Major Writers .....	3
LIT 460 Studies in British Literature.....	1-3
LIT 461 Studies in American Literature.....	1-3
LIT 463 Studies in Contemporary Literature.....	1-3
LIT 464 Studies in Medieval Literature .....	1-3
RLST 303 Greek and Roman Mythology.....	3
RLST 304 Mythology Around the World.....	3

### Area II Writing

*CRWR 240 Introductory Creative Writing Workshop .....	3
CRWR 310 Intermediate Fiction Workshop.....	3
CRWR 311 Intermediate Poetry Workshop .....	3
CRWR 312 Intermediate Nonfiction Workshop.....	3
CRWR 360 Magazine Article Writing .....	1-3
CRWR 410 Advanced Fiction Workshop .....	3
CRWR 411 Advanced Poetry Workshop .....	3
CRWR 412 Advanced Nonfiction Workshop.....	3
CRWR 491 Special Topics.....	1-3
FILM 324 Writing for Stage and Screen .....	3
FILM 424 Advanced Writing for Stage and Screen .....	3
*WRIT 220 Business & Professional Writing.....	3
*WRIT 221 Intermediate Technical Writing.....	3
WRIT 396 Peer Tutoring .....	1

### Area III Linguistics

LING 301 History of the English Language.....	3
LING 312 English Grammar .....	3
LING 315 Sociolinguistics .....	3
LING 318/PSYX 482 Introduction to Psycholinguistics .....	3
LING 491 Special Topics .....	1-3

**NOTE:** WRIT/LIT/CRWR/LING 294, WRIT 498, WRIT/LIT/CRWR/LING 492, WRIT/LIT/CRWR/LING 494, and ENGL 591 courses may be used in all areas of emphasis as course content dictates. LIT 460, LIT 461, LIT 463, LIT 464, LING 491, and CRWR 491 may be repeated to a maximum of six credits each.

**Total minimum credits required for major..... 46**

**Minor..... 21**

**NOTE – Extended major:** Instead of a minor, students majoring in English may select an extended major. The extended major requires completion of 15 credits in English beyond the credits required in the existing major. Students must select the 15 credits in consultation with their department advisor.

**Language requirement (see page 122) ..... 14**

**Electives..... 8**

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Arts Degree

### Major in English

### Teaching Licensure Option

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

#### Credits

#### General Education Requirements ..... 31 (Secondary & K-12 majors)

(See page 69) LIT 230 satisfies General Education Category IV and is counted in the major. Students should consult with their English advisor to determine other specific courses necessary in order to satisfy the General Education requirements within this major.

#### Professional Core (see page 266) ..... 34 -36

(includes EDU 497D Methods: 5-12 English, 2cr.)

EDU 105^ also satisfies General Education Requirements.

#### Required English Courses:

LING 210 Introduction to Language and Linguistics .....	3
LING 312 English Grammar .....	3
LING 315 Sociolinguistics .....	3
*LIT 230 World Literature Survey .....	3
LIT 300 Literary Criticism .....	3
LIT 312 Advanced American Literature I .....	3
LIT 313 Advanced American Literature II .....	3
LIT 320 Advanced British Literature I .....	3
LIT 321 Advanced British Literature II .....	3
LIT 322 Advanced British Literature III .....	3
LIT 327 Shakespeare .....	3
LIT 381 Young Adult Literature .....	3
LIT 499 Thesis/Capstone: Portfolio .....	3
WRIT 396 Peer Tutoring .....	1
WRIT 398A Internship .....	1
<b>Total minimum required credits for major .....</b>	<b>41</b>

#### Teaching minor ..... 21^

(**Extended major:** Instead of a minor, students majoring in English may select an extended major. The extended major requires completion of 15 credits in English beyond the credits required in the existing major. Students must select the 15 credits in consultation with their department advisor.)

#### Restricted electives selected with advisor approval ..... 6

#### Total minimum credits required for degree ..... 128^

^ **Double counting credits.** Students may double count at least six General Education credits to satisfy requirements in both the major and minor. LIT 230 required in this program meets an General Education requirement for BA majors in English, as does EDU 105 in the Professional Education Core.

**Residency Requirement:** Students electing the BA in English at MSU Billings with teaching licensure must complete a minimum of 10 semester  
*Continued...*

## SUGGESTED PLAN OF STUDY

### *B.A. Major in English Teaching Licensure Option*

Students should talk with their faculty advisors prior to registration for classes. It is a good practice to visit with the faculty advisor each semester. The following suggested schedule provides a general overview of courses and work that will enable the Teaching Major in English student to progress through the degree in an orderly and timely manner.

First Year	F	S
WRIT 101	3	
LIT 230	3	
LING 210		3
BIOB 101		3
EDU 105	3	
EDU 220		3
COMX 111	3	
Minor		3
General Education	3	6
<b>Total</b>	<b>15</b>	<b>18</b>

Second Year	F	S
WRIT 201		3
LING 312	3	
LIT 312	3	
LIT 313		3
EDU 221		3
HSTA 101 or 102	3	
HTH 412	1	
NASX 105 or 205		3
EDSP 204	3	
LIT 320	3	
General Education w/Lab		4
<b>Total</b>	<b>16</b>	<b>16</b>

Apply for Admission to Educator Preparation Program Spring Semester.

Third Year	F	S
LING 315	3	
LIT 300		3
LIT 321	3	
LIT 322		3

hours of the major requirements or electives in English at MSU Billings and six semester hours of the teaching minor requirements or electives in English at MSU Billings. Exceptions to this requirement can be petitioned to the Department of English for special approval.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites*

LIT 381	3	
WRIT 396	1	
EDU 333		3
Minor	6	9
WRIT 398A		1
<b>Total</b>	<b>17</b>	<b>18</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
EDU 497D	2	
LIT 499	3	
LIT 327	3	
EDU 406		3
EDU 380	2	
EDU 495C		9
Minor Methods	3	
Minor		6
<b>Total</b>	<b>16</b>	<b>12</b>

Apply to Student Teach Fall Semester.

Apply to Graduate Fall Semester.

Apply for licensure Spring Semester.

## Minor in English

See below for options.

Substitutions must be approved in writing by the chairperson, Department of English, Philosophy and Modern Languages. WRIT 095 and WRIT 101 cannot be counted toward an English minor.

### *Program of Study: Professional Writing*

#### Required courses

*CRWR 240 Introductory Creative Writing Workshop.....	3
JRNL 270 Reporting.....	3
*WRIT 220 Business & Professional Writing.....	3
<b>Total.....</b>	<b>9</b>

Credits

#### Elective courses

Choose 12 credits from the following courses. Special Topics courses may be offered on subjects such as grant writing, writing in the nonprofit world, editing, and so on. Check the Class Schedule for specific listings. Internships and independent study must be arranged with an instructor.

COMX 340 Visual Rhetoric .....	3
COMX 341 History and Theory of Persuasion.....	3
CRWR 294 Seminar/Workshop .....	1-3
CRWR 312 Intermediate Nonfiction Workshop.....	3
CRWR 360 Magazine Article Writing .....	3
CRWR 412 Advanced Nonfiction Workshop.....	3
CRWR 491 Special Topics.....	1-3
CRWR 494 Seminar/Workshop .....	1-3
*WRIT 201 College Writing II.....	3
*WRIT 221 Intermediate Technical Writing.....	3
WRIT 294 Seminar/Workshop.....	1-3
WRIT 298 Cooperative Education/Internship .....	1-9
WRIT 492 Independent Study .....	1-3
WRIT 494 Seminar/Workshop.....	1-3
WRIT 498 Cooperative Education/Internship .....	1-3
<b>Total Elective courses.....</b>	<b>12</b>

**Total minimum credits required for minor.....21**

## Minor in English

### *Program of Study: Creative Writing*

#### Required courses

*CRWR 240 Introductory Creative Writing Workshop.....	3
CRWR 310 Intermediate Fiction Workshop.....	3
CRWR 311 Intermediate Poetry Workshop .....	3

Credits

CRWR 312 Intermediate Nonfiction Workshop .....	3
<b>Total Required courses.....</b>	<b>12</b>

#### Select 6 credits from:

CRWR 360 Magazine Article Writing.....	1-3
CRWR 410 Advanced Fiction Workshop .....	3
CRWR 411 Advanced Poetry Workshop.....	3
CRWR 412 Advanced Nonfiction Workshop .....	3
CRWR 491 Special Topics .....	1-3
FILM 324 Writing for Stage and Screen.....	3
FILM 424 Advanced Writing for Stage and Screen..	3
WRIT 498 Cooperative Education/Internship.....	1-3
<b>Total Elective courses .....</b>	<b>6</b>

#### Literature Component

##### Select 3 credits from:

*LIT 110 Introduction to Literature .....	3
*LIT 230 World Literature Survey .....	3
LIT 312 Advanced American Literature I.....	3
LIT 313 Advanced American Literature II .....	3
LIT 320 Advanced British Literature I .....	3
LIT 321 Advanced British Literature II .....	3
LIT 322 Advanced British Literature III.....	3
LIT 327 Shakespeare .....	3
<b>Total Literature courses .....</b>	<b>3</b>

**Total minimum credits required for minor ..... 21**

## Minor in English

### *Program of Study: Literature*

Credits

#### Required courses

LIT 201 Introduction to Literary Studies .....	3
LIT 499 Thesis/Capstone: Portfolio.....	3
<b>Total required courses .....</b>	<b>6</b>

#### Elective courses

Fifteen (15) credits of any course with a LIT rubric. Nine (9) credits must be upper division.

Students may also take any of the following courses for the elective category.

RLST 303 Greek and Roman Mythology .....	3
RLST 304 Mythology Around the World .....	3

**Total electives .....** 15

**Total minimum credits required for minor ..... 21**

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*



## Teaching Minor in English

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### Credits

#### Required Courses

EDU 497D Methods: 5-12 English.....	2
LING 210 Introduction to Language and Linguistics.....	3
*LIT 230 World Literature Survey.....	3
LIT 312 Advanced American Literature I.....	3
LIT 313 Advanced American Literature II.....	3
LIT 320 Advanced British Literature I.....	3
LIT 321 Advanced British Literature II.....	3
LIT 499 Thesis/Capstone: Portfolio .....	3
WRIT 396 Peer Tutoring .....	1
<b>Total minimum credits required for minor.....</b>	<b>24</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Philosophy

### Credits

#### Core Requirements

*PHL 110 Introduction to Ethics: Problems of Good and Evil .....	3
*PHL 111 Philosophies of Life .....	3
<b>Total.....</b>	<b>6</b>

#### Lower Division Electives

Choose 3 credits from Group A and 3 credits from Group B.

##### Group A

PHL 234 Introduction to Logic: Applied Logic .....	3
*PHL 271 Indian Philosophies and Religions .....	3
*PHL 272 Chinese Philosophies and Religions.....	3

##### Group B

*PHL 254 People and Politics .....	3
PHL 265 Studies in the History of Philosophy.....	3
PHL 294 Seminar/Workshop.....	3
<b>Total.....</b>	<b>6</b>

#### Upper Division Electives

Select 9 credits from the list below in consultation with your advisor from any upper division Philosophy courses. Do not count both RLST 303 and RLST 304.

PHL 320 Philosophy and Business Ethics.....	3
PHL 324 Nature, Culture, Ethics.....	3

PHL 326 Death, Dying and Medical Ethics .....	3
PHL 364 Great Figures and Ideas .....	3
PHL 375 Women, Philosophy and Religion .....	3
PHL 494 Seminar/Workshop .....	3
RLST 303 Greek and Roman Mythology .....	3
RLST 304 Mythology Around the World .....	3
<b>Total .....</b>	<b>9</b>

**Total minimum credits required for minor ..... 21**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; student should check the course descriptions for required prerequisites.*

## Minor in Philosophy Religious Studies Option

### Credits

#### Core Requirement

*RLST 170 The Religious Quest .....	3
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#### Lower Division Electives

Choose 9 credits from the following list.

*LIT 240 The Bible as Literature.....	3
*PHL 110 Introduction to Ethics: Problems of Good and Evil .....	3
*PHL 271 Indian Philosophies and Religions.....	3
*PHL 272 Chinese Philosophies and Religions .....	3
RLST 245 Christianity .....	3
<b>Total .....</b>	<b>9</b>

#### Upper Division Electives

Select 9 credits in consultation with an advisor from any upper division Philosophy courses.

NASX 304 Native American Beliefs and Philosophy .....	3
PHL 324 Nature, Culture, Ethics .....	3
PHL 364 Great Figures and Ideas .....	3
PHL 494 Seminar/Workshop .....	3
RLST 303 Greek and Roman Mythology .....	3
RLST 304 Mythology Around the World .....	3
<b>Total .....</b>	<b>9</b>
<b>Total Minimum credits required for minor.....</b>	<b>21</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; student should check the course descriptions for required prerequisites.*

## Bachelor of Arts Degree Major in Spanish

### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

### Spanish Required Courses

^SPNS 201 Intermediate Spanish I.....	3
^SPNS 202 Intermediate Spanish II .....	3
SPNS 311 Hispanic Culture and Civilization I.....	3
SPNS 312 Hispanic Culture and Civilization II .....	3
^SPNS 321 Advanced Spanish Conversation I.....	3
^SPNS 322 Advanced Spanish Conversation II .....	3
SPNS 499 Senior Thesis/Capstone .....	1
<b>Total Spanish Required Credits .....</b>	<b>19</b>

### Restricted Electives

#### A. Select 1 course from the following:

SPNS 405 Spanish Composition & Grammar I.....	3
SPNS 406 Spanish Composition & Grammar II.....	3

#### B. Select 1 course from the following:

SPNS 455 Topics in Spanish American Literature .....	3
SPNS 456 Topics in Spanish Literature .....	3

#### C. Select 4 additional upper division courses in Spanish in consultation with an advisor..... 12

#### D. Select 1 course from the following:

HSTR 330 History of Mexico.....	3
HSTR 332 Pre-Columbian & Colonial Latin America .....	3
HSTR 336 Modern Latin America .....	3

**Total Restricted Electives..... 21**

**Total minimum credits for major ..... 40**

**Minor ..... 21-24**

**Electives selected in consultation with advisor..... 25**

**Total minimum credits required for degree..... 120**

^Students with fluency may receive credit for these courses through the challenge mechanism.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

\*May satisfy General Education requirements.

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts Major in Spanish*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts Major in Spanish. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

First Year	F	S
WRIT 101	3	
SPNS 201	3	
SPNS 202		3
General Education	9	3
General Education w/Lab	4	
Minor		3
Elective		3
<b>Total</b>	<b>15</b>	<b>16</b>

Second Year	F	S
SPNS 321	3	
SPNS 322		3
SPNS 311	3	
SPNS 312		3
General Education	3	9
Minor	6	
<b>Total</b>	<b>15</b>	<b>15</b>

Third Year	F	S
SPNS 405 or 406	3	
Spanish Electives	3	6
General Education	3	
Minor	3	6
Electives		3
<b>Total</b>	<b>15</b>	<b>15</b>

Fourth Year	F	S
SPNS 499		1
Spanish Electives	3	3
Minor	3	3
Electives	9	7
<b>Total</b>	<b>15</b>	<b>14</b>

## Bachelor of Arts Degree

### Major in Spanish

### Teaching Licensure Option

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

#### General Education Requirements ..... 31

#### Professional Core.....34-36

Includes EDU 497C Methods: K-12 Modern Language (see page 266)

#### Required Courses

^SPNS 201 Intermediate Spanish I.....	3
^SPNS 202 Intermediate Spanish II .....	3
SPNS 305 Spanish Phonetics.....	3
SPNS 311 Hispanic Culture and Civilization I.....	3
SPNS 312 Hispanic Culture and Civilization II .....	3
^SPNS 321 Advanced Spanish Conversation I.....	3
^SPNS 322 Advanced Spanish Conversation II .....	3
SPNS 405 Spanish Composition & Grammar I.....	3
SPNS 406 Spanish Composition & Grammar II.....	3
<b>Total Required Course credits .....</b>	<b>27</b>

#### Restricted Electives

**A.** Select 1 course from the following:

SPNS 455 Topics in Spanish American Literature .....	3
SPNS 456 Topics in Spanish Literature .....	3

**B.** Select 1 course from the following:

LANG 495 Study Abroad .....	3
SPNS 498 Internship/Cooperative Education .....	1-3

**C.** Select 1 upper division course in consultation with an advisor ..... 3

**D.** Select 1 course from the following:

HSTR 330 History of Mexico.....	3
HSTR 332 Pre-Columbian & Colonial Latin America .....	3
HSTR 336 Modern Latin America .....	3

**Total Restricted Elective credits..... 12**

**Total minimum credits required for major..... 39**

**Teaching minor..... 22**

**Total minimum credits required for degree..... 128**

^Students with fluency may receive credit for these courses through the challenge mechanism. In addition to language courses, it is recommended that students, in consultation with their advisors, select appropriate courses in other disciplines which will enhance their preparation to teach Spanish.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites*

## SUGGESTED PLAN OF STUDY

### B.A. Major in Spanish

### Teaching Licensure

### Option

Students should talk with their faculty advisors prior to registration for classes. It is a good practice to visit with the faculty advisor each semester. The following suggested schedule provides a general overview of courses and work that will enable the Teaching Major in Spanish student to progress through the degree in an orderly and timely manner.

<b>First Year</b>	<b>F</b>	<b>S</b>
SPNS 201	3	
SPNS 202		3
EDU 200	3	
EDU 220		3
BIOB 101		3
WRIT 101		3
COMX 115 or 111	3	
General Education	3	6
<b>Total</b>	<b>15</b>	<b>18</b>
<b>Second Year</b>	<b>F</b>	<b>S</b>
SPNS 321	3	
SPNS 322		3
SPNS 311	3	
SPNS 312		3
WRIT 201		3
EDU 221		3
NASX 105 or 205		3
HSTA 101 or 102	3	
EDSP 204	3	
Minor		3
General Education	6	
<b>Total</b>	<b>18</b>	<b>18</b>
Apply for Admission to Educator Preparation Program Spring Semester.		
<b>Third Year</b>	<b>F</b>	<b>S</b>
Spanish Elective	6	6
EDU 333		3
General Education with Lab	4	
Minor	6	6
<b>Total</b>	<b>16</b>	<b>15</b>
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
Spanish Electives	3	
EDU 380	2	
EDU 497C	2	
EDU 406		3
EDU 495A		9
Minor Methods	3	
Minor	6	
<b>Total</b>	<b>16</b>	<b>12</b>
Apply to Student Teach Fall Semester.		
Apply to Graduate Fall Semester.		
Apply for Licensure Spring Semester.		

## Minor in Spanish

### Credits

#### Spanish Required Courses

^SPNS 201 Intermediate Spanish I.....	3
^SPNS 202 Intermediate Spanish II .....	3
^SPNS 321 Advanced Spanish Conversation I.....	3
^SPNS 322 Advanced Spanish Conversation II .....	3
SPNS 311 Hispanic Culture & Civilization I	
OR SPNS 312 Hispanic Culture & Civilization II ..	3
<b>Total Spanish Required Credits .....</b>	<b>15</b>

<b>Restricted Electives chosen in consultation with advisor .....</b>	<b>6</b>
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**Total minimum credits required for minor .....**21

^Students with fluency may receive credit for these courses through the challenge mechanism.

*Certain courses in the program have prerequisites; students should check the course descriptions for required prerequisites.*

## Teaching Minor in Spanish

### (K–12)

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### Credits

#### Required Courses

EDU 497C Methods: K-12 Modern Language .....	2
^SPNS 201 Intermediate Spanish I.....	3
^SPNS 202 Intermediate Spanish II .....	3
^SPNS 321 Advanced Spanish Conversation I.....	3
^SPNS 322 Advanced Spanish Conversation II .....	3
<b>Total Required Course credits .....</b>	<b>14</b>

#### Restricted Electives

<b>A. Select one course from the following .....</b>	<b>3</b>
SPNS 311 Hispanic Culture and Civilization I.....	3
SPNS 312 Hispanic Culture and Civilization II .....	3

#### **B. Select two upper division courses in Spanish in consultation with advisor from the following .....**

SPNS 314/LIT 307 Latino Literature .....	3
SPNS 405 Spanish Composition & Grammar I.....	3
SPNS 406 Spanish Composition & Grammar II.....	3
SPNS 455 Topics in Spanish American Literature....	3
SPNS 456 Topics in Spanish Literature .....	3

**Total Restricted Elective credits.....**9

**Total minimum credits required for minor .....** 23

^Students with fluency may receive credit for these courses through the challenge mechanism. In addition to language courses, it is recommended that students, in consultation with their advisors, select appropriate courses in other disciplines which will enhance their preparation to teach Spanish.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in International Studies

### Credits

#### Required Core

*HSTR 102 Western Civilization II.....	3
*PSCI 230 Introduction to International Relations ...	3
A course in modern language.....	see below
LANG 499 International Studies Capstone Course ..	1

#### Option A: Study Abroad

After satisfying the core courses, the student is encouraged to choose an area for overseas study through consultation with the Director of the Office of International Studies. Credits earned while studying abroad will constitute the remaining courses for the fulfillment of the minor. Upon returning to campus or upon completion of the minor, the student will register for the capstone course LANG 499.

#### Option B: On Campus

In Option B, the student must first satisfy the core courses. Remaining courses will be selected so that they constitute a focus of interest such as Latin America, Asia, the Arts, or General Comparative. The student must then write a short essay which states the rationale for the choice of courses for the focus area. Upon completion of the focus area courses, the student will register for the capstone course LANG 499.

#### Suggested Focus Areas and Course Options:

### Credits

##### Latin America focus:

HSTR 336 Modern Latin America.....	3
HSTR 330 History of Mexico .....	3
LIT 307/SPNS 314 Latino Literature.....	3

##### Asia focus:

HSTR 466 Islamic Civilization .....	3
*PHL 271 Indian Philosophies and Religions.....	3
*PHL 272 Chinese Philosophies and Religions .....	3

**General Comparative focus:**

RLST 304 Mythology Around the World.....3

**Comparative Arts focus:**

\*ARTH 160 Global Visual Culture .....3

\*FILM 160 Introduction to World Cinema .....3

\*LIT 230 World Literature Survey .....3

\*MUSI 207 World Music .....3

**Language Requirement**

Students are required to present a course in modern language as part of the core. If the student has had one year or less of high school foreign language, the language requirement is satisfied by successful completion of the second half of the elementary language sequence (FRCH/SPNS/etc. 102). If the student has had more than one year of high school foreign language, that student must successfully complete the second half of the intermediate language sequence (FRCH/SPNS/etc. 202). Only one language course will be counted toward the minor.

**Total credits required for minor .....22-23**

\*May satisfy General Education requirements.

*Certain courses in the program have prerequisites; students should check the course descriptions for required prerequisites.*

# The Department of History

***Dr. Keith Edgerton, Chairperson***

***LA 809, (406) 657-2896***

**kedgerton@msubillings.edu**

Professors: Edgerton, Redinger, Rust

Associate Professor: Lynn

Assistant Professor: Arendt, Bryan

Emeritus: Fargo, Friguglietti, Moses

## Undergraduate Degrees and Majors

**Bachelor of Arts**

**Major:** History

**Option:** Teaching Licensure

**Minor:** History

**Teaching Minor:** History

**Licensure:** Social Science (Broadfield) Endorsement

## Advising Information

Students are encouraged to meet with their advisor each semester to confirm that their Plan of Study is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner. Faculty advisors work with students to explore appropriate internships, cooperative education placements and/or experiential learning opportunities that will enhance the student's academic program. In addition, advisors provide assistance in selecting elective courses that support the student's interests, career plans and Plan of Study.

Academic advising services for all freshmen Arts and Sciences majors are provided through Advising & Career Services on McMullen Hall first floor west. Upon declaring a specific major, Arts and Science majors will be assigned to a faculty advisor in their department for upper-division advising. Advising files for all upper-division students are maintained in the departmental office of the program in which the student is majoring.

Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

The Department of History has a four-year program in History that leads to a Bachelor of Arts degree.

## Learning Outcomes in History

1. Identify primary sources and secondary sources and assess their validity and applicability to a project.
2. Use primary and secondary sources to construct historical knowledge through analysis and interpretation.
3. Compose a persuasive and clearly written essay that maintains and supports a historical thesis.
4. Prepare a paper that meets the format and citation expectations of the discipline.

## Language Requirement for the B.A. Degree in History

Requires proficiency in a language other than English, equivalent to satisfactory completion of second-year college-level work or the 101-102 active skills sequence in one foreign language plus 6 credit hours of foreign culture courses selected from the following:

HSTA 309 The Atlantic World 1492-1763

HSTR 330 History of Mexico

HSTR 332 Pre-Columbian & Colonial Latin America

HSTR 336 Modern Latin America

HSTR 366 Middle East in the 20<sup>th</sup> Century

HSTR 439 Colonial and Independent Africa since 1884

HSTR 440 Topics in Southern Asia since 1750

HSTR 447 Modern Asia

HSTR 449 History of Vietnam

HSTR 466 Islamic Civilization

HSTR 491 Special Topics: Modern European History

\*PHL 271 Indian Philosophies and Religions

\*PHL 272 Chinese Philosophies and Religions

\*SPNS 150 The Hispanic Tradition

\*May satisfy General Education requirements.

Transfer students may use other foreign cultural courses they may have taken in another institution to fulfill this requirement upon approval by the department. History majors and extended majors in history who choose history courses from the above options will still have to

fulfill the required number of credit hours of upper-division courses in history in addition to the 6 credit hours chosen from the list.

## Extended Major

In lieu of obtaining a minor in another discipline, history majors may choose the “extended major” option in history. To fulfill the extended major option students are required to complete an additional twelve upper-division (300-400 level) credits in history courses. These courses can be in any combination chosen from among the restricted electives offered by the history program. These credits are in addition to the other general education, language requirements, history major requirements, and minimum credits required for a degree. Students who seek this option do not have to obtain a minor in another discipline.

## History

The history program provides a broad general education, an intensive study of history, proficiency in a foreign language, and courses in a selected minor field of study or further study in advanced history courses if a student chooses the extended major option.

Students focus their study in the following three areas: United States history, European history, and global history. History helps one to learn to read critically, to write carefully, and to think problems through to a logical conclusion. History courses offer a basic background of knowledge essential to many professions.

Pre-law students can put their study of the past to good use, since the study of history requires a systematic examination of past events and the reasons how and why they happened, in addition to requiring students to refine their critical thinking, writing, and research skills. A range of national and international businesses and government agencies, particularly during this age of emerging globalization, are interested in hiring individuals who have an interest and knowledge in international affairs and cultures. In addition to preparing students who wish to pursue an advanced graduate degree in history or in a related discipline, a degree in history can serve as preparation and background for management, sales, public relations, and those occupations that rely on individuals who have the ability to communicate, orally and in writing, and to think critically.

In the area of journalism—both web-based and print—newspapers, journals, and magazines have a number of research-oriented jobs. History provides a perspective

and the advanced communication and writing skills necessary in today’s world of communication and social media, television, radio, films and the theater. History also provides artists with the understanding of forces and conflicts that molded and influenced the arts.

Federal, state, and local government agencies remain among the largest employers of history majors. Whatever students choose as occupations, an interest in the world around them, past and present, is essential.

## Bachelor of Arts Degree Major in History

Credits

**General Education Requirements ..... 31**

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

**A grade of “C” or higher is mandatory in all History Courses satisfying major requirements.**

### Required Courses

*HSTA 101 American History I.....	3
*HSTA 102 American History II .....	3
*HSTR 101 Western Civilization I .....	
<b>OR</b> *HSTR 103 Honors Western Civilization I .....	3
*HSTR 102 Western Civilization II .....	
<b>OR</b> *HSTR 104 Honors Western Civilization II .....	3
HSTA 200 Historian as Detective .....	3
HSTA/HSTR 499 Senior Capstone: Historical Methodology .....	3
<b>Total Required Courses .....</b>	<b>18</b>

### Restricted Electives..... 18

A minimum of 18 credits of upper division courses distributed as follows: at least 3 credits from each of the following categories: Area 1a, Area 1b, Area 2a, Area 2b, and Area 3, and 3 credits from any Area. Please note that students may, upon consultation with and the permission of their academic advisor, count up to 6 credits of historically-oriented Honors Seminars as restricted electives in their History major.

#### Area 1a: Early United States

HSTA 313 American Colonial and Revolutionary History to 1789 .....	3
HSTA 315 Early American Republic 1787-1848.....	3
HSTA 316 American Civil War Era.....	3
HSTA 428 Historical Archaeology in the Americas .....	3

#### Area 1b: Modern United States

HSTA 320 Birth of Modern United States .....	3
HSTA 321 America in Crisis.....	3
HSTA 325 United States since 1960 .....	3

#### Area 1c: United States Topics

HSTA 408 Gender in America .....	3
HSTA 460 Montana and the West.....	3
HSTA 464 Trans-Mississippi West .....	3
HSTA 470 American Environmental History.....	3
HSTA 480/PSCI 472 Constitutional Law: Civil Liberties.....	3
HSTA 481/PSCI 473 Constitutional Law: Powers and Structures .....	3
HSTA 498 Cooperative Education/Internship I, II, III .....	3

#### Area 2a: Ancient and Medieval

HSTR 302 Ancient Greece .....	3
HSTR 304 Ancient Rome .....	3
HSTR 305 Middle Ages .....	3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts Major in History*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts Major in History. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

First Year	F	S
HSTA 101	3	
HSTR 101 or 103	3	
HSTA 102		3
HSTR 102 or 104		3
General Education	9	9
<b>Total</b>	<b>15</b>	<b>15</b>

Second Year	F	S
HSTA 200	3	
Foreign Language	4	4
General Education	7	3
Restricted Elective		3
Elective/Minor/Ext. Major		6
<b>Total</b>	<b>14</b>	<b>16</b>

Third Year	F	S
Restricted Elective	6	6
Foreign Language	3	3
Elective/Minor/Ext. Major	6	6
<b>Total</b>	<b>15</b>	<b>15</b>

Fourth Year	F	S
Restricted Elective	6	3
Elective/Minor/Ext. Major	9	9
HSTA/HSTR 499		3
<b>Total</b>	<b>15</b>	<b>15</b>



HSTR 317 Renaissance & Reformation .....	3
HSTR 365 History of Ancient Near East.....	3
HSTR 420 Ancient and Medieval Archaeology .....	3

**Area 2b: Modern Europe**

HSTR 318 Enlightenment & Revolution 1648-1815.....	3
HSTR 322 19 <sup>th</sup> Century Europe.....	3
HSTR 324 20 <sup>th</sup> Century Europe.....	3
HSTR 326 Contemporary Europe .....	3
HSTR 417 Early Modern Science: The Scientific Revolution .....	3
HSTR 450 Women in European History since 1700.....	3
HSTR 462 Holocaust in Nazi Occupied Europe.....	3
HSTR 473 Gender, War and Film: Europe 1648-1945 .....	3
HSTR 487 Monsters in European History: Witches, Vampires and Zombies .....	3
HSTR 491 Special Topics: Modern European History.....	3

**Area 3: Global Studies**

HSTA 309 The Atlantic World 1492-1763 .....	3
HSTR 330 History of Mexico.....	3
HSTR 332 Pre-Columbian & Colonial Latin America .....	3
HSTR 336 Modern Latin America .....	3
HSTR 366 Middle East in the 20 <sup>th</sup> Century.....	3
HSTR 439 Colonial and Independent Africa since 1884.....	3
HSTR 440 Topics in Southern Asia since 1750 .....	3
HSTR 447 Modern Asia .....	3
HSTR 449 History of Vietnam.....	3
HSTR 466 Islamic Civilization .....	3

Students may, upon consultation with and the permission of their academic advisor, take any of the following courses to fit any of the above areas.

HSTA 492 Independent Study.....	3
HSTR 492 Independent Study .....	3
HSTA 494 Seminar/Workshop.....	3
HSTR 494 Seminar/Workshop.....	3

**Total minimum credits required for major.....36**

**Language Requirements (see page 182)..... 14**

**Restricted electives selected with advisor approval.....6**

**Electives chosen in consultation with advisor .....** 12

**Minor .....** 21

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Arts Degree

### Major in History

### Teaching Licensure Option

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

**Credits**

#### General Education Requirements ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

#### Professional Core (see page 266) ..... 31

EDU 105 counted in General Education, 34 credits if not.

#### Required Courses

\*HSTA 101 American History I..... 3

\*HSTA 102 American History II ..... 3

HSTA 460 Montana and the West..... 3

\*HSTR 101 Western Civilization I

**OR** \*HSTR 103 Honors Western Civilization I..... 3

\*HSTR 102 Western Civilization II

**OR** \*HSTR 104 Honors Western Civilization II..... 3

HSTA 200 Historian as Detective ..... 3

HSTA/HSTR 499 Senior Capstone: Historical Methodology ..... 3

**Total Required Courses ..... 21**

#### Restricted Electives..... 18

A minimum of 18 credits of upper division History courses selected in consultation with the departmental advisor, distributed as follows: at least 3 credits from each of the following categories: Area 1a, Area 1b, Area 2a, Area 2b, and Area 3, and 3 credits from any Area. Please note that students may, upon consultation with and the permission of their academic advisor, count up to 6 credits of historically-oriented upper division Honors Seminars as restricted electives in their History major.

#### Area 1a: Early United States

HSTA 313 American Colonial and Revolutionary History to 1789 ..... 3

HSTA 315 Early American Republic 1787-1848..... 3

HSTA 316 American Civil War Era..... 3

HSTA 428 Historical Archeology in the Americas ..... 3

#### Area 1b: Modern United States

HSTA 320 Birth of Modern United States ..... 3

HSTA 321 America in Crisis..... 3

HSTA 325 United States since 1960 ..... 3

#### Area 1c: United States Topics

HSTA 408 Gender in America ..... 3

HSTA 464 Trans-Mississippi West..... 3

HSTA 470 American Environmental History..... 3

HSTA 480/PSCI 472 Constitutional Law: Civil Liberties..... 3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts Degree, History Major, Teaching Licensure Option*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts Major in History Teaching Licensure Option. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
HSTR 101 or 103	3	
HSTA 101	3	
General Education	6	9
EDU 105	3	
HSTR 102 or 104		3
HSTA 102		3
EDU 220/220L		3
<b>Total</b>	<b>15</b>	<b>18</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
HSTA 200	3	
EDU 221	3	
HTH 412	1	
EDSP 204		3
Restricted Electives	6	9
General Education	3	4
<b>Total</b>	<b>16</b>	<b>16</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
HSTA 460	3	
General Education	3	
Professional Core	5	6
Restricted Electives	3	6
Minor/Electives	4	6
<b>Total</b>	<b>18</b>	<b>18</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
HSTA/HSTR 499	3	
Professional Core	3	
Minor/Electives	12	
Student Teaching		9
<b>Total</b>	<b>18</b>	<b>9</b>

HSTA 481/PSCI 473 Constitutional Law: Powers and Structures .....	3
HSTA 498 Internship/Cooperative Education I, II, III .....	3

**Area 2a: Ancient and Medieval**

HSTR 302 Ancient Greece .....	3
HSTR 304 Ancient Rome .....	3
HSTR 305 Middle Ages .....	3
HSTR 317 Renaissance & Reformation .....	3
HSTR 365 History of Ancient Near East.....	3
HSTR 420 Ancient and Medieval Archaeology .....	3

**Area 2b: Modern Europe**

HSTR 318 Enlightenment & Revolution 1648-1815.....	3
HSTR 322 19 <sup>th</sup> Century Europe.....	3
HSTR 324 20 <sup>th</sup> Century Europe.....	3
HSTR 326 Contemporary Europe .....	3
HSTR 417 Early Modern Science: The Scientific Revolution .....	3
HSTR 450 Women in European History since 1700 .....	3
HSTR 462 Holocaust in Nazi Occupied Europe.....	3
HSTR 473 Gender, War and Film: Europe 1648-1945 .....	3
HSTR 487 Monsters in European History: Witches, Vampires and Zombies .....	3
HSTR 491 Special Topics: Modern European History.....	3

**Area 3: Global Studies**

HSTA 309 The Atlantic World 1492-1763 .....	3
HSTR 330 History of Mexico.....	3
HSTR 332 Pre-Columbian & Colonial Latin America .....	3
HSTR 336 Modern Latin America .....	3
HSTR 366 Middle East in the 20 <sup>th</sup> Century.....	3
HSTR 439 Colonial and Independent Africa since 1884.....	3
HSTR 440 Topics in Southern Asia since 1750 .....	3
HSTR 447 Modern Asia .....	3
HSTR 449 History of Vietnam .....	3
HSTR 466 Islamic Civilization .....	3

Students may, upon consultation with and the permission of their academic advisor, take any of the following courses to fit any of the above areas.

HSTA 492 Independent Study .....	3
HSTR 492 Independent Study .....	3
HSTA 494 Seminar/Workshop.....	3
HSTR 494 Seminar/Workshop.....	3

**Total minimum credits required for major..... 70**

**Teaching minor..... 21**

**Restricted electives selected with advisor approval..... 6**

**Total minimum credits required for degree..... 128**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites*

## Minor in History

	Credits
<b>Required courses</b>	
*HSTA 101 American History I.....	3
*HSTA 102 American History II .....	3
*HSTR 101 Western Civilization I	
<b>OR</b> *HSTR 103 Honors Western Civilization I .....	3
*HSTR 102 Western Civilization II	
<b>OR</b> *HSTR 104 Honors Western Civilization II .....	3
<b>Total required course credits.....</b>	<b>12</b>
<b>Electives .....</b>	<b>9</b>
Nine upper-division credits in History courses selected in consultation with advisor.	
<b>Total minimum credits required for minor .....</b>	<b>21</b>

\*May satisfy General Education requirements.

## Teaching Minor in History

Students who intend to graduate on the 128 credit degree program should consult with Advising & Career Services and their faculty advisor before selecting a teaching minor. Some requirements for certain teaching minors can be met in General Education, but some others cannot. Students choosing to take teaching minors with requirements beyond 21 credits may take credits in excess of 128 to complete their teaching major and preferred teaching minor.

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

	Credits
<b>Required Courses</b>	
EDU 497A Methods: 5-12 Social Studies .....	2
*HSTA 101 American History I.....	3
*HSTA 102 American History II .....	3
HSTA 460 Montana and the West.....	3
*HSTR 101 Western Civilization I	
<b>OR</b> *HSTR 103 Honors Western Civilization I .....	3
*HSTR 102 Western Civilization II	
<b>OR</b> *HSTR 104 Honors Western Civilization II .....	3
HSTA/HSTR 499 Senior Capstone: Historical Methodology .....	3
<b>Total required course credits.....</b>	<b>20</b>
<b>Restricted Electives.....</b>	<b>3</b>
Select one of the following courses in non-western history:	
HSTA 309 The Atlantic World 1492-1763 .....	3

HSTR 330 History of Mexico .....	3
HSTR 332 Pre-Columbian & Colonial Latin America .....	3
HSTR 336 Modern Latin America.....	3
HSTR 365 History of Ancient Near East.....	3
HSTR 366 Middle East in the 20 <sup>th</sup> Century .....	3
HSTR 439 Colonial and Independent Africa since 1884.....	3
HSTR 440 Topics in Southern Asia since 1750.....	3
HSTR 447 Modern Asia .....	3
HSTR 449 History of Vietnam .....	3
HSTR 466 Islamic Civilization .....	3

**Total minimum credits required for minor ..... 23**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Licensure

### Social Science (Broadfield)

#### Endorsement

Social Science Broadfield Endorsement has been eliminated as a major. It is now a Licensure.

Students majoring in history (licensure option) and political science (teaching minor) are encouraged to expand employment opportunities by adding a social science (broadfield) endorsement. Students seeking this endorsement must complete one of the following four areas:

#### Geography

\*GPHY 111, \*GPHY 121, GPHY 282, and one upper division geography course (total 12 credits)

#### Economics

\*ECNS 201, \*ECNS 202, ECNS 314, and one upper division economics course (total 12 credits)

#### Sociology

\*SOCI 101, \*ANTY 220, \*SOCI 201, and one upper-division sociology course (total 12 credits)

#### Psychology

\*PSYX 100, PSYX 223, \*PSYX 231 and PSYX 330 (total 12 credits)

\*May satisfy General Education requirements.

## The Department of Mathematics

***Dr. Mark Jacobson, Chair***

***LA 848, (406) 657-2228***

**mjacobson@msubillings.edu**

Professors: Chen, Jacobson

Associate Professor: Hoover, Wilathgamuwa

Assistant Professor: S. Aryal

Lecturer: A. Aryal, Silva

Professor Emeritus: Howell, McKinley, Stannard

Academic advising services for all freshmen Arts and Sciences majors are provided through Advising & Career Services on McMullen Hall first floor west. Upon declaring a specific major, Arts and Science majors will be assigned to a faculty advisor in their department for upper-division advising. Advising files for all upper-division students are maintained in the departmental office of the program in which the student is majoring. Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

### Undergraduate Degrees and Majors

**Bachelor of Science**

**Major:** Mathematics

**Option:** Teaching Licensure Single Subject Endorsement

**Minors:** Mathematics, Computer Science, Statistics

**Teaching Minor:** Mathematics

The mathematics major is designed to include students with a wide variety of goals and backgrounds. Mathematics is an excellent preparation for fields from technical to legal, from scientific to managerial, and from computational to philosophic. It is also a source of pleasure and satisfaction for people in every line of endeavor. Therefore, MSU Billings' programs are constructed to welcome interested students of all sorts. Our programs reflect the diversity of interests of our students and the increasingly diverse nature of the mathematical sciences.

### Advising Information

Students are encouraged to meet with their advisor each semester to confirm that their Plan of Study is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner.

Faculty advisors work with students to explore appropriate internships, cooperative education placements and/or experiential learning opportunities which will enhance the student's academic program. In addition, advisors provide assistance in selecting elective courses which support the student's interests, career plans and Plan of Study.

### Learning Outcomes for Math Department

1. Have proficiency in geometry, trigonometry, functions, calculus, probability and statistics, matrix algebra, and discrete math.
2. Have the ability to follow mathematical reasoning and to both recognize as well as construct valid mathematical proofs.
3. Be able to use technology such as Minitab, Mathematica, MathXL, and calculators for mathematical problem solving.
4. Demonstrate mathematical understanding through classroom presentations.

## Bachelor of Science Degree Major in Mathematics

**General Education Requirements** ..... 31

(See page 69) Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the General Education requirements within this major.

**Language Requirement (see page 122)** ..... 8

### Required Core Courses

CSCI 111A Programming with Java I ..... 4  
 M 110 Mathematical Computing ..... 1  
 \*M 171 Calculus I ..... 4  
 M 172 Calculus II ..... 4  
 M 242 Methods of Proof ..... 3  
 M 273 Multivariable Calculus ..... 4  
 M 274 Introduction to Differential Equations ..... 4  
 M 305 Discrete Structures I ..... 4  
 M 329 Modern Geometry ..... 3  
 M 333 Linear Algebra ..... 4  
 M 371 Numerical Computing ..... 4  
 M 431 Abstract Algebra I ..... 3  
 M 471 Mathematical Analysis ..... 3  
 M 472 Introduction to Complex Analysis ..... 3  
 M 499 Capstone ..... 3  
 STAT 341 Introduction to Probability & Statistics ..... 4  
**Total Required Core Courses** ..... 55

**Minor (Optional)** ..... 21

**Electives** ..... 5

**Total minimum credits required for degree** ..... 120

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science*

### *Major in Mathematics*

The following sample schedule is a suggested plan for students to follow in completing the Bachelor of Science Major in Mathematics. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each semester.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
M 110		1
M 171	4	
M 172		4
CSCI 111A	4	
Language	4	4
General Education		6
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
M 242		3
M 305	4	
M 333		4
M 273	4	
STAT 341		4
General Education	8	4
<b>Total</b>	<b>16</b>	<b>15</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
M 329	3	
M 471	3	
M 472		3
M 371		4
General Education	3	3
Minor	6	6
<b>Total</b>	<b>15</b>	<b>16</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
M 274		4
M 431	3	
M 499	3	
Minor	6	3
Electives	3	2
General Education		4
<b>Total</b>	<b>15</b>	<b>13</b>

# Bachelor of Science Degree

## Major in Mathematics

### Teaching Licensure Option

### Single Subject Endorsement

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

#### Credits

#### General Education Requirements ..... 31

Students should consult with their advisor to determine other specific courses necessary in order to satisfy the General Education requirements within this major.

#### Professional Core (see page 266) ..... 38

##### Included in this core, students must take:

EDU 497B Methods: 5-12 Mathematics (2 cr.)

EDU 497R Methods: 5-8 Mathematics (3 cr.)

EDU 494 Seminar/Workshop: Mathematics (1 cr.)

#### Required Courses

CSCI 111A Programming with Java I .....	4
M 110 Mathematical Computing .....	1
*M 171 Calculus I .....	4
M 172 Calculus II .....	4
M 242 Methods of Proof .....	3
M 273 Multivariable Calculus .....	4
M 305 Discrete Structures I .....	4
M 329 Modern Geometry .....	3
M 333 Linear Algebra .....	4
M 371 Numerical Computing .....	4
M 431 Abstract Algebra I .....	3
M 471 Mathematical Analysis .....	3
M 472 Introduction to Complex Analysis .....	3
M 499 Capstone .....	3
STAT 341 Introduction to Probability & Statistics .....	4
<b>Total .....</b>	<b>51</b>

#### Electives ..... 8

#### Total minimum credits required for degree ..... 128

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## SUGGESTED PLAN OF STUDY

### B.S. Mathematics

### Teaching Option

### Single Subject

Students should talk with their faculty advisors prior to registration for classes. It is a good practice to visit with the faculty advisor each semester. The following suggested schedule provides a general overview of courses and work that will enable the student to progress through the degree in an orderly and timely manner.

First Year	F	S
M 110		1
M 171	4	
M 172		4
BIOB 101	3	
CSCI 111A	4	
COMX 115 or 111		3
EDU 105 or 200	3	
EDU 220		3
WRIT 101	3	
General Education		6
<b>Total</b>	<b>17</b>	<b>17</b>
Second Year	F	S
M 242		3
M 305	4	
M 333		4
M 273	4	
STAT 341		4
EDU 221		3
WRIT 201		3
HTH 412	1	
HSTA 101 or 102	3	
EDSP 204	3	
<b>Total</b>	<b>15</b>	<b>17</b>
Apply for Admission to Educator Preparation Program Spring Semester		
Third Year	F	S
M 329	3	
M 371		4
M 471	3	
M 472		3
EDU 380		2
EDU 497R		3
NASX 105 or 205		3
Elective	6	2
General Education	4	
<b>Total</b>	<b>16</b>	<b>17</b>
Fourth Year	F	S
EDU 497B	2	
EDU 494	1	
EDU 406		3
EDU 495C		9
EDU 333	3	
M 431	3	
M 499	3	
General Education	5	
<b>Total</b>	<b>17</b>	<b>12</b>
Apply to Student Teach Fall Semester		
Apply to Graduate Fall Semester		
Apply for Licensure Spring Semester		

## Minor in Mathematics

### Credits

#### Required Courses

CSCI 111A Programming with Java I .....	4
M 110 Mathematical Computing .....	1
*M 171 Calculus I .....	4
M 172 Calculus II .....	4
M 273 Multivariable Calculus .....	4
M 333 Linear Algebra .....	4
<b>Total minimum credits required for minor .....</b>	<b>21</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Teaching Minor in Mathematics

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### Credits

#### Required Courses

EDU 494 Seminar .....	1
EDU 497B Methods: 5-12 Mathematics .....	2
EDU 497R Methods: 5-8 Mathematics .....	3
*M 121 College Algebra .....	3
*M 122 College Trigonometry .....	3
*M 161 Survey of Calculus .....	3
M 242 Methods of Proof .....	3
M 329 Modern Geometry .....	3
*STAT 216 Introduction to Statistics .....	4
<b>Total minimum credits required for minor .....</b>	<b>25</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Computer Science

### Credits

#### Required Courses

CSCI 111A Programming with Java I .....	4
CSCI 132 Basic Data Structures and Algorithms .....	4
M 305 Discrete Structures I .....	4
M 306 Discrete Structures II .....	4
Electives in Computer Science .....	5
<b>Total minimum credits required for minor .....</b>	<b>21</b>

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Statistics

### Credits

#### Required Courses Group A

*STAT 216 Introduction to Statistics .....	4
--	---

#### One or both of:

STAT 217 Intermediate Statistical Concepts .....	4
STAT 341 Introduction to Probability & Statistics ...	4
<b>Total .....</b>	<b>4-8</b>

#### Electives

Choose 0-9 credits from the list below or other courses chosen in consultation with the Math Department advisor. The elective courses are not limited to the list below. Students should contact the Math Department to confirm the eligibility of any course with an adequate statistics component to count as an elective in this group.

BGEN 315 Applied Business Decisions .....	3
BMGT 322 Operations Management .....	3
BMKT 342 Marketing Research .....	3
BMKT 411 Services/Relationship Marketing .....	3
SOCI 318 Sociological Research Methods .....	3
SOCI 319 Statistics for Sociologists .....	3
SOCI 499 Senior Thesis/Capstone .....	3
*STAT 141 Introduction to Statistical Concepts .....	3
STAT 492 Independent Study .....	1-3
PSYX 222 Psychological Statistics .....	3
PSYX 223 Research Design and Analysis I .....	3
PSYX 320 Research Methods III .....	3
PSYX 321 Research Methods III Lab .....	1
PSYX 499 Senior Thesis .....	3
<b>Total .....</b>	<b>0-9</b>

**Total Group A .....**11-17



**Required Courses Group B**

\*M 171 Calculus I .....4

**OR**

\*M 161 Survey of Calculus .....3

**Total .....3-4****Electives**

Choose 0-6 credits from the list below or other courses chosen in consultation with the Math Department advisor. The elective courses are not limited to the list below. Students should contact the Math Department to confirm the eligibility of any course with an adequate math or statistics component to count as an elective in this group.

CHMY 371 Physical Chemistry-Quantum Chemistry  
and Spectroscopy .....3CHMY 373 Physical Chemistry-Kinetics and  
Thermodynamics.....3

CSCI 111A Programming with Java I .....4

CSCI 246 Discrete Structures .....4

CSCI 320 Numerical Methods.....4

M 172 Calculus II .....4

Any M 200-level or above .....3-4

PHSX 232 Physics II and Thermo .....3

PHSX 343 Modern Physics .....3

**Total .....0-6****Total Group B .....3-9****Total minimum credits required for minor .....20**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
students should check the course descriptions for  
required prerequisites.*

# The Department of Music

***Dr. Mark Fenderson***

***Mr. Douglas Nagel***

***Co-Chairs***

***CI 119, (406) 657-2350***

**[www.msubillings.edu/CAS/music](http://www.msubillings.edu/CAS/music)**

Associate Professor: Fenderson

Assistant Professors: Nagel, Roberts

Professor Emeritus: Behm

## Undergraduate Degrees and Majors

### **Bachelor of Arts**

**Major:** Music

**Options:** Business, Performance, Teaching  
Licensure

**Minor:** Music

### **Mission of the Department**

The Department of Music educates musicians by combining a thorough professional training with a sound general education. It is accredited by the National Association of Schools of Music. The MSU Billings Department of Music stresses high standards of performance, a strong theoretical background, a broad exposure to music history, opportunities in pedagogy, and a significant encounter with other academic disciplines.

### **Program Choices**

The varied functions of music in the world today present many interesting and challenging opportunities to students as teachers, performers, creative artists, and employees in the music industry. Because of the many opportunities available to students, the faculty of the Department of Music has established a program of training which allows first year students to determine the course of study they may wish to follow. Through an emphasis in music history and theory, as well as instruction in performance participation in various ensembles, students are prepared for graduate study, performance, studio teaching, teaching in the public schools, and employment in the field of music.

The Bachelor of Arts Major in Music General Degree is a liberal arts degree that is designed primarily for those wishing to pursue a well-rounded arts and sciences education.

The Bachelor of Arts Major in Music Performance Option is designed to prepare students for a career in music performance.

The Bachelor of Arts Major in Music Teaching Licensure Option is designed for students wishing to pursue music teaching careers in the schools.

The Bachelor of Arts Major in Music Business Option prepares students for employment in the music industry.

The Minor in Music provides students with enrichment in the field of music.

## Accreditation

The Department of Music is accredited by the National Association of Schools of Music (NASM).

## Learning Outcomes

Students enrolled in all of the Music Programs will:

- Demonstrate a comprehensive knowledge of music theory. They will do so by analyzing selected works in which they will identify and relate fundamental musical elements such as phrase structure, organization of harmonic elements, and the construction of rhythmic and melodic materials.
- Demonstrate an understanding of the major historical musical styles by placing selected works, for which they will be provided scores and recordings, into appropriate time frames. During this process they will document and comment on elements such as harmonic style, melodic and rhythmic structure, dynamic structure, the use of ornamentation, etc., as they relate to each of the historical style periods.
- Perform an upper divisional jury at the end of their sophomore year (30 minutes for performance majors, 20 minutes for general music majors and teaching licensure majors).

Students in the Performance Option will also:

- Display the technical and musical ability to perform significant musical literature at an advanced level.
- Perform two one-hour adjudicated solo recitals at the end of their junior and senior years. Prior to each recital, they must qualify by successfully performing a pre-recital jury for the music faculty.

Students in the Teaching Licensure Option will also:

- Display the technical and musical ability to perform significant musical literature at an advanced level.
- Perform an adjudicated 45 minute recital. Prior to this recital, they must qualify by successfully performing a pre-recital jury for the music faculty.
- Display an acquaintance with current and traditional methodology for teaching music.

Students in the Business Track will also:

- Display a basic understanding of the theory, performance, and history of music.
- Demonstrate knowledge of various aspects of business, including accounting, organization, marketing, and communication.

## Advising Information

Students are encouraged to meet with their advisor each semester to confirm that their Plan of Study is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner. In addition, advisors provide assistance in selecting elective courses which support the students' interests, career plans, and Plan of Study.

Academic advising services for all freshmen Arts and Sciences majors are provided through Advising & Career Services on McMullen Hall first floor west. Upon declaring a specific major, Arts and Science majors will be assigned to a faculty advisor in their department for upper-division advising. Advising files for all upper-division students are maintained in the departmental office of the program in which the student is majoring. Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

## Bachelor of Arts Degree Major in Music

### General Education Requirements ..... 31

The following General Education course also satisfies requirements in the major: MUSI 207 (3 cr.). The credits may be counted only once. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of credits required for graduation.

### Music

Four credits of Applied Study selected from one of the following ..... 4

MUSI 195A, 195B, 195C, 195D, 195E, 195F, 195G, 195H, 195I, 195J,  
195K, 195L, 195M, 195N, 195O, 195P

MUSI 135 Keyboard Skills I ..... 1

MUSI 136 Keyboard Skills II ..... 1

MUSI 105 Music Theory I ..... 3

MUSI 140 Aural Perception I ..... 1

MUSI 106 Music Theory II ..... 3

MUSI 141 Aural Perception II ..... 1

\*MUSI 207 World Music ..... 3

Four credits selected from the following performance ensembles ..... 4

\*MUSI 114 Band: MSUB Symphonic

MUSI 108 Orchestra: MSUB

\*MUSI 147 Choral Ensemble: University Chorus

MUSI 205 Music Theory III ..... 3

MUSI 240 Aural Perception III ..... 1

MUSI 206 Music Theory IV ..... 3

MUSI 241 Aural Perception IV ..... 1

### Upper Divisional Juries

Music majors must pass an upper divisional jury before registering for 300 Level Advanced Music courses. Students must apply for upper divisional with the chairperson at least two weeks prior to the proposed jury date. Following are the upper divisional requirements:

1. A closed audition before a faculty committee. This audition may be performed during the semester, or during the semester-end juries. It must consist of at least two solo works of varying styles that demonstrate appropriate technical and musical ability, as well as scales, and other performance requirements specified by the student's applied teacher.
2. A working copy of the student's transcript to verify satisfactory progress in MUSI 206 and MUSI 241.

Four credits of Advanced Study selected from one of the following ..... 4

MUSI 395A, 395B, 395C, 395D, 395E, 395F, 395G, 395H, 395I, 395J,  
395K, 395L, 395M, 395N, 395O, 395P

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts*

### *Degree Major in Music*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts Degree Major in Music. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

First Year	F	S
WRIT 101	3	
MUSI 135	1	
MUSI 136		1
MUSI 105	3	
MUSI 140	1	
MUSI 106		3
MUSI 141		1
MUSI 207	3	
Performance Ensemble	1	1
Applied Study	1	1
General Education	3	3
Electives		4
<b>Total</b>	<b>16</b>	<b>14</b>

Second Year	F	S
MUSI 205	3	
MUSI 240	1	
MUSI 206		3
MUSI 241		1
Performance Ensemble	1	1
Applied Study	1	1
Foreign Language	4	4
General Education		6
General Education w/Lab	4	
<b>Total</b>	<b>14</b>	<b>16</b>

Third Year	F	S
MUSI 301	3	
MUSI 302		3
Performance Ensemble	1	1
Advanced Study	1	1
Foreign Language	3	3
General Education	6	3
Minor		3
<b>Total</b>	<b>14</b>	<b>14</b>

MUSI 301 Music History I.....	3
MUSI 302 Music History II.....	3
Four credits selected from the following performance ensembles.....	4
MUSI 364 Symphonic Band	
MUSI 365 Symphony Orchestra	
MUSI 312 Choir III: University Chorus	
MUSI 443 Music Form and Style.....	3
MUSI 440 Orchestration .....	3
MUSI 499 Senior Recital .....	1

**Total Music Credits ..... 50**

**Total minimum credits for major ..... 50**

**Minor ..... V**

**Language Requirements (see page 122)..... 14**

**Restricted electives selected with advisor approval..... 6**

**Electives ..... V 0-3**

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
MUSI 443	3	
MUSI 440		3
MUSI 499		1
Performance Ensemble	1	1
Advanced Study	1	1
Minor	9	8
Elective	3	1
<b>Total</b>	<b>17</b>	<b>15</b>

## Bachelor of Arts Degree

### Major in Music

### Business Option

Credits

#### General Education Requirements ..... 31

The following General Education course also satisfies requirements in the major: MUSI 207 (3 cr.). The credits may be counted only once. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of credits required for graduation. BGEN 105 is recommended in the first year.

#### Music Requirements ..... 50

*MUSI 101 Enjoyment of Music .....	3
MUSI 105 Music Theory I .....	3
MUSI 106 Music Theory II .....	3
MUSI 135 Keyboard Skills I .....	1
MUSI 136 Keyboard Skills II .....	1
MUSI 140 Aural Perception I .....	1
MUSI 141 Aural Perception II .....	1
Four credits selected from the following ensembles.....	4
*MUSI 114 Band: MSUB Symphonic	
*MUSI 131 Jazz Ensemble I: MSUB	
*MUSI 147 Choral Ensemble: University Chorus	
Four credits of Applied Study selected from one of the following.....	4
MUSI 195A, 195B, 195C, 195D, 195E, 195F, 195G, 195H, 195I, 195J, 195K, 195L, 195M, 195N, 195O, 195P	
*MUSI 207 World Music .....	3
MUSI 301 Music History I .....	3
MUSI 302 Music History II .....	3
MUSI 498 Internship/Cooperative Education .....	9^
MUST 294 Seminar: Recording Technology I .....	2
MUST 394 Seminar: Recording Technology II .....	2
Electives in Music .....	7

^Required to be taken over 3 semesters, 3 credits per semester.

#### Business Requirements..... 27

ACTG 201 Principles of Financial Accounting.....	3
BGEN 235 Business Law .....	3
BMGT 329 Human Resource Management .....	3
BMGT 335 Management and Organization .....	3
BMKT 325 Principles of Marketing .....	3
BMKT 350 Social Media Marketing .....	3
*ECNS 201 Principles of Microeconomics .....	3
Choose 2 courses from the following .....	6
BMGT 353 Organizational Behavior	
BMGT 422 Project Management	
BMGT 461 Small Business Management	
BMIS 311 Management Information Systems	
BMKT 337 Consumer Behavior	

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts*

### *Degree Major in Music*

### *Business Option*

This sample schedule is a suggested plan for students to follow. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

First Year	F	S
Applied Study	1	1
Performance Ensemble	1	1
MUSI 101	3	
MUSI 135	1	
MUSI 136		1
MUSI 105	3	
MUSI 106		3
MUSI 140	1	
MUSI 141		1
General Education	3	9
<b>Total</b>	<b>13</b>	<b>16</b>
Second Year	F	S
Applied Study	1	1
Performance Ensemble	1	1
MUSI 207	3	
ACTG 201	3	
PSYX 230		3
General Education	4	3
ECNS 201		3
BGEN 235	3	
WRIT 220		3
<b>Total</b>	<b>15</b>	<b>14</b>
Third Year	F	S
MUST 294	2	
MUST 394		2
BMGT 329	3	
BMGT 335		3
BMKT 325		3
MUSI 498	3	3
COMX 320	3	
General Education	3	3
Music Electives	2	2
<b>Total</b>	<b>16</b>	<b>16</b>

Continued...

<b>Other Requirements .....</b>	<b>9</b>
COMX 320 Principles of Organizational Communication .....	3
PSYX 230 Developmental Psychology: Development Over the Lifespan ....	3
WRIT 220 Business & Professional Writing.....	3

**Electives .....** **3**

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree.....** **120**

It is a student's responsibility to know and meet the requirements for graduation. A minimum of 36 credits must be upper division classes (300 and above).

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
MUSI 498	3	
MUSI 301	3	
MUSI 302		3
BMKT 350	3	
Business Electives		6
General Education	3	3
Music Electives		3
Electives	3	
<b>Total</b>	<b>15</b>	<b>15</b>

## Bachelor of Arts Degree

### Major in Music

### Performance Option

Credits

#### General Education Requirements ..... 31

The following General Education courses also satisfy requirements in the major: MUSI 114, MUSI 147 and MUSI 207. The credits may be counted only once. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of credits required for graduation.

#### Musicianship

MUSI 105 Music Theory I .....	3
MUSI 106 Music Theory II .....	3
MUSI 135 Keyboard Skills I .....	1
MUSI 136 Keyboard Skills II .....	1
MUSI 140 Aural Perception I .....	1
MUSI 141 Aural Perception II .....	1
MUSI 205 Music Theory III .....	3
MUSI 206 Music Theory IV .....	3
*MUSI 207 World Music .....	3
MUSI 235 Keyboard Skills III .....	1
MUSI 236 Keyboard Skills IV .....	1
MUSI 240 Aural Perception III .....	1
MUSI 241 Aural Perception IV .....	1
MUSI 301 Music History I .....	3
MUSI 302 Music History II .....	3
Two credits of conducting selected from the following .....	2
MUSI 335 Instrumental Conducting	
MUSI 336 Choral Conducting	
MUSI 399 Junior Recital .....	1
MUSI 440 Orchestration .....	3
MUSI 443 Music Form and Style .....	3
MUSI 499 Senior Recital .....	1
<b>Total .....</b>	<b>39</b>

#### Performance

Four credits of applied study selected from the following .....	4
MUSI 195A, 195B, 195C, 195D, 195E, 195F, 195G, 195H, 195I, 195J, 195K, 195L, 195M, 195N, 195O, 195P	
Four credits selected from the following performance ensembles (R-4) .....	4
MUSI 108 Orchestra: MSUB	
*MUSI 114 Band: MSUB Symphonic	
*MUSI 147 Choral Ensemble: University Chorus	
Four credits of advanced study selected from the following (R-4) .....	4
MUSI 395A, 395B, 395C, 395D, 395E, 395F, 395G, 395H, 395I, 395J, 395K, 395L, 395M, 395N, 395O, 395P	
Four credits selected from the following performance ensembles (R-4) .....	4
MUSI 365 Symphony Orchestra	
MUSI 312 Choir III: University Chorus	
MUSI 364 Symphonic Band	

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts in Music*

#### *Performance Option*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts in Music – Performance Option. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
Applied Study	1	1
Performance Ensemble	1	1
MUSI 105	3	
MUSI 106		3
MUSI 135	1	
MUSI 136		1
MUSI 140	1	
MUSI 141		1
Electives	3	3
General Education	3	3
<b>Total</b>	<b>13</b>	<b>13</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
Applied Study	1	1
Performance Ensemble	1	1
MUSI 205	3	
MUSI 206		3
MUSI 207	3	
MUSI 235	1	
MUSI 236		1
MUSI 240	1	
MUSI 241		1
MUSI 294	2	
Electives		4
General Education	3	6
<b>Total</b>	<b>15</b>	<b>17</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
Applied Study	1	1
Performance Ensemble	1	1
MUSI 235 or 236		2
MUSI 301	3	
MUSI 302		3
MUSI 399		1
Advanced Pedagogy	2	
Electives	4	2
General Education	6	6
<b>Total</b>	<b>17</b>	<b>16</b>



**Upper Divisional Juries**

Advanced Music courses.

Students must apply for admittance to upper divisional courses with the chairperson at least two weeks prior to the proposed jury date. Following are the upper divisional requirements:

Music majors must pass an upper divisional jury before registering for 300-level Advanced Music courses.

1. A closed audition before a faculty committee. This audition may be performed during the semester, or during semester end juries. It must be at least 30 minutes in length and consist of at least two solo works of varying styles that demonstrate appropriate technical and musical ability as well as scales and other performance requirements specified by the student's applied teacher.
2. A working copy of the student's transcript to verify satisfactory progress in MUSI 105 and 106.

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
Applied Study	1	1
Performance Ensemble	1	1
MUSI 440	3	
MUSI 443		3
MUSI 499		1
Advanced Pedagogy or Electives	5	3
General Education	4	6
<b>Total</b>	<b>14</b>	<b>15</b>

**Music Technology**

MUST 294 Seminar: Recording Technology ..... 2

**Advanced Pedagogy**

The following courses are required of all **piano** students:

MUSE 330 Keyboard Pedagogy ..... 1  
 MUSE 430 Keyboard Pedagogy II ..... 1  
 MUSI 432 Keyboard Literature ..... 2

The following courses are required of all **voice** students:

MUSI 281 Diction I: English and Italian ..... 2  
 MUSI 282 Diction II: French and German ..... 2  
 MUSI 442 Advanced Vocal Studio Pedagogy and Literature ..... 2

**Woodwind, Brass, Percussion, and Guitar** students must choose one of the following courses:

MUSI 438A Advanced Instrumental Studio Pedagogy and Literature:  
     Guitar ..... 2  
 MUSI 438B Advanced Instrumental Studio Pedagogy and Literature: Flute  
     and Single Reed ..... 2  
 MUSI 438 C Advanced Instrumental Studio Pedagogy and Literature:  
     Double Reed ..... 2  
 MUSI 438D Advanced Instrumental Studio Pedagogy and Literature: High  
     Brass ..... 2  
 MUSI 438E Advanced Instrumental Studio Pedagogy and Literature: Low  
     Brass ..... 2  
 MUSI 438F Advanced Instrumental Studio Pedagogy and Literature:  
     Percussion ..... 2

**Total credits required for major .....59-63**

**Restricted electives selected with advisor approval ..... 6**

*Continued...*

**Unrestricted Electives.....20-24**

The total number of elective credits required for the degree will be determined by the student's advanced pedagogy requirements and the number of courses a student elects to take which fulfills both the General Education and major requirements. Electives should be chosen in consultation with an academic advisor.

**Total credits required for degree ..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Arts Degree

### Major in Music

### Teaching Licensure Option

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

**Credits**

**General Education Requirements .....31^**  
(Secondary & K-12 majors)

^The following General Education courses also satisfy requirements in the major and the Professional Education Core: MUSI 207 and EDU 105. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of credits required for graduation.

**Professional Core (see page 266) .....34**  
(Includes EDU 397I Methods: K-12 Music, 2 credits.)

#### Required Music Courses

MUSE 272 Techniques: Flute and Single Reed .....	1
MUSE 273 Techniques: Double Reed.....	1
MUSE 274 Techniques: Upper Brass.....	1
MUSE 275 Techniques: Lower Brass .....	1
MUSE 276 Techniques: Percussion .....	1
MUSE 278 Techniques: String Instrument.....	1
MUSE 279 Techniques: Vocal .....	1
MUSI 105 Music Theory I .....	3
MUSI 106 Music Theory II.....	3
Four credits of performance ensembles selected from the following .....	4
MUSI 108 Orchestra: MSUB	
*MUSI 114 Band: MSUB Symphonic	
*MUSI 147 Choral Ensemble: University Chorus	
MUSI 135 Keyboard Skills I .....	1
MUSI 136 Keyboard Skills II.....	1
MUSI 140 Aural Perception I.....	1
MUSI 141 Aural Perception II .....	1
Four credits of applied music selected from MUSI 195A, 195B, 195C, 195D, 195E, 195F, 195G, 195H, 195I, 195J, 195K, 195L, 195M, 195N, 195O, 195P.....	4
MUSI 205 Music Theory III.....	3
MUSI 206 Music Theory IV.....	3
*MUSI 207 World Music .....	3
MUSI 235 Keyboard Skills III .....	1
MUSI 236 Keyboard Skills IV .....	1
MUSI 240 Aural Perception III .....	1
MUSI 241 Aural Perception IV .....	1

#### Upper Divisional Juries

Music majors must pass an upper divisional jury before registering for 300 Level Advanced Music courses. Students must apply for upper divisional with the chairperson at least two weeks prior to the proposed jury date. Following are the upper divisional requirements:

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts*

### *Major in Music*

### *Teaching Licensure*

### *Option*

Students should talk with their faculty advisors prior to registration for classes. It is a good practice to visit with the faculty advisor each semester. The following suggested schedule provides a general overview of courses and work that will enable the Teaching Major in Music student to progress through the degree in an orderly and timely manner.

<b>First Year</b>	<b>F</b>	<b>S</b>
MUSI 135	1	
MUSI 136		1
MUSI 105	3	
MUSI 140	1	
MUSI 106		3
MUSI 141		1
MUSI 114/108/147	1	1
MUSI 195	1	1
COMX 111	3	
EDU 105	3	
EDU 220		3
WRIT 101	3	
M 105		3
<b>Total</b>	<b>16</b>	<b>13</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
MUSI 114/108/147	1	1
MUSI 235	1	
MUSI 236		1
MUSI 205	3	
MUSI 240	1	
MUSI 206		3
MUSI 241		1
MUSE 276		1
MUSE 274	1	
MUSE 275		1
MUSI 335		2
MUSI 195	1	1
BIOB 101/102		4
EDU 221		3
WRIT 201	3	
NASX 105/205	3	
HTH 412		1
EDSP 204	3	
<b>Total</b>	<b>17</b>	<b>19</b>

Apply for Admission to Educator Preparation Program Spring Semester.

**A closed audition before a faculty committee.** This audition may be performed during the semester, or during semester end juries. It must consist of at least two solo works of varying styles that demonstrate appropriate technical and musical ability, as well as scales, and other performance requirements specified by the student's applied teacher.

**A working copy of the student's transcript** to verify satisfactory progress in MUSI 206 and MUSI 241.

### Upper Division Courses

MUSI 301 Music History I.....	3
MUSI 302 Music History II.....	3
Three credits of performance ensembles selected from the following.....	3
MUSI 312 Choir III: University Chorus	
MUSI 364 Symphonic Band	
MUSI 365 Symphony Orchestra	
MUSI 335 Instrumental Conducting.....	2
MUSI 336 Choral Conducting.....	2
Three credits of advanced study selected from: MUSI 395A, 395B, 395C, 395D, 395E, 395F, 395G, 395H, 395I, 395J, 395K, 395L, 395M, 395N, 395O, 395P .....	3
MUSI 440 Orchestration .....	3
MUSI 443 Music Form and Style.....	3
MUSI 499 Senior Recital .....	1
MUST 394 Seminar: Recording Technology .....	2

**Total Music Credits .....**63

**Restricted electives selected with advisor approval.....**6

**Total minimum credits required for degree.....**128

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

<b>Third Year</b>	<b>F</b>	<b>S</b>
MUSE 278		1
MUSE 272		1
MUSE 273	1	
MUSE 279	1	
MUSI 301	3	
MUSI 302		3
MUSI 336	2	
MUSI 364/365/312	1	1
MUSI 443		3
MUSI 440	3	
MUSI 395	1	1
EDU 333		3
EDU 354	2	
HSTA 101 or 102	3	
Gen Ed Social Sci.		3
<b>Total</b>	<b>17</b>	<b>16</b>
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
MUSI 207	3	
MUSI 364/365/312	1	
MUSI 499		1
MUSI 395	1	
MUST 394	2	
EDU 380	2	
EDU 397I	2	
Gen Ed Physical Sci.	3	
EDU 406		3
EDU 495A		9
Gen Ed Humanities	3	
<b>Total</b>	<b>17</b>	<b>13</b>
Apply to Student Teach Fall Semester.		
Apply to Graduate Fall Semester.		
Apply for Licensure Spring Semester.		

## Minor in Music

	Credits
MUSI 105 Music Theory I .....	3
MUSI 106 Music Theory II .....	3
MUSI 140 Aural Perception I .....	1
MUSI 141 Aural Perception II .....	1
MUSI 205 Music Theory III .....	3
*MUSI 207 World Music .....	3
MUSI 240 Aural Perception III .....	1
<b>Total .....</b>	<b>15</b>

**Select two from the following.....6**

*MUSI 101 Enjoyment of Music .....	3
MUSI 301 Music History I .....	3
MUSI 302 Music History II .....	3

**Total minimum credits required for minor.....21**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
students should check the course descriptions for  
required prerequisites.*

# The Department of Psychology

***Dr. Matt McMullen, Chairperson***

***LA 500, (406) 657-2242***

**MMcmullen@msubillings.edu**

Professors: Hatch, Havens, McMullen

Assistant Professor: Finger

Professor Emeritus: Mossman

## Undergraduate Degrees and Majors

### **Bachelor of Arts**

**Major:** Psychology

### **Bachelor of Science**

**Major:** Psychology

**Minor:** Psychology

**Teaching Minor:** Psychology

**Associate of Arts degree Program of Study:** Applied Psychology

## Graduate Degree

**Master of Science in Psychology**

For details, see the Graduate Catalog.

## Advising Information

Students are encouraged to meet with their advisor each semester to confirm that their Plan of Study is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner.

Faculty advisors work with students to explore appropriate internships, cooperative education placements, and/or experiential learning opportunities that will enhance the student's academic program. In addition, advisors provide assistance in selecting elective courses that support the student's interests, career plans and Plan of Study.

Academic advising services for all freshmen Arts and Sciences majors are provided through Advising & Career Services on McMullen Hall first floor west. Upon declaring a specific major, Arts and Science majors will be assigned to a faculty advisor in their department for upper-division advising. Advising files

for all upper-division students are maintained in the departmental office of the program in which the student is majoring. Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

Students interested in applied psychology, developing knowledge in human relations, abnormal psychology, psychological testing and clinical psychology are encouraged to develop their skills in an internship in a human service agency.

A Bachelor's degree in Psychology can serve as a general Liberal Arts degree, as preparation for a career in Psychology, or as preparation for graduate school in Psychology or related fields.

As a general Liberal Arts degree, Psychology majors develop excellent interpersonal, research, writing, and analytical skills and are attractive to a wide variety of employers. Students may wish to take appropriate courses in other areas to enhance their skills and marketability. To prepare for a career in Psychology with a Bachelor's degree, students are encouraged to consult with faculty to take appropriate courses and to pursue internships in the Billings community.

Students who graduate with the Bachelor's degree in Psychology should be able to:

- Understand the major theories of Psychology, their historical and philosophical background, and their clinical significance.
- Understand the scientific process, especially the design of research questions, collection, analysis and interpretation of data.
- Demonstrate competency in collecting and analyzing data in a major research project.
- Work effectively in a professional psychology setting, e.g. research, mental health.
- Think critically, write and speak clearly on psychological topics.

Students intending to pursue graduate education should obtain a broad background in Psychology and maintain a high GPA. All Psychology majors, but particularly those considering graduate school, are encouraged to work closely with at least one faculty member in research, and to keep in mind that letters of recommendation are required for graduate school applications and most other types of employment.

The Associate of Arts degree with a Program of Study in Applied Psychology provides part-time and paraprofessionally-oriented students with training in psychology at an intermediate level. The graduate of this program is prepared for paraprofessional level positions in human services.

Students who graduate with the Associate of Arts degree in Psychology should be able to:

- Understand the major theories of psychology.
- Understand the scientific process, especially the design of research questions, collection, analysis and interpretation of data.
- Transfer psychological principles and concepts outside the academic setting.

## Bachelor of Arts Degree Major in Psychology

### General Education Requirements ..... 31

The following General Education courses also satisfy requirements in the major: PSYX 100 and PSYX 231. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major. A grade of "C" or higher is mandatory in all psychology courses satisfying these major requirements.

### Required Courses

*PSYX 100 Introduction to Psychology.....	3
PSYX 222 Psychological Statistics .....	3
PSYX 223 Research Design and Analysis I.....	3
PSYX 224 Research Design and Analysis I Lab.....	1
PSYX 400 History & Systems in Psychology .....	3
PSYX 499 Senior Thesis .....	3

The student is also required to complete a minimum of three semester credits in one of the following courses:

PSYX 395 Field Work.....	3
PSYX 492 Independent Study .....	V 1-4
PSYX 495 Practicum.....	V 1-3
PSYX 298/498 Cooperative Education/Internship .....	V 1-8

**Total minimum Required Courses credits ..... 19**

### Restricted Psychology Electives

#### Group 1: Select two courses from this group

PSYX 320/321 Research Methods III w/Lab .....	4
PSYX 350/351 Physiological Psychology w/Lab.....	4
PSYX 352/353 Comparative Psychology w/Lab.....	4
PSYX 354/355 Sensation & Perception w/Lab .....	4
PSYX 358/359 Drugs and Behavior w/Lab.....	4
PSYX 370/371 Psychology of Learning w/Lab.....	4
PSYX 380/381 Memory & Cognition w/Lab .....	4
PSYX 480 Cognitive Development.....	3

**Total Group 1 credits ..... 7-8**

#### Group 2: Select five courses from this group

*PSYX 231 Human Relations .....	3
PSYX 330 Child Psychology.....	3
PSYX 332 Adult Psychology .....	3
PSYX 333 Psychology of Aging .....	3
PSYX 335 Psychology of Gender .....	3
PSYX 340 Abnormal Psychology .....	3
PSYX 360 Social Psychology .....	3
PSYX 378 Introduction to Clinical Psychology .....	3
PSYX 382 Forensic Psychology.....	3
PSYX 385 Psychology of Personality .....	3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts Major in Psychology*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Arts Major in Psychology. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
PSYX 100	3	
PSYX 222		3
Foreign Language	4	4
General Education	9	6
Additional Writing		3
<b>Total</b>	<b>16</b>	<b>16</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
PSYX 223	3	
PSYX 224	1	
Foreign Language	3	3
General Education	4	3
Restricted Electives	4	10
<b>Total</b>	<b>15</b>	<b>16</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
PSYX 400	3	
General Education	3	3
Restricted Electives	6	3
Minor/Ext Major/Electives	3	8
<b>Total</b>	<b>15</b>	<b>14</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
Field Work/Pract/Coop Ed	3	
PSYX 499		3
Minor/Electives	11	11
<b>Total</b>	<b>14</b>	<b>14</b>



PSYX 410 Cognitive Learning Theories .....	3
PSYX 461 Industrial & Organizational Psychology .....	3
PSYX 470 Psychological Testing.....	3
<b>Total Group 2 credits .....</b>	<b>15</b>

**Total Restricted Psychology Electives.....22-23**

**Total minimum credits required for major.....41-42**

**Language Requirement (see page 122) ..... 14**

**Writing Requirement**

Course selected in consultation with advisor..... 3

**Minor ..... 20**

**Electives .....10-11**

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Science Degree Major in Psychology

### General Education Requirements ..... 31

The following General Education courses also satisfy requirements in the major: PSYX 100, PSYX 231. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major. A grade of "C" or higher is mandatory in all psychology courses satisfying these major requirements.

### Required Courses

*PSYX 100 Introduction to Psychology.....	3
PSYX 222 Psychological Statistics .....	3
PSYX 223 Research Design and Analysis I .....	3
PSYX 224 Research Design and Analysis I Lab .....	1
PSYX 400 History & Systems in Psychology .....	3
PSYX 499 Senior Thesis .....	3

The student is also required to complete a minimum of three semester credits in one of the following courses:

PSYX 395 Field Work.....	3
PSYX 492 Independent Study .....	V 1-4
PSYX 495 Practicum.....	V 1-3
PSYX 298/498 Cooperative Education/Internship .....	V 1-8

**Total minimum Required Courses credits ..... 19**

### Restricted Psychology Electives

#### Group 1: Select two courses from this group

PSYX 320/321 Research Methods III w/Lab .....	4
PSYX 350/351 Physiological Psychology w/Lab.....	4
PSYX 352/353 Comparative Psychology w/Lab.....	4
PSYX 354/355 Sensation & Perception w/Lab .....	4
PSYX 358/359 Drugs and Behavior w/Lab.....	4
PSYX 370/371 Psychology of Learning w/Lab.....	4
PSYX 380/381 Memory & Cognition w/Lab .....	4
PSYX 480 Cognitive Development.....	3

**Total Group 1 credits .....7-8**

#### Group 2: Select five courses from this group

*PSYX 231 Human Relations .....	3
PSYX 330 Child Psychology.....	3
PSYX 332 Adult Psychology .....	3
PSYX 333 Psychology of Aging .....	3
PSYX 335 Psychology of Gender .....	3
PSYX 340 Abnormal Psychology .....	3
PSYX 360/SOCI 382 Social Psychology .....	3
PSYX 378 Introduction to Clinical Psychology .....	3
PSYX 382 Forensic Psychology.....	3
PSYX 385 Psychology of Personality .....	3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science Major in Psychology*

This sample schedule is a suggested plan for students to follow in completing the Bachelor of Science Major in Psychology. Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
PSYX 100	3	
PSYX 222		3
Math/Comp Sci Course	3	
General Education	6	6
Foreign Language	4	4
Additional Writing Req		3
<b>Total</b>	<b>16</b>	<b>16</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
PSYX 223	3	
PSYX 224	1	
Math/Comp Sci Course		3
Restricted Electives	4	7
General Education	7	6
<b>Total</b>	<b>15</b>	<b>16</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
PSYX 400	3	
Restricted Electives	6	3
General Education	3	
Minor/Ext Major/Elective	3	12
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
PSYX 499		3
Field Work/Pract/Coop Ed		3
Minor/Ext Major/Elective	13	8
<b>Total</b>	<b>13</b>	<b>14</b>

PSYX 410 Cognitive Learning Theories .....	3
PSYX 461 Industrial & Organizational Psychology .....	3
PSYX 470 Psychological Testing.....	3
<b>Total Group 2 credits .....</b>	<b>15</b>

**Total Restricted Psychology Electives.....22-23**

**Total minimum credits required for major.....41-42**

**Language Requirement (see page 122) ..... 8**

**Writing Requirement**

Course selected in consultation with advisor..... 3

**Mathematics/Computer Science Requirement**

Courses selected in consultation with advisor ..... V 6-8

**Minor ..... 20**

**Electives .....8-11**

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Associate of Arts Degree Program of Study in Applied Psychology

### Credits

#### General Education.....31

Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.

#### Required Courses

*PSYX 100 Introduction to Psychology.....	3
PSYX 222 Psychological Statistics .....	3
PSYX 223 Research Design and Analysis I .....	3
PSYX 224 Research Design and Analysis I Lab .....	1
<b>Total Required Courses credits .....</b>	<b>10</b>

#### Restricted Electives

##### Group 1: Select one course from this group

PSYX 320/321 Research Methods III w/Lab .....	4
PSYX 350/351 Physiological Psychology w/Lab.....	4
PSYX 352/353 Comparative Psychology w/Lab.....	4
PSYX 354/355 Sensation & Perception w/Lab .....	4
PSYX 358/359 Drugs and Behavior w/Lab.....	4
PSYX 370/371 Psychology of Learning w/Lab.....	4
PSYX 380/381 Memory & Cognition w/Lab .....	4
PSYX 480 Cognitive Development.....	3
<b>Total Group 1 credits .....</b>	<b>3-4</b>

##### Group 2: Select two courses from this group

*PSYX 231 Human Relations .....	3
PSYX 330 Child Psychology.....	3
PSYX 332 Adult Psychology .....	3
PSYX 333 Psychology of Aging .....	3
PSYX 335 Psychology of Gender .....	3
PSYX 340 Abnormal Psychology .....	3
PSYX 360/SOCI 382 Social Psychology .....	3
PSYX 378 Introduction to Clinical Psychology .....	3
PSYX 385 Psychology of Personality .....	3
PSYX 410 Cognitive Learning Theories .....	3
PSYX 461 Industrial & Organizational Psychology .....	3
PSYX 470 Psychological Testing.....	3
<b>Total Group 2 credits .....</b>	<b>6</b>

**Total Restricted Electives.....9-10**

**Restricted electives selected with advisor approval .....6**

#### Electives ..... 3-4

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the degree requirements. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree ..... 60**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course description for required prerequisites.*

## Minor in Psychology

### Credits

#### Required Courses

*PSYX 100 Introduction to Psychology .....	3
PSYX 222 Psychological Statistics .....	3
PSYX 223 Research Design and Analysis I.....	3
PSYX 224 Research Design and Analysis I Lab .....	1
<b>Total Required Courses Credits .....</b>	<b>10</b>

#### Restricted Elective Courses

##### Group 1: Select one course from this group

PSYX 320/321 Research Methods III w/Lab.....	4
PSYX 350/351 Physiological Psychology w/Lab .....	4
PSYX 352/353 Comparative Psychology w/Lab .....	4
PSYX 354/355 Sensation & Perception w/Lab.....	4
PSYX 358/359 Drugs and Behavior w/Lab .....	4
PSYX 370/371 Psychology of Learning w/Lab .....	4
PSYX 380/381 Memory & Cognition w/Lab .....	4
PSYX 480 Cognitive Development .....	3
<b>Total Group 1 credits.....</b>	<b>3-4</b>

##### Group 2: Select three courses from this group

*PSYX 231 Human Relations.....	3
PSYX 330 Child Psychology .....	3
PSYX 332 Adult Psychology.....	3
PSYX 333 Psychology of Aging.....	3
PSYX 335 Psychology of Gender.....	3
PSYX 340 Abnormal Psychology.....	3
PSYX 360/SOCI 382 Social Psychology.....	3
PSYX 378 Introduction to Clinical Psychology.....	3
PSYX 385 Psychology of Personality.....	3
PSYX 410 Cognitive Learning Theories .....	3
PSYX 461 Industrial & Organizational Psychology .....	3
PSYX 470 Psychological Testing .....	3
PSYX 482/LING 318 Introduction to Psycholinguistics .....	3
<b>Total Group 2 credits.....</b>	<b>9</b>

**Total Restricted Psychology Electives.....12-13****Total credits required for minor .....22-23**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
students should check the course description for  
required prerequisites.*

## Teaching Minor in Psychology

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

### Credits

**Required Courses**

EDU 497A Methods: 5-12 Social Studies .....	2
*PSYX 100 Introduction to Psychology.....	3
PSYX 222 Psychological Statistics .....	3
PSYX 223 Research Design and Analysis I .....	3
PSYX 224 Research Design and Analysis I Lab .....	1
PSYX 330 Child Psychology.....	3
PSYX 340 Abnormal Psychology .....	3
PSYX 360 Social Psychology .....	3
<b>Total minimum credits required for minor .....</b>	<b>21</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
students should check the course descriptions for  
required prerequisites.*

# The Department of Social Sciences and Cultural Studies

*Dr. Joy Crissey Honea,*

*Chairperson*

*LA 807, (406) 657-2311 or 657-2119*

*jhonea@msubillings.edu*

## Sociology

Professors: Eliason, Honea

Associate Professor: Hardt

Assistant Professor: Scroggins

Emeritus: Floyd, Lin, Waltner

## Political Science

Assistant Professor: Pope

Emeritus: Wilson

## Native American Studies

Assistant Professor: Harrison-Barcus

Emeritus: Heidenreich, Sanders

**American Indian Outreach Director:** Reno Charette

## Environmental Studies

Professor: Gilbertz

## Undergraduate Degrees and Majors

### Bachelor of Arts

**Majors:** Environmental Studies, Sociology

### Bachelor of Science

**Majors:** Criminal Justice, Political Science, Political Science Teaching Licensure Option, Sociology

**Minors:** Criminal Justice, Environmental Studies, Native American Studies, Political Science (options: General, Public Administration, Pre-Law), Sociology, Women's Studies

**Teaching Minors:** Political Science, Sociology

**Pre-Professional Program:** Pre-Law

**Licensure:** Social Science (Broadfield) Endorsement

## Advising Information

Students are encouraged to meet with their advisor each semester to confirm that their Plan of Study is accurate and complete. If necessary, changes and updates should be made in order to ensure that program requirements can be completed in a timely manner. Faculty advisors work with students to explore appropriate internships, cooperative education placements and/or experiential learning opportunities which will enhance the student's academic program. In addition, advisors provide assistance in selecting elective courses which support the student's interests, career plans and Plan of Study.

Academic advising services for all freshmen Arts and Sciences majors are provided through Advising & Career Services on McMullen Hall first floor west. Upon declaring a specific major, Arts and Science majors will be assigned to a faculty advisor in their department for upper-division advising. Advising files for all upper-division students are maintained in the departmental office of the program in which the student is majoring. Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

The Department of Social Sciences and Cultural Studies combines four scholarly disciplines, each with its separate faculty and academic programs. The four-year program in Sociology leads to a Bachelor of Science or Bachelor of Arts degree, or a Bachelor of Science in Criminal Justice. The four year program in Environmental Studies leads to a Bachelor of Arts degree. The department offers minors in Political Science, Native American Studies, Sociology, Environmental Studies, and Women's Studies.

## Sociology

### Mission Statement

The sociology program at MSU Billings is dedicated to promoting the values of social responsibility, respect for diversity, and a commitment to lifelong learning. Our sociology program takes a holistic approach to learning, an approach that directly links academic work with understanding of the structure of social institutions, changes in them, and their impacts on the lives of individuals. Our program also conveys insights into the dynamics of social processes, and the manners in which individuals both shape and are shaped by these

processes. Finally, the sociology program at MSU Billings imparts knowledge about the self as it relates to various social contexts.

## Objectives

Students who complete the sociology program at MSU Billings will be able to use the following tools to provide an understanding a variety of social situations.

- Critical thinking
- Introspective awareness of self in social contexts
- Multi-cultural awareness
- Inductive and deductive logical modeling
- Quantitative and qualitative research methods

The study of sociology at MSU Billings is based on a core of theory and method courses: (1) how to understand social life as a sociologist (theory) and (2) how to observe social life and draw conclusions from what one sees (method). Courses involving theory and method are required for every major.

In the interest of building a broad sociological foundation, each student is required to take at least two courses in the lower division core and at least one course from each of the five areas in the program: (1) General Sociology, (2) Family and Relationships, (3) Crime and Criminal Justice, (4) Social Inequalities, and (5) Health and Environments. Based on this foundation, students are strongly encouraged to focus their academic interest on one of the four areas. To provide opportunity for students to integrate their academic knowledge in sociology and the wider social world we live in, the department requires a minimum of 135 hours of work experience with an organization.

A degree in Sociology provides a solid foundation for a student to enter into either graduate study or occupation in government, industry or business. For instance, with a concentration in program area two or three, a student can find job opportunities in human services or the criminal and/or juvenile justice related fields. There are two degree programs in Sociology. A Bachelor of Arts degree program orients a student toward graduate study by putting an emphasis on the proficiency of a second language. A Bachelor of Science degree program puts an emphasis on familiarity with Mathematics and Computer Science to prepare a student for entering the labor market right after graduation. Nonetheless, the difference between the two degree programs is only a matter of emphasis, rather than the substance of the program itself. Regardless of one's special interest, one might wish to emphasize research methods and statistics. Because of the growth of computer use, these two skills are cited as most valuable by sociology graduates employed in nonacademic jobs.

Extended major: in lieu of a minor, students may choose the Sociology major extended option. This option requires 15 additional credits from the list of Sociology courses.

## Political Science

### Mission Statement

Political Science is the study of politics, government, and public affairs. It provides the student with knowledge and understanding of the theory, organization, functions, and processes of domestic and international systems and institutions of politics and government, including the role of individual and group relations.

### Objectives

Courses offered are oriented toward:

- preparing the student for citizenship roles in community and national affairs and providing a coherent knowledge of political and government activities;
- assisting the student to secure a broad liberal arts and sciences education;
- providing undergraduate preparation for those students who propose to study at the graduate level;
- offering general training for students who plan careers in government and public affairs;
- preparing students for careers in secondary teaching;
- providing a sound background for those students who intend to enroll in law and other professional schools;
- providing a useful background for students who wish to work in management and staff positions in business and industry which have relationships with the public sector, including political journalism.

## Native American Studies

### Mission Statement

The Native American Studies program at MSU Billings is dedicated to providing outstanding courses in Native American Studies, support for all students, and working cooperatively with Tribal communities and organizations. All Native American Studies programs incorporate traditional indigenous philosophies of maintaining balance in a holistic environment.

## Objectives

The Native American Studies Program has four primary goals:

- to offer a comprehensive academic program in Native American Studies for both Native American and non-Native students;
- to provide increased awareness of and appreciation for the rich cultural heritage, knowledge, and contributions of Native Americans in the United States;
- to contribute actively to increased multicultural awareness and appreciation at MSU Billings and throughout the region; and
- to cooperate with other MSU Billings programs in providing a supportive environment for Native American students.

Native American Studies began at Montana State University Billings in 1970 and has continued to develop in response to internal and external needs and provisions. The Native American Studies staff supports other Native American related programs at MSU Billings including American Indian Outreach & Diversity Center and the Intertribal Indian Club. The academic offerings in Native American Studies include classes which examine past and present Native American cultures as living, vital cultures; explores issues in Native American history, education, and the behavioral sciences; and identifies factors that contribute to the unique cultural and legal status of Native American people. Special workshops and classes are held which are responsive to the contemporary needs and concerns of the Native American populations in Montana. NASX courses provide a background for any career involving work with people from different cultures and especially with Native American communities. MSU Billings actively supports, encourages, and instructs in MCA 20-1-501, commonly called Indian Education for All. An academic minor of 21 credits is offered for the Arts and Sciences, Education, or Business student.

## Environmental Studies

The Environmental Studies program is dedicated to balancing students' understanding of environmental values and social dimensions, environmental sciences, and environmental policies. Students benefit from living in one of the most ecologically diverse and environmentally spectacular regions of North America. Yellowstone National Park, the northern Rockies, and the northern Great Plains are within a short drive of the MSU Billings campus. As an interdisciplinary program, the environmental studies major gives students the opportunity to take courses in

environmental ethics, environmental history, environmental ecology, geography, environmental assessments, and geographic information systems.

Students have course options in advanced ecology, environmental law, Native Americans and the environment, business and the environment, environmental sociology, and art and the environment. Students can select electives and Minor Fields of Study with career options in mind. An internship opportunity in the Environmental Studies major allows students to enhance their academic studies with real world experience. As student interns, students may work in local, state, and federal agencies, in private firms, in lab settings and/or in the field.

The faculty of the Environmental Studies program are drawn from existing academic programs and occasionally from the community of environmental professionals in the Billings area. The faculty are involved in environmental research, they attend national meetings and colloquia, and they serve in various capacities within community organizations and agencies. Their work outside the classroom enhances the curriculum and the learning objectives of the program.

The program prepares students to enter the work force in environmental occupations, and graduates from the program have proven to be successful in both the public and private sectors. Others have been accepted into graduate programs where they earn Masters or professional degrees in areas such as planning and environmental law.

## Mission Statement

The Environmental Studies program at MSU Billings provides a well-rounded interdisciplinary approach to understanding our natural systems and the role of humans in those systems. The program is dedicated to community collaboration and experiential learning opportunities.

## Objectives

Students who complete the program will be able to:

- Identify and explain key scientific principles involved in understanding environmental issues.
- Identify and explain key human concerns involved in understanding environmental issues.
- Identify and explain key policy and regulatory concerns involved in understanding environmental issues.



## Bachelor of Arts Degree Major in Sociology

Credits

### General Education Requirements ..... 31

The following General Education courses also satisfy requirements in the major: ANTY 217, ANTY 220, SOCI 101, SOCI 201, WGSS 274. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

### Required Courses

*SOCI 101 Introduction to Sociology .....	3
<i>(SOCI 101 is a prerequisite for all other coursework in the required core.)</i>	
SOCI 318 Sociological Research Methods .....	3
SOCI 319 Statistics for Sociologists .....	3
SOCI 455 Classical Sociological Theory .....	3
SOCI 482 Contemporary Sociological Theory .....	3
SOCI 498 Internship/Cooperative Education .....	3
SOCI 499 Senior Thesis/Capstone .....	3
WRIT 201 College Writing II .....	3
<i>(WRIT 201 is required for all upper division coursework in the major.)</i>	
<b>Total Required Courses credits .....</b>	<b>24</b>

### Restricted Electives

At least 2 courses from the lower division core and at least 1 course from 4 of the 5 content areas. Minimum of 18 credits, including 14 upper division.

### Lower Division Core

Choose at least two courses.

*ANTY 217 Physical Anthropology and Archeology .....	3
*ANTY 220 Culture and Society .....	3
CJUS 228 Diversity in Criminal Justice .....	3
*SOCI 201 Social Problems .....	3
SOCI 221 Criminal Justice System .....	3
*WGSS 274 Women, Culture and Society .....	3

Choose at least one course from four of the five content areas below.

### Area 1: General Sociology

SOCI 355 Social Demography and Population Studies .....	3
SOCI 356 Sociology of Violence .....	3
SOCI 382/PSYX 360 Social Psychology and Social Structure .....	3
SOCI 435 Law and Society .....	3

### Area 2: Family and Relationships

SOCI 332 Sociology of the Family .....	3
SOCI 351 Dating & Mate Selection .....	3
SOCI 432 Human Sexual Behavior .....	3

### Area 3: Crime and Criminal Justice

CJUS 421 Criminal Justice Ethics .....	3
SOCI 311 Criminology .....	3
SOCI 327 Sociology of Deviance .....	3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Arts Major in Sociology*

First Year	F	S
WRIT 101	3	
WRIT 201		3
SOCI 101	3	
Sociology Lower Division Core		3
Foreign Language	4	4
General Education	6	3
Minor/Ext. Major		3
<b>Total</b>	<b>16</b>	<b>16</b>

Second Year	F	S
Sociology Lower Division Core	3	
Foreign Language	3	3
General Education	6	6
General Education w/Lab	4	
Minor/Ext. Major		6
<b>Total</b>	<b>16</b>	<b>15</b>

Third Year	F	S
SOCI 455	3	
SOCI 482		3
SOCI 318	3	
SOCI 319		3
Restricted Electives	6	
Electives	3	6
Minor/Ext. Major		3
<b>Total</b>	<b>15</b>	<b>15</b>

Fourth Year	F	S
SOCI 499		3
SOCI 498		3
Restricted Electives	6	
Minor/Ext. Major	3	6
Electives	6	
<b>Total</b>	<b>15</b>	<b>12</b>

SOCI 330 Juvenile Delinquency .....	3
SOCI 423 Sociology of Corrections .....	3
SOCI 425 Victims and Society.....	3

**Area 4: Social Inequalities**

CJUS 440 Gender, Crime and Justice.....	3
*NASX 205 Native Americans in Contemporary Society.....	3
SOCI 344 Sociology of Race and Ethnicity .....	3
SOCI 431 Sociology of Gender Roles .....	3

**Area 5: Health and Environments**

SOCI 352 Diseases & Society .....	3
SOCI 380 Sociology of Health and Medicine .....	3
SOCI 448 Sport and Society.....	3
SOCI 461 Urban Society and Human Ecology.....	3
SOCI 470 Environmental Sociology .....	3

**Other courses which may be used to satisfy Restricted Elective****Requirements include the following:**

SOCI 294/494 Seminar/Workshop .....	V1-3
SOCI 492 Independent Study .....	V1-5

**Total Restricted Elective Courses credits .....** 18

**Total minimum credits required for major .....** 42

**Minor .....** 21

**Language Requirement (See page 122).....** 14

**Electives .....** V

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. Electives should be chosen in consultation with an academic advisor. Please refer to limitations on General Education requirements (see page 69). Limited to two courses per discipline.

**Total minimum credits required for degree.....** 120

**Note:** A Minimum grade of “C-” is required in all Sociology major coursework.

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Science Degree Major in Sociology

### General Education Requirements ..... 31

The following General Education courses also satisfy requirements in the major: ANTY 217, ANTY 220, SOCI 101, SOCI 201, WGSS 274. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

### Required Courses

*SOCI 101 Introduction to Sociology .....	3
<i>(SOCI 101 is prerequisite for all other coursework in the required core)</i>	
SOCI 318 Sociological Research Methods.....	3
SOCI 319 Statistics for Sociologists.....	3
SOCI 455 Classical Sociological Theory .....	3
SOCI 482 Contemporary Sociological Theory.....	3
SOCI 498 Internship/Cooperative Education .....	3
SOCI 499 Senior Thesis/Capstone .....	3
WRIT 201 College Writing II.....	3
<i>(WRIT 201 is required for all upper division coursework in the major.)</i>	
<b>Total Required credits.....</b>	<b>24</b>

### Restricted Electives

At least 2 courses from the lower division core and at least 1 course from 4 of the 5 content areas. Minimum of 18 credits, including 14 upper division.

### Lower Division Core

Choose at least two courses.

*ANTY 217 Physical Anthropology and Archeology .....	3
*ANTY 220 Culture and Society .....	3
CJUS 228 Diversity in Criminal Justice .....	3
*SOCI 201 Social Problems .....	3
SOCI 221 Criminal Justice System .....	3
*WGSS 274 Women, Culture and Society .....	3

Choose at least one course from four of the five content areas below.

### Area 1: General Sociology

SOCI 355 Social Demography and Population Studies.....	3
SOCI 356 Sociology of Violence .....	3
SOCI 382/PSYX 360 Social Psychology and Social Structure .....	3
SOCI 435 Law and Society .....	3

### Area 2: Family and Relationships

SOCI 332 Sociology of the Family .....	3
SOCI 351 Dating & Mate Selection .....	3
SOCI 432 Human Sexual Behavior.....	3

### Area 3: Crime and Criminal Justice

CJUS 421 Criminal Justice Ethics .....	3
SOCI 311 Criminology.....	3
SOCI 327 Sociology of Deviance.....	3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science Major in Sociology*

First Year	F	S
WRIT 101	3	
WRIT 201		3
SOCI 101	3	
Sociology Lower Division		
Core		3
Foreign Language	4	4
General Education	6	3
Minor/Ext. Major		3
<b>Total</b>	<b>16</b>	<b>16</b>

Second Year	F	S
Elective/Minor	3	
Sociology Lower Division		
Core	3	
Restricted Electives		6
STAT 216	4	
General Education	6	6
General Education w/Lab		4
<b>Total</b>	<b>16</b>	<b>16</b>

Third Year	F	S
SOCI 455	3	
SOCI 482		3
SOCI 318	3	
SOCI 319		3
Restricted Electives	3	3
Electives/Minor	6	3
Minor/Ext. Major		3
<b>Total</b>	<b>15</b>	<b>15</b>

Fourth Year	F	S
SOCI 499		3
SOCI 498		3
Restricted Electives	6	
Minor/Ext. Major	3	6
Electives	5	
<b>Total</b>	<b>14</b>	<b>12</b>

SOCI 330 Juvenile Delinquency .....	3
SOCI 423 Sociology of Corrections .....	3
SOCI 425 Victims and Society.....	3

**Area 4: Social Inequalities**

CJUS 440 Gender, Crime and Justice.....	3
*NASX 205 Native Americans in Contemporary Society.....	3
SOCI 344 Sociology of Race and Ethnicity .....	3
SOCI 431 Sociology of Gender Roles .....	3

**Area 5: Health and Environments**

SOCI 352 Diseases & Society .....	3
SOCI 380 Sociology of Health and Medicine .....	3
SOCI 448 Sport and Society.....	3
SOCI 461 Urban Society and Human Ecology.....	3
SOCI 470 Environmental Sociology .....	3

**Other courses which may be used to satisfy Restricted Elective****Requirements:**

SOCI 294/494 Seminar/Workshop .....	1-3
SOCI 492 Independent Study .....	1-5

**Total Restricted Electives..... 18**

**Total for the Major..... 42**

**Language Requirement (See page 122)..... 8**

**Mathematics Course..... 4**

\*STAT 216 Introduction to Statistics .....

**Minor..... 21**

In lieu of a minor, students may choose the Sociology Extended Major. This option requires 15 additional credits from the lists above for a total of 57 credits (42+15).

**Electives..... V**

The total number of elective credits required for the degree will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the major requirements. Electives should be chosen in consultation with an academic advisor. Please refer to limitations on General Education requirements (see page 69). Limited to two courses per discipline.

**Total minimum credits required for degree..... 120**

**Note:** A Minimum grade of “C-” is required in all Sociology major coursework.

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Science Degree Major in Criminal Justice

Credits

**General Education Requirements** ..... 31

The following General Education courses also satisfy requirements in the major: SOCI 101, SOCI 201. Students should consult with an academic advisor before registering for General Education courses in order to minimize the number of courses needed to satisfy the requirements of the major.

**Language Requirement (See page 122)** ..... 8

**Mathematics Course** ..... 4

Must be in addition to course taken in General Education.

\*STAT 216 Introduction to Statistics ..... 4

### Required Courses

CJUS 421 Criminal Justice Ethics ..... 3

\*SOCI 101 Introduction to Sociology

**OR** \*SOCI 201 Social Problems ..... 3

SOCI 221 Criminal Justice System ..... 3

SOCI 318 Sociological Research Methods ..... 3

SOCI 319 Statistics for Sociologists ..... 3

SOCI 455 Classical Sociological Theory

**OR** SOCI 482 Contemporary Sociological Theory ..... 3

SOCI 498 Internship/Cooperative Education ..... 3

SOCI 499 Senior Thesis/Capstone ..... 3

\*WRIT 201 College Writing II

**OR** \*WRIT 221 Intermediate Technical Writing ..... 3

**Total** ..... 27

### Restricted Electives

Choose at least 1 course from 5 of the 6 content areas below. Minimum of 18 credits, 14 of which must be upper division.

#### Area 1: Law Enforcement

CJUS 227 Introduction to Policing ..... 3

CJUS 413 Administration of Law Enforcement ..... 3

SOCI 362 Sociology of Law Enforcement ..... 3

#### Area 2: Corrections

CJUS 226 Introduction to Probation ..... 3

CJUS 437 Mass Incarceration and Prisoner Reentry ..... 3

SOCI 423 Sociology of Corrections ..... 3

#### Area 3: Law and Legal System

NASX 379 Federal Indian Law ..... 3

PSCI 370 Courts and Judicial Politics ..... 3

PSCI 472/HSTA 480 Constitutional Law: Civil Liberties ..... 3

SOCI 435 Law and Society ..... 3

#### Area 4: Criminology

SOCI 311 Criminology ..... 3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science Major in Criminal Justice*

First Year	F	S
WRIT 101	3	
WRIT 201 or WRIT 221		3
SOCI 101 or SOCI 201	3	
SOCI 221	3	
Foreign Language	4	4
General Education	3	9
<b>Total</b>	<b>16</b>	<b>16</b>

Second Year	F	S
SOCI 318	3	
SOCI 319		3
STAT 216	4	
General Education	3	6
General Education w/Lab	4	
Electives/Minor		6
<b>Total</b>	<b>14</b>	<b>15</b>

Third Year	F	S
SOCI 455 or SOCI 482	3	
CJUS 421	3	
Restricted Electives	3	9
Electives/Minor	6	6
<b>Total</b>	<b>15</b>	<b>15</b>

Fourth Year	F	S
Restricted Electives	3	3
SOCI 499		3
SOCI 498		3
Minor/Electives	11	6
<b>Total</b>	<b>14</b>	<b>15</b>

SOCI 327 Sociology of Deviance.....	3
SOCI 330 Juvenile Delinquency .....	3
SOCI 415 Sociology of Hunting and Poaching .....	3

**Area 5: Inequality, Violence, and Victimization**

CJUS 228 Diversity in Criminal Justice .....	3
CJUS 440 Gender, Crime and Justice.....	3
SOCI 356 Sociology of Violence .....	3
SOCI 425 Victims and Society.....	3

**Area 6: Mental Health, Addiction, and Rehabilitation**

HTH 411 Alcohol, Tobacco and Other Drug Prevention .....	3
PSYX 360/SOCI 382 Social Psychology and Social Structure .....	3
PSYX 382 Forensic Psychology.....	3
REHA 425 Psychiatric Rehabilitation and Co-Occurring Disorders.....	3

**Total Restricted Electives..... 18**

**Total for Major ..... 49**

**Minor ..... V 21**

**Unrestricted Electives..... V 10**

**Total Minimum Credits for Degree ..... 120**

**Note:** A Minimum grade of “C-” is required in all Criminal Justice major coursework.

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Science Degree Major in Political Science

Credits

**General Education Requirements** ..... 31

The following General Education courses also satisfy requirements in the major: PSCI 220, PSCI 210, and PSCI 230. Please refer to the General Education requirements (see page 69).

### Required Courses

*PSCI 210 Introduction to American Government .....	3
*PSCI 220 Introduction to Comparative Government.....	3
*PSCI 230 Introduction to International Relations.....	3
PSCI 240 Introduction to Public Administration.....	3
PSCI 342 Media, Public Opinion, Polling	
OR PSCI 427 Research Methods.....	3
*WRIT 201 College Writing II.....	3
<b>Total</b> .....	<b>18</b>

### Restricted Electives

Choose a minimum of 12 credits from at least 2 of the 4 Areas of concentration below. Of the 12 credits, at least 9 must be upper division (300-400 level).

#### Area 1: International Relations and Comparative Politics

PSCI 424 Democratization .....	3
PSCI 425 International Conflict .....	3
PSCI 426 Comparative Political Economy.....	3

#### Area 2: The Legal System

NASX 379 Federal Indian Law .....	3
PSCI 472/POLS 523 Constitutional Law: Civil Liberties .....	3
PSCI 473/POLS 527 Constitutional Law: Powers and Structures.....	3

#### Area 3: U.S. Government

PSCI 260 Introduction to State and Local Government .....	3
PSCI 335 American Foreign Policy .....	3
PSCI 341 Political Parties & Elections.....	3
PSCI 342 Media, Public Opinion, Polling .....	3
PSCI 346 American Presidency.....	3
PSCI 347 United States Congress.....	3
PSCI 370 Courts and Judicial Politics .....	3

#### Area 4: Public Administration

PSCI 365 Public Policy Issues and Analysis .....	3
PSCI 458 Urban and Regional Planning.....	3
PSCI 459/POLS 557 Public Budgeting & Finance.....	3
PSCI 464/POLS 562 Local Government Administration .....	3
PSCI 469/POLS 560 Ethics and Public Policy .....	3

#### Other Courses which may be used to satisfy Restricted Electives:

PSCI 491/POLS 580 Special Topics .....	3
PSCI 492 Independent Study.....	1-5

*Continued...*

## SUGGESTED PLAN OF STUDY

*Bachelor of Science  
Major in Political  
Science*

*Please see the department for an  
up-to-date plan of study.*

PSCI 494 Seminar/Workshop .....	1-3
PSCI 498 Internship/Cooperative Education .....	1-12

**Total Restricted Electives..... 12**

**Total minimum credits required for major ..... 30**

**Restricted electives selected with advisor approval ..... 6**

**Option 1: Minor ..... 21**

**Unrestricted Electives..... 32**

**Option 2: Extended Major ..... 15**

In lieu of a minor, students may choose the Political Science Extended Major. This option requires 15 additional credits from the lists above, for a total of 45 major credits.

**Unrestricted Electives..... 38**

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*



## Bachelor of Science Degree Major in Political Science Teaching Licensure Option

Credits

**General Education Requirements ..... 31**

The following General Education courses also satisfy requirements in the major: PSCI 220, PSCI 210, and PSCI 230. Please refer to the General Education requirements (see page 69).

**Professional Core (see page 266) ..... 34-36****Required Courses**

EDU 497A Methods: 5-12 Social Studies .....	2
*PSCI 210 Introduction to American Government .....	3
*PSCI 220 Introduction to Comparative Government.....	3
*PSCI 230 Introduction to International Relations.....	3
PSCI 240 Introduction to Public Administration.....	3
PSCI 260 Introduction to State and Local Government .....	3
PSCI 342 Media, Public Opinion, Polling .....	3
<b>Total.....</b>	<b>20</b>

**Restricted Electives**

Choose 2 courses from two of the three areas of concentration or from other political science courses that may satisfy this requirement. Nine of the 12 credits in Restricted Electives must be upper division.

**Area 1: International Relations and Comparative Government**

PSCI 424 Democratization .....	3
PSCI 425 International Conflict .....	3
PSCI 426 Comparative Political Economy.....	3

**Area 2: The Legal System**

NASX 379 Federal Indian Law .....	3
PSCI 472/POLS 523 Constitutional Law: Civil Liberties .....	3
PSCI 473/POLS 527 Constitutional Law: Powers and Structures.....	3

**Area 3: U.S. Government**

PSCI 335 American Foreign Policy .....	3
PSCI 341 Political Parties & Elections.....	3
PSCI 346 American Presidency.....	3
PSCI 347 United States Congress.....	3
PSCI 370 Courts and Judicial Politics .....	3

**Other Courses which may be used to satisfy Restricted Electives:**

PSCI 491/POLS 580 Special Topics .....	3
PSCI 492 Independent Study.....	1-5
PSCI 494 Seminar/Workshop.....	1-3
PSCI 498 Internship/Cooperative Education.....	1-12

**Total Restricted Electives..... 12**

*Continued...*

### SUGGESTED PLAN OF STUDY

*Bachelor of Science  
Major in Political  
Science  
Teaching Licensure  
Option*

*Please see the department for an  
up-to-date plan of study.*

<b>Total minimum credits required for major .....</b>	<b>66-69</b>
<b>Restricted electives selected with advisor approval .....</b>	<b>6</b>
<b>Unrestricted Electives.....</b>	<b>25</b>
<b>Total minimum credits required for degree.....</b>	<b>128</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Criminal Justice

Credits

### Required Courses

*SOCI 101 Introduction to Sociology	
<b>OR</b> *SOCI 201 Social Problems .....	3
SOCI 221 Criminal Justice System .....	3
SOCI 318 Sociological Research Methods.....	3
SOCI 319 Statistics for Sociologists.....	3
<b>Total</b> .....	<b>12</b>

### Restricted Electives

Choose at least 3 courses from the list below.

Minimum 9 credits, 6 of which must be upper division.

CJUS 226 Introduction to Probation.....	3
CJUS 227 Introduction to Policing.....	3
CJUS 228 Diversity in Criminal Justice .....	3
CJUS 413 Administration of Law Enforcement.....	3
CJUS 421 Criminal Justice Ethics .....	3
PSCI 370 Courts and Judicial Politics .....	3
SOCI 311 Criminology.....	3
SOCI 327 Sociology of Deviance.....	3
SOCI 330 Juvenile Delinquency .....	3
SOCI 423 Sociology of Corrections .....	3
SOCI 425 Victims and Society.....	3

**Other courses which many be used to satisfy the Restricted Electives requirement include the following:**

SOCI 292/492 Independent Study .....	1-5
SOCI 294/494 Seminar/Workshop .....	1-6

**Restricted elective total** ..... **9**

**Total minimum credits required for minor** ..... **21**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Native American Studies

Credits

### Required Courses

*NASX 105 Introduction to Native American Studies .....	3
*NASX 205 Native Americans in Contemporary Society .....	3
NASX 332 Montana Indians: Cultures, Histories, Current Issues .....	3

### At least 3 credits chosen from the following:

NASX 294/494 Seminar/Workshop.....	1-3
NASX 492 Independent Study .....	1-5
NASX 498 Internship/Cooperative Education .....	1-12
<b>Total required credits</b> .....	<b>12</b>

### Restricted Elective Courses

At least nine credits from among the following courses chosen in consultation with the Native American Studies staff/advisor:

NASX 294/494 Seminar/Workshop.....	1-3
NASX 304 Native American Beliefs and Philosophy .....	3
NASX 340/LIT 305 Native American Literature.....	3
NASX 350 Native Americans and the Environment .....	3
NASX 379 Federal Indian Law.....	3
NASX 406 History of American Indian Women .....	3
NASX/PSCI 419 Federal Indian Policy .....	3
NASX/ARTH 439 American Indian Art.....	3
NASX 492 Independent Study .....	1-5
NASX 498 Internship/Cooperative Education .....	1-12
Other appropriate courses in areas related to Native American Studies .....	1-4

**Restricted Electives** ..... **9**

The total number of elective credits required for the minor will be determined by the number of courses a student elects to take which fulfill both the General Education requirements and the minor requirements. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for minor** ..... **21**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Political Science

### Minor Options:

#### Minor in Political Science

##### General Emphasis

	Credits
*PSCI 210 Introduction to American Government ...	3
*PSCI 220 Introduction to Comparative Government.....	3
*PSCI 230 Introduction to International Relations....	3
PSCI 342 Media, Public Opinion, Polling	
<b>OR</b> PSCI 427 Research Methods .....	3
<b>Total required credits.....</b>	<b>12</b>

##### Restricted Electives

Nine credits chosen from the following courses in consultation with a Political Science advisor. Substitutions must be approved by the Political Science advisor.

PSCI 240 Introduction to Public Administration.....	3
PSCI 335 American Foreign Policy .....	3
PSCI 341 Political Parties & Elections.....	3
PSCI 342 Media, Public Opinion, Polling (if not taken as a required course) .....	3
PSCI 346 American Presidency.....	3
PSCI 347 United States Congress.....	3
PSCI 424 Democratization .....	3
PSCI 425 International Conflict .....	3
PSCI 426 Comparative Political Economy.....	3
PSCI 458 Urban and Regional Planning.....	3
PSCI 464 Local Government Administration.....	3
PSCI 472 Constitutional Law: Civil Liberties .....	3
PSCI 473 Constitutional Law: Powers and Structures .....	3
PSCI 491 Special Topics .....	3
PSCI 492 Independent Study.....	1-5
PSCI 294/494 Seminar/Workshop.....	1-6
PSCI 498 Internship/Cooperative Education.....	1-6
<b>Total Restricted Electives.....</b>	<b>9</b>

**Total minimum credits required for minor.....21**

\*May satisfy General Education requirements.

#### Minor in Political Science

##### Public Administration Emphasis

	Credits
<b>Required Courses</b>	
*PSCI 210 Introduction to American Government ...	3
PSCI 240 Introduction to Public Administration.....	3
PSCI 260 Introduction to State and Local Government.....	3

PSCI 427 Research Methods.....	3
PSCI 464 Local Government Administration .....	3
<b>Total required course credits .....</b>	<b>15</b>

##### Restricted Electives

Select 9 credits in one of the following areas, chosen in consultation with a Political Science advisor.

Substitutions must be approved by the Political Science advisor.

##### American Politics

PSCI 346 American Presidency .....	3
PSCI 347 United States Congress .....	3
PSCI 370 Courts and Judicial Politics.....	3

##### Public Administration

PSCI 458 Urban and Regional Planning .....	3
PSCI 459 Public Budgeting & Finance.....	3
PSCI 469 Ethics and Public Policy .....	3
PSCI 491 Special Topics.....	3
<b>Total Restricted Electives credits .....</b>	<b>9</b>

**Total minimum credits required for minor ..... 24**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

#### Minor in Political Science

##### Pre-Law Emphasis

	Credits
<b>Required Courses</b>	
*PSCI 210 Introduction to American Government ...	3
*PSCI 230 Introduction to International Relations ...	3
PSCI 260 Introduction to State and Local Government.....	3
PSCI 427 Research Methods.....	3
<b>Total Required Course credits.....</b>	<b>12</b>

##### Restrictive Electives

Nine credits chosen in consultation with the Pre-Law advisor. Substitutions must be approved by the Pre-Law advisor.

##### Two courses selected from the following:

NASX 379 Federal Indian Law.....	3
PSCI 370 Courts and Judicial Politics.....	3
PSCI 472/HSTA 480 Constitutional Law: Civil Liberties.....	3
PSCI 473/HSTA 481 Constitutional Law: Powers and Structures.....	3
PSCI 491 Special Topics.....	3
<b>Total .....</b>	<b>6</b>

**One course selected from the following:**

*SOCI 201 Social Problems .....	3
SOCI 311 Criminology.....	3
SOCI 330 Juvenile Delinquency .....	3
<b>Total.....</b>	<b>3</b>

**Total minimum credits required for minor.....21**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Sociology

**Credits**

**Required Courses**

*SOCI 101 Introduction to Sociology .....	3
SOCI 318 Sociological Research Methods.....	3
SOCI 319 Statistics for Sociologists.....	3
SOCI 455 Classical Sociological Theory	
OR SOCI 482 Contemporary Sociological Theory..	3
<b>Total required credits.....</b>	<b>12</b>

**Lower Division Core****At least one course from the following:**

*ANTY 217 Physical Anthropology and Archaeology .....	3
*ANTY 220 Culture and Society .....	3
CJUS 228 Diversity in Criminal Justice .....	3
*SOCI 201 Social Problems .....	3
SOCI 221 Criminal Justice System .....	3
*WGSS 274 Women, Culture and Society .....	3
<b>Total.....</b>	<b>3</b>

**Restricted Electives**

At least 1 course from 2 of the following 5 areas.  
Minimum of 6 credits, including 3 upper division.

**Area 1: General Sociology**

SOCI 355 Social Demography and Population Studies.....	3
SOCI 356 Sociology of Violence .....	3
SOCI 382/PSYX 360 Social Psychology and Social Structure.....	3
SOCI 435 Law and Society .....	3

**Area 2: Family and Relationships**

SOCI 332 Sociology of the Family .....	3
SOCI 351 Dating & Mate Selection .....	3
SOCI 432 Human Sexual Behavior .....	3

**Area 3: Crime and Criminal Justice**

CJUS 421 Criminal Justice Ethics .....	3
CJUS 440 Gender, Crime and Justice.....	3

SOCI 311 Criminology .....	3
SOCI 327 Sociology of Deviance .....	3
SOCI 330 Juvenile Delinquency .....	3
SOCI 423 Sociology of Corrections.....	3
SOCI 425 Victims and Society .....	3

**Area 4: Social Inequalities**

*NASX 205 Native Americans in Contemporary Society .....	3
SOCI 344 Sociology of Race and Ethnicity .....	3
SOCI 431 Sociology of Gender Roles .....	3

**Area 5: Health and Environments**

SOCI 352 Diseases & Society.....	3
SOCI 380 Sociology of Health and Medicine.....	3
SOCI 448 Sport and Society .....	3
SOCI 461 Urban Society and Human Ecology .....	3
SOCI 470 Environmental Sociology.....	3

**Other courses which may be used to satisfy****Restricted Elective Requirements:**

SOCI 294/494 Seminar/Workshop.....	1-3
SOCI 492 Independent Study.....	1-5

**Restricted Elective total..... 6**

**Total minimum credits required for minor ..... 21**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Teaching Minor in Political Science

Students who intend to graduate on the 128 credit degree program should consult with Advising & Career Services and their faculty advisor before selecting a teaching minor. Some requirements for certain teaching minors can be met in General Education, but some others cannot. Students choosing to take teaching minors with requirements beyond 21 credits may take credits in excess of 128 to complete their teaching major and preferred teaching minor.

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

**Credits**

**Required Courses:**

EDU 497A Methods: 5-12 Social Studies.....	2
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*PSCI 210 Introduction to American Government ...	3
*PSCI 220 Introduction to Comparative Government.....	3
*PSCI 230 Introduction to International Relations....	3
PSCI 342 Media, Public Opinion, Polling .....	3
<b>Total Required Course credits .....</b>	<b>14</b>

**Restricted Electives**

Nine credits chosen in consultation with an advisor from the following list:

PSCI 240 Introduction to Public Administration.....	3
PSCI 260 Introduction to State and Local Government.....	3
PSCI 335 American Foreign Policy .....	3
PSCI 341 Political Parties & Elections.....	3
PSCI 424 Democratization .....	3
PSCI 464 Local Government Administration.....	3
PSCI 472/HSTA 480 Constitutional Law: Civil Liberties .....	3
PSCI 473/HSTA 481 Constitutional Law: Powers and Structures .....	3
PSCI 491 Special Topics .....	3
PSCI 498 Internship/Cooperative Education.....	1-12
<b>Total Restricted Elective credits.....</b>	<b>9</b>

**Total minimum credits required for minor .....**23

\*May satisfy General Education requirements.

**Teaching Minor in Sociology**

Students who intend to graduate on the 128 credit degree program should consult with Advising & Career Services and their faculty advisor before selecting a teaching minor. Some requirements for certain teaching minors can be met in General Education, but some others cannot. Students choosing to take teaching minors with requirements beyond 21 credits may take credits in excess of 128 to complete their teaching major and preferred teaching minor.

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

**Credits****Required Courses:**

*ANTY 220 Culture and Society .....	3
EDU 497A Methods: 5-12 Social Studies .....	2
*SOCI 101 Introduction to Sociology .....	3
SOCI 318 Sociological Research Methods.....	3
SOCI 319 Statistics for Sociologists.....	3
SOCI 455 Classical Sociological Theory	

**OR**

SOCI 482 Contemporary Sociological Theory .....	3
<b>Total Required Course credits.....</b>	<b>17</b>

**Restricted Electives:**

Select two additional upper division courses from the following in consultation with a Sociology advisor:

SOCI 311 Criminology .....	3
SOCI 330 Juvenile Delinquency .....	3
SOCI 332 Sociology of the Family .....	3
SOCI 344 Sociology of Race and Ethnicity .....	3
SOCI 355 Social Demography and Population Studies .....	3
SOCI 382/PSYX 360 Social Psychology and Social Structure .....	3
SOCI 423 Sociology of Corrections.....	3
SOCI 431 Sociology of Gender Roles .....	3
SOCI 432 Human Sexual Behavior .....	3
SOCI 455 Classical Sociological Theory.....	3
SOCI 461 Urban Society and Human Ecology .....	3
SOCI 482 Contemporary Sociological Theory .....	3
<b>Total Restricted Elective credits .....</b>	<b>6</b>

**Total minimum credits required for minor .....**23

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

**Licensure****Social Science (Broadfield)****Endorsement**

Social Science Broadfield Endorsement has been eliminated as a major. It is now a licensure. Students majoring in history (licensure option) and political science (teaching minor) are encouraged to expand employment opportunities by adding a social science (broadfield) endorsement. Students seeking this endorsement must complete one of the following four areas:

**Geography**

\*GPHY 111, \*GPHY 121, GPHY 282, and one upper division geography course (total 12 credits)

**Economics**

\*ECNS 201, \*ECNS 202, ECNS 314, and one upper division economics course (total 12 credits)

**Sociology**

\*SOCI 101, \*ANTY 220, \*SOCI 201, and one upper-division sociology course (total 12 credits)

**Psychology**

\*PSYX 100, PSYX 223, \*PSYX 231 and PSYX 330  
(total 12 credits)

\*May satisfy General Education requirements.

**Minor in Women's Studies**

The field of Women's Studies is interdisciplinary, sourcing from anthropology, art, education, history, literature, psychology, and sociology, among others. The curriculum reflects this orientation. The minor in Women's Studies will prepare students for occupational and societal success across a range of fields including, but not limited to: Art and Literature, Communications, Philosophy, History, Education, Psychology, Sociology and Criminal Justice, Native American Studies, Social Work and Counseling, Advocacy, Community Organization, Public Relations, Public Administration, Languages, Economics, Math, and Biological and Physical Sciences. For more information about the Women's Studies program, please contact Joy C. Honea, Professor of Sociology (406-647-2996, jhonea@msubillings.edu).

**Credits****Required Courses**

*WGSS 274 Women, Culture and Society .....	3
^WGSS 499 Capstone Seminar in Women's Studies.....	3
<b>Total.....</b>	<b>6</b>

**Restricted Electives**

Choose five courses from the following:

ARTH 436 The History of Women in Art .....	3
CJUS 228 Diversity in Criminal Justice .....	3
CJUS 440 Gender, Crime and Justice.....	3
COMX 482 Women, Media and Society .....	3
HSTR 473 Gender, War and Film: Europe 1648-1945 .....	3
HSTR 494 Seminar: European Women and Gender.....	3
LIT 335 Women & Literature.....	3
PHL 375 Women, Philosophy and Religion.....	3
PSYX 335 Psychology of Gender .....	3
SOCI 431 Sociology of Gender Roles .....	3
<b>Total.....</b>	<b>15</b>

**Other courses which may be used to satisfy****Restricted Elective requirements:**

WGSS 492 Independent Study .....	1-6
WGSS 294/494 Seminar in Women's Studies.....	3-6
WGSS 498 Internship/Cooperative Education .....	1-6

**Total minimum credits required for minor.....21**

\*May satisfy General Education requirements.

**^Service Learning in Women's Studies**

A central component to the Capstone Seminar (WGSS 499) will be a service learning project. The goal of the project is to provide students with both a robust academic curriculum and the opportunity to provide valuable services of benefit to local and regional organizations and the wider communities they serve. Each Capstone class will partner with a community organization to work on a semester-long project designed to meet both the academic goals of the course and program and the needs of the community partner.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Bachelor of Arts Degree

### Major in Environmental Studies

As an interdisciplinary area of study, many Environmental Studies Major Field of Study Requirements also fulfill General Education requirements. By carefully selecting courses, most students have enough available open elective credits to fulfill a Minor Field of Study.

Students must earn a grade of “C-” or better in all Core Requirements and Restricted Electives.

Students must earn a minimum of 120 credits, including at least 30 upper-division credits within the Core Requirements and/or Restricted Electives. Overall, students must earn at least 36 upper-division credits.

	Credits
<b>General Education Requirements .....</b>	<b>31</b>
(See page 69) Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree. The following General Education courses also satisfy requirements in the major: STAT 216, BIOB 101/102 or BIOB 160/161, any approved physical science course from the Gen Ed listing, ECNS 201, and GPHY 121.	

### ENVIRONMENTAL STUDIES CORE REQUIREMENTS

**The Environmental Studies major requires 48 total credits of Core Requirements. Of those 48, 17 Core Required credits also serve as the General Education requirements. They are listed below.**

Any approved Physical Science course from the Gen Ed listings .....	(3)^
BIOB 101/102 Discover Biology with Lab	
<b>OR</b> BIOB 160/161 Principles of Living Systems with Lab .....	(4)
ECNS 201 Principles of Microeconomics .....	(3)
GPHY 121 Human Geography .....	(3)
STAT 216 Introduction to Statistics .....	(4)
<b>Total .....</b>	<b>17</b>

^The Physical Science lab course is required, but not counted in Gen Ed. See below.

### Additional Environmental Studies Core Requirements

^Physical Science lab .....	1
Additional (second) writing course .....	3

#### Choose from:

- \*WRIT 121 Introduction to Technical Writing
- \*WRIT 201 College Writing II

\*WRIT 221 Intermediate Technical Writing

**Note:** Additional writing course is a prerequisite for ENST 210.

BIOE 202 Introduction to Environmental Ecology...	3
ENST 210 Introduction to Environmental Studies....	3
ENST 385 Environmental Impact and Policy Analysis .....	3
ENST 494 Seminar/Workshop (any topic) .....	3
ENST 498 Internship/Cooperative Education .....	3
ENST 499 Senior Thesis/Capstone .....	3
GPHY 282 Mapping Techniques .....	3
HSTA 470 American Environmental History .....	3
PHL 324 Nature, Culture, Ethics .....	3
<b>Total .....</b>	<b>31</b>

### RESTRICTED ELECTIVES

#### Area 1: Biological & Physical Sciences

Select one course/lab combination from:

GEO 211/212 Earth History and Evolution with Lab .....	4
*GPHY 111/112 Introduction to Physical Geography with Lab .....	4
<b>Total .....</b>	<b>4</b>

#### Area 2: Society & Environment

Select two courses from:

ARTH 455 Art and the Environment .....	3
CRWR 312 Intermediate Nonfiction Workshop .....	3
ENST 335 The Environmental Vision .....	3
ENST 494 Seminar/Workshop (various, check semester schedule).....	1-6
GPHY 440 Geography of Montana.....	3
HSTA 464 Trans-Mississippi West.....	3
HSTR 336 Modern Latin America.....	3
NASX 304 Native American Beliefs and Philosophy .....	3
NASX 340/LIT 305 Native American Literature.....	3
NASX 350 Native Americans and the Environment .....	3
NASX/ARTH 439 American Indian Art.....	3
SOCI 355 Social Demography and Population Studies .....	3
SOCI 380 Sociology of Health and Medicine.....	3
SOCI 461 Urban Society and Human Ecology .....	3
SOCI 470 Environmental Sociology.....	3
Other options, such as 494 Seminars in Eco-Feminism or Water Policies of the Western U.S., must be approved by the Chairperson of Social Sciences and Cultural Studies.	
<b>Total .....</b>	<b>6</b>

#### Area 3: Environmental Policies

Select one course from:

BGEN 440 Business and the Environment .....	3
ENST 381 Law and Society .....	3



ENST 382/HON 352 Environmental Law .....3  
 GPHY 460 Urban Policy and Development .....3  
 PSCI 458 Urban and Regional Planning.....3  
 Other options, such as 494 Seminars in Environmental  
 Policies Making, must be approved by the Chairperson  
 of Social Sciences and Cultural Studies.

**Total.....3**

#### **Area 4: Environmental Studies Career Focus**

Consider need for upper-division coursework. Select  
 any additional science course, and/or any additional  
 courses from those in Restricted Elective Areas 2 & 3.

**Total.....9**

#### **LANGUAGE REQUIREMENT**

In Bachelor of Arts degrees requiring foreign language,  
 the language requirement is satisfied by demonstrating  
 proficiency in a language other than English equivalent  
 to satisfactory completion of two semesters of college-  
 level work in that language. Many students use Foreign  
 Language credits to complete this requirement;  
 however, options are available for students fluent in  
 non-English languages, including Native American  
 languages.

**Total.....8**

**Electives .....29-30**

Any other college-level credits, including credits  
 toward Minor Field of Study, area of career interest,  
 and/or necessary prerequisite courses. A minor area of  
 study is not required, but strongly encouraged.

**Total minimum credits required .....120**

\*May satisfy General Education requirements.

*Note: certain courses in this program have  
 prerequisites; students should check the course  
 descriptions for required prerequisites.*

## **Minor in Environmental Studies**

**Credits**

### **Required Courses**

Select **one** Biology course/lab combination from:

\*BIOB 101/102 Discover Biology with Lab..... 4

\*BIOB 160/161 Principles of Living Systems with  
 Lab..... 4

**Total ..... 4**

**All** of the following courses:

BIOE 202 Introduction to Environmental Ecology... 3

ENST 210 Introduction to Environmental Studies.... 3

ENST 385 Environmental Impact and Policy  
 Analysis ..... 3

\*GPHY 121 Human Geography ..... 3

HSTA 470 American Environmental History ..... 3

PHL 324 Nature, Culture, Ethics ..... 3

**Total ..... 18**

**Total minimum credits required for minor ..... 22**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites;  
 students should check the course descriptions for  
 required prerequisites.*

# The College of Business

***Dr. Barbara Wheeling, Dean***

***McD 300, (406) 657-2326***

## Undergraduate Degree and Options

**Bachelor of Science in Business Administration (BSBA)** major in Business Administration with options in Accounting, Finance, Management, Marketing, and Online General Business (including a track in Fire Science)

**Minors:** Accounting, Business Administration, Finance, Information Systems, and Marketing.

**Teaching Minor:** Economics

## Vision Statement

The College of Business' vision is to accelerate student success through applied business knowledge and to contribute to a better and brighter future for our students, businesses, community, and world.

## Mission Statement

Our mission is to graduate business students who will succeed in business and entrepreneurial endeavors and contribute to making our world a better place. Our student education bridges theory and practice, both online and onsite, by

- partnering with the community
- teaching applied business skills
- providing experiential learning
- maintaining close faculty, student and community engagement.

Our research focuses on

- application of business theory and concepts to help organizations apply business principles
- educational practices to aid teaching methodologies
- contributions derived from community engagement.

## AACSB Accreditation

The College of Business is now one of less than 700 universities worldwide that are accredited by the Association to Advance Collegiate Schools of Business (AACSB). This means that Montana State University Billings offers an undergraduate degree in the same league as institutions such as the University of Colorado, Michigan State University, the University of Montana, and Montana State University. This accomplishment is even more impressive since MSUB is one of fewer than 8% of accredited undergraduate only business schools.

## Career Preparation

The development of management and administrative personnel for business, government, and other organizations is the primary goal of the business administration degree. Business programs at MSU Billings provide a foundation of study in the arts and sciences combined with professional business training preparing graduates for numerous career paths and leadership roles in business.

Development of the student's knowledge of the traditional functional areas of business, the behavioral and social sciences, the management sciences, and the systems approach to problem solving, is of key importance to these programs. Integrated throughout this part of the program is an emphasis on developing the ability to make effective operational and administrative decisions.

Additionally, intensive study in a chosen area of concentration provides the student with the in-depth experience necessary for an understanding of the global economic and social systems and their relationships to the individual and the organization.

Each program is designed to provide the undergraduate student with the background to effectively participate in business, industry, government, education, and other organizations and institutions which require a high degree of management and administrative competence. The programs also provide the basic undergraduate education required for admission to graduate study in professional fields such as management, law, urban planning, health administration, etc. An advisor will assist students with information about business degrees and degree planning.

## Advising Information

All new, transfer, and readmitted students are encouraged to visit Advising & Career Services on McMullen Hall first floor west to meet with an academic advisor. New students will receive information regarding General Education requirements and advising worksheets related to their major and minor programs. Transfer and readmitted students will work with an advisor to complete a transcript evaluation and select courses for the upcoming semester.

Beginning at the sophomore level, students who have declared business as their major are assigned a COB faculty advisor, based on their option. The faculty advisor is available to assist with the selection of courses, clarify course and degree requirements, monitor student progress toward degree completion, and provide other general academic assistance, including information about career opportunities.

Students are ultimately responsible for meeting regularly with an advisor and for successfully completing degree requirements.

## Student Services Office

Business majors and other students taking business courses utilize the Student Services Office (McD 304 & 304B, 657-2812) to obtain information and assistance on College of Business courses, programs, registration, and support services.

## Coordination of Internships

Internships provide COB students with the opportunity to gain valuable business work experience as it relates to their option. The COB Internship coordinator, together with the University Cooperative Education specialist, work with students to ensure a quality educational experience. Specific information about applying for an internship is available at the cooperative education web site.

## Assessment Testing

All first-time students and transfer students who have not completed their general education requirements in English or Mathematics must take the COMPASS Placement test. Results of the COMPASS Placement tests along with ACT and/or SAT scores are used to place students into the most appropriate Math and English courses. The Compass Placement tests are

administered during Student Orientation. For further information, contact Advising & Career Services (406-657-2240 or 406-247-3020).

All College of Business students are required to pass a comprehensive test in Microsoft Word, Excel, and PowerPoint.

## Grade Requirements in Required Business Core, Pre-Admission, and Option Courses

All courses counting toward fulfillment of Required Business Core, Pre-Admission and Option Requirements must be a grade of “C-” or better.

## Student Help Lab

A student help lab is available to assist students in lower level accounting courses, BGEN 235 Business Law, as well as BGEN 315 Applied Business Decisions. The lab is open approximately 20 hours per week during the fall and spring semesters and is located in the College of Business in McD 213. The lab is coordinated by the Academic Support Center and is staffed by upper-level business students and graduates. Solution manuals are available for students to check their homework. Students receive one-on-one help with homework and course topics.

## Support Services

Campus-wide academic support services are available at the Academic Support Center in the Student Union Building. These services include a learning lab, English, math and tutoring services. More information is available at their web site [www.msubillings.edu/asc](http://www.msubillings.edu/asc).

## College of Business Committees

Students are actively involved in the policy making and governance of the College of Business. Many College committees have a combined student and faculty membership, and there are numerous opportunities for student involvement.

## Business Advisory Board

The College of Business has a Business Advisory Board that meets periodically to provide counsel and guidance to faculty and administration of the College.

Specific functions of the Board include assisting the College to: prepare and update strategic plans, participate in the selection of the Montana Business

Hall of Fame inductees, provide professional development activities for faculty, increase the effectiveness of student placement activities, and keep COB programs attuned to the needs of the business community.

## Student Advisory Board

The Student Advisory Board works directly with the Department Chair and the Dean on student and college matters. Students are encouraged to take advantage of this opportunity to participate in and contribute to the College.

## General Requirements for Baccalaureate Degree Programs in Business Administration

**Credits**

**General Education Requirements .....31**  
The following General Education courses also satisfy requirements in the major: ECNS 201, ECNS 202, M 143 (or M 171), and STAT 216. Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.

### Required Business Core

ACTG 201 Principles of Financial Accounting.....3  
 ACTG 202 Principles of Managerial Accounting .....3  
 BFIN 322 Business Finance .....3  
 BGEN 235 Business Law .....3  
 BGEN 315 Applied Business Decisions.....3  
 BGEN 499 Capstone .....3  
 BMGT 322 Operations Management .....3  
 BMGT 335 Management and Organization .....3  
 BMIS 311 Management Information Systems .....3  
 BMKT 325 Principles of Marketing.....3  
 CAPP 131 Basic MS Office .....3  
 \*ECNS 201 Principles of Microeconomics .....3  
 \*ECNS 202 Principles of Macroeconomics .....3  
 \*M 143 Finite Mathematics.....4  
 \*STAT 216 Introduction to Statistics .....4  
 \*WRIT 220 Business & Professional Writing.....3  
**Total credits required.....50**

### Option Requirements

(see listing by area) .....30-33  
**Total credits required for major .....80-83**  
**Unrestricted Electives.....6-15**  
**Total minimum credits required for degree.....120**

\*May satisfy General Education requirements.

## Requirements for Admission to Upper Division Classes

Students admitted to most 300- and 400- level courses in Business Administration degree programs must complete the preparatory courses listed below. Course requirements and proper sequencing are outlined by each department as typical plans of study. Students must consult with their advisors when selecting electives. All courses listed must be completed before students are allowed to take upper-division courses.

### Pre-Admission Requirements<sup>^</sup>

All Business Administration majors must pass each of the following courses with a grade of “C-” or better:

\*M 143 Finite Mathematics ..... 4  
 \*STAT 216 Introduction to Statistics..... 4

\*WRIT 101 College Writing I ..... 3

ACTG 201 Principles of Financial Accounting ..... 3  
 ACTG 202 Principles of Managerial Accounting ..... 3  
 \*ECNS 201 Principles of Microeconomics ..... 3  
 \*ECNS 202 Principles of Macroeconomics ..... 3

\*May satisfy General Education requirements.

<sup>^</sup>Competency in the computer applications Word, Excel and PowerPoint must be demonstrated. This may be done by:

- Earning a passing score on the COB Productivity Application Software Proficiency Exam.
- Earning a “C-” or better in CAPP 131 Basic MS Office or a similar course from another institution.

### Accounting Option

The following accounting courses are exempt from the pre-admission requirements and may be taken in the second year of study, provided students have completed the necessary accounting prerequisites:

ACTG 301 Intermediate Accounting I..... 3  
 ACTG 302 Intermediate Accounting II ..... 3  
 ACTG 303 Intermediate Accounting III and Theory ..... 3  
 ACTG 410 Cost/Management Accounting I..... 3  
 ACTG 415 Governmental and Not-For-Profit Accounting ..... 3

### Credits from Two Year Institutions

Credits earned in business courses taught at junior colleges may not be used to satisfy upper division requirements, but some might count as electives toward graduation. Check with the College of Business Student Services Office.

# The Department of Business Administration

***Dr. Salem Boumediene,***

***Chairperson***

***McD 253, (406) 657-1606***

***salem.boumediene@msubillings.edu***

The Department of Business Administration consists of the following options: Accounting (available onsite and entirely online), Finance, Management, Marketing and an online option in General Business (including a track in Fire Science).

**Director of Student Services:** Mr. Michael Campbell

Professors: Campbell, A. Heiat, N. Heiat, Johnson, Otjen, Sah, Wang

Associate Professors: Boumediene, Butterfield, Harris, Larsen

Assistant Professors: Craig, Das, Hill, Kinghorn, Mori

Adjunct Faculty: Dockery, Gurney, Talafuse

Professor Emeritus: Bieber-Moses, Farsio, Hinthorne, Holman, Howard, McNally, Sheridan, Spicer

## **Bachelor of Science in Business**

### **Administration with options in:**

- Accounting
- Finance
- Management
- Marketing
- Online General Business (including a track in Fire Science)

## **Minors**

Accounting, Business Administration, Finance, Information Systems, Marketing

**Teaching Minor:** Economics

## **Accounting Option**

Accounting is a system for measuring, processing, and communicating information useful in making economic decisions. Accounting, in different forms, has existed for many years, but significant changes have occurred in the past several decades and have created greater information needs for managers. In keeping pace with these changes and increased demands for information, the need for accountants has increased in recent years, thus resulting in excellent opportunities for graduates.

The MSU Billings accounting program prepares students to sit for and pass the Certified Public Accountant Examination (CPA Exam). Requirements to sit for the CPA Exam in Montana include successful completion of 24 credits of upper division accounting courses and 24 credits of other business courses, e.g., courses in management, marketing, finance, management information systems, economics, communications and ethics. After passing the CPA Exam individuals must meet an experience requirement, possess a bachelor's degree and have earned at least 150 semester credits of college courses in order to be licensed as a Certified Public Accountant in Montana. The additional 30 credits beyond the 120 credits required for a bachelor's degree may be in any area. Transfer students and students who have changed majors often have 150 credits by the time they complete their accounting and other business courses. Due to potential changes in laws and regulations regarding licensing as a CPA, students should be sure to consult with their accounting advisor or any accounting faculty member in planning their course schedules.

Starting with 2011-2012 academic year, all accounting courses are offered online. This will allow students to complete the Bachelor of Science in Business Administration degree with an Option in Accounting by taking all courses online if they wish. For the past ten years, many business core courses and many accounting courses have been offered online, and online students have performed well in these courses. We are excited to offer this online opportunity for our accounting students.

## **Finance Option**

The Finance Option is designed to give students an understanding of the financial markets and their relation to banking and investments as well as to acquaint students with the concepts and methods relevant to financial analysis and management. Employment opportunities include careers in corporate financial management, financial institution management, or investment portfolio management.

## **Management Option**

The Management Option is designed for students seeking management careers in a variety of both public and private organizations. The curriculum focuses on the development and application of analytical and ethical decision-making skills in solving practical problems.

The program emphasizes integration of a broad set of skills and abilities. Students in management receive a well-rounded exposure to accounting, business law, economics, finance, marketing, and computer applications. Management students are also taught management-specific topics relating to issues such as the structural design of organizations, the creation of a competitive business strategy, project management, the effect of human relation factors on organizational performance, and effective performance measurement and control. Students also are given opportunities to study and practice leadership, motivation, and team building and to become skilled writers and speakers through various classroom activities and projects.

Current job opportunities are broad, with graduates finding employment in private firms, nonprofit organizations, and government. Some students start their own businesses, while others gain employment in small entrepreneurial firms, mid-size companies, and large corporations.

## Marketing Option

The Marketing Option prepares students to succeed in an integrated business environment with a focus on meeting the needs of the customer. Marketing option graduates are prepared for a position such as marketing manager, sales manager, account manager, marketing representative, professional salesperson, or advertising staff. Students completing this option will understand strategic marketing planning, the marketing mix, market research fundamentals, customer relationship management, and the financial implications of marketing within firms. The integrated sequence of courses enables students to obtain a broad education in marketing decision-making.

## Online General Business Option

The Online General Business Option is designed for students who wish to complete a degree in business in a totally online environment. All courses required for this degree are offered in an online format. Students completing this option receive a well-rounded exposure to accounting, business law, economics, finance, marketing, and computer applications. For more information, please contact Brian Gurney (406-657-2906 or [bgurney@msubillings.edu](mailto:bgurney@msubillings.edu)), Coordinator for the Online General Business Option.

The new Fire Science track in the General Business Option is designed for students who have completed an A.S. degree in Fire Science and would like to complete a Bachelor's degree. All courses required for this

degree are offered in an online format. Students completing this option receive a well-rounded exposure to general business classes as well as specific topics of interest to those in Fire Science disciplines. For more information, please contact Brian Gurney (406-657-2906 or [bgurney@msubillings.edu](mailto:bgurney@msubillings.edu)), Coordinator for the Online General Business Option.

# Bachelor of Science in Business Administration Major in Business Administration Accounting Option ▽

## General Education Requirements ..... 31

Two of the following General Education courses also satisfy requirements in this option: ECNS 201, ECNS 202, STAT 216, and M 143. Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.

## Quantitative Methods (see page 236) ..... 8

## Required Business Core (see page 236)..... 39

### Accounting Option Requirements

ACTG 301 Intermediate Accounting I .....	3
ACTG 302 Intermediate Accounting II .....	3
ACTG 303 Intermediate Accounting III and Theory.....	3
ACTG 321 Accounting Information Systems I .....	3
ACTG 401 Principles of Federal Taxation-Individuals .....	3
ACTG 410 Cost/Management Accounting I .....	3
ACTG 411 Auditing I.....	3
ACTG 415 Governmental and Not-for-Profit Accounting .....	3
ACTG 436 Advanced Accounting.....	3
BGEN 405 Laws, Regulations and Research .....	3
<b>Total .....</b>	<b>30</b>

### Restricted Elective

#### Select one course from the following:

ACTG 402 Advanced Income Tax .....	3
ACTG 412 Auditing II .....	3
<b>Total .....</b>	<b>3</b>

## Option Requirements Total ..... 33

## Total credits required for major ..... 80

## Electives ..... V 3-15

The number of courses a student elects to take that fulfill both General Education requirements and the major requirements will determine the total number of elective credits required for the degree. Electives should be chosen in consultation with an academic advisor.

## Total minimum credits required for degree..... 120

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

▽ This program is also offered in an online format.

## SUGGESTED PLAN OF STUDY

### *B.S. in Business Administration*

### *Accounting Option*

Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
ACTG 201	3	
ACTG 202		3
WRIT 101	3	
Electives		3
M 143		4
General Education	9	6
<b>Total</b>	<b>15</b>	<b>16</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
ACTG 301	3	
ACTG 302		3
ACTG 415		3
ACTG 410	3	
WRIT 220		3
ECNS 201	3	
ECNS 202		3
STAT 216	4	
General Education		3
<b>Total</b>	<b>13</b>	<b>15</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
ACTG 303	3	
ACTG 401	3	
BGEN 315	3	
BMGT 335	3	
BGEN 235		3
BMGT 322		3
ACTG 321		3
General Education	4	3
BMIS 311		3
<b>Total</b>	<b>16</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
ACTG 411	3	
ACTG 436	3	
BFIN 322	3	
BMKT 325	3	
BGEN 405		3
BGEN 499		3
ACTG 402 or 412		3
Electives	3	3
Restricted Electives		3
<b>Total</b>	<b>15</b>	<b>15</b>

# Bachelor of Science in Business Administration Major in Business Administration Finance Option

**Credits****General Education Requirements ..... 31**

Two of the following General Education courses also satisfy requirements in this option: ECNS 201, ECNS 202, STAT 216, and M 143. Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.

**Quantitative Methods (see page 236) ..... 8****Required Business Core (see page 236)..... 39****Finance Option Requirements..... 21**

BFIN 316 Quantitative Methods in Business and Economics .....	3
BFIN 420 Investments .....	3
BFIN 422 Intermediate Business Finance .....	3
ECNS 300 Intermediate Microeconomics .....	3
ECNS 302 Intermediate Macroeconomics.....	3
ECNS 313 Money and Banking .....	3
ECNS 403 Introduction to Econometrics .....	3

**Restricted Electives..... 9**

Select three courses from the following

BFIN 460 Futures and Options.....	3
BFIN 492 Independent Study .....	3
BFIN 494 Seminar/Workshop (limit 2-6 cr.).....	3
BGEN 498 Internship (limit 3 cr.).....	3
ECNS 314 International Economics	
<b>OR</b> BGEN 360 International Business .....	3
ECNS 457 Economics of Organizations.....	3
ECNS 490 Undergraduate Research.....	3

**Option Requirements Total ..... 30****Total credits required for major ..... 77****Electives ..... V 4-14**

The number of courses a student elects to take that fulfill both the General Education requirements and the major requirements will determine the total number of elective credits required for the degree. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

**SUGGESTED PLAN OF STUDY*****B.S. in Business******Administration Finance******Option***

Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
M 143		4
ECNS 201		3
General Education	9	8
Electives	3	
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
ACTG 201	3	
ACTG 202		3
BGEN 235		3
ECNS 202		3
Electives	3	
WRIT 220	3	
STAT 216		4
General Education	4	4
<b>Total</b>	<b>16</b>	<b>14</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
ECNS 300	3	
ECNS 302		3
BFIN 316	3	
BFIN 322	3	
BGEN 315	3	
BMGT 335	3	
BMGT 322		3
BMKT 325		3
BMIS 311		3
Restricted Electives		3
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
BFIN 455	3	
BFIN 420	3	
BFIN 422	3	
ECNS 403		3
BGEN 499	3	
Electives	3	6
Restricted Electives		6
<b>Total</b>	<b>15</b>	<b>15</b>



# Bachelor of Science in Business Administration Major in Business Administration Management Option

**Credits****General Education Requirements ..... 31**

Two of the following General Education courses also satisfy requirements in this option: ECNS 201, ECNS 202, STAT 216, and M 143. Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.

**Pre-Admission Requirements (page 236)..... 26****Required Business Core (page 236)..... 24****Management Option Requirements**

BGEN 360 International Business .....	3
BGEN 440 Business and the Environment .....	3
BMGT 329 Human Resource Management .....	3
BMGT 353 Organizational Behavior .....	3
BMGT 422 Project Management.....	3
BMGT 448 Entrepreneurship <b>or</b> BMGT 461 Small Business Management..	3
BMKT 342 Marketing Research .....	3
<b>Total .....</b>	<b>21</b>

**Restricted Electives****Select 3 courses from following:**

ACTG 410 Cost/Management Accounting I .....	3
BFIN 305 Financial Planning .....	3
BGEN 450 Business and Society .....	3
BGEN 498 Internship .....	3
BMGT 492 Independent Study.....	3
BMGT 494 Seminar/Workshop.....	3
BMIS 310 Web Design, Development, and Implementation .....	3
BMKT 337 Consumer Behavior.....	3
BMKT 343 Integrated Marketing Communications.....	3
BMKT 350 Social Media Marketing.....	3
BMKT 436 Sales and Sales Management .....	3
<b>Total .....</b>	<b>9</b>

**Total credits required for major ..... 80****Electives ..... V 6-16****Total minimum credits required for degree..... 120**

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

**SUGGESTED PLAN OF STUDY*****B.S. in Business******Administration******Management Option***

Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
ECNS 201	3	
ECNS 202		3
M 143		4
General Education	6	9
Electives	3	
<b>Total</b>	<b>15</b>	<b>16</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
WRIT 220	3	
STAT 216	4	
ACTG 201	3	
ACTG 202		3
BGEN 235		3
Electives	3	3
General Education	3	7
<b>Total</b>	<b>16</b>	<b>16</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
BGEN 315	3	
BFIN 322		3
BMGT 335	3	
BMKT 325	3	
BMGT 322	3	
BMIS 311	3	
BMKT 342		3
Restricted Elective		3
Electives		6
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
BMGT 353		3
BMGT 448/BMGT 461	3	
BGEN 440	3	
BMGT 422	3	
BMGT 329		3
BGEN 360		3
BGEN 499		3
Restricted Electives	6	
<b>Total</b>	<b>15</b>	<b>12</b>

## Requirements – Double Option in Management and Marketing

NOTE: Students seeking to complete options in both Marketing and Management must complete the following in addition to fulfilling the General Education requirements and Business Core requirements:

1. Management Option Requirements
2. Marketing Option Requirements
3. Three courses from the Restricted Elective courses in the Management option
4. **Three different** courses from the Restricted Elective courses in the Marketing option

In most cases, this will result in five additional courses beyond that required for either a BSBA Management Option or a BSBA Marketing Option.

# Bachelor of Science in Business Administration Major in Business Administration Marketing Option▽

## Credits

**General Education Requirements ..... 31**

Two of the following General Education courses also satisfy requirements in the major: ECNS 201, ECNS 202, STAT 216, and M 143. Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.

**Pre-Admission Requirements (page 236)..... 23****Required Business Core (page 236)..... 27****Marketing Option Requirements**

BGEN 360 International Business.....	3
BMKT 337 Consumer Behavior.....	3
BMKT 342 Marketing Research .....	3
BMKT 343 Integrated Marketing Communications.....	3
OR ^BMKT 460 Marketing High-Technology Products and Innovation ...	3
BMKT 411 Services/Relationship Marketing .....	3
BMKT 436 Sales and Sales Management .....	3
BMKT 449 Strategic Marketing Management .....	3
OR ^BMKT 446 Marketing for Entrepreneurs .....	3
<b>Total.....</b>	<b>21</b>

^Online only; counted as restricted elective for onsite program

**Restricted Electives..... 9****Select 2 or 3 courses from the following:**

BMKT 350 Social Media Marketing .....	3
BMKT 470 Supply Chain Management .....	3
BMKT 490 Undergraduate Research.....	3
BMKT 492 Independent Study .....	3
BMKT 494 Seminar/Workshop.....	3

**Total .....6-9****Select none or 1 course from the following:**

ARTZ 258 New Media I.....	4
BGEN 440 Business and the Environment.....	3
BGEN 498 Internship .....	3
BMGT 422 Project Management.....	3
BMIS 310 Web Design, Development, and Implementation.....	3
BMIS 352 Microcomputer Database Design and Implementation .....	3
ECNS 403 Introduction to Econometrics.....	3
<b>Total .....</b>	<b>0-3</b>

**Marketing Option Requirements Total ..... 30**

Continued...

**SUGGESTED PLAN OF STUDY*****B.S. in Business  
Administration******Marketing Option***

Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
M 143		4
Electives	3	
General Education	9	11
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
ACTG 201	3	
ACTG 202		3
BGEN 235		3
ECNS 201	3	
ECNS 202		3
STAT 216	4	
WRIT 220		3
Electives	5	3
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Third Year</b>	<b>F</b>	<b>S</b>
BGEN 315	3	
BFIN 322		3
BMGT 335	3	
BMGT 322		3
BMKT 325	3	
BMKT 337		3
BMKT 436	3	
BMIS 311		3
Restricted Electives	3	3
<b>Total</b>	<b>15</b>	<b>15</b>

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
BMKT 342	3	
BMKT 449 or 446		3
BMKT 411	3	
BGEN 360		3
BGEN 499		3
BMKT 343 or 460	3	
Electives	3	3
Restricted Electives	3	3
<b>Total</b>	<b>15</b>	<b>15</b>

▽ This program is also offered in an online format.

**Total credits required for major ..... 80**

**Electives ..... V 6-16**

The total number of courses a student elects to take that fulfill both the General Education requirements and the major requirements will determine the total number of elective credits required for the degree. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree..... 120**

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

# Bachelor of Science in Business Administration

## Major in Business Administration

### Online General Business Option▼

#### General Education Requirements ..... 31

Two of the following General Education courses also satisfy requirements in this option: ECNS 201, ECNS 202, STAT 216, and M 143. Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree.

#### Pre-Admission Requirements ..... 23

ACTG 201 Principles of Financial Accounting.....	3
ACTG 202 Principles of Managerial Accounting .....	3
*ECNS 201 Principles of Microeconomics .....	3
*ECNS 202 Principles of Macroeconomics .....	3
*M 143 Finite Mathematics.....	4
*STAT 216 Introduction to Statistics .....	4
*WRIT 101 College Writing I.....	3

#### Required Business Core (see page 236)..... 27

BFIN 322 Business Finance .....	3
BGEN 235 Business Law .....	3
BGEN 315 Applied Business Decisions.....	3
BGEN 499 Capstone .....	3
BMGT 322 Operations Management .....	3
BMGT 335 Management and Organization .....	3
BMIS 311 Management Information Systems .....	3
BMKT 325 Principles of Marketing.....	3
*WRIT 220 Business & Professional Writing.....	3

#### Online General Business Option ..... 30

BFIN 455 Money and Banking.....	3
BGEN 440 Business and the Environment.....	3
BMGT 422 Project Management.....	3
BMGT 448 Entrepreneurship .....	3
BMIS 310 Web Design, Development and Implementation .....	3
BMIS 352 Microcomputer Database Design and Implementation .....	3
BMKT 337 Consumer Behavior.....	3
Restricted Electives (any 3 upper division business courses).....	9

#### Total credits required for major ..... 80

#### Electives ..... 6-16

The total number of courses a student elects to take that fulfill both the General Education requirements and the major requirements will determine

*Continued...*

## SUGGESTED PLAN OF STUDY

### *B.S. in Business*

### *Administration Online*

### *General Business*

Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

#### X - Summer

First Year	F	S	X
WRIT 101	3		
WRIT 220		3	
ECNS 201			3
ECNS 202			3
M 143		4	
General Education	9	6	
<b>Total</b>	<b>12</b>	<b>13</b>	<b>6</b>

Second Year	F	S	X
STAT 216	4		
ACTG 201	3		
ACTG 202		3	
BGEN 235		3	
BMIS 352			3
General Education	3	7	
Electives	2		
<b>Total</b>	<b>12</b>	<b>13</b>	<b>3</b>

Third Year	F	S	X
BFIN 322		3	
BMGT 335	3		
BMGT 322		3	
BGEN 315	3		
BMKT 325		3	
BMKT 337			3
BMIS 311	3		
BMIS 310		3	
Restricted Electives	3		3
<b>Total</b>	<b>12</b>	<b>12</b>	<b>6</b>

Fourth Year	F	S	X
BGEN 440	3		
BGEN 499		3	
BMGT 448	3		
BFIN 455		3	
BMGT 422	3		
Restricted Electives	3	3	
Electives		3	4
<b>Total</b>	<b>12</b>	<b>12</b>	<b>4</b>

the total number of elective credits required for the degree. Electives should be chosen in consultation with an academic advisor.

**Total minimum credits required for degree..... 120**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

# Bachelor of Science in Business Administration

## Major in Business Administration

### Online General Business Option

### 2+2 Track – Fire Science▽

#### Credits

#### General Education Requirements

Students must have completed all requirements for an Associate of Science degree in Fire Science including M 143, WRIT 101, WRIT 220, and ECNS 201 before enrolling in the General Business program.

<b>Business Core (see page 236)</b>	<b>37</b>
ACTG 201 Principles of Financial Accounting	3
ACTG 202 Principles of Managerial Accounting	3
BFIN 322 Business Finance	3
BGEN 235 Business Law	3
BGEN 315 Applied Business Decisions	3
BGEN 499 Capstone	3
BMGT 322 Operations Management	3
BMGT 335 Management and Organization	3
BMIS 311 Management Information Systems	3
BMKT 325 Principles of Marketing	3
*ECNS 202 Principles of Macroeconomics	3
*STAT 216 Introduction to Statistics	4

#### Required Courses

BFIN 316 Quantitative Methods in Business and Economics	3
BGEN 440 Business and the Environment	3
BGEN 498 Internship	3
BMGT 329 Human Resource Management	3
BMGT 422 Operations Management	3
BMKT 436 Sales and Sales Management	3
MGMT 472 Principles of Fire Management	3
MGMT 473 Principles of Planning and Prevention	3
<b>Total</b>	<b>24</b>

**Total credits required for major** ..... **61**

\*May satisfy General Education requirements.

▽ This program is also offered in an online format.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

#### SUGGESTED PLAN OF STUDY

#### *B.S.B.A. Online General Business 2+2 Fire Science Track*

Due to course schedule changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their advisors to plan classes before registering each term.

**First two years completed at City College to earn the A.S. in Fire Science.**

X - Summer			
Third Year	F	S	X
STAT 216	4		
ACTG 201	3		
BFIN 316	3		
ECNS 202	3		
ACTG 202		3	
BFIN 322		3	
BGEN 235		3	
BMKT 436		3	
BMGT 335			3
BMIS 311			3
<b>Total</b>	<b>13</b>	<b>12</b>	<b>6</b>
Fourth Year	F	S	X
BGEN 315	3		
BGEN 440	3		
BMGT 422	3		
MGMT 472	3		
BMKT 325		3	
BMGT 322		3	
BMGT 329		3	
MGMT 473		3	
BGEN 498			3
BGEN 499			3
<b>Total</b>	<b>12</b>	<b>12</b>	<b>6</b>

## Minor in Accounting

Intended for students who desire sufficient accounting knowledge to enable them to use effectively accounting information in making business and personal financial decisions.

### Credits

#### Required courses

ACTG 201 Principles of Financial Accounting .....	3
ACTG 202 Principles of Managerial Accounting .....	3
ACTG 301 Intermediate Accounting I .....	3
ACTG 410 Cost/Management Accounting I .....	3
BMGT 335 Management and Organization .....	3
*ECNS 201 Principles of Microeconomics .....	3
Accounting Electives .....	6
<b>Total credits required for minor .....</b>	<b>24</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Business Administration

### Credits

#### Required courses

ACTG 201 Principles of Financial Accounting .....	3
ACTG 202 Principles of Managerial Accounting .....	3
BFIN 322 Business Finance .....	3
BMGT 335 Management and Organization .....	3
BMIS 311 Management Information Systems .....	3
BMKT 325 Principles of Marketing .....	3
*ECNS 201 Principles of Microeconomics .....	3
*ECNS 202 Principles of Macroeconomics .....	3
Additional 300- and 400-level College of Business electives .....	6
<b>Total credits required for minor .....</b>	<b>30</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Finance

Intended for students with non-business majors who desire sufficient finance knowledge in order to make optimum business and personal investment decisions.

### Credits

#### Required courses

*ECNS 201 Principles of Microeconomics .....	3
*ECNS 202 Principles of Macroeconomics .....	3
BFIN 316 Quantitative Methods in Business and Economics .....	3

BFIN 322 Business Finance .....	3
BFIN 420 Investments .....	3
BFIN 422 Intermediate Business Finance .....	3
BFIN 455 Money and Banking .....	3
Finance Elective .....	3
<b>Total credits required for minor .....</b>	<b>24</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Information Systems

Intended for students who desire sufficient information systems knowledge to enable them to use effectively information and computers to assist with making business and personal decisions.

### Credits

#### Required courses

BMIS 310 Web Design, Development, and Implementation .....	3
BMIS 311 Management Information Systems .....	3
BMIS 352 Microcomputer Database Design and Implementation .....	3
BMKT 325 Principles of Marketing .....	3
BMKT 342 Marketing Research .....	3
BMKT 411 Services/Relationship Marketing .....	3
CSCI 211 Client Side Programming .....	3
One Business elective selected in consultation with advisor .....	3
<b>Total .....</b>	<b>24</b>

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Minor in Marketing

The Marketing Minor is designed for the non-business major. A minor in marketing provides students in non-business majors the opportunity to learn how to market a product, service and/or their career.

### Credits

#### Required courses

ACTG 201 Principles of Financial Accounting .....	3
BMKT 325 Principles of Marketing .....	3
BMKT 337 Consumer Behavior .....	3
BMKT 342 Marketing Research .....	3
BMKT 436 Sales and Sales Management .....	3
BMKT 449 Strategic Marketing Management .....	3
*ECNS 201 Principles of Microeconomics .....	3



**Marketing Elective .....3**

Choose three credits from the courses below:

BMKT 343 Integrated Marketing Communications .....	3
BMKT 411 Services/Relationship Marketing .....	3
BMKT 441 International Marketing .....	3
BMKT 470 Supply Chain Management .....	3
BMKT 490 Undergraduate Research .....	3
BMKT 494 Seminar/Workshop.....	1-3

**Total credits required for minor ..... 24**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

## Teaching Minor in Economics

For students who are gaining teaching licensure in a content major, the following minor leads to endorsement. All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program (see page 254).

**Credits****Required courses**

*ECNS 201 Principles of Microeconomics .....	3
^ECNS 202 Principles of Macroeconomics.....	3
ECNS 300 Intermediate Microeconomics .....	3
ECNS 302 Intermediate Macroeconomics.....	3
EDU 497A Methods: 5-12 Social Studies .....	2
GPHY 222 Introduction to Economic Geography .....	3
<b>Total.....</b>	<b>17</b>

**Upper division electives in Economics selected in consultation with advisor .....6****Total minimum credits required for minor ..... 23**

^This course may meet General Education requirements for Secondary/K-12 majors. Please refer to limitations on General Education Requirements (see page 69).

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

# The College of Education

*Dr. Mary Susan E. Fishbaugh,*  
*Dean*

*COE 106, (406) 657-2286*

*mfishbaugh@msubillings.edu*

## Advising Information

All new, transfer, and re-admitted students are encouraged to visit Advising & Career Services in McMullen Hall on first floor west, to meet with a center academic advisor. New students will receive information regarding General Education requirements and Plan of Study worksheets related to their major and minor programs. Transfer and readmitted students will work with a center advisor to complete a transcript evaluation and to develop a Plan of Study. Students majoring in bachelor degree programs in the College of Education will be advised through Advising & Career Services until they are ready for admission to the Educator Preparation Program. At that time, students will be assigned a faculty member for advising. Students majoring in a content area with the Educator Licensure Option will have two faculty advisors: one in the College of Arts and Sciences and one in the College of Education.

## Undergraduate Degrees and Majors

The College of Education provides an array of undergraduate and graduate programs for educator preparation. Degree programs and specific courses are designed to ensure the comprehensive development of practitioners able to serve children in a variety of settings.

### **Bachelor of Science in Education with Teaching Majors in the following:**

Broadfield Major in Elementary Education  
Elementary Ed/Special Ed (P-12) Double Major  
Elementary Education/Reading (K-12) Double Major  
Secondary Ed/Special Ed (P-12) Double Major  
Secondary Education/Reading (K-12) Double Major

Special Education and Reading majors are available to candidates completing an elementary broadfield major or a secondary educator licensure option.

### **Bachelor of Science or Bachelor of Arts Degree with Secondary or K-12 Teaching Licensure Option**

MSU Billings no longer offers a Bachelor of Science in Education (BSED) degree. Students now receive either a Bachelor of Arts or Bachelor of Science in a content area through the College of Arts and Sciences with a secondary or K-12 educator licensure option. Students must earn a broadfield teaching major, a teaching major and teaching minor, a double major, or an extended major in order to complete degree and licensure requirements.

**See Teacher Licensure Options** for the following areas in the College of Arts & Sciences (see page 120) and College of Allied Health Professions (see page 84).

Art (K-12)  
Biology  
Broadfield Science  
Chemistry  
English  
Health & Physical Education (K-12)  
History  
Mathematics  
Music (K-12)  
Political Science  
Social Science (Broadfield licensure)\*  
Spanish (K-12)

\* It is recommended that students interested in pursuing Social Sciences choose a major in history (licensure option) with a teaching minor in political science and apply for the social science (broadfield) licensure endorsement. This plan will expand employment potential. Please consult the College of Arts & Sciences for specific information (see page 120).

### **Teaching Minors**

For students who are pursuing secondary or K-12 educator licensure in a content major, the following minors lead to an additional endorsement. A teaching minor, second major, or extended major is required for the teacher licensure.

Art (K-12)  
Biology  
Chemistry  
Earth Science  
Economics  
English  
Geography  
Health and Physical Education (K-12)  
History  
Mathematics

Physics  
 Political Science  
 Psychology  
 Reading (K-12)  
 Sociology  
 Spanish (K-12)

### **Non-Endorsable Teaching Minor in Special Education (P-12)**

#### **Minor**

Early Childhood Studies (endorsable with student teaching)

### **Associate of Arts Degree Program of Study in: Education**

## **Graduate**

### **Degrees/Endorsements**

Information on Graduate Programs offered by Montana State University Billings may be obtained by writing:

Director, Graduate Studies  
 Montana State University Billings  
 1500 University Drive  
 Billings, Montana 59101-0298  
 (406) 657-2238  
 email: gradstudies@msubillings.edu

### **Master of Education (M.Ed.) with Options in:**

Curriculum and Instruction Teacher Licensure Option  
 Online Instructional Technologies▽  
 Interdisciplinary Studies  
 Reading  
 School Counseling

The Interdisciplinary Studies Option permits students the flexibility to design a program in collaboration with a faculty advisor.

### **Master of Science in Special Education with Options in:**

Advanced Studies▽  
 Advanced Studies in Applied Behavioral Analysis  
 Generalist▽

### **Certificate of Teaching and Learning Online▽**

### **Supervisory Endorsements**

Supervisor of Reading  
 Supervisor of Special Education

## **Academic Department**

The College of Education is comprised of the following academic department and a public service agency:

**Department of Educational Theory and Practice**  
**Montana Center for Inclusive Education**

## **Accreditations and Affiliations**

The educator preparation programs at Montana State University Billings are accredited by the National Council for the Accreditation of Teacher Education (NCATE) and the Montana Board of Public Education.

## **Mission Statement**

The College of Education is dedicated to:

- Preparing competent, caring and committed professionals for Montana's schools;
- Conducting socially significant research to improve the human condition;
- Providing community service aimed at improving the quality of life experienced by Montanans; and
- Providing graduate education designed for the continuing development of professionals.

## **Educator Oath**

I dedicate myself to the life of an educator, nurturing others to fulfill their potential, live meaningful lives, and participate fully in our society.

I dedicate myself to assuring excellent educational opportunities for all individuals.

I pledge to make the well-being of my students the fundamental value in my professional decisions and actions.

I recognize parents and community as integral to education and pledge to encourage their involvement.

I dedicate myself to teaching the virtues of honesty, respect, trust, and courage.

I commit myself to continuing my own personal growth and professional development, for I must bear witness in my life to the ideals being encouraged in others.

In cooperation with my colleagues, I pledge to advance education professions.

I pledge myself to serving both educational and larger community needs.

I pledge to fulfill these professional responsibilities with diligence, integrity, and dedication.

## Instructional Facilities and Special Partnerships

### The Montana Center for Inclusive Education

The Montana Center for Inclusive Education is a statewide service agency in the College of Education. The Center is dedicated to developing resources that promote the inclusion of people with disabilities of all ages and cultural backgrounds into their communities. To meet this mission, the Center works with numerous university and community partners.

The Montana Center serves as a training and technical assistance resource to people with disabilities, families and numerous agencies throughout the state. The activities of the Center are funded by a variety of state and federal resources.

The staff of the Montana Center have professional skills related to disability in the areas of employment, rehabilitation counseling, transition, hearing conservation, community integration, prevention, collaboration, and learning strategies.

The Center serves as the state Regional Education Service Area III (RESA III) that includes the Region III Comprehensive System of Personnel Development (CSPD).

### Montana State University Cooperative Programs

The Montana State University campuses at Billings and Bozeman have developed cooperative programs to better serve students who want to earn endorsements and degrees not offered through the authorized curricula on one or the other campus. For Bozeman, MSU Billings offers the special education endorsement program, and the Master of Science in Special Education program. For Billings, MSU-Bozeman offers the school administration endorsement for elementary education and secondary education, and the Master of Education in Educational Administration. Contact the Office of the Dean of Education at either campus for additional information.

## The Educator Preparation Program

The faculty of Montana State University Billings recognizes that the preparation of educators is an entire-University responsibility. Therefore, the various preparation programs represent a cooperative effort by the colleges and departments involved.

All candidates from the University who wish to be recommended for the State of Montana Educator License must be formally admitted to the Educator Preparation Program and meet all of the program requirements.

The overall purpose of the Educator Preparation Program is to develop competent educators to meet the challenges of contemporary education. The faculty in the Educator Preparation Program accepts the fact that teaching competence at every level requires steadily changing patterns and greater depths of preparation in order to meet the rising standards of study. Therefore, the faculty assumes responsibility for the selection and admission of those who wish to prepare to teach, for the advisement and retention of those admitted, and for the development of curricula designed for the preparation of educators.

Certain requirements are of major importance: (1) a broad background in General Education; (2) in-depth content preparation in specific teaching fields; (3) mastery of professional education knowledge, skills, and dispositions; and (4) demonstration of the competencies of the Initial Conceptual Framework.

In order to accomplish these objectives, the prospective educator must acquire a scholarly mastery of the field to be taught and the ability to use methods of critical inquiry. This implies that prospective teachers acquire a superior fund of knowledge and enhanced scholarly ability in their respective academic disciplines. Moreover, prospective educators must have knowledge and understanding of human development and behavior; competence in the techniques of instruction; knowledge of school organization and administration; an understanding of education as a social institution in historical and philosophical perspectives; knowledge, understanding, and experience in culturally diverse settings; and an ability to work with a diverse group of learners.

## Field-Based Experiences

The College of Education provides a number of supervised clinical and field-based experiences designed to prepare students to work effectively in the education professions. All field-based experiences are systematically designed and selected to provide students with opportunities to observe, plan, and practice in a variety of community settings including schools and social service agencies. The major aim of these experiences is to apply principles and theories from the professional knowledge base in supervised environments. Through a sequence of field-based experiences, students develop skills that allow them to assume full responsibility as a beginning professional. Site and University personnel supervise clinical and field-based experiences.

Students may be required to purchase an insurance policy during the field experience. In some cases the school or agency provides insurance.

## Student Teaching

Student teaching is the culminating experience in the Educator Preparation Program. Student teaching provides a guided teaching experience in a school setting on a fulltime basis. During the student teaching term, students concurrently participate in capstone seminars. For further information and basic policies regarding the student teaching experience, students should meet with their faculty advisors and refer to the Guide for Student Teachers, Mentoring Teachers, and University Supervisors.

## Internship

Field-based internships offer students the opportunity for enhanced experiences in school and community settings. Proposals for internships must be planned by students and their faculty advisor. An internship requires 45 field based hours per credit hour.

## Application Process

In order to provide the highest quality field experience placements for students majoring in elementary or secondary education, deadlines have been set for accepting field placement applications. Field experience placements are the product of a number of elements including student needs, school district requests, and recommendations from faculty. Coordination of these elements requires planning-time. Application deadlines are posted throughout the College each semester. Students who plan to enroll for student teaching must have completed their required coursework prior to the term they plan to student teach.

## Teacher Licensure Requirements

Specific educator licensure requirements for the State of Montana have been established by the Office of Public Instruction and approved by the Montana Board of Public Education. All licenses are endorsed by the State Superintendent of Public Instruction for the appropriate level(s) and area(s) of professional competence based upon the recommendation by the Licensure Official of the College of Education. Curriculum programs at MSU Billings prepare students for standard and professional licensure in elementary and secondary teaching and school counseling. Education students who meet all endorsement requirements may be recommended to the state for the endorsement by the Licensure Official of the College of Education.

## Processing Procedures for Licensure and Endorsement

1. Direct all applications for licensure to the College of Education Licensure Officer.
2. All applications for areas of permissive special competency, teaching licensure, teaching endorsements, and supervisory endorsements must be reviewed and receive final approval by the Licensure Officer prior to institutional recommendation and final consideration by the State Licensure Office in Helena, Montana.
3. The same regulation applies to applicants seeking licensure outside the state of Montana.

## Drug and Alcohol Course Requirement

Chapter No. 396, Section 3, Montana Session Laws 1971 "All units of the Montana University System and all private colleges and universities in Montana that offer any degree in education shall require that any person who receives any degree in education from that unit, private college, or university must have successfully completed a course in health education to include drug and alcohol education and abuse prior to being awarded his or her degree."

## Indian Education for All (IEFA)

The State of Montana requires licensed personnel to have instruction pertaining to the history, traditions, customs, values, beliefs, ethics, and contemporary affairs of American Indians, particularly Indian tribal groups in Montana. While one three-credit course is an Educator Preparation Program requirement, IEFA is infused throughout the program.

## Admission to the Educator

### Preparation Program

The Educator Preparation Program at MSU Billings may be completed by students enrolled in the College of Education, the College of Arts and Sciences, or the College of Allied Health Professions.

All students desiring licensure to teach are required to file an Application for Admission to the Educator Preparation Program. The application is completed during the term following the completion of a minimum of 45 semester hours of credit, or in the case of a transfer student, during the first term of residence above the sophomore level or the first term of graduate studies enrollment. Approved admission is necessary prior to registration for education courses at the 300 and 400 level.

1. Completion of a minimum of 45 semester credits with a minimum overall grade point average of 2.65 in all coursework completed.
2. All students must have completed the following General Education Requirements (see page 69) at MSU Billings, or from another regionally accredited institution of post-secondary education, earning a minimum grade point average of 3.0 with a minimum grade of “C” (2.0) in each course.

\*COMX 115 Introduction to Interpersonal Communication

**OR**

\*COMX 111 Introduction to Public Speaking .....3

\*WRIT 101 College Writing I .....3

\*HSTA 101 American History I

**OR**

\*HSTA 102 American History II.....3

A science course with the lab chosen from those approved for General Education .....4

A math course chosen from those approved for General Education.....3

\*NASX 105 Introduction to Native American Studies

**OR**

\*NASX 205 Native Americans in Contemporary Society .....3

\*May satisfy General Education requirements.

3. A minimum grade of “C”(2.0) and a combined GPA of 3.0 must be earned for the following courses.

### Professional Education Core

EDSP 204 Introduction to Teaching Exceptional Learners ..... 3

\*EDU 105 Education and Democracy ..... 3

EDU 220 Human Growth and Development with lab ..... 3

EDU 221 Educational Psychology and Measurement ..... 3

HTH 201 Health Issues for Educators..... 3

**OR**

HTH 412 Drugs and Alcohol ..... 1

4. Prior to assignment/placement in any field experience, a student must provide a federal background check, including finger printing, with clear results. The documentation must be no older than two (2) years and must remain current throughout the field experience. The candidate must agree that information submitted may need to be shared with faculty and the school district/organization, on a “need to know” basis, to secure the candidate’s field experience placement(s). Field experience placements include sophomore practica, junior field experiences, student teaching, and internships.

## Educator Preparation Program

### Appeals

Candidates proposing a deviation from the program appeal to the College of Education Educator Preparation Program Appeals Committee. Candidates should contact their faculty advisor for assistance with this process. The Committee makes recommendations to the Dean of the College of Education, who has final decision-making authority.

## Courses Restricted to Educator Preparation Program Admission

### CURRICULUM AND INSTRUCTION

EDU 353 Junior Field Experience

EDU 397A Methods: K-8 Language Arts

EDU 397B Methods: K-8 Social Studies

EDU 397C Methods: K-8 Mathematics

EDU 397D Methods: K-8 Science

EDU 397E Methods: K-8 Art

EDU 397F Methods: K-8 Music

EDU 397G Methods: 5-12 Science

EDU 397H Methods: K-12 Art  
 EDU 397I Methods: K-12 Music  
 EDU 397J Methods: 5-12 Speech and Drama  
 EDU 492 Independent Study  
 EDU 494 Seminar/Workshop  
 EDU 495A Student Teaching: K-12  
 EDU 495B Student Teaching: K-8  
 EDU 495C Student Teaching: 5-12  
 EDU 496 Clinic  
 EDU 497A Methods: 5-12 Social Studies  
 EDU 497B Methods: 5-12 Mathematics  
 EDU 497C Methods: K-12 Modern Language  
 EDU 497D Methods: 5-12 English

### EDUCATIONAL FOUNDATIONS

EDU 406 Philosophical, Legal and Ethical Issues in Education

### READING

EDU 330/RD 512 Emergent Literacy  
 EDU 333 Reading and Writing Across the Curriculum  
 EDU 432 Literature and Literacy for Young Adults  
 EDU 438 Literacy Assessment, Diagnosis and Instruction

### SPECIAL EDUCATION

EDSP 301 Teaching Students with Learning Disabilities  
 EDSP 302 Teaching Students with Emotional or Behavioral Disorders  
 EDSP 303 Teaching Students with Intellectual Disabilities  
 EDSP 402 Individualizing Curriculum  
 EDSP 404 Teaching Special Populations  
 EDSP 405 Assessment of Students with Exceptionalities  
 EDSP 461 Positive Behavior Supports  
 EDSP 462 Special Education Law, Policy and Practices  
 EDSP 494 Seminar/Workshop  
 EDSP 495 Field Work/Clinical/Practicum: Student Teaching in Special Education

## Initial Conceptual Framework

The Initial Conceptual Framework represents the shared vision of members of the faculty in collaboration with members of the professional education community in preparing undergraduate students to become educators in P-12 schools. It provides direction for programs, courses, teaching, candidate performance, scholarship, service, and unit accountability. The Initial Conceptual Framework provides expected performance outcomes of program completers.

## Initial Conceptual Framework Professional and Pedagogical Development MSU Billings–INTASC Standards

### The Learner and Learning

**Standard #1: Learner Development.** The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

**Standard #2: Learning Differences.** The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

**Standard #3: Learning Environments.** The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self motivation.

### Content

**Standard #4: Content Knowledge.** The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.

**Standard #5: Application of Content.** The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

### Instructional Practice

**Standard #6: Assessment.** The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

**Standard #7: Planning for Instruction.** The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

**Standard #8: Instructional Strategies.** The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

## Professional Responsibility

**Standard #9: Professional Learning and Ethical Practice.** The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

**Standard #10: Leadership and Collaboration.** The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning and to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth and to advance the profession.

Montana Educator Licensure Standards  
[www.opi.mt.gov/pdf/arm/57chapter.pdf](http://www.opi.mt.gov/pdf/arm/57chapter.pdf)

Montana Professional Educator Preparation Program  
Standards (PEPPS)  
[www.opi.mt.gov/pdf/arm/58chapter.pdf](http://www.opi.mt.gov/pdf/arm/58chapter.pdf)



# The Department of Educational Theory and Practice

*with programs in Elementary/Secondary Education, Special Education, Reading Education, Early Childhood Education, and School Counseling*

**Dr. Ken Miller, Chairperson**  
**(406) 657-2315**  
**kmiller@msubillings.edu**

Professors: Fishbaugh, Gregory, Miller, Yazak  
 Associate Professors: Bohlmann, Dell, Waller, Young-Pelton  
 Assistant Professors: Dahle-Huff, Gee, West  
 University Lecturers: Allard, A. Christensen, Schwalbe  
 Adjuncts/Instructors: Blair, Hart, Holt  
 Professors Emeritus: Card, L. Christensen, Dunlop, Gruber, Hecimovic, LaCounte, Rietz, Sexton

## Mission

The Mission of the Department of Educational Theory and Practice is preparation of teachers who evidence the highest ideals of the teaching profession. This mission involves leading prospective teachers to examine the complex ways in which diverse disciplines interrelate and provide the foundations of all education. Study in the Department's programs prepares professional educators for insightful, critical examination of the principles and practices that they encounter in their careers.

Offerings in the Department are based on the assumptions that teaching excellence depends upon: 1) celebration of the dignity of all individuals and cultural groups; 2) comprehensive understanding of subject matter; 3) a knowledge of human intellectual, physical, social, emotional, and spiritual development; and, 4) thoughtful, informed decisions about pedagogy.

## Advising Information

Academic advising services for freshmen education majors are provided through Advising & Career Services in McMullen Hall on first floor west. When ready for admission to the Educator Preparation Program, education majors will be assigned to a faculty advisor in their program for upper division advising. Advising files for upper division students are maintained within the department. Although advisors are available to assist students in designing their Plans of Study, students are ultimately responsible for meeting degree requirements.

## Undergraduate Degrees and Majors

### **Bachelor of Science in Education with Teaching Majors in the following:**

Broadfield Major in Elementary Education  
 Elementary Ed/Special Ed (P-12) Double Major  
 Elementary Education/Reading (K-12) Double Major  
 Secondary Ed/Special Ed (P-12) Double Major  
 Secondary Education/Reading (K-12) Double Major

Special Education and Reading majors are available to candidates completing an elementary broadfield major or a secondary teaching option.

### **Bachelor of Science or Bachelor of Arts Degree with Secondary or K-12 Teaching Licensure Option**

MSU Billings no longer offers a Bachelor of Science in Education (BSED) degree. Students now receive either a Bachelor of Arts or Bachelor of Science in a content area through the College of Arts and Sciences with a secondary or K-12 educator licensure option. Students must earn a broadfield teaching major, a teaching major and teaching minor, a double major, or an extended major in order to complete degree and licensure requirements.

**See Teacher Licensure Options** for the following areas in the College of Arts & Sciences (see page 120) and College of Allied Health Professions (see page 84).

Art (K-12)  
 Biology  
 Broadfield Science  
 Chemistry  
 English  
 Health & Physical Education (K-12)  
 History  
 Mathematics  
 Music (K-12)  
 Political Science  
 Social Science (Broadfield licensure)\*  
 Spanish (K-12)

\* It is recommended that students interested in pursuing Social Sciences choose a major in history (licensure)

option) with a teaching minor in political science and apply for the social science (broadfield) licensure endorsement. This plan will expand employment potential. Please consult the College of Arts & Sciences for specific information (see page 120).

### Teaching Minors

For students who are pursuing secondary or K-12 educator licensure in a content major, the following minors lead to an additional endorsement. A teaching minor, second major, or extended major is required for the teacher licensure.

Art (K-12)  
Biology  
Chemistry  
Earth Science  
Economics  
English  
Geography  
Health and Physical Education (K-12)  
History  
Mathematics  
Physics  
Political Science  
Psychology  
Reading (K-12)  
Sociology  
Spanish (K-12)

### Non-Endorsable Teaching Minor in Special Education (P-12)

#### Minor

Early Childhood Studies (endorsable with student teaching)

### Associate of Arts Degree Program of Study in: Education

## Graduate

### Degrees/Endorsements

Information on Graduate Programs offered by Montana State University Billings may be obtained by writing:

Director, Graduate Studies  
Montana State University Billings  
1500 University Drive  
Billings, Montana 59101-0298  
(406) 657-2238  
email: gradstudies@msubillings.edu

### Master of Education (M.Ed.) with Options in:

Curriculum and Instruction Teacher Licensure  
Option  
Online Instructional Technologies▽  
Interdisciplinary Studies  
Reading  
School Counseling

The Interdisciplinary Studies Option permits students to have the flexibility to design a program in collaboration with faculty advisor.

### Master of Science in Special Education with Options in:

Advanced Studies▽  
Advanced Studies in Applied Behavioral Analysis  
Generalist▽

### Certificate of Teaching and Learning Online▽

### Supervisory Endorsements

Supervisor of Reading  
Supervisor of Special Education

The Department of Educational Theory and Practice is committed to preparing educators who evidence the highest ideals of the teaching profession. Programs in the Department are based on the assumptions that: 1) effective educators celebrate the uniqueness and dignity of all individuals; 2) a comprehensive understanding of subject matter is essential to teaching excellence; 3) an in depth knowledge of human intellectual, physical, social, emotional, and spiritual development through informed classroom practice is essential to teaching excellence; 4) human learning emerges contextually within individuals and is molded in part by familial and cultural institutions and values; and, 5) thoughtful, informed decisions about pedagogy enable teachers to guide students in constructing knowledge and becoming actively involved citizens in an increasingly global society.

### Online Availability

A number of COE programs are available online with limited on-campus residency requirements. These include the following:

- AA Program of Study in Education
- Minor in Early Childhood Studies
- Special Education Teaching Endorsement
- Graduate licensure programs in elementary and secondary education
- Graduate special education supervisory endorsement
- Master of Education in Online Instructional Technologies

In addition, some College of Education programs have individual course availability online but not the entire program of study. These include the following:

- Early Childhood undergraduate minor
- Reading
- School Counseling
- Elementary Education

## Bachelor of Science in Education Degree Broadfield Major in Elementary Education

Credits

### General Education Requirements ..... 31

The General Education requirements for elementary education majors have been designed to prepare pre-service educators in a liberal arts curriculum that: stimulates scholarship; promotes a critical understanding of human concepts; fosters individual fulfillment; nurtures the development of free, rational, and responsible professions; cultivates an appreciation for the values associated with life in a free, democratic society; develops intellectually competent, imaginative and vigorous educators; and encourages an analysis of values inherent in foreign cultures, the variety of American ethnic cultures with an aim toward developing a clearer understanding of other peoples. The General Education program for elementary majors is similar to the General Education program established for all students at Montana State University Billings. A complete description is on page 69. Students should select General Education courses in consultation with their academic advisors.

### I. Global Academic Skills

#### A. Mathematics

\*M 130 Mathematics for Elementary Teachers I ..... 3

#### B. English

\*WRIT 101 College Writing I ..... 3

#### OR

\*WRIT 201 College Writing II ..... 3

#### C. Communication & Information Literacy

\*COMX 111 Introduction to Public Speaking ..... 3

#### OR

\*COMX 115 Introduction to Interpersonal Communication ..... 3

### II. Natural Sciences

#### Life Sciences & Physical Sciences

\*SCIN 101 Integrated Sciences I ..... 3

\*SCIN 103 Integrated Sciences II ..... 3

\*SCIN 102 Integrated Sciences Lab ..... 1

#### OR

\*SCIN 104 Integrated Sciences Lab II ..... 1

### III. Social Sciences and History

#### A. Social Sciences

\*PSCI 210 Introduction to American Government ..... 3

#### OR

\*PSCI 220 Introduction to Comparative Government ..... 3

#### B. History

\*HSTA 101 American History I ..... 3

#### OR

\*HSTA 102 American History II ..... 3

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Broadfield Major*

### *Elementary Education*

Students should talk with their faculty advisors prior to registration for classes. It is a good practice to visit with the faculty advisor each semester. The following suggested schedule provides a general overview of courses and work that will enable the Elementary Education major to progress through the degree in an orderly and timely manner.

First Year	F	S
EDU 105	3	
M 130	3	
WRIT 101	3	
HSTA 101 or 102	3	
COMX 111 or 115	3	
Elective	2	1
ARTZ 102		2
EDU 220/220L		3
M 131		3
MUSI 101		3
Gen Ed Humanities		3
<b>Total</b>	<b>17</b>	<b>15</b>

Second Year	F	S
EDSP 204	3	
EDU 221	3	
EDU 270	3	
HTH 201	3	
SCIN 101	3	
SCIN 102 or 104	(1)	(1)
SCIN 103		3
EDU 381		3
GPHY 121		3
NASX 105 or 205		3
PSCI 210 or 220		3
<b>Total</b>	<b>15-16</b>	<b>15-16</b>

Apply for Admission to Educator Preparation Program Spring semester.

**IV. Cultural Diversity**

\*NASX 105 Introduction to Native American Studies.....3

**OR**

\*NASX 205 Native Americans in Contemporary Society.....3

**V. Arts and Humanities****A. Fine Arts**

\*MUSI 101 Enjoyment of Music .....3

**B. Humanities.....3**

Select from list on page 69.

**Professional Core for Elementary Education**

EDSP 204 Introduction to Teaching Exceptional Learners .....3

EDU 105 Education and Democracy.....3

EDU 220 Human Growth and Development.....3

EDU 221 Educational Psychology and Measurement .....3

EDU 353 Junior Field Experience .....2

EDU 381 Curriculum Theory and Design .....3

EDU 406 Philosophical, Legal and Ethical Issues in Education .....3

EDU 495B Student Teaching: K-8.....12

HTH 201 Health Issues for Educators .....3

**Total.....35****Required Elementary Education Courses**

ARTZ 102 Fundamentals of Art for Elementary Teachers.....2

EDSP 310 Supporting Diverse Learners through Collaboration .....3

EDU 270 Instructional Technology.....3

EDU 331 Literature and Literacy for Children.....3

EDU 343 Strategies for Managing Diverse Learners .....2

EDU 383 Assessment in Education.....3

EDU 397A Methods: K-8 Language Arts .....3

EDU 397B Methods: K-8 Social Studies .....3

EDU 397C Methods: K-8 Mathematics.....3

EDU 397D Methods: K-8 Science .....3

EDU 397M Methods: K-8 Integrating the Arts into the Curriculum.....4

EDU 433 Reflective Practices in Teaching Reading .....3

EDU 442 Reading Diagnosis and Interventions in the Classroom .....3

\*GPHY 121 Human Geography.....3

HEE 309 Health Enhancement Strategies K-8 .....3

M 131 Mathematics for Elementary Teachers II .....3

Area of Concentration electives in consultation with advisor .....9

**Total.....56****Restricted electives selected with advisor approval.....6****Total minimum credits required for major.....128**

\*May satisfy General Education requirements.

<b>Third Year</b>	<b>F</b>	<b>S</b>
EDSP 310	3	
EDU 343	2	
EDU 383	3	
EDU 397A	3	
EDU 397B	3	
EDU 331		3
EDU 353		2
EDU 397C		3
EDU 397D		3
HEE 309		3
Area of Concentration	3	3
<b>Total</b>	<b>17</b>	<b>17</b>
<b>PRAXIS II</b>		
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
EDU 397M	4	
EDU 433	3	
EDU 442	3	
Area of Concentration	3	
Electives	3	
EDU 406		3
EDU 495B		12
<b>Total</b>	<b>16</b>	<b>15</b>
Apply to student teach Fall semester.		
Apply to graduate Fall semester.		
Apply for licensure Spring semester.		

## Bachelor of Science in Education Elementary Education/Special Education

### (P–12) Double Major

This program leads to licensure in teaching at the elementary school level (K–8) and an endorsement to teach special education (P–12). This double major requires the completion of the basic courses required in regular Broadfield Major in Elementary Education and the additional courses required to qualify for a Special Education Major (P–12).

#### Credits

#### General Education Requirements ..... 31

General Education requirements are in place effective with this catalog.

Appropriate general education programs as per catalogs predating General Education will be accepted.

**See requirements for Broadfield Elementary Education major on page 260.**

#### Professional Education Core - Elementary

EDSP 204 Introduction to Teaching Exceptional Learners .....	3
EDU 105 Education and Democracy.....	3
EDU 220 Human Growth and Development.....	3
EDU 221 Educational Psychology and Measurement .....	3
EDU 353 Junior Field Experience .....	2
EDU 381 Curriculum Theory and Design .....	3
EDU 406 Philosophical, Legal and Ethical Issues in Education .....	3
EDU 495B Student Teaching: K-8.....	9
HTH 201 Health Issues for Educators .....	3
<b>Total .....</b>	<b>32</b>

#### Elementary Education Requirements

ARTZ 102 Fundamentals of Art for Elementary Teachers.....	2
EDU 270 Instructional Technology.....	3
EDU 331 Literature and Literacy for Children.....	3
EDU 397A Methods: K-8 Language Arts .....	3
EDU 397B Methods: K-8 Social Studies .....	3
EDU 397C Methods: K-8 Mathematics.....	3
EDU 397D Methods: K-8 Science .....	3
EDU 397M Methods: K-8 Integrating the Arts into the Curriculum.....	4
EDU 433 Reflective Practices in Teaching Reading .....	3
*GPHY 121 Human Geography.....	3
HEE 309 Health Enhancement Strategies K-8 .....	3
M 131 Mathematics for Elementary Teachers II .....	3
<b>Total .....</b>	<b>36</b>

#### Required Special Education Courses

EDSP 301 Teaching Students with Learning Disabilities .....	3
EDSP 302 Teaching Students with Emotional or Behavioral Disorders .....	3
EDSP 303 Teaching Students with Intellectual Disabilities .....	3
EDSP 402 Individualizing Curriculum.....	3
EDSP 404 Teaching Special Populations .....	2
EDSP 405 Assessment of Students with Exceptionalities .....	3
EDSP 461 Positive Behavior Supports.....	3

*Continued...*

### SUGGESTED PLAN OF STUDY

#### *Bachelor of Science in Education*

#### *Elementary Education/ Special Education (P–12)*

#### *Double Major*

This sample schedule is a suggested plan for students to follow in completing the **double major of Elementary Education and Special Education**. Due to course changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their faculty advisors to plan classes before registering each semester.

<b>First Year</b>	<b>F</b>	<b>S</b>
EDU 105	3	
M 130	3	
WRIT 101 or 201	3	
HSTA 101 or 102	3	
COMX 111 or 115	3	
ARTZ 102		2
EDU 220/220L		3
M 131		3
MUSI 101		3
NASX 105 or 205		3
Gen Ed Humanities		3
<b>Total</b>	<b>15</b>	<b>17</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
EDSP 204	3	
EDU 221	3	
EDU 270	3	
HTH 201	3	
SCIN 101	3	
SCIN 102 or 104	(1)	(1)
SCIN 103		3
EDU 381		3
GPHY 121		3
HEE 309		3
PSCI 210 or 220		3
<b>Total</b>	<b>15-16</b>	<b>15-16</b>

Apply for Admission to Educator Preparation Program Spring Semester.

EDSP 462 Special Education Law, Policy and Practices .....	3
EDSP 495 Field Work/Clinical/Practicum: Student Teaching in Special Education .....	9
EDU 438 Literacy Assessment, Diagnosis and Instruction .....	3
(Note: EDU 433 is a prerequisite for EDU 438)	
<b>Total.....</b>	<b>35</b>

**Total minimum credits required for double major ..... 134**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.*

<b>Third Year</b>	<b>F</b>	<b>S</b>
EDSP 301	3	
EDU 397A	3	
EDU 397B	3	
EDU 397C	3	
EDU 397D	3	
EDU 406	3	
EDSP 302		3
EDSP 303		3
EDU 433		3
EDSP 461		3
EDU 331		3
EDU 353		2
<b>Total</b>	<b>18</b>	<b>17</b>

Apply for EDU 353 Fall semester.  
Apply for EDSP 404 Spring semester.

<b>Fourth Year</b>	<b>F</b>	<b>S</b>
EDU 438	3	
EDU 397M	4	
EDSP 402	3	
EDSP 404	2	
EDSP 405	3	
EDSP 462	3	
EDU 495B		9
EDSP 495		9
<b>Total</b>	<b>18</b>	<b>18</b>

Apply to Student Teach Fall semester.  
Apply to graduate Fall semester.  
Apply for licensure Spring semester.

## Bachelor of Science in Education

### Elementary Education/Reading Double Major

### K–8; K–12 Reading Endorsement

This program leads to initial licensure in teaching (K-8) and the K-12 Reading Endorsement. The double major requires completion of the basic courses required in regular Broadfield Major in Elementary Education along with additional courses in Reading indicated for completion of the double major. The Reading Major provides a route to Highly Qualified Teacher status.

#### Credits

#### General Education Requirements ..... 31

General Education requirements are in place effective with this catalog. Appropriate general education programs as per catalogs predating General Education will be accepted.

**See requirements for Broadfield Elementary Education major on page 260.**

#### Professional Education Core - Elementary

EDSP 204 Introduction to Teaching Exceptional Learners .....	3
EDU 105 Education and Democracy.....	3
EDU 220 Human Growth and Development.....	3
EDU 221 Educational Psychology and Measurement .....	3
EDU 353 Junior Field Experience .....	2
EDU 381 Curriculum Theory and Design .....	3
EDU 406 Philosophical, Legal and Ethical Issues in Education .....	3
EDU 495B Student Teaching: K-8 .....	12
HTH 201 Health Issues for Educators .....	3
<b>Total .....</b>	<b>35</b>

#### Elementary Education Requirements

ARTZ 102 Fundamentals of Art for Elementary Teachers.....	2
EDSP 310 Supporting Diverse Learners through Collaboration .....	3
EDU 270 Instructional Technology.....	3
EDU 331 Literature and Literacy for Children.....	3
EDU 343 Strategies for Managing Diverse Learners .....	2
EDU 397A Methods: K-8 Language Arts .....	3
EDU 397B Methods: K-8 Social Studies .....	3
EDU 397C Methods: K-8 Mathematics.....	3
EDU 397D Methods: K-8 Science .....	3
EDU 397M Methods: K-8 Integrating the Arts into the Curriculum.....	4
EDU 433 Reflective Practices in Teaching Reading .....	3
*GPHY 121 Human Geography.....	3
HEE 309 Health Enhancement Strategies K-8 .....	3
M 131 Mathematics for Elementary Teachers II .....	3
<b>Total .....</b>	<b>41</b>

#### Reading Major Requirements

EDU 330 Emergent Literacy .....	3
EDU 333 Reading and Writing Across the Curriculum .....	3
EDU 336 Cognitive and Language Development in Young Children.....	3
EDU 355 Reading Junior Field.....	2

*Continued...*

#### SUGGESTED PLAN OF STUDY

#### *Bachelor of Science in Education*

#### *Elementary Education/Reading Double Major*

This sample schedule is a suggested plan for students to follow in completing the **double major of Elementary Education and Reading**. Due to course changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their faculty advisors to plan classes before registering each semester.

<b>First Year</b>	<b>F</b>	<b>S</b>
EDU 105	3	
M 130	3	
WRIT 101 or 201	3	
HSTA 101 or 102	3	
COMX 111 or 115	3	
NASX 105 or 205	3	
ARTZ 102		2
EDU 220/220L		3
M 131		3
MUSI 101		3
PSCI 210 or 220		3
Gen Ed Humanities		3
<b>Total</b>	<b>18</b>	<b>17</b>

<b>Second Year</b>	<b>F</b>	<b>S</b>
EDSP 204	3	
EDU 270	3	
HEE 309	3	
EDU 381	3	
SCIN 101	3	
SCIN 102 or 104	(1)	(1)
SCIN 103		3
EDU 221		3
EDSP 310		3
EDU 343		2
HTH 201		3
GPHY 121		3
<b>Total</b>	<b>15-16</b>	<b>17-18</b>

Apply for admission to the Educator Preparation Program during second year Spring semester.



EDU 413 Developing Student Writing .....	3
EDU 430 Teaching Reading K-3 .....	3
EDU 432 Literature and Literacy for Young Adults .....	3
EDU 435 Theories in Reading.....	3
EDU 438 Literacy Assessment, Diagnosis and Instruction .....	3
EDU 495D Reading Student Teaching I.....	3
EDU 495E Reading Student Teaching II.....	3
<b>Total .....</b>	<b>32</b>

**Total credits for Double Major ..... 139**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for prerequisites.*

<b>Third Year</b>	<b>F</b>	<b>S</b>
EDU 397A	3	
EDU 397B	3	
EDU 397C	3	
EDU 406	3	
EDU 333	3	
EDU 336	3	
EDU 433		3
EDU 331		3
EDU 353		2
EDU 397D		3
EDU 397M		4
EDU 330		3
<b>Total</b>	<b>18</b>	<b>18</b>
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
EDU 413	3	
EDU 438	3	
EDU 435	3	
EDU 432	3	
EDU 355	2	
EDU 430	3	
EDU 495D		3
EDU 495E		3
EDU 495B		12
<b>Total</b>	<b>17</b>	<b>18</b>
Apply to student teach Fall semester.		
Apply to graduate Fall semester.		
Apply for licensure Spring semester.		

## Teaching Licensure Option Secondary Majors

### Professional Core

NOTE: The Professional Core is listed in the sequential order in which students will take the courses.

#### Credits

#### Secondary and K-12

EDSP 204 Introduction to Teaching Exceptional Learners.....	3
^EDU 105 Education and Democracy .....	3
EDU 220 Human Growth and Development.....	3
EDU 221 Educational Psychology and Measurement.....	3
EDU 333 Reading and Writing Across the Curriculum .....	3
EDU 354 Secondary Junior Field .....	2
EDU 380 Introduction to Curriculum Planning/Practice .....	2
EDU 406 Philosophical, Legal and Ethical Issues in Education .....	3
EDU 495A Student Teaching: K-12	
OR EDU 495C Student Teaching: 5-12 .....	9
HTH 412 Drugs and Alcohol.....	1
Content Area Methods Course.....	2-3
<b>Total Professional Core credits .....</b>	<b>34-35</b>

^Also satisfies General Education Requirements, EDU 200 may be substituted for EDU 105, but EDU 200 does not satisfy General Education Requirements.

### Professional Core Requirements

The Professional Core at Montana State University Billings combines the intellectual foundations of education and the professional knowledge and skills required of all teachers into a coherent sequence of courses. The core provides the basis for understanding the philosophical, historical, cultural, and sociopolitical means by which society attempts cultural transmission and it provides the opportunity to acquire the knowledge and skills that are essential for effective instruction. It includes the range of human development and learning as they affect instructional planning, evaluation, curriculum design and implementation, performance skills, management of classrooms, direction of students, professional responsibilities, and ethical issues affecting teacher effectiveness.

At different points in its sequence of courses, the Professional Core engages students in supervised practice applying their developing knowledge and skills. By having faculty who hold diverse disciplinary

perspectives teach throughout its sequence, the Professional Core encourages students to develop a professionally responsible understanding of the diversity that defines learners and teachers. The student teaching experience completes the sequence and includes both a final look at classroom skills and a capstone seminar.

The Professional Core presents a balanced approach to epistemology from philosophical, psychological, and sociological perspectives. The core is predicated on the evidential nature of knowledge required for the professional practice of education. While the professional practice of education is also informed by belief and intuition, it is ultimately defensible only to the extent that it has evidential support. The Professional Core engages students in both the processes and products of human knowing as such knowing is central to all aspects of education. The Professional Core involves the (a) creation, (b) facilitation of change, (c) transmission, and (d) application of human knowledge across the diversity of ways in which individuals understand human knowledge.

## Bachelor of Science in Education

### Secondary Education/Special Education

### (P–12) Double Major

	Credits
<b>General Education Requirements .....</b>	<b>31</b>
<b>Professional Education Core - Secondary</b>	
EDSP 204 Introduction to Teaching Exceptional Learners .....	3
*EDU 105 Education and Democracy .....	3
EDU 220 Human Growth and Development .....	3
EDU 221 Educational Psychology and Measurement .....	3
EDU 333 Reading and Writing Across the Curriculum .....	3
EDU 354 Secondary Junior Field .....	2
EDU 380 Introduction to Curriculum Planning/Practice .....	2
EDU 406 Philosophical, Legal and Ethical Issues in Education .....	3
EDU 495A Student Teaching: K-12 .....	
<b>OR</b> EDU 495C Student Teaching: 5-12 .....	9
HTH 412 Drugs and Alcohol .....	1
Content Area Methods Course .....	2-3
<b>Total .....</b>	<b>34-35</b>
<b>Special Education Major Required Courses</b>	
EDSP 301 Teaching Students with Learning Disabilities .....	3
EDSP 302 Teaching Students with Emotional or Behavioral Disorders .....	3
EDSP 303 Teaching Students with Intellectual Disabilities .....	3
EDSP 402 Individualizing Curriculum .....	3
EDSP 404 Teaching Special Populations .....	2
EDSP 405 Assessment of Students with Exceptionalities .....	3
EDSP 461 Positive Behavior Supports .....	3
EDSP 462 Special Education Law, Policy and Practices .....	3
EDSP 495 Field Work/Clinical/Practicum: Student Teaching in Special Education .....	9
EDU 433 Reflective Practices in Teaching Reading .....	3
EDU 438 Literacy Assessment, Diagnosis and Instruction .....	3
(Note: EDU 433 is a prerequisite for EDU 438)	
<b>Total .....</b>	<b>38</b>
<b>Secondary Teaching Major .....</b>	<b>30</b>
<b>Total minimum credits required for double major .....</b>	<b>134</b>

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for prerequisites.*

#### SUGGESTED PLAN OF STUDY

##### *B. S. in Education*

##### *Secondary Education/Special Education (P–12) Double Major*

This sample schedule is a suggested plan for students to follow in completing the **double major of Secondary Education and Special Education**. Due to course changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their faculty advisors to plan classes before registering each semester.

<b>First Year</b>	<b>F</b>	<b>S</b>
WRIT 101	3	
EDU 105	3	
COMX 111	3	
HSTA 101 or 102	3	
NASX 105 or 205	3	
M 131	3	
EDSP 204		3
EDU 221		3
PSCI 210		3
MUSI 101		3
Major		3
<b>Total</b>	<b>18</b>	<b>15</b>
<b>Second Year</b>	<b>F</b>	<b>S</b>
SCIN 101 & 102	3.5	
EDU 220 w/lab	3	
Content Methods	2-3	
EDU 380	2	
Major	6	3
SCIN 103 & 104		3.5
EDSP 301		3
EDSP 302		3
HTH 412		1
Gen Ed Humanities		3
<b>Total</b>	<b>16.5-17.5</b>	<b>16.5</b>
Apply for Admission to Educator Preparation Program Spring Semester		
<b>Third Year</b>	<b>F</b>	<b>S</b>
EDSP 303	3	
EDU 433	3	
EDU 333	3	
EDSP 461	3	
EDU 354	2	
Major		12
EDU 438		3
EDSP 405		3
<b>Total</b>	<b>14</b>	<b>18</b>
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
EDU 406	3	
EDSP 402	3	
EDSP 404	2	
EDSP 462	3	
Major	6	
EDU 495A or 495C		9
EDSP 495		9
<b>Total</b>	<b>17</b>	<b>18</b>
Apply to Student Teach Fall Semester		
Apply to Graduate Fall Semester		
Apply for Licensure Spring Semester		

## Bachelor of Science in Education

### Secondary Education/Reading Double Major

### 5–12 and K–12 Reading Endorsement

This program leads to initial licensure in teaching (5-12) per chosen content field and the K-12 Reading Endorsement. This double major requires completion of courses required the Secondary Teaching major, specified courses in Secondary Education along with courses in Reading indicated for completion of the double major. The Reading Major provides a route to Highly Qualified Teacher status.

#### Credits

#### General Education Requirements ..... 31

General Education requirements are in place effective with this catalog. Appropriate general education programs as per catalogs predating General Education will be accepted.

#### Professional Education Core - Secondary

EDSP 204 Introduction to Teaching Exceptional Learners .....	3
*EDU 105 Education and Democracy .....	3
EDU 220 Human Growth and Development .....	3
EDU 221 Educational Psychology and Measurement .....	3
EDU 333 Reading and Writing Across the Curriculum .....	3
EDU 354 Secondary Junior Field .....	2
EDU 380 Introduction to Curriculum Planning/Practice .....	2
EDU 406 Philosophical, Legal and Ethical Issues in Education .....	3
EDU 495A Student Teaching: K-12 .....	
<b>OR</b> EDU 495C Student Teaching: 5-12 .....	9
HTH 412 Drugs and Alcohol .....	1
Content Methods Course .....	2-3
<b>Total .....</b>	<b>34-35</b>

#### Secondary Teaching Major minimum ..... 30

#### Reading Major Requirements

EDU 330 Emergent Literacy .....	3
EDU 336 Cognitive and Language Development in Young Children .....	3
EDU 355 Reading Junior Field .....	2
EDU 413 Developing Student Writing .....	3
EDU 430 Teaching Reading K-3 .....	3
EDU 432 Literature and Literacy for Young Adults .....	3
EDU 433 Reflective Practices in Teaching Reading .....	3
EDU 435 Theories in Reading .....	3
EDU 438 Literacy Assessment, Diagnosis and Instruction .....	3
EDU 495D Reading Student Teaching I .....	3
EDU 495E Reading Student Teaching II .....	3
<b>Total .....</b>	<b>32</b>

#### Restricted Electives

Select one of the following courses in consultation with an advisor.

EDU 434 Reading Round Table .....	3
EDU 436 Storytelling .....	3
<b>Total .....</b>	<b>3</b>

*Continued...*

## SUGGESTED PLAN OF STUDY

### *Bachelor of Science in Education*

### *Secondary Education/Reading Double Major*

This sample schedule is a suggested plan for students to follow in completing the **double major of Secondary Education and Reading**. Due to course changes and staff assignments, students may not be able to follow the plan exactly. Students should consult with their faculty advisors to plan classes before registering each semester.

First Year	F	S
WRIT 101	3	
EDU 105	3	
SCIN 101	3	
SCIN 102 or 104	(1)	(1)
SCIN 103		3
NASX 105 or 205	3	
HTH 412	1	
Content Major	3	
COMX 111		3
HSTA 101 or 102		3
EDU 221		3
MUSI 101		3
<b>Total</b>	<b>16/17</b>	<b>15/16</b>

Second Year	F	S
EDU 220 w/lab	3	
EDSP 204	3	
M 131	3	
PSCI 210	3	
Gen Ed Humanities	3	
Content Major	3	6
EDU 330		3
EDU 380		2
EDU 433		3
<b>Total</b>	<b>18</b>	<b>14</b>

Apply for admission to the Educator Preparation Program during second year Spring semester.

Third Year	F	S
EDU 336	3	
EDU 435	3	
EDU 413	3	

**Total credits for Double Major ..... 131**

\*May satisfy General Education requirements.

*Certain courses in this program have prerequisites; students should check the course descriptions for prerequisites.*

EDU 438	3	
Content Major	6	6
EDU 355		2
EDU 333		3
EDU 432		3
Reading Elective		3
<b>Total</b>	<b>18</b>	<b>17</b>
<b>Fourth Year</b>	<b>F</b>	<b>S</b>
EDU 354	2	
EDU 430	3	
EDU 406	3	
Content Major	6	
Content Methods	2-3	
EDU 495D		3
EDU 495E		3
EDU 495A or 495C		9
<b>Total</b>	<b>16-17</b>	<b>15</b>
Apply to student teach Fall semester.		
Apply to graduate Fall semester.		
Apply for licensure Spring semester.		

## Associate of Arts Degree

### Program of Study in Education

Provides the student with the knowledge and skills to work in the capacity of a paraeducator in early childhood education and can serve as a career ladder to Elementary Education/Early Childhood Education leading to teacher licensure and other professional opportunities.

#### Credits

#### General Education Requirements .....31

General Education same as elementary program. See page 260. Students should consult with their faculty advisors to determine if specific courses are necessary in order to satisfy the General Education requirements leading to a degree in Education.

#### Required Courses

EDEC 130 Health, Safety and Nutrition in Early Childhood.....	2
EDEC 310 Child in the Family.....	3
EDEC 352 Math and Science in Early Childhood.....	3
EDEC 381 Early Childhood Curriculum and Methods .....	3
EDEC 385 Integrated Curriculum in Early Childhood Education .....	3
EDEC 430 Social/Emotional Development in Young Children .....	3
EDSP 204 Introduction to Teaching Exceptional Learners.....	3
EDU 220/220L Human Growth and Development ...	3
EDU 330 Emergent Literacy .....	3
EDU 336 Cognitive and Language Development in Young Children.....	3
<b>Total Required Credits .....</b>	<b>29</b>

**Total minimum credits required for degree.....60**

*Certain courses in this program have prerequisites; students should check the course description for required prerequisites.*

#### Advising Option for AA degree in Education: Special Education

#### General Education Requirements .....31

Students should consult with the Special Education faculty advisors to determine if specific courses are necessary in order to satisfy the General Education

requirements leading to a degree in Education or to specific employment requirements in special needs work settings.

#### Required Courses

EDEC 265 Leadership and Professionalism in Early Childhood Education .....	3
EDEC 381 Early Childhood Curriculum and Methods .....	3
EDSP 204 Introduction to Teaching Exceptional Learners .....	3
EDSP 205 Adult and Child Interaction Skills .....	3
**EDSP 294 Seminar/Workshop.....	1
^EDSP 298 Internship.....	2
EDU 220 Human Growth and Development .....	3
EDU 232 Foundations of Reading .....	3
<b>Total Required Credits.....</b>	<b>21</b>

**Restricted electives selected with advisor approval..... 6**

^Co-register with EDSP 294 Seminar/Workshop

\*\* Co-register with EDSP 298 Internship

*Certain courses in this program have prerequisites; students should check the course description for required prerequisites.*

## Minor in Early Childhood Studies

With student teaching, the Early Childhood minor qualifies an individual for the P-3 Endorsement on a Montana Educator License. The endorsement is required for educators in accredited P-3 programs.

#### Credits

#### Required Courses

EDEC 130 Health, Safety and Nutrition in Early Childhood .....	2
EDEC 296 Fieldwork/Practicum.....	1
EDEC 310 Child in the Family .....	3
EDEC 352 Math and Science in Early Childhood ....	3
EDEC 381 Early Childhood Curriculum and Methods .....	3
EDEC 385 Integrated Curriculum in Early Childhood Education .....	3
EDEC 430 Social/Emotional Development in Young Children .....	3
EDU 330 Emergent Literacy.....	3
EDU 336 Cognitive and Language Development in Young Children .....	3
<b>Total Credits for Minor.....</b>	<b>24</b>

**Optional**

EDEC 495 Early Childhood Student

Teaching.....9 or 12

**NOTE:** Early Childhood student teaching is required for candidates who want a P-3 teaching license.**Total Credits for Minor with Licensure .... 33 or 36***Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.***Teaching Minor in Reading  
(K–12)**

The minor in reading qualifies an individual for a Reading Endorsement on a Montana Educator License. The endorsement allows the licensed teacher to serve as reading specialist for kindergarten through grade 12.

**Credits****Required Courses**

EDU 413 Developing Student Writing .....3

EDU 430 Teaching Reading K-3.....3

EDU 432 Literature and Literacy for Young

Adults.....3

EDU 435 Theories in Reading.....3

EDU 438 Literacy Assessment, Diagnosis and

Instruction .....3

**Total Required Courses credits..... 15****Restricted Electives**

Select two courses from the list below and/or a special workshop in consultation with your faculty advisor.

EDEC 310 Child in the Family.....3

EDU 330 Emergent Literacy .....3

EDU 336 Cognitive and Language Development in

Young Children.....3

EDU 434 Reading Round Table .....1-3

EDU 436 Storytelling .....3

**Total Restricted Electives..... 6****Total minimum credits for minor ..... 21***Certain courses in this program have prerequisites; students should check the course descriptions for required prerequisites.***Teaching Endorsement in Special  
Education (P–12)**

All students selecting a teaching endorsement in special education must have a written plan of study for the endorsement.

**Credits****Required Courses**

EDSP 204 Introduction to Teaching Exceptional

Learners ..... 3

EDSP 301 Teaching Students with Learning

Disabilities..... 3

EDSP 302 Teaching Students with Emotional or

Behavioral Disorders ..... 3

EDSP 303 Teaching Students with Intellectual

Disabilities..... 3

EDSP 402 Individualizing Curriculum ..... 3

EDSP 404 Teaching Special Populations..... 2

EDSP 405 Assessment of Students with

Exceptionalities ..... 3

EDSP 461 Positive Behavior Supports ..... 3

EDSP 462 Special Education Law, Policy and

Practices ..... 3

EDSP 495 Field Work/Clinical/Practicum: Student

Teaching in Special Education ..... 9

EDU 438 Literacy Assessment, Diagnosis and

Instruction..... 3

(Note: EDU 433 is a prerequisite for EDU 438)

**Total Credits for Teaching Endorsement ..... 38****Non-Endorsable Teaching Minor in  
Special Education (P–12)****Concentration**

The special education requirements listed below will better prepare elementary or secondary education candidates to meet the educational needs of an increasingly diverse student population. To earn a special education endorsement, the candidate must complete the special education teaching major, including student teaching, listed on pages 262 and 267.

**All courses in this minor count toward a special education major.**

**Credits**

EDSP 301 Teaching Students with Learning

Disabilities..... 3

EDSP 302 Teaching Students with Emotional or

Behavioral Disorders ..... 3

EDSP 303 Teaching Students with Intellectual

Disabilities..... 3

EDSP 402 Individualizing Curriculum.....	3
EDSP 461 Positive Behavior Supports.....	3
EDSP 462 Special Education Law, Policy and Practices .....	3
<b>Total Required Course Credits .....</b>	<b>18</b>

**Restricted Elective**

**Select one course in consultation with the faculty advisor.**

EDSP 405 Assessment of Students with Exceptionalities .....	3
EDU 438 Literacy Assessment, Diagnosis and Instruction .....	3
(Note: EDU 433 is a prerequisite for EDU 438)	
<b>Total Elective Credits.....</b>	<b>3</b>

**Total Minimum Credits for the Minor .....21**

*Certain courses in this program have prerequisites;  
students should check the course descriptions for  
required prerequisites.*



# City College

***Dr. Clifford Coppersmith, Dean***  
***CC A-009, (406) 247-3000***

For the most up-to-date information about City College programs please see the annual City College Catalog.

## Mission

The mission of the City College at Montana State University Billings is to be the College of first choice, dedicated to the development of workforce capacity by providing top quality learning opportunities and services to meet a variety of career choices and customer needs by being responsive, flexible, and market-driven.

## History

In 1969, the Montana State Legislature created the Billings Vocational-Technical Education Center (BVTC) to serve the postsecondary technical training needs of adults. In 1987, by order of the Legislature, governance passed from the Billings School District to the Montana University System Board of Regents, making the BVTC one of five campuses of the Montana University System for postsecondary vocational-technical education. In 1994, the BVTC officially merged with Eastern Montana College to become the fifth College of Montana State University Billings, the College of Technology. The merger and subsequent sharing of resources brought about new and improved student services, such as cooperative education, health services, career services, fee payment options, and credit transferability. In June 2012, the Montana University System Board of Regents approved the name change to City College at Montana State University Billings.

## Areas of Emphasis

City College provides individuals with training (or re-training) to obtain excellent, “in demand” positions available at many area employers. Graduates of City College become licensed practical nurses, surgical technicians, paramedics, firefighters, automobile technicians, diesel technicians, process plant operators, computer system technicians, and computer desktop

support specialists. These examples are just a few of the career possibilities awaiting students earning a Certificate, Associate of Applied Science degree, Associate of Science degree or Associate of Art degree from City College. We will give you the tools to make your career dreams come true.

## Partnerships and Collaborative Relationships

City College at MSU Billings enjoys partnerships with key organizations in the greater Billings region including: Billings Clinic, St. Vincent Healthcare, Billings Fire Department, Optimum, Underriner Motors, The Billings Gazette, and the Montana Contractor’s Association to name a few. In addition, the College offers occupationally specific and related instructional opportunities on campus as well as through distance learning to prepare or retrain individuals to meet the demands of present and future technology. The College continues to develop collaborative relationships and articulation agreements with other institutions of higher education where appropriate. Since fall 2003, City College at MSU Billings has been a training site for the University of Montana’s Surgical Technology Associate of Applied Science degree. Students in the Billings area are now able to complete all of the training locally instead of having to relocate to the Missoula area. We anticipate expanding such collaborations in the near future.

## Specialized Training

Through City College Outreach and Community Development, a variety of special programs have been developed to meet specific training needs of business, industry, and other organizations through contract training, continuing education courses, workshops, and seminars. Specialized programs can be developed at the request of individuals and employers and are conducted on the job site or on campus.

## Accreditation

Montana State University Billings is accredited by the Northwest Commission on Colleges and Universities. City College at MSU Billings has individual programs that are recognized and approved by the United States Office of Education, Bureau of Indian Affairs, Division of Vocational Rehabilitation, National Automotive Technicians Education Foundation (NATEF), Inter-

Industry Conference on Auto Collision Repair (I-CAR), Committee on Accreditation of Allied Health Education Programs (CAAHEP), Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP), and the Montana State Board of Nursing. All programs are approved for veterans.

## Location and Campus

City College at MSU Billings is located at 3803 Central Avenue, seven miles from the MSU Billings University campus in the fast-growing west-Billings “Shiloh Corridor Complex,” near the intersection of Central Avenue and Shiloh Road. The campus consists of two buildings: the Tech building and Health Sciences building. The MSU Billings soccer field, used by both the women’s and men’s soccer teams for practice and games, is located on the City College campus.

## City College

### Degrees and Certificates

City College offers Associate of Arts, Associate of Science, Associate of Applied Science Degrees and Certificates in the following areas:

Programs marked with a ∇ are also offered in an online format.

#### Associate of Science Degree (AS)

##### Programs of Study in:

Business Administration ∇

Criminal Justice

~~Drafting & Design~~ (Program placed on moratorium)

Fire Science

General Studies (Self-designed) ∇

Human Resources - General Applied Emphasis ∇

Human Resources - College of Business Articulated Emphasis ∇

Networking Technology

#### Associate of Science in Nursing (ASN)

#### Associate of Applied Science (AAS)

Accounting Technology ∇

Automobile Collision Repair and Refinishing

Automotive Technology

Computer Desktop/Network Support

Computer Programming & Application Development

Computer Systems Technology

Construction Management

Diesel Technology

~~Drafting & Design Technology~~ (Program placed on moratorium)

General Business

Medical Administrative Assistant

Paramedic

Power Plant Technology

Practical Nurse

Process Plant Technology

Radiologic Technology

Surgical Technology (from the Missoula College

University of Montana)

Sustainable Energy Technician

Welding and Metal Fabrication

#### Certificate of Applied Science Programs

Accounting Assistant ∇

~~Assistant Drafter~~ (Program placed on moratorium)

Automobile Collision Repair

Automobile Refinishing

Automotive Technology

Construction Management

Diesel Technology

Human Resource Management ∇

Medical Coding and Insurance Billing ∇

Networking Technology

~~Office Assistant~~ (Program placed on moratorium)

Energy Technician

Welding & Metal Fabrication Technology

Welding for Energy Technology

#### Certificate of Technical Study programs

Energy Technician

Welding and Fabrication 1

**Moratorium = City College is not currently taking students into the program.**

For the most up-to-date information about City College programs, please see the City College catalog.

▽ Program available online

## Accounting Assistant ▽

### *Certificate of Applied Science*

For more information on this program, please see the City College catalog.

Required Courses	Credits
ACTG 101 Accounting Procedures I.....	3
ACTG 102 Accounting Procedures II .....	3
ACTG 125 QuickBooks .....	3
ACTG 205 Computerized Accounting .....	3
BGEN 105 Introduction to Business .....	3
CAPP 120 Introduction to Computers .....	3
CAPP 156 MS Excel .....	3
COMX 106 Communicating in a Dynamic Workplace	3
COMX 111 Introduction to Public Speaking.....	3
M 108 Business Mathematics .....	3
WRIT 122 Introduction to Business Writing.....	3
<b>Total minimum credits required .....</b>	<b>33</b>

*Students should check course descriptions for required prerequisites. Math and communication requirements are usually determined by performance on placement tests or transfer credits.*

## Accounting Technology ▽

### *Associate of Applied Science Degree*

For more information on this program, please see the City College catalog.

Required Courses	Credits
ACTG 101 Accounting Procedures I.....	3
ACTG 102 Accounting Procedures II .....	3
ACTG 103 Accounting Procedures III .....	3
ACTG 125 QuickBooks .....	3
ACTG 180 Payroll Accounting .....	3
ACTG 205 Computerized Accounting .....	3
BGEN 105 Introduction to Business .....	3
BGEN 235 Business Law .....	3
CAPP 120 Introduction to Computers .....	3
CAPP 154 MS Word .....	3
CAPP 156 MS Excel .....	3
CAPP 158 MS Access .....	3
COMX 106 Communicating in a Dynamic Workplace	3
COMX 111 Introduction to Public Speaking.....	3
M 108 Business Mathematics .....	3
M 121 College Algebra .....	3*

**OR**

M 143 Finite Mathematics..... 4\*

**OR**

M 105 Contemporary Mathematics.....	3*
WRIT 122 Introduction to Business Writing .....	3
<b>Subtotal.....</b>	<b>51</b>

\* Students should check with their academic advisor to determine the specific math course that is appropriate for their plan of study.

**Restricted Electives chosen in consultation with academic advisor .....** 9  
**Total minimum credits required for degree .....** 60  
*Students should check course descriptions for required prerequisites. Math and communication requirements are usually determined by performance on placement tests or transfer credits.*

### **Suggested Electives:**

ACTG 201 Principles of Financial Accounting  
 BFIN 305 Financial Planning  
 BMGT 180 Employment Law and Practices  
 BMGT 235 Management  
 BMGT 237 Human Relations in Business  
 BMGT 250 Employment and Compensation Strategies  
 BMKT 112 Applied Sales  
 BMKT 225 Marketing  
 CAPP 110 Short Courses: MS Outlook  
 CAPP 153 MS PowerPoint  
 ECNS 201 Principles of Microeconomics  
 TASK 298 Internship/Cooperative Education

## Automobile Collision Repair and Refinishing Technology

### *Associate of Applied Science Degree*

For more information on this program, please see the City College catalog.

Required Courses	Credits
ABDY 111 Introduction to Auto Body Repair .....	5
ABDY 112 Minor Collision Repair .....	6
ABDY 121 Automobile Body Structural Repair .....	6
ABDY 122 Automobile Collision Mechanics.....	5
ABDY 131 Introduction to Refinishing Principles .....	6
ABDY 132 Introduction to Automotive Undercoats & Plastics.....	6
ABDY 141 Advanced Automotive Refinishing.....	6
ABDY 142 Introduction to Automotive Paint Blending and Color Matching.....	7
AST 285 ASE Exam Prep: Section One .....	1
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace	3
M 114 Extended Technical Mathematics.....	3
TRID 140 Automobile Sheet Metal and Structural MIG Welding .....	2
TRID 150 Environmental and Shop Practices .....	2
TRID 152 Vehicle Heating, Ventilation & Air Conditioning .....	3
TRID 181 Transportation Electrical Systems Lecture ..	2

TRID 182 Transportation Electrical Systems Lab ..... 2  
 WRIT 122 Introduction to Business Writing ..... 3  
**Total minimum credits required for degree ..... 71**  
*Students should check the course descriptions for required prerequisites. Math and English requirements are usually determined by performance on placement tests or transfer credits.*

## Automobile Collision Repair Technology

### ***Certificate of Applied Science***

For more information on this program, please see the City College catalog.

#### **Required Courses Credits**

ABDY 111 Introduction to Auto Body Repair ..... 5  
 ABDY 112 Minor Collision Repair ..... 6  
 ABDY 121 Automobile Body Structural Repair ..... 6  
 ABDY 122 Automobile Collision Mechanics ..... 5  
 CAPP 120 Introduction to Computers ..... 3  
 COMX 106 Communicating in a Dynamic Workplace 3  
 M 111 Technical Mathematics ..... 3  
 TRID 140 Automobile Sheet Metal and Structural MIG Welding ..... 2  
 WRIT 104 Workplace Communications ..... 3

**Total minimum credits required ..... 36**

*Students should check the course descriptions for required prerequisites.*

## Automobile Refinishing Technology

### ***Certificate of Applied Science***

For more information on this program, please see the City College catalog.

#### **Required Courses Credits**

ABDY 131 Introduction to Refinishing Principles ..... 6  
 ABDY 132 Introduction to Automotive Undercoats and Plastics ..... 6  
 ABDY 141 Advanced Automotive Refinishing ..... 6  
 ABDY 142 Introduction to Automotive Paint Blending and Color Matching ..... 7  
 CAPP 120 Introduction to Computers ..... 3  
 COMX 106 Communicating in a Dynamic Workplace 3  
 M 111 Technical Mathematics ..... 3  
 WRIT 104 Workplace Communications ..... 3

**Total minimum credits required ..... 37**

#### **Suggested elective**

TRID 152 Vehicle Heating, Ventilation and Air Conditioning ..... 3

*Students should check the course descriptions for required prerequisites.*

## Automotive Technology

### ***Associate of Applied Science Degree***

For more information on this program, please see the City College catalog.

#### **Required Courses Credits**

AST 106 Automotive Manual Drive Train and Axles .. 2  
 AST 107 Automotive Manual Drive Train and Axles Lab ..... 2  
 AST 114 Automotive Brakes ..... 2  
 AST 115 Automotive Brakes Lab ..... 2  
 AST 162 Automotive Engine Diagnostics ..... 3  
 AST 163 Automotive Engine Diagnostics Lab ..... 3  
 AST 175 Engine Rebuild Lab ..... 5  
 AST 220 Automotive Steering and Suspension ..... 2  
 AST 221 Automotive Steering and Suspension Lab ..... 2  
 AST 230 Electrical/Electronics Systems II ..... 2  
 AST 231 Electrical/Electronics Systems II Lab ..... 2  
 AST 260 Advanced Automotive Diagnostics ..... 3  
 AST 261 Advanced Automotive Diagnostics Lab ..... 3  
 AST 270 Automatic Transmissions and Transaxles ..... 3  
 AST 271 Automatic Transmissions and Transaxles Lab ..... 3  
 AST 285 ASE Exam Prep: Section One ..... 1  
 AST 280 Applied Lab Experience and Light Repair OR AST 298 Automotive Internship ..... 4  
 CAPP 120 Introduction to Computers ..... 3  
 COMX 106 Communicating in a Dynamic Workplace 3  
 M 114 Extended Technical Mathematics ..... 3  
 TRID 150 Environmental and Shop Practices ..... 2  
 TRID 151 Welding ..... 2  
 TRID 152 Vehicle Heating, Ventilation, and Air Conditioning ..... 3  
 TRID 170 Engine Theory ..... 4  
 TRID 181 Transportation Electrical Systems Lecture .. 2  
 TRID 182 Transportation Electrical Systems Lab ..... 2  
 WRIT 122 Introduction to Business Writing

OR WRIT 121 Introduction to Technical Writing ..... 3

**Total minimum credits required for degree ..... 71**

*Students should check the course descriptions for required prerequisites. Math and English requirements are usually determined by performance on placement tests or transfer credits.*

## Automotive Technology

### ***Certificate of Applied Science***

For more information on this program, please see the City College catalog.

#### **Required Courses Credits**

AST 106 Automotive Manual Drive Train and Axles .. 2  
 AST 107 Automotive Manual Drive Train and Axles Lab ..... 2  
 AST 114 Automotive Brakes ..... 2  
 AST 115 Automotive Brakes Lab ..... 2

AST 162 Automotive Engine Diagnostics.....	3
AST 163 Automotive Engine Diagnostics Lab .....	3
AST 175 Engine Rebuild Lab.....	5
COMX 106 Communicating in a Dynamic Workplace	3
M 111 Technical Mathematics .....	3
TRID 170 Engine Theory .....	4
TRID 181 Transportation Electrical Systems Lecture..	2
TRID 182 Transportation Electrical Systems Lab.....	2
WRIT 104 Workplace Communications .....	3
<b>Total credits required.....</b>	<b>36</b>

**Optional courses**

CAPP 120 Introduction to Computers .....	3
TRID 150 Environmental and Shop Practices .....	2

*Students should check the course descriptions for required prerequisites. Math and English requirements are usually determined by performance on placement tests or transfer credits.*

**Business Administration** ▽**Associate of Science Program of Study**

For more information on this program, please see the City College catalog.

**Required Courses** **Credits****General Education Requirements .....** **31**

Students should consult with an academic advisor before registering for General Education courses. **The following General Education courses are required: M 143, WRIT 101, WRIT 220, COMX 111 or BMIS 150, and ECNS 201.**

**Core Courses**

^ACTG 201 Principles of Financial Accounting.....	3
^BGEN 105 Introduction to Business.....	3
#BGEN 235 Business Law .....	3
^BMGT 235 Management .....	3
^BMKT 225 Marketing .....	3

CAPP 120 Introduction to Computers

**OR**

^CAPP 131 Basic MS Office.....	3
#ECNS 202 Principles of Macroeconomics .....	3
^TASK 294 Seminar/Workshop .....	2

**Total for core.....** **23**

#Indicates courses that transfer to the College of Business core.

^Indicates courses that transfer to the College of Business as general electives.

**Restricted electives selected with advisor approval. 6**

**Computer Desktop/Network Support****Associate of Applied Science Degree**

For more information on this program, please see the City College catalog.

**Required Courses** **Credits**

CAPP 110 Short Courses: MS Outlook .....	1
CAPP 154 MS Word.....	3
CAPP 156 MS Excel.....	3
CAPP 158 MS Access.....	3
COMX 106 Communicating in a Dynamic Workplace	3
COMX 111 Introduction to Public Speaking .....	3
CSCI 181 Web Design & Programming .....	3
CSCI 211 Client Side Programming .....	3
ITS 166 Configuring MS Windows 10 .....	3
ITS 171 Configuring MS Server 2016 .....	3
ITS 182 Help Desk Support .....	3
ITS 217 Network Operating System – Server Admin/Apps .....	3
ITS 224 Introduction to Linux .....	3
ITS 256 CCNA Security .....	3
ITS 274 Advanced Hardware/Software Troubleshooting and Support .....	3
ITS 280 Computer Repair and Maintenance.....	3
ITS 283 Health Information Networking .....	3
ITS 284 Network Storage .....	3
M 114 Extended Technical Mathematics.....	3
NTS 104 CCNA 1: Intro to Networks.....	4
NTS 105 CCNA 2: Routing & Switching Essentials ...	4
WRIT 121 Introduction to Technical Writing.....	3
Elective or ITS 298 Technical Support Internship.....	3
<b>Total minimum credits required for degree .....</b>	<b>69</b>

*Students should check course descriptions for required prerequisites. Math and communication requirements are usually determined by performance on placement tests or transfer credits.*

**Computer Programming and Application Development****Associate of Applied Science Degree**

For more information on this program, please see the City College catalog.

**Required Courses** **Credits**

CAPP 156 MS Excel.....	3
CAPP 158 MS Access.....	3
COMX 106 Communicating in a Dynamic Workplace	3
CSCI 111B Programming with Java I.....	4
CSCI 113 Programming with C++ I .....	3
CSCI 114 Programming with C# .....	3
CSCI 116 Introduction to Python Programming.....	3
CSCI 121 Programming with Java II .....	4

CSCI 124 Advanced C#/.NET .....	3
CSCI 181 Web Design & Programming.....	3
CSCI 211 Client Side Programming.....	3
CSCI 214 Server-Side Web Programming & Administration .....	3
CSCI 223 Software Development .....	3
CSCI 240 Databases and SQL .....	3
CSCI 299 Thesis/Capstone .....	3
ITS 163 MS Windows 8 Configuration .....	3
ITS 170 MS Windows Server 2012.....	3
ITS 224 Introduction to Linux .....	3
M 143 Finite Mathematics.....	4
NTS 104 CCNA 1: Intro to Networks .....	4
WRIT 121 Introduction to Technical Writing .....	3
Restricted Elective	
CSCI 298 Technical Support Internship	
OR CSCI 241 PL/SQL .....	3
<b>Total minimum credits .....</b>	<b>70</b>

## Computer Systems Technology

### *Associate of Applied Science Degree*

For more information on this program, please see the City College catalog.

#### **Required Courses** **Credits**

CAPP 156 MS Excel .....	3
COMX 106 Communicating in a Dynamic Workplace	3
CSCI 181 Web Design & Programming.....	3
HIT 101 Introduction to Health Care Informatics .....	3
ITS 166 Configuring MS Windows 10.....	3
ITS 171 Configuring MS Server 2016.....	3
ITS 217 Network Operating System – Server Admin/Apps.....	3
ITS 224 Introduction to Linux .....	3
ITS 256 CCNA Security.....	3
ITS 260 CCNP: Routing.....	4
ITS 264 CCNP 3: Switching.....	4
ITS 266 CCNP: Troubleshooting .....	4
ITS 280 Computer Repair and Maintenance .....	3
M 114 Extended Technical Mathematics .....	3
NTS 104 CCNA 1: Intro to Networks .....	4
NTS 105 CCNA 2: Routing & Switching Essentials...	4
NTS 204 CCNA 3: Scaling Networks .....	4
NTS 205 CCNA 4: Connecting Networks.....	4
WRIT 121 Introduction to Technical Writing .....	3
Restricted Elective (choose from list below).....	3
<b>Total minimum credits required for degree.....</b>	<b>67</b>

#### **Restricted Electives**

CSCI 116 Introduction to Python Programming .....	3
CSCI 211 Client Side Programming.....	3
CSCI 214 Server-Side Web Programming & Administration .....	3
ITS 182 Help Desk Support.....	3
ITS 200 CCNS Exam Preparation .....	1

ITS 284 Network Storage .....	3
ITS 291 Special Topics .....	3
ITS 298 Internship/Cooperative Education .....	3

## Construction Management

### *Associate of Applied Science Degree*

For more information on this program, please see the City College catalog.

#### **Required Courses** **Credits**

ACTG 101 Accounting Procedures I .....	3
ACTG 125 QuickBooks.....	3
BGEN 105 Introduction to Business.....	3
BMGT 210 Small Business Entrepreneurship .....	3
BMGT 281 Risk Management, Safety and Security .....	3
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace	3
CSTN 120 Carpentry Basics and Rough-in Framing ....	4
CSTN 145 Exterior Finishing, Stair Construction, and Metal Stud Framing.....	4
CSTN 147 Blueprint Reading .....	3
CSTN 160 Construction Concepts and Building Laboratory .....	5
CSTN 161 Construction Concepts and Building Laboratory II .....	4
CSTN 220 Interior Finishing .....	4
CSTN 230 Advanced Roof, Floor, Wall, and Stair Systems .....	4
CSTN 270 Foundations of Construction Project Management .....	3
CSTN 272 Construction Estimating Using Databases ..	1
CSTN 295 Construction Concepts and Building Laboratory III.....	5
CSTN 299 Capstone: Carpentry.....	4
M 114 Extended Technical Mathematics.....	3
WRIT 121 Introduction to Technical Writing.....	3
<b>Total minimum credits required for degree .....</b>	<b>68</b>

## Construction Management

### *Certificate of Applied Science Degree*

For more information on this program, please see the City College catalog.

#### **Required Courses** **Credits**

ACTG 101 Accounting Procedures I .....	3
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace	3
CSTN 120 Carpentry Basics and Rough-in Framing ....	4
CSTN 145 Exterior Finishing, Stair Construction, and Metal Stud Framing.....	4
CSTN 147 Blueprint Reading .....	3
CSTN 160 Construction Concepts and Building Laboratory .....	5
CSTN 161 Construction Concepts and Building Laboratory II .....	4

M 114 Extended Technical Mathematics	
<b>OR</b>	
M 111 Technical Mathematics .....	3
WRIT 121 Introduction to Technical Writing	
<b>OR</b>	
WRIT 104 Workplace Communications .....	3
<b>Total minimum credits required for degree.....</b>	<b>35</b>

## Craft Brewing and Fermentation

### *Certificate of Technical Studies*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
BGEN 105 Introduction to Business .....	3
BGEN 299 Capstone: Brewing & Fermentation .....	2
BIOM 208 Applied Brewing Microbiology .....	3
BMGT 102 Business Basics for Brewing and Distillery .....	3
CHMY 170 Applied Brewing Chemistry .....	3
PPT 140 Brewing Process Technology .....	2
<b>Total minimum credits required for certificate ....</b>	<b>16</b>

## Diesel Technology

### *Associate of Applied Science Degree*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace .....	3
DST 101 Power Trains .....	2
DST 117 Introduction to Diesel Fuel Systems .....	4
DST 132 Diesel Engine Overhaul .....	6
DST 140 Introduction to Hydraulics .....	2
DST 141 Introduction to Hydraulics Lab .....	2
DST 155 Advanced Hydraulics and Pneumatics .....	4
DST 202 Advanced Power Trains .....	2
DST 250 Heavy Duty Chassis .....	6
DST 256 Applied Diesel Service Operation I	
<b>OR</b> DST 298 Cooperative Education/Internship .....	2
DST 257 Applied Diesel Service Operation II	
<b>OR</b> DST 298 Cooperative Education/Internship .....	2
DST 260 Diesel Engine Diagnosis and Troubleshooting .....	5
DST 277 Advanced Fuel Systems and Diesel Engine Controls .....	6
M 114 Extended Technical Mathematics .....	3
TRID 150 Environmental and Shop Practices .....	2
TRID 151 Welding .....	2
TRID 152 Vehicle Heating, Ventilation and Air Conditioning .....	3
TRID 170 Engine Theory .....	4
TRID 181 Transportation Electrical Systems Lecture ..	2

TRID 182 Transportation Electrical Systems Lab .....	2
WRIT 122 Introduction to Business Writing	
<b>OR</b> WRIT 121 Introduction to Technical Writing .....	3
<b>Total minimum credits required for degree .....</b>	<b>70</b>
<i>Students should check the course descriptions for required prerequisites. Math and English requirements are usually determined by performance on placement tests or transfer credits.</i>	

## Diesel Technology

### *Certificate of Applied Science*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
COMX 106 Communicating in a Dynamic Workplace .....	3
DST 101 Power Trains .....	2
DST 117 Introduction to Diesel Fuel Systems .....	4
DST 140 Introduction to Hydraulics .....	2
DST 141 Introduction to Hydraulics Lab .....	2
DST 250 Heavy Duty Chassis .....	6
M 111 Technical Mathematics .....	3
TRID 150 Environmental and Shop Practices .....	2
TRID 170 Engine Theory .....	4
TRID 181 Transportation Electrical Systems Lecture ..	2
TRID 182 Transportation Electrical Systems Lab .....	2
WRIT 104 Workplace Communications .....	3
<b>Total minimum credits required.....</b>	<b>35</b>
<i>Students should check the course descriptions for required prerequisites. Math and English requirements are usually determined by performance on placement tests or transfer credits.</i>	

## Energy Technician

### *Certificate of Applied Science*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace .....	3
ELCT 130 Electric Motors and Generators .....	3
ETEC 103 AC/DC Electronics II .....	3
ETEC 192 Fundamentals of Energy Technicians I .....	4
ETEC 193 Fundamentals of Energy Technicians II .....	4
M 114 Extended Technical Mathematics .....	3
NRGY 101 Introduction to Sustainable Energy .....	3
NRGY 121 Climb Safety and Rigging .....	1
TRID 150 Environmental and Shop Practices .....	2
TRID 185 Introduction to Industrial Power Systems Lecture .....	2
TRID 186 Introduction to Industrial Power Systems Laboratory .....	1
WRIT 121 Introduction to Technical Writing .....	3
<b>Total .....</b>	<b>35</b>

## Energy Technician

### ***Certificate of Technical Studies***

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
EETC 103 AC/DC Electronics II .....	3
EETC 192 Fundamentals of Energy Technicians I.....	4
M 114 Extended Technical Mathematics .....	3
TRID 150 Environmental and Shop Practices .....	2
TRID 185 Introduction to Industrial Power Systems Lecture .....	2
TRID 186 Introduction to Industrial Power Systems Laboratory.....	1
WRIT 121 Introduction to Technical Writing .....	3
<b>Total .....</b>	<b>18</b>

## Fire Science

### ***Associate of Science Program of Study***

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
<b>General Education Requirements .....</b>	<b>31</b>
Students should consult with an academic advisor before registering for General Education courses.	
<b>Students must take M 143, WRIT 220, and ECNS 201 if they wish to continue into the BSBA General Business Program in the College of Business.</b>	
<b>Required Technical Courses</b>	
ECP 294 Workshop: Conflict Resolution .....	3
FIRE 105 Fire Apparatus, Equipment and Hydraulics .	3
FIRE 115 Fire Fighter I Essentials .....	3
FIRE 130 Fire Service Management and Law.....	3
FIRE 172 Wildlands Standards for Survival .....	3
FIRE 180 Incident Command.....	3
FIRE 214 Inspection Codes and Practice .....	3
FIRE 255 Cause and Origin.....	2
FIRE 275 Fire Service Instructor.....	3
TRID 160 Hazardous Materials Technician General Training .....	3
<b>Total Technical Courses.....</b>	<b>29</b>
<b>Total minimum credits required for degree.....</b>	<b>60</b>

*It is highly recommended that all students take Emergency Medical Technician (EMT) training before graduation.*

## General Business

### ***Associate of Applied Science Degree***

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
ACTG 101 Accounting Procedures I .....	3
ACTG 102 Accounting Procedures II.....	3
BGEN 105 Introduction to Business .....	3
BGEN 110 Applied Business Leadership .....	3
BGEN 220 Business Ethics and Social Responsibility .	3
BGEN 235 Business Law .....	3
BGEN 280 Business Planning .....	3
BMGT 210 Small Business Entrepreneurship .....	3
BMGT 230 Business Logistics .....	3
BMGT 235 Management .....	3
BMGT 237 Human Relations in Business .....	3
BMGT 245 Customer Service Management .....	3
BMGT 282 Organizational Training and Development	3
BMKT 112 Applied Sales .....	3
BMKT 225 Marketing .....	3
CAPP 120 Introduction to Computers .....	3
CAPP 156 MS Excel.....	3
CAPP 158 MS Access.....	3
COMX 106 Communicating in a Dynamic Workplace	3
M 121 College Algebra.....	3*
<b>OR</b>	
M 143 Finite Mathematics .....	4*
<b>OR</b>	
M 105 Contemporary Mathematics.....	3*
WRIT 122 Introduction to Business Writing .....	3
<b>Subtotal .....</b>	<b>63</b>

\* Students should check with their academic advisor to determine the specific math course that is appropriate for their plan of study.

### **Restricted Elective chosen from the following:**

BGEN 294 Seminar .....	3
BMGT 222 Principles of Project Management.....	3
ECNS 201 Principles of Microeconomics .....	3
WRIT 220 Business & Professional Writing .....	3
<b>Total .....</b>	<b>3</b>
<b>Total minimum credits required for degree .....</b>	<b>66</b>
<i>Students should check course descriptions for required prerequisites. Math and communication requirements are usually determined by performance on placement tests or transfer credits.</i>	

## AA/AS General Studies (Self-Designed) ▽

### ***Associate of Science Program of Study***

For more information on this program, please see the City College catalog.



## Human Resources College of Business Articulated Emphasis ▽

### *Associate of Science Program of Study*

For more information on this program, please see the City College catalog.

The AS programs of study are arranged to transfer credits to a Bachelor degree program. Those who choose the College of Business articulated emphasis will be able to transfer directly into the College of Business.

### **Required Courses Credits**

#### **General Education Requirements ..... 31**

The following General Education courses are required:

M 143 in Category I subcategory A; WRIT 101 **OR** WRIT 220 in Category I subcategory B; COMX 111 **OR** BMIS 150 in Category I subcategory C; and ECNS 201 in Category III.

#### **Technical Courses**

ACTG 180 Payroll Accounting ..... 3  
ACTG 201 Principles of Financial Accounting ..... 3  
BMGT 180 Employment Law and Practices ..... 3  
BMGT 250 Employment and Compensation

Strategies ..... 3  
BMGT 281 Risk Management, Safety and Security

#### **OR**

BMGT 282 Organizational Training and Development ..... 3  
CAPP 120 Introduction to Computers

#### **OR**

CAPP 131 Basic MS Office ..... 3  
ECNS 202 Principles of Macroeconomics ..... 3  
TASK 294 Seminar/Workshop

#### **OR**

BMGT 298 Internship ..... 2-3\*

**Total Required Courses ..... 23**

**Restricted electives selected with advisor approval . 6**

**Total Credits ..... 60**

\*Students are required to complete two credits, but may earn up to three.

## Human Resources General Applied Emphasis ▽

### *Associate of Science Program of Study*

For more information on this program, please see the City College catalog.

### **Required Courses Credits**

#### **General Education Requirements ..... 31**

The following General Education courses are required:

WRIT 101 **OR** WRIT 220 in Category I subcategory B;

COMX 111 **OR** BMIS 150 in Category I subcategory C; and ECNS 201 **OR** ECNS 202 in Category III.

#### **Required Technical Courses**

ACTG 101 Accounting Procedures I ..... 3

ACTG 180 Payroll Accounting ..... 3

BMGT 180 Employment Law and Practices ..... 3

BMGT 250 Employment and Compensation Strategies 3

BMGT 281 Risk Management, Safety and Security ..... 3

BMGT 282 Organizational Training and Development 3

CAPP 120 Introduction to Computers ..... 3

TASK 294 Seminar/Workshop

#### **OR**

BMGT 298 Internship ..... 2-3\*

**Total Required Courses ..... 23**

**Restricted electives selected with advisor approval . 6**

**Total Credits ..... 60**

\*Students are required to complete two credits, but may earn up to three.

## Human Resource Management ▽

### *Certificate of Applied Science*

For more information on this program, please see the City College catalog.

### **Required Courses Credits**

#### **General Education**

WRIT 122 Introduction to Business Writing ..... 3

COMX 106 Communicating in a Dynamic Workplace 3

M 121 College Algebra ..... 3

**Total ..... 9**

Students should consult with an academic advisor before registering for General Education courses in order to maximize the number of elective credits allowed in the degree. A list of General Education courses is available in the General Bulletin and City College at MSU Billings catalog.

ACTG 101 Accounting Procedures I ..... 3

ACTG 180 Payroll Accounting ..... 3

BMGT 180 Employment Law and Practices ..... 3

BMGT 250 Employment and Compensation Strategies 3

BMGT 281 Risk Management, Safety and Security ..... 3

BMGT 282 Organizational Training and Development 3

CAPP 120 Introduction to Computers ..... 3

TASK 294 Seminar/Workshop

#### **OR**

BMGT 298 Internship ..... 2-3\*

**Total Required Courses ..... 23**

**Total minimum credits required ..... 32**

\*Students are required to complete two credits, but may earn up to three.

## Medical

### *Certificate of Technical Study*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
ECP 207 Cardiology .....	4
ECP 208 Cardiology Lab and ACLS .....	1
ECP 220 Special Considerations .....	1
ECP 221 OB/Neonate/Pediatrics .....	2
ECP 222 OB/Neonate/Pediatrics Lab and NRP and PALS .....	1
ECP 242 Medical .....	2
ECP 243 Medical Lab .....	1
ECP 246 Hospital Clinical II .....	6
<b>Total minimum credits required .....</b>	<b>18</b>

## Medical Administrative Assistant

### *Associate of Applied Science Degree*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
ACTG 101 Accounting Procedures I .....	3
AHMS 144 Medical Terminology .....	3
AHMS 160 Beginning Procedural Coding .....	3
AHMS 162 Beginning Diagnosis Coding .....	3
AHMS 175 Medical Law and Ethics .....	3
AHMS 220 Medical Office Procedures .....	3
AHMS 255 Medical Transcription I .....	3
AHMS 299 Capstone Project .....	1
BGEN 105 Introduction to Business .....	3
BIOH 101 Foundations of Human Biology .....	3
CAPP 110 Short Courses: MS Outlook .....	1
OR CAPP 153 MS PowerPoint .....	2
CAPP 120 Introduction to Computers .....	3
CAPP 154 MS Word .....	3
CAPP 156 MS Excel .....	3
CAPP 158 MS Access .....	3
COMX 106 Communicating in a Dynamic Workplace .....	3
COMX 111 Introduction to Public Speaking .....	3
HIT 101 Introduction to Health Care Informatics .....	3
HIT 265 Electronic Health Record in Medical Practice .....	3
M 108 Business Mathematics .....	3
M 121 College Algebra .....	3*
<b>OR</b>	
M 143 Finite Mathematics .....	4*
<b>OR</b>	
M 105 Contemporary Mathematics .....	3*
WRIT 122 Introduction to Business Writing .....	3
<b>Subtotal .....</b>	<b>62-64</b>

\* Students should check with their academic advisor to determine the specific math course that is appropriate for their plan of study.

Restricted Electives chosen in consultation with

academic advisor (see below) ..... 3

**Total minimum credits required for degree ..... 65-67**

### **Suggested Restricted Electives:**

ACTG 125 QuickBooks  
 BGEN 235 Business Law  
 BGEN 110 Applied Business Leadership  
 BMGT 237 Human Relations in Business  
 BMGT 245 Customer Service Management  
 CSCI 181 Web Design & Programming  
 TASK 298 Internship/Cooperative Education  
*Students should check course descriptions for required prerequisites. Math and communication requirements are usually determined by performance on placement tests or transfer credits.*

## Medical Coding & Insurance

### Billing ▽

### *Certificate of Applied Science*

For more information on this program, please see the City College catalog.

<b>Required courses</b>	<b>Credits</b>
AHMS 144 Medical Terminology .....	3
AHMS 160 Beginning Procedural Coding .....	3
AHMS 162 Beginning Diagnosis Coding .....	3
AHMS 220 Medical Office Procedures .....	3
AHMS 250 Advanced Medical Coding .....	3
AHMS 299 Capstone Project .....	1
BIOH 101 Foundations of Human Biology .....	3
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace .....	3
M 108 Business Mathematics .....	3
WRIT 122 Introduction to Business Writing .....	3
<b>Total Credits .....</b>	<b>31</b>
<i>Students should check the course descriptions for required prerequisites. Math and English requirements are usually determined by performance on placement tests or transfer credits.</i>	

## Networking Technology

### *Associate of Science Program of Study*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
<b>General Education Requirements .....</b>	<b>31</b>
Students should consult with an academic advisor before registering for General Education courses.	
<b>Required Technical Courses</b>	
CAPP 110 Short Courses: MS Outlook .....	1
ITS 166 Configuring MS Windows 10 .....	3
ITS 171 Configuring MS Server 2016 .....	3
ITS 256 CCNA Security .....	3
NTS 104 CCNA 1: Intro to Networks .....	4

NTS 105 CCNA 2: Routing & Switching Essentials...	4
NTS 204 CCNA 3: Scaling Networks .....	4
<b>Total .....</b>	<b>22</b>
<b>Total minimum credits required for degree .....</b>	<b>60</b>
<b>Preparatory Course</b>	
CAPP 120 Introduction to Computers .....	3
<b>Recommended</b>	
CAPP 156 MS Excel .....	3

## Networking Technology

### *Certificate of Applied Science*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
CAPP 156 MS Excel .....	3
COMX 106 Communicating in a Dynamic Workplace	3
ITS 166 Configuring MS Windows 10.....	3
ITS 171 Configuring MS Server 2016.....	3
ITS 256 CCNA Security .....	3
M 111 Technical Mathematics .....	3
NTS 104 CCNA 1: Intro to Networks .....	4
NTS 105 CCNA 2: Routing & Switching Essentials...	4
NTS 204 CCNA 3: Scaling Networks .....	4
WRIT 104 Workplace Communications .....	3
<b>Total minimum credits required .....</b>	<b>33</b>

**NOTE:** Students are encouraged to take the industry certifications tests for Cisco and MCSE. Please contact our testing center for more information on cost and scheduling.

## Practical Nursing

### *Certificate of Applied Science*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
^BIOH 101 Foundations of Human Biology .....	3
BIOH 105 Basic Human Biology Lab .....	1
M 120 Mathematics with Health Care Applications.....	3
NRSG 130 Fundamentals of Nursing .....	3
NRSG 131 Fundamentals of Nursing Lab .....	3
NRSG 135 Pharmacology for Practical Nurses .....	3
NRSG 136 Pharmacology for Practical Nurses Lab.....	2
NRSG 140 Adult Health Nursing .....	4
NRSG 141 Adult Health Nursing Clinical .....	3
NRSG 142 Nursing Care of Women and Children.....	3
NRSG 143 Nursing Care of Women and Children Clinical.....	1
NRSG 148 Leadership Issues for Practical Nurses.....	2
NRSG 149 Leadership Issues for Practical Nurses Clinical.....	1
NRSG 152 Gerontology and Community Nursing.....	2
NRSG 153 Gerontology and Community Nursing Clinical.....	2

PSYX 100 Introduction to Psychology .....	3
WRIT 101 College Writing I .....	3
<b>Total .....</b>	<b>42</b>
^ Or BIOH 104 Basic Human Biology	

## Nursing

### Registered Nurse

#### *Associate of Science (ASN)*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
BIOH 201 Human Anatomy and Physiology I .....	3
BIOH 202 Human Anatomy and Physiology I Laboratory .....	1
BIOH 211 Human Anatomy and Physiology II .....	3
BIOH 212 Human Anatomy and Physiology II Laboratory .....	1
BIOM 250 Microbiology for Health Sciences .....	3
BIOM 251 Microbiology for Health Sciences Lab .....	1
CHMY 121 Introduction to General Chemistry .....	3
CHMY 122 Introduction to General Chemistry Laboratory .....	1
M 121 College Algebra.....	3
NRSG 230 Nursing Pharmacology .....	3
NRSG 231 Pharmacology for Nursing Lab .....	2
NRSG 232 Foundations for Nursing .....	3
NRSG 233 Foundations of Nursing Lab .....	3
NRSG 234 Adult Nursing I.....	3
NRSG 235 Adult Nursing I Clinical .....	2
NRSG 236 Health and Illness of Maternity Nursing ....	2
NRSG 237 Health and Illness of Maternal Nursing Clinical .....	1
NRSG 244 Adult Nursing II .....	3
NRSG 245 Adult Nursing II Clinical .....	2
NRSG 246 Health and Illness of Child and Family Nursing.....	2
NRSG 247 Health and Illness of Child and Family Nursing Clinical .....	1
NRSG 254 Mental Health Concepts .....	3
NRSG 255 Mental Health Concepts Clinical.....	1
NRSG 256 Pathophysiology .....	3
NRSG 259 Adult Nursing III .....	3
NRSG 260 Adult Nursing III Lab .....	1
NRSG 261 Adult Nursing III Clinical.....	2
NRSG 266 Managing Client Care for the RN.....	2
NRSG 267 Managing Client Care for the RN Clinical .	2
PSYX 100 Introduction to Psychology .....	3
SOCI 101 Introduction to Sociology.....	3
WRIT 101 College Writing I .....	3
<b>Total for Associate of Science in Nursing.....</b>	<b>72</b>

For the RN to BSN Degree Completion Program, See the Department of Health Care Services on page 86.

## Paramedic

### *Associate of Applied Science*

For more information on this program, please see the City College catalog.

#### **Required Courses** **Credits**

AHMS 144 Medical Terminology .....	3
BIOH 101 Foundations of Human Biology .....	3
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace .....	3
ECP 200 Transition to Paramedic Care .....	3
ECP 201 Paramedic Fundamentals .....	3
ECP 202 Paramedic Fundamentals Lab .....	1
ECP 206 EMS Case Studies .....	4
ECP 207 Cardiology .....	4
ECP 208 Cardiology Lab and ACLS .....	1
ECP 216 Hospital Clinical I .....	5
ECP 220 Special Considerations .....	1
ECP 221 OB/Neonate/Pediatrics .....	2
ECP 222 OB/Neonate/Pediatrics Lab and NRP and PALS .....	1
ECP 230 Trauma .....	2
ECP 232 Pulmonary .....	2
ECP 233 Trauma/Pulmonary Lab and PHTLS .....	1
ECP 242 Medical .....	2
ECP 243 Medical Lab .....	1
ECP 246 Hospital Clinical II .....	6
ECP 250 NREMT Exam Preparation .....	3
ECP 251 NREMT Exam Preparation Lab .....	1
ECP 295 Field Internship .....	8
M 105 Contemporary Mathematics	
<b>OR</b> STAT 141 Introduction to Statistical Concepts	
<b>OR</b> M 121 College Algebra	
<b>OR</b> M 114 Extended Technical Mathematics .....	3
WRIT 122 Introduction to Business Writing	
<b>OR</b> WRIT 121 Introduction to Technical Writing ....	3
Restricted Elective .....	3
<b>Total .....</b>	<b>72</b>

*Students should check course descriptions for required prerequisites.*

## Paramedic

### *Certificate of Technical Study*

For more information on this program, please see the City College catalog.

#### **Required Courses** **Credits**

ECP 251 NREMT Exam Preparation Lab .....	1
ECP 291 Special Topics: Conflict Resolution for Public Safety .....	3
ECP 295 Field Internship .....	8
Restricted Elective .....	3
<b>Total minimum credits required .....</b>	<b>15</b>

## Pharmacy Technician

### *Certificate of Applied Science*

For more information on this program, please see the City College catalog.

#### **Required Courses** **Credits**

AHMS 144 Medical Terminology .....	3
COMX 106 Communicating in a Dynamic Workplace .....	3
^PHAR 100 Introduction to Pharmacy Practice for Technicians .....	3
^PHAR 101 Pharmacy Calculations .....	3
^PHAR 102 Pharmacology for Technicians .....	6
PHAR 104 Pharmacy Dispensing Lab .....	3
^PHAR 120 Medication Safety .....	3
^PHAR 121 Preparation for the PTCB Exam .....	1
PHAR 198 Internship: Pharmacy .....	8
<b>Total credits required .....</b>	<b>33</b>

^Course offered online only, through Missoula College

## Power Plant Technology

### *Associate of Applied Science Degree*

For more information on this program, please see the City College catalog.

#### **Required Courses** **Credits**

BGEN 105 Introduction to Business .....	3
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace .....	3
COMX 111 Introduction to Public Speaking .....	3
M 114 Extended Technical Mathematics .....	3
PPT 101 Fundamentals of Processing Technology	
Lecture .....	4
PPT 102 Fundamentals of Processing Technology	
Laboratory .....	1
PPT 120 Environmental Awareness .....	2
PPT 130 Process Diagrams for Process Technology ....	2
PPT 135 Instrument and Control Systems Lecture .....	4
PPT 136 Instrument and Control Systems Laboratory ..	1
PPT 151 Process Plant Safety I .....	2
PPT 161 Process Plant Safety II .....	2
PPT 175 Process Plant Sciences Lecture .....	4
PPT 176 Process Plant Sciences Laboratory .....	1
PPT 207 Boilers, Accessories and Basic Operations ....	3
PWRP 201 Power Plant Equipment and Operations .....	3
PWRP 203 Energy Sources and Conversion .....	3
PWRP 210 Turbines, Accessories and Basic Operation ..	3
PWRP 214 Power Generation .....	4
PWRP 216 Electrical System Components and	
Protections .....	3
PWRP 218 Advanced Plant Operations and	
Troubleshooting .....	4
PWRP 296 Cooperative Education/Internship .....	2
TRID 160 Hazardous Materials Technician General	
Training .....	3

TRID 185 Introduction to Industrial Power Systems	
Lecture .....	2
TRID 186 Introduction to Industrial Power Systems	
Laboratory .....	1
WRIT 122 Introduction to Business Writing	
OR WRIT 121 Introduction to Technical Writing .....	3
<b>Total minimum credits required for degree .....</b>	<b>72</b>

## Process Plant Technology

### *Associate of Applied Science Degree*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
BGEN 105 Introduction to Business .....	3
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace	3
COMX 111 Introduction to Public Speaking .....	3
M 114 Extended Technical Mathematics .....	3
PPT 101 Fundamentals of Processing Technology	
Lecture .....	4
PPT 102 Fundamentals of Processing Technology	
Laboratory .....	1
PPT 120 Environmental Awareness .....	2
PPT 130 Process Diagrams for Process Technology .....	2
PPT 135 Instrument and Control Systems Lecture .....	4
PPT 136 Instrument and Control Systems Laboratory .	1
PPT 151 Process Plant Safety I .....	2
PPT 161 Process Plant Safety II .....	2
PPT 175 Process Plant Sciences Lecture .....	4
PPT 176 Process Plant Sciences Laboratory .....	1
PPT 207 Boilers, Accessories and Basic Operations .....	3
PPT 208 Equipment and Operations Laboratory .....	2
PPT 210 Equipment and Operations Lecture .....	4
PPT 211 Advanced Operations Lecture .....	2
PPT 212 Advanced Operations Laboratory .....	1
PPT 220 Quality Control Practices .....	2
PPT 225 Plant Investigation and Troubleshooting .....	2
PPT 296 Cooperative Education/Internship .....	3
TRID 160 Hazardous Materials Technician General	
Training .....	3
TRID 185 Introduction to Industrial Power Systems	
Lecture .....	2
TRID 186 Introduction to Industrial Power Systems	
Laboratory .....	1
WRIT 122 Introduction to Business Writing	
OR WRIT 121 Introduction to Technical Writing .....	3
<b>Restricted Elective (to be selected in consultation with the advisor) .....</b>	<b>3</b>
Choose from the following:	
BIOB 101 Discover Biology .....	3
CAPP 110 Short Courses: MS Outlook .....	1
CAPP 156 MS Excel .....	3
PWRP 210 Turbines, Accessories and Basic	
Operations .....	3

SOCI 101 Introduction to Sociology .....	3
TRID 151 Welding .....	2
<b>Total minimum credits required for degree .....</b>	<b>69</b>
<i>Students should check the course descriptions for required prerequisites.</i>	

## Radiologic Technology

### *Associate of Applied Science*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
AHXR 101 Patient Care in Radiology .....	3
AHXR 108 Introduction to Radiologic Physics .....	3
AHXR 150 Radiological Technology I .....	3
AHXR 151 Radiology I Positioning Lab .....	1
AHXR 160 Radiological Technology II .....	4
AHXR 161 Radiology II Positioning Lab .....	1
AHXR 181 Radiology III Positioning Lab .....	1
AHXR 195 Clinical Radiology Intersession .....	1
AHXR 195A Radiographic Clinical I .....	5
AHXR 195B Radiographic Clinical II .....	6
AHXR 195C Radiographic Clinical III .....	9
AHXR 225 Radiobiology/Radiation Protection .....	3
AHXR 250 Radiologic Technology III .....	4
AHXR 260 Radiologic Technology IV .....	2
AHXR 270 Radiographic Registry Review .....	2
AHXR 295A Radiographic Clinical IV .....	8
AHXR 295B Radiographic Clinical V .....	8
BIOH 201 Human Anatomy and Physiology I .....	3
BIOH 202 Human Anatomy and Physiology I	
Laboratory .....	1
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace	3
M 114 Extended Technical Mathematics (preferred)	
OR M 105 Contemporary Mathematics .....	3
WRIT 122 Introduction to Business Writing	
OR WRIT 121 Introduction to Technical Writing .....	3
<b>Total .....</b>	<b>80</b>
<i>Students should check the course descriptions for required prerequisites.</i>	

### **Recommended Prerequisite Courses**

BIOH 211 Human Anatomy and Physiology II .....	3
PHSX 103 Our Physical World .....	3

## Sustainable Energy Technician

### *Associate of Applied Science*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
<b>General Education Requirements</b>	
COMX 106 Communicating in a Dynamic Workplace	3
M 114 Extended Technical Mathematics	
OR M 121 College Algebra .....	3

WRIT 121 Introduction to Technical Writing .....	3
<b>Sustainable Energy Technician Required Courses</b>	
CAPP 120 Introduction to Computers .....	3
DST 140 Introduction to Hydraulics .....	2
DST 141 Introduction to Hydraulics Lab .....	2
ELCT 130 Electric Motors and Generators .....	3
ELCT 241 Electric Motor Controls .....	3
ELCT 250 Programmable Logic Controllers.....	3
ETEC 103 AC/DC Electronics II .....	3
ETEC 220 Electrical Power and Distribution I.....	3
HVC 110 Introduction to HVAC.....	3
HVC 255 Advanced Controls .....	3
NRGY 101 Introduction to Sustainable Energy .....	3
NRGY 121 Climb Safety and Rigging .....	1
NRGY 220 Wind Turbine Equipment .....	3
NRGY 235 Building Energy Efficiency.....	3
NRGY 243 Fundamentals of Photovoltaic Design and Installation .....	3
NRGY 299 Senior Capstone.....	3
NTS 104 CCNA 1: Intro to Networks .....	4
TRID 150 Environmental and Shop Practices .....	2
TRID 185 Introduction to Industrial Power Systems Lecture .....	2
TRID 186 Introduction to Industrial Power Systems Laboratory.....	1
Restricted Elective.....	3
<b>Choose from the following:</b>	
DDSN 114 Introduction to CAD .....	3
ETEC 284 Digital Electronics .....	4
NRGY 291 Special Topics .....	3
NRGY 298 Internship.....	3
<b>Total.....</b>	<b>65</b>

## Surgical Technology

### *Associate of Applied Science*

For more information on this program, please see the City College catalog.

The Missoula College University of Montana is proud to partner with City College at Montana State University Billings to offer the Associate of Applied Science Degree in Surgical Technology on the Outreach campus in Billings.

Students will take classes on the City College at Montana State University Billings (City College at MSUB) and Montana State University Billings (MSU Billings) campuses, and online through The Missoula College University of Montana (MCUM). The lab and clinical components of the curriculum are offered at St. Vincent Healthcare and Billings Clinic. All coursework can be completed in Billings. However, Outreach

students are required to come to Missoula for commencement and to take the national Certification exam.

Prospective students may contact MCUM Outreach Office at 406-243-7871 for more information regarding the Surgical Technology program or Program Director, Debbie Fillmore, at 406-243-7860 or [debbie.fillmore@mso.umt.edu](mailto:debbie.fillmore@mso.umt.edu)

## Trauma

### *Certificate of Technical Study*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
ECP 201 Paramedic Fundamentals .....	3
ECP 202 Paramedic Fundamentals Lab .....	1
ECP 206 EMS Case Studies.....	4
ECP 216 Hospital Clinical I.....	5
ECP 230 Trauma.....	2
ECP 232 Pulmonary.....	2
ECP 233 Trauma/Pulmonary Lab and PHTLS .....	1
<b>Total minimum credits required.....</b>	<b>18</b>

## Welding and Metal Fabrication Technology

### *Associate of Applied Science*

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace .....	3
M 114 Extended Technical Mathematics.....	3
WLDG 117 Blueprint Reading and Welding Symbols .....	3
WLDG 124 Welding Theory, Technology and Safety.....	3
WLDG 125 Cutting and Shielded Metal Arc Welding Lab .....	5
WLDG 126 Shielded Metal Arc Welding Lab.....	4
WLDG 153 Metal Fabrication Basics.....	3
WLDG 154 Metal Fabrication Basics Lab.....	3
WLDG 156 Semi-Automatic Welding.....	2
WLDG 157 Semi-Automatic and SMAW Lab .....	5
WLDG 205 Applied Metallurgy .....	2
WLDG 212 Pipe Welding and Layout .....	3
WLDG 213 Pipe Welding I Lab .....	5
WLDG 215 Gas Tungsten Arc Welding .....	5
WLDG 250 Metals Production .....	2
WLDG 251 Specialty Welding Processes.....	5
WLDG 280 Weld Testing Certification .....	2

WLDG 281 Weld Testing Certification Lab .....	3
WRIT 122 Introduction to Business Writing.....	3
<b>Total minimum credits required .....</b>	<b>67</b>

**Suggested Elective**

WLDG 298 Internship/Cooperative Education .....	3-9
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*In order to take the first semester of WLDG courses, students must prove their skills in Reading Comprehension and Writing. For more information, please contact the Advising Office.*

## Welding and Metal Fabrication

### Technology

#### ***Certificate of Applied Science***

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace 3	
M 111 Technical Mathematics .....	3
WLDG 117 Blueprint Reading and Welding Symbols. 3	
WLDG 124 Welding Theory, Technology and Safety . 3	
WLDG 125 Cutting and Shielded Metal Arc Welding Lab .....	5
WLDG 126 Shielded Metal Arc Welding Lab .....	4
WLDG 153 Metal Fabrication Basics .....	3
WLDG 154 Metal Fabrication Basics Lab .....	3
WLDG 156 Semi-Automatic Welding .....	2
WLDG 157 Semi-Automatic and SMAW Lab.....	5
WRIT 104 Workplace Communications .....	3
<b>Total minimum credits required .....</b>	<b>40</b>

*In order to take the first semester of WLDG courses, students must prove their skills in Reading Comprehension and Writing. For more information, please contact the Advising Office.*

## Welding for Energy Technology

#### ***Certificate of Applied Science***

For more information on this program, please see the City College catalog.

#### **Entrance Requirement**

Entrance requirement for the Welding for Energy Technology Certificate of Applied Science is successful completion of the Welding and Metal Fabrication Certificate of Applied Science or equivalent professional industry certification, and/or evaluation by qualified City College faculty of applicable work experience.

<b>Required Courses</b>	<b>Credits</b>
CAPP 120 Introduction to Computers .....	3
COMX 106 Communicating in a Dynamic Workplace 3	
M 111 Technical Mathematics .....	3
WLDG 205 Applied Metallurgy.....	2

WLDG 212 Pipe Welding and Layout.....	3
WLDG 213 Pipe Welding I Lab .....	5
WLDG 215 Gas Tungsten Arc Welding .....	5
WLDG 250 Metals Production .....	2
WLDG 251 Specialty Welding Processes.....	5
WLDG 280 Weld Testing Certification .....	2
WLDG 281 Weld Testing Certification Lab.....	3
WRIT 104 Workplace Communications .....	3
<b>Total minimum credits required.....</b>	<b>39</b>

*Students should check the course descriptions for required prerequisites.*

The WLDG courses are on a fall start rotation.

## Welding and Fabrication 1

#### ***Certificate of Technical Study***

For more information on this program, please see the City College catalog.

<b>Required Courses</b>	<b>Credits</b>
WLDG 117 Blueprint Reading and Welding Symbols . 3	
WLDG 124 Welding Theory, Technology and Safety.. 3	
WLDG 125 Cutting and Shielded Metal Arc Welding Lab .....	5
WLDG 126 Shielded Metal Arc Welding Lab.....	4
WRIT 104 Workplace Communications.....	3
<b>Total minimum credits required.....</b>	<b>18</b>

*Students should check the course descriptions for required prerequisites.*

# MSU Billings Extended Campus

***Mr. Kevin Nemeth, Director***

***COE 114***

***(406) 896–5890***

***[www.msubillings.edu/extendedcampus](http://www.msubillings.edu/extendedcampus)***

## Mission Statement

MSU Billings Extended Campus supports the University's mission by engaging our community and our region with innovative services, programs, and activities delivered in alternative formats and locations.

These programs and activities are designed and carried out in partnership with various units of Academic Affairs, Student Affairs, Administrative Services, and community partners.

## Connecting the Campus to the Community

MSUB Extended Campus serves to provide greater access to academic programs, create new partnerships with organizations external to the University, and strengthen and expand existing partnerships with regional and community organizations.

MSUB Extended Campus activities are organized into several program areas. These include Certificate Programs, Community Programs, Continuing Education for Educators, Professional Development Programs and Youth Programs.

## Certificate Programs

Extended Campus offers both credit and non-credit programs in collaboration with academic departments and community organizations.

## Community Programs

Community Programs provide access to educational activities and events at little to no cost. They include such notable events as "Girls-n-Science," "Kids on Campus," youth camps, and other non-credit classes.

## Continuing Education – K–12

### Educators

Designed for educators who are seeking university credit.

### Professional Development Programs

These programs and courses focus on knowledge and skill development needed to advance in a profession or change careers. We can also develop customized programs to meet the specific needs of an individual business or organization.

### Youth Programs

Academic-based camps designed to engage youth in fun learning programs. Camps are offered in summer and during winter break.



# MSU Billings Online

We are pleased to be able to offer you an opportunity to take college courses via the Internet as a way of overcoming barriers of time and place. Our students have told us that they need the ability to fulfill their academic goals in an environment that affords them “freedom and flexibility, comfort and convenience and more time for work and family.” By combining our commitment to “Access and Excellence” with the technology that allows you to “Learn Online... Anywhere... Anytime,” this program ensures that you can achieve your personal, professional and academic goals while not having to sacrifice the other things that are important in your life.

## Health Career Pathways 2+2 Online Degree Completion Program

### Bachelor of Applied Science (with thematic concentration in Healthcare Administration, Emergency Medical Services Management, or Radiology Technology Management)

This program provides individuals who have earned an associate’s degree or radiology technology certification an opportunity to complete an interdisciplinary bachelor’s degree. The program has been strategically designed to prepare graduates for success in leadership roles in Healthcare Administration, Emergency Medical Services Management, or Radiology Technology.

Montana State University Billings will work with your college or institution, enabling you to seamlessly transfer credits you have earned in your completed associate’s degree as a paramedic, radiologic technician, or other health-related field toward completion of an interdisciplinary bachelor’s degree in our 2+2 Online Degree Completion Program.

This unique program provides working adults with an opportunity to earn a bachelor’s degree while still enjoying freedom and flexibility, comfort and

convenience, and more time for work and family. Students admitted to this program will complete the bachelor’s degree within two years, via fully online courses.

### Healthcare Administration Concentration (33 credits)

	Credits
BMGT 335 Management and Organization .....	3
BMKT 325 Principles of Marketing .....	3
COMX 320 Principles of Organizational Communication .....	3
COMX 351 Principles of Public Relations .....	3
HADM 305 Survey of the U.S. Healthcare System ..	3
HADM 307 Health Informatics .....	3
HADM 335 Health Law & Ethics .....	3
HADM 425 Financial Management and Budgeting in Healthcare .....	3
HADM 440 Managerial Epidemiology and the Public’s Health .....	3
HADM 450 Health Policy and Politics .....	3
HADM 462 Supervision in Healthcare .....	3

### Emergency Medical Services Management (33 credits)

	Credits
BMGT 335 Management and Organization .....	3
BMGT 329 Human Resource Management .....	3
BMKT 325 Principles of Marketing .....	3
COMX 320 Principles of Organizational Communication .....	3
HADM 305 Survey of the U.S. Healthcare System ..	3
HADM 307 Health Informatics .....	3
HADM 335 Health Law & Ethics .....	3
HADM 422 Operations, Outcomes, and Quality .....	3
HADM 425 Financial Management and Budgeting in Healthcare .....	3
HADM 445 Managing Healthcare Organizations .....	3
HADM 462 Supervision in Healthcare .....	3

## Radiology Technology Management Concentration (36 credits)

This thematic concentration is intended for individuals who have earned an Associate of Applied Science (AAS) degree in Radiology Technology, Associate of Occupational Science degree in Radiography or a radiology technology certificate holder.

### Credits

BMGT 335 Management and Organization .....	3
BMGT 329 Human Resource Management .....	3
BMKT 325 Principles of Marketing .....	3
COMX 320 Principles of Organizational Communication .....	3
HADM 305 Survey of the U.S. Healthcare System...	3
HADM 307 Health Informatics .....	3
HADM 335 Health Law and Ethics .....	3
HADM 422 Operations, Outcomes, and Quality .....	3
HADM 425 Financial Management and Budgeting in Healthcare .....	3
HADM 445 Managing Healthcare Organizations .....	3
HADM 462 Supervision in Healthcare .....	3
*REHA 201 Introduction to Diversity in Counseling .....	3

\*May satisfy General Education requirements.

A final degree completion plan of study will be developed and approved for each student following an analysis of his or her associate degree transcripts. Some students may need to earn additional course credits beyond the thematic concentrations in order to satisfy missing general education requirements or other required elective credits. Any additional course credits required will be confirmed for the student before getting started in the program. Courses may be subject to change.

## Degree Planning & Course Selection Advising

### Assistance

Students are encouraged to work with an advisor to ensure that courses selected will successfully meet all degree requirements and also fulfill the student's academic interests and goals. For academic advising and course selection assistance, please contact Advising & Career Services at [advising@msubillings.edu](mailto:advising@msubillings.edu)

# Special Programs and Pre–Professional Programs

## Pre–Engineering and Pre–Engineering Technology

***Advising & Career Services, McMullen***

***First Floor West***

***(406) 657–2240***

Students interested in a career in Engineering may pursue a two-year course of study at MSU Billings, culminating in an Associate of Science Degree (A.S.) with a Program of Study in Pre-Engineering. This two-year course of study allows students to complete their general education requirements as well as the prerequisites for further engineering study including introductory engineering courses in statics, dynamics, and strength of materials. Students are also required to participate in a two-credit introduction to general engineering course during their first year to help them refine their career goals through the exploration of a variety of engineering disciplines. This program can be tailored for specific engineering disciplines or can be pursued as a general course of study in pre-engineering. Ultimately, students wishing to further their engineering education will transfer into an engineering bachelor's program in the discipline of their choosing at an accredited university.

In order to complete the requirements for an A.S. Program of Study in Pre-Engineering in two years, it is generally necessary to carry 16-18 credit hours per semester.

## Pre–Law Program

***Advising & Career Services, McMullen***

***First Floor West***

***(406) 657–2240***

Most accredited law schools require that a Bachelor's degree be completed prior to registration. Additionally, admission is based upon the applicant's score on the Law School Admission Test (LSAT), ethical character, professional promise, academic achievements, and letters of recommendation. Because admission to law school is highly competitive, a student should attempt to achieve a cumulative grade point average of at least 3.00 and a LSAT score of at least 150 within a range of 120 to 180.

Law schools do not prescribe a specific undergraduate course of study. Students should seek out specific requirements of the law schools to which they are applying. Individuals with baccalaureate degrees in every subject area have been admitted to law schools and have become successful lawyers. The best background, however, is a program that provides a broad liberal arts education. Useful majors include English, Communication Arts, Foreign Languages, History, Psychology, and Sociology. As the practice of law becomes increasingly technical, a specialized background in business or science may prove valuable. A major should be chosen on the basis of the interest and challenge it offers, not because it might guarantee admission to a law school.

Montana State University Billings offers a minor in Political Science with a pre-law emphasis. The Political Science minor includes courses in United States Government, Constitutional Law, Civil Liberties, and Juvenile Delinquency--areas directly related to the law.

Certain academic skills are essential: the ability to read effectively with speed and comprehension; the ability to write clearly, including a good command of grammar; and the ability to think logically. These basic skills can be acquired by carefully selecting courses and instructors, regardless of the specific subject. Communication skills can also be developed through drama, creative writing, and the like. The ability to type and computer skills are invaluable.

Law schools require applicants to take the LSAT, a half-day standardized test. It consists of three sections which evaluate a student's reading comprehension, analytical reasoning, logical reasoning, and other skills. A 30-minute writing session is also included. The writing sample is not scored; rather, copies of the essay are sent to all schools to which candidates request their LSAT score sent. Most law schools also require candidates to register for the Law School Data Assembly Service (LSDAS), a biographical and academic information clearinghouse. The LSAT should be taken in June following the junior year or in October of the senior year.

Most law schools operate on a semester basis; they begin the year of study in September and only allow admission at that time. Pre-law students should begin to consider possible law schools during the spring of their junior year and complete their applications by the

end of the fall semester of their senior year. The Pre-Law Handbook provides information about all accredited law schools; it may be consulted in the pre-law advisor's office.

Montana State University Billings provides the basis for an excellent pre-law education. While admission to law school ultimately depends upon the student's abilities, MSU Billings offers challenging courses and instructors who help individuals develop the skills needed for admission into law school and a successful legal career.

This information is general and only serves as a beginning. More detailed information, including a suggested pre-law curriculum and particular law school admission standards, is available on request from the faculty pre-law advisor.

## Pre-Medicine

### *Advising & Career Services, McMullen*

#### *First Floor West*

**(406) 657-2240**

Students interested in medicine, veterinary medicine, dentistry, or medical technology must obtain a Bachelor's degree in preparation for these professional programs. No specific undergraduate major is required for these health professions, but a strong academic background in biology and chemistry is expected for admission to most medical-science professional programs. Programs that build a foundation in science and mathematics are adjusted to best fit the needs of particular professional or graduate schools and the student.

Medical schools look for students who are well-rounded. Individual programs can be designed to provide the student with the maximum opportunity for pursuing educational goals. Classes outside the sciences can be helpful to offer breadth to a student's education. Education outside of the classroom is also important. Medical schools expect students to have a strong understanding of the world around them. Volunteer work, internships, and involvement in clubs or activities that interest students are strongly encouraged.

Medical technology students graduating with a baccalaureate major in Biology or Chemistry need to apply to an approved school of medical technology to serve a 12-month internship. Students in the other areas should apply to an appropriate professional school before graduation from MSU Billings. Biology and

Chemistry faculty will assist and advise the student in arranging these applications, but the initiative lies with the student.

Pre-medical students should regularly use the *Medical School Admissions Requirement Handbook* to find admissions standards of accredited medical schools and keep abreast of requirements in this field.

## Pre-Nursing

### *Advising & Career Services, McMullen*

#### *First Floor West*

**(406) 657-2240**

The Pre-Nursing curriculum at MSU Billings is designed in conjunction with the College of Nursing at Montana State University-Bozeman. This two year pre-nursing program fulfills the basic undergraduate General Education requirements and the College of Nursing requirements WITH THE EXCEPTION OF FIVE (5) LOWER DIVISION NURSING COURSES. One of these five lower division courses is available online through MSU-Bozeman. The remaining four (4) lower division nursing courses are taught at the Bozeman Campus and are offered on a limited basis at the Billings campus.

Upper Division placement is competitive and based strictly on a "selected" Grade Point Average (GPA) calculation. Due to occasional changes in the curriculum, it is essential to contact the pre-nursing advisor before course selection.

Students interested in details of the complete MSU-Bozeman program may write directly to MSU-Bozeman College of Nursing or contact the director at the Billings Extended Campus of the MSU-Bozeman College of Nursing located on the MSU Billings campus, Apsaruke Hall 212, 657-1775.

Students are reminded that a Practical Nursing Program is available at City College at MSU Billings. The chairperson of the Health Occupations Department may be reached at (406) 247-3000.

## **Pre-Pharmacy and Pre-Physical Therapy**

***Advising & Career Services, McMullen***

***First Floor West***

***(406) 657-2240***

Students interested in Pharmacy or Physical Therapy should see an advisor for information. Forms outlining the curricula for transfer to the University of Montana in either program are available from the from Advising & Career Services on McMullen first floor west.

Students planning to transfer to any other school will need to obtain a catalog from the college and, in consultation with their advisor, develop a plan of study to meet the specific requirements of the college of their choice. Because competition for acceptance into the professional schools is intense, the student should maintain a strong grade point average, have experience in the field, be knowledgeable of the application deadlines for the schools of choice, and apply to several schools.

# Course Terms and Definitions

Listings in the Course Descriptions section are grouped alphabetically according to academic discipline. Then, under each academic discipline, the courses follow a numerical order. Each listing includes the description of the course content, the course credit, prerequisites (if any), and corequisites (if any). Course offerings are subject to the availability of staff and adequate enrollment. Students should consult the yearly time schedule of classes to determine the courses actually offered each semester.

## Cross-Listed Rubrics

Some courses carry two rubrics (i.e. ARTH/NASX 439). This means the same course is offered in the Art History listing and in the Native American Studies listing of courses.

## Course Numbering

The academic program at Montana State University Billings is organized in lower division, upper division and graduate courses. Lower division courses are numbered 100 to 299; upper division courses carry numbers from 300 to 499; graduate courses have numbers from 500 to 599. Ordinarily, freshmen take courses carrying numbers from 100 to 199; sophomores from 200 to 299; juniors from 300 to 399; and seniors from 400 to 499. However, provided that prerequisites are met, freshmen may take courses carrying numbers from 200 to 299, sophomores from 300 to 399, and juniors from 400 to 499. Courses numbered 500 to 599 are available to senior students who are within one semester of graduation, have a minimum grade point average of 3.00, and have received prior approval from the Director of Graduate Studies. If these conditions have been satisfied, students may enroll for up to eight semester graduate credits.

The designated course number for professional development credit bearing courses offered by Extended Campus is 589. These credits do not count toward any degree at MSU Billings.

Courses numbered 600 and above are only available to graduate students.

## Educator Preparation Program Restricted Courses

Certain upper division courses are restricted to students admitted to the Educator Preparation Program at MSU Billings. (See page 254 for a listing of specified courses.) Only those students admitted to the Educator Preparation Program may register for these restricted courses.

## Credit Hour

The number following the course title indicates the number of credits for which the course is offered. When the credit number is followed by “R,” the course may be repeated up to the total credit indicated. For example, 1 cr. R-6 means a course is offered for one credit but may be repeated up to a maximum of six credits. When the indicated credit is preceded by a “V,” the possible credit varies. For example, V 1-5 cr. means the credit varies from one up to a maximum of five. Normally, a credit represents 60 minutes of classroom instruction per week for one semester. The time required for each credit may be distributed in any combination among preparation, recitation, lecture or laboratory work.

## Lecture and Laboratory 4 cr. (Lec. 3; Lab 1)

Illustrates a class with three credits of lecture per week and one credit of laboratory.

## Lecture and Studio 4 cr. (Lec. 2, Stu 2)

Illustrates a class with two credits of lecture per week and two credits of studio work a week.

## Recitation and Studio 4 cr. (Rct 2, Stu 2)

Illustrates a class with two credits of recitation a week and two credits of studio work a week.

## Course Rotation (F, Sp, Su)

Illustrates when a class is regularly offered: F – fall, Sp – spring, Su – summer.

## Cooperative Education V 1–8 cr.

Each Cooperative Education course requires, as a minimum, 45 contact hours per semester credit hour.

**Prerequisite**

Some courses require other courses which must be completed before another can be taken. For example, **ACTG 202 Principles of Managerial Accounting**  
**Prerequisite: ACTG 201** means that ACTG 201 must be completed before a student enrolls in ACTG 202. In some cases, an equivalent course for stated prerequisites may be substituted by permission of the dean or chairperson of the area in which the course is given.

**Corequisite**

Some courses require that another course(s) be taken simultaneously if the corequisite course has not been successfully completed prior to registration. Withdrawal from a corequisite course necessitates withdrawal from the other corequisite course(s).

**Symbols**

\* Designates a course that can be counted toward General Education Requirements (See General Education, page 69).

∇ Designates programs and degrees that are offered online as well as on campus (see the Online University, page 289).

## Course Descriptions

A&SC Arts & Sciences .....	299	BMGT (formerly MGMT) Business	
ABDY Auto Body.....	299	Management.....	326
ACT (formerly HHP) Activities:		BMIS (formerly MIS) Business Management	
General.....	300	Information Systems .....	329
ACTG (formerly ACCT) Accounting ..	302	BMKT (formerly MKT) Business	
AHAT (formerly HHP) Allied Health:		Marketing .....	330
Athletic Training .....	305	CAPP (formerly MIS) Computer	
AHMS (formerly CODE, HLTH) Allied		Applications.....	332
Health: Medical Coding/Insurance		CHMY (formerly CHEM) Chemistry ...	333
Billing .....	305	CHTH (formerly HHP) Community	
AHXR (formerly RAD) Allied Health:		Health.....	336
Radiologic Technology .....	306	CMP Computers .....	337
ANTY (formerly SOCL)		COA (formerly HHP) Coaching .....	338
Anthropology.....	308	COMP Computer Sciences .....	339
ARTH (formerly ART) Art History.....	308	COMX (formerly COMT)	
ARTZ (formerly ART) Visual Arts .....	309	Communication .....	339
AST (formerly AUTO) Auto Service		CJUS (formerly CRIM) Criminal	
Technician .....	313	Justice.....	343
ASTR (formerly PHYS) Astronomy ....	315	CRWR (formerly ENGL) Creative	
BCH (formerly CHEM/BIOL)		Writing.....	344
Biochemistry .....	315	CSCI (formerly COMP, MIS) Computer	
BFIN (formerly FIN) Business		Science/Programming .....	346
Finance .....	316	CST Computer Systems	
BGEN (formerly BUS) General		Technology.....	348
Business .....	317	CSTN (formerly CARP, TRID) Construction	
BIOB (formerly BIOL) General		Trades .....	349
Biology .....	319	CTBU Business .....	351
BIOE (formerly BIOL) Ecological		DANC (formerly HHP) Dance.....	352
Biology .....	322	DDSN (formerly DRFT, DSGN) Drafting	
BIOH (formerly BIOL) Human		Design .....	352
Biology .....	322	DENT Dental .....	354
BIOM (formerly BIOL) Microbiology ..	324	DST (formerly DIES) Diesel Service	
BIOO (formerly BIOL) Organismal		Technician .....	355
Biology .....	325	ECNS (formerly ECON) Economics ....	356



ECP (formerly HHP, PARA) Emergency Care Provider and Paramedic.....	357	HS Human Services.....	386
EDCI Curriculum and Instruction .....	360	HSTA (formerly HIST) American History.....	389
EDEC (formerly EC) Early Childhood Education.....	361	HSTR (formerly HIST) History.....	391
EDSP (formerly SPED) Special Education.....	362	HTH (formerly HHP) Health .....	395
EDU (formerly EC, EDCI, EDF, RD) Education.....	365	HUMN Humanities .....	396
EELE (formerly EE) Electrical Engineering .....	372	HVC Heating, Ventilating, Air Conditioning, and Refrigeration Maintenance Technology.....	396
EGEN Engineering: General.....	373	ITS (formerly CST) Information Technology Systems .....	398
ELCT (formerly SET) Electrical Technology.....	373	JRNL (formerly COMT) Journalism ....	401
ENST (formerly EVST) Environmental Studies .....	373	KIN (formerly HHP) Kinesiology .....	401
ERTH (formerly EASC) Geoscience: Earth Systems .....	374	LANG Languages .....	402
ETEC (formerly SET) Electronics Technology.....	375	LING (formerly ENGL) Linguistics .....	403
FILM (formerly COMT, ENGL) Film ....	376	LIT (formerly ENGL) English Literature .....	404
FIRE Fire Science.....	376	LSCI (formerly LS) Library Science ....	407
FRCH (formerly FREN) French.....	377	M (formerly MATH) Mathematics .....	407
GEO (formerly EASC) Geoscience: Geology .....	378	MART (formerly DSGN) Media Arts... ..	411
GPHY (formerly GEOG) Geoscience: Geography .....	378	MGMT Management .....	411
GRMN (formerly GERM) German.....	380	MIS Information Systems .....	411
HADM Health Administration.....	381	MSL (formerly MSG) Military Science Leadership.....	412
HEE (formerly HHP) Health Enhancement .....	383	MUSE (formerly MUSC) Music Education.....	414
HHP Health and Human Performance .....	384	MUSI (formerly MUSC) Music.....	415
HIT Health Information Technology.....	384	MUST (formerly MUSC) Music Technology.....	420
HLTH Health Science .....	385	NASX (formerly NAMS) Native American Studies .....	421
HONR Honors.....	385	NRGY (formerly SET) Sustainable Energy .....	423
HR Human Resources .....	386	NRSG (formerly NURS) Nursing .....	424
		NTS (formerly ITS) Networking Technology Systems .....	431
		NUTR (formerly BIOL) Nutrition.....	431
		PHAR Pharmacy.....	432

PHL (formerly PHIL) Philosophy.....	433
PHOT Photography .....	434
PHSX (formerly PHYS) Physics .....	434
PPT Process Plant .....	436
PSCI (formerly POLS) Political Science .....	438
PSYX (formerly PSYC) Psychology.....	441
PWRP Power Plant.....	444
RD Reading .....	445
REC (formerly HHP) Outdoor Recreation .....	445
REHA Rehabilitation and Related Services .....	450
RLST (formerly PHIL) Religious Studies .....	452
SCIN Integrated Sciences .....	452
SIGN Sign Language .....	453
SOCI (formerly SOCL, CRIM) Sociology .....	453
SPNS (formerly SPAN) Spanish .....	457
STAT Statistics .....	458
TASK (formerly CTBU) Technical Administrative Skills .....	459
THTR (formerly COMT) Theatre .....	460
TRID Trade and Industry.....	460
WGSS Women's & Gender Studies ....	462
WLDG (formerly METL) Welding .....	462
WRIT (formerly ENGL) Writing .....	464

## Arts & Sciences

### Advising & Career Services (406) 657-2240

#### **A&SC 101 College Success Strategies**

**1 cr.** Orients students to the expectations of college-level study and introduces basic strategies for success (such as time management, goal setting, choosing a major, study skills, and test taking).

#### **A&SC 111 First Year Seminar**

**2 cr. (F, Sp)** Provides resources, strategies, and learning environments that actively engage students in meeting their educational goals while increasing their knowledge of community, civic engagement, and service learning. Students who are taking, or have taken, A&SC 101 cannot enroll in A&SC 111.

#### **A&SC 291 Independent Study**

**V1-3 cr.** Provides an opportunity to receive credit for individualized or special experiential learning opportunities.

#### **A&SC 292 Interdisciplinary Seminar**

**V1-3 cr.** An opportunity to explore basic themes and concepts common to the broad areas of the Humanities, the sciences, and the social sciences and to focus on contemporary Human problems. Course content will vary, and the course may be repeated for credit.

#### **A&SC 297 Service Learning**

**1 cr. (P/NP).** Introduces students to basic skills as a volunteer; offers credit for a variety of service activities including volunteer work with the needy, tutoring, and helping service organizations; and helps students assess their experience.

#### **A&SC 298 Student Leadership Development**

**1 cr. (P/NP).** Provides a leadership training component to supplement student involvement in a student leadership position. No student officer or participant in student organization need take this course as a condition for his or her participation.

#### **A&SC 492 Interdisciplinary Seminar**

**V1-3 cr.** An opportunity to explore in-depth certain concepts, problems, and issues from a combination of arts and sciences disciplines. Course content will vary, and the course may be repeated for credit.

## Auto Body

### City College

#### **ABDY 111 Introduction to Auto Body Repair**

**5 cr. (2 lec/6 lab/wk) (F)**

Covers the basic methods and techniques used in the repair of non-structurally damaged automobile sheet metal panels, the use and care of basic hand tools, identifying metal composition, automobile body construction, set up and use of a metal inert gas (MIG) and resistance welding equipment.

#### **ABDY 112 Minor Collision Repair**

**6 cr. (2 lec/6 shop/wk) Prerequisite: ABDY 111. (F)**

Covers training in removal, replacement, and alignment of various panels and parts, including glass. Diagnosis and correcting body component malfunctions.

Advanced training in panel repair, damage analysis and estimating using manuals and computer software programs.

#### **ABDY 121 Automobile Body Structural Repair**

**6 cr. (2 lec/6 shop/wk) Prerequisite: ABDY 111. (Sp)**

Covers the inspection, measurements, and repair of automobile bodies. Methods and techniques recommended by the manufacturers are studied and utilized. Tasks and procedures which are promoted by ASE and I-CAR programs are incorporated into the training. Repair of plastic body parts as recommended by manufacturers is practiced.

#### **ABDY 122 Automobile Collision Mechanics**

**5 cr. (2 lec/6 lab/wk) (Sp)**

Includes the removal, replacement, and service of mechanical and electrical components in repairing collision damaged automobiles. Components include suspension, steering, brakes, drive train, cooling system, fuel system and restraint system.

#### **ABDY 131 Introduction to Refinishing Principles**

**6 cr. (3 lec/6 lab/wk) (Sp)**

Provides the student with entry level training in job safety, refinishing basic application techniques, tools and equipment, and the skills necessary to prepare a vehicle for the refinishing process.

**ABDY 132 Introduction to Automotive Undercoats and Plastics****6 cr. (2 lec/4 lab/6 shop/wk) Prerequisite: ABDY 131. (Sp)**

Provides the student with entry level access to knowledge in automotive refinishing undercoats: types, specific usages, and application. The course also provides the student with automotive plastic identifications, alternate repair procedures, and refinishing.

**ABDY 141 Advanced Automotive Refinishing**  
**6 cr. (2 lec/4 lab/6 shop/wk) Prerequisites: ABDY 131 and ABDY 132. (F)**

Provides the student with training in application and paint makeup of current automotive finishes. Causes and the possible cures of surface defects and the art of finesse polishing are also studied. The student is exposed to the latest techniques in duplicating original factory paint finishes.

**ABDY 142 Introduction to Automotive Paint Blending and Color Matching****7 cr. (3 lec/2 lab/6 shop/wk) Prerequisites: ABDY 131, ABDY 132 and ABDY 141. (F)**

Develops mental and optical skills in the art of color matching. Alternate processes in spot repairing solid, metallic, and MICA finishes are also covered. Skills in equipment adjustment and techniques provide for blendable repair procedures.

**ABDY 292 Seminar****V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of automobile collision repair and refinishing technology.

**ABDY 293 Workshop****V1-3 cr.**

Provides an opportunity for experimental study in an area of automobile collision repair and refinishing.

**ABDY 296 Cooperative Education/Internship**  
**V1-9 cr. (45 hours/credit)**

Provides university credit for a sophomore work experience in the area of Automobile Collision Repair and Refinishing Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**Activities: General**  
**Health & Human Performance**  
**(406) 657–2370****ACT 104 Beginning Bowling****[formerly HHP 111 Bowling]**

**1 cr. (F)** Bowling is a lifetime sport. Students participate in bowling instruction, bowl and record assigned minimum number of games, and demonstrate understanding of rules, etiquette and scoring procedures. (Special fee required.)

**ACT 109 Beginning Racquetball****[formerly HHP 114 Racquetball]****1 cr. (Sp)****ACT 110 Beginning Weight Training****[formerly HHP 186 Strength Training]**

**2 cr. (F, Sp)** Teaches students how to develop fitness programs and tailor them to meet individual needs in helping promote lifelong health skills. Various components of fitness (cardiorespiratory fitness, muscular strength, muscular endurance, flexibility, and body composition) are explored. Students will develop an understanding of aerobic and anaerobic energy production systems, overload principles, and specificity of training while learning to utilize systems of isometric, isokinetic, and progressive exercises. This course is a hands-on activity course, but also includes an academic component where students investigate the above principles.

**ACT 113 Beginning Softball****[formerly HHP 176 Softball]****1 cr. (Sp)****ACT 140 Beginning Basketball****[formerly HHP 105 Basketball, Beginning]****1 cr. (F)****ACT 146 Beginning Golf****[formerly HHP 125 Golf]**

**1 cr. (F, Sp)** Covers the mechanics, skills and strategies of playing golf. (Special fee required.)

**ACT 150 Beginning Yoga****[formerly HHP 188 Yoga]**

**2 cr. (F, Sp)** Promotes lifelong health skills through presenting history and philosophy of yoga while providing opportunities for students to learn a variety of yoga poses designed to increase flexibility, strength, and endurance. This class provides an opportunity to learn stress management skills, improve balance and body control, incorporate breathing techniques that foster development in yoga, and enhance well-being.

**ACT 153 Beginning Badminton****[formerly HHP 108 Badminton, Beginning]**

**1 cr. (Sp)** Covers fundamental skills, equipment, strategy, rules and etiquette of badminton.

**ACT 155 Beginning Judo****[formerly HHP 180 Judo]**

**2 cr. (F, Sp)** Promotes lifelong health skills through presenting judo history, philosophy, and etiquette. Specific throwing and grappling skills designed to improve strength and endurance are presented. Also the course seeks to provide the student with some personal self-defense skills. Teaches how to fall safely in judo play or in self-defense situations. Develops understanding of body mechanics through the study of techniques sport-specific to judo such as grip, Kumikata; throwing, Nagewaza; falling, Ukemi; and grappling skills, Katamewaza.

**ACT 169 Beginning Tennis****[formerly HHP 146 Tennis, Beginning]**

**1 cr. (F, Sp)** Practice basic tennis fundamentals: forehand, backhand, and serve. Covers equipment, strategy, rules and etiquette.

**ACT 170 Beginning Swimming****[formerly HHP 140 Beginning Swimming/Aquatics I]**

**1 cr. (F)** Course includes learning to swim front crawl, backstroke, elementary backstroke, breaststroke, treading water and survival float. Additionally an introduction to aquatic exercise is included.

**ACT 180 Beginning Volleyball****[formerly HHP 154 Volleyball]**

**1 cr. (F)**

**ACT 235 Belly Dancing-Activity**

**1 cr. (1 lab/wk) (F, Sp)** Promotes lifelong health skills through presenting the philosophy of belly dance while providing opportunities for students to learn a variety of belly dance movements and techniques. Dance movements are designed to increase flexibility, strength, and balance, as well as creativity, body awareness, and confidence. This class provides an opportunity to learn a cultural dance, improve coordination and body control, and enhance well-being.

**ACT 236 Belly Dancing II**

**1 cr. (1 lab/wk) (F, Sp)** Promotes lifelong health skills and provides an increased variety of belly dance movements and techniques designed to increase flexibility, strength, and balance, as well as creativity, body awareness, and confidence. As the advanced class, it will provide an opportunity to learn another cultural dance, create choreography and improvisational solo dances, plus improve coordination and body control, and enhance well-being.

**ACT 250 Pilates**

**2 cr. (2 lab/wk) (F, Sp)** Teaches students how to safely perform five movement patterns, which strengthen major muscles of the core. Students will adapt exercises to changing physical needs and identify locations, names, and actions of five core muscles. Students will understand the evolving role of Pilates within the scope of physical fitness traditions.

**ACT 254 Self Defense**

**2 cr. (2 lab/wk) (F, Sp)** Introduces and develops defensive skills to protect the student from aggressive physical attack that could result in physical or emotional harm. The course will present dynamics of assault situations with discussions to include environmental and personal issues as well as the use of physical skill development. Defense techniques will include the use of strikes, kicks, takedowns, blocks, and the use of personal items such as weapons. The student will also be introduced to and practice some falling techniques to help enhance safety. This course will involve some intense physical activity.

**ACT 269 Intermediate Tennis****[formerly HHP 147 Tennis, Intermediate]**

**1 cr. (F, Sp)** Provides further development of groundstrokes, serve, volley and lob. Advanced singles and doubles strategies.

**ACT 270 Intermediate Swimming**  
**[formerly HHP 141 Intermediate Swimming/Aquatics II]****1 cr. Prerequisite:** ACT 170 or consent of instructor.

(F) Course seeks to improve skills taught in ACT 170. Additionally, the side stroke, single trudgen and single trudgen crawl strokes are taught, as are skills such as open turns, simple rescue and aquatic safety.

**ACT 271 Swimming for Fitness**  
**[formerly HHP 145 Swim for Fitness/Aquatic Exercise]****2 cr. Prerequisite:** Consent of instructor. (F, Sp)

Seeks to develop awareness and foster application of fitness principles through reading, lab activities, and development of personal fitness program to meet personal goals through swimming, kicking, pulling, and participation in swimming and aquatic exercise routines.

**ACT 274 Scuba Diving**  
**[formerly HHP 197 Scuba Diving/Snorkeling]**

**2 cr. (Sp)** Learn, understand, and apply scuba diving techniques, equipment, and knowledge of diving hazards and precautions.

**ACT 294 Seminar/Workshop**  
**[formerly HHP 292 Seminar]**

**V1-3 cr. (F, Sp)** Provides students an opportunity to investigate intensively topics pertinent to the field of Physical Education.

**ACT 294 Workshop**  
**[formerly HHP 293 Workshop]**

**V1-3 cr.** Provides experience in popular activities suitable for satisfying the physical education activity requirement, but which presently is offered only on a temporary experimental basis. Examples: Intermediate Golf, Jog for Fitness, Scuba Diving, Ice Skating, Cheerleading, Individual Exercise, and Handball.

**ACT 298 Internship**  
**[formerly HHP 290 Internship/Practicum]**

**V1-3 cr.** Provides students with practical selected experiences related to Health and Human Performance. In-field contact time is 45 hours per semester credit.

**ACT 395 Field Work**  
**[formerly HHP 390 Junior Field Experience]**

**1 cr. (F, Sp)** Provides the student the opportunity to engage in 45 hours of supervised practical experience in the health enhancement classroom. This experience is to include: structured observation focusing on cultural and developmental characteristics of children; working with teachers in individual diagnosis of student needs and prescription of student activities; assisting with

small groups or in one-on-one settings to accomplish learning tasks. Where appropriate, the student will also gain practical experience with school athletic programs. This course is offered as a Pass/No Pass course only. The student must receive a passing grade to complete graduation requirements. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice.

**ACT 492 Independent Study**  
**[formerly HHP 491 Independent Study]**

**V1-3 cr.** Provides an opportunity for students of superior academic standing to explore material not covered by the regular college courses.

**ACT 494 Seminar**  
**[formerly HHP 492 Seminar]**

**V1-3 cr.** Provides students of superior academic standing to explore material not covered by the regular college courses.

**ACT 498 Internship**  
**[formerly HHP 490 Internship/Practicum]**

**V1-3 cr. (F, Sp)** Provides supervised practical experience related to the HHP options and serves as an introduction to professional fields. In-field contact time is 45 hours per semester credit.

**ACT 499 Senior Thesis**  
**[formerly HHP 499 Senior Thesis]**

**V3-6 cr. (F, Sp)** Provides students the opportunity to conduct a research project under faculty supervision. Students engage in the scholarly activities needed to conceptualize and design a relevant research topic; conduct the research including data collection, analysis, and interpretation; and present the research as a written thesis that is orally defended in a meeting open to faculty and students outside of the committee.

## Accounting

### City College

**ACTG 101 Accounting Procedures I**  
**[formerly CTBU 108 Applied Accounting I]**  
**3 cr. (3 lec/wk) (F, Sp)**

Introduces fundamental double-entry accounting concepts and terminology. Emphasis on analyzing and recording business transactions and completing, adjusting, and closing entries for the accounting cycle of a service business. Includes procedures for banking, cash funds, and calculating and recording payroll.

**ACTG 102 Accounting Procedures II****[formerly CTBU 109 Applied Accounting II]****3 cr. (3 lec/wk) Prerequisite:** ACTG 101. (F, Sp)

Studies accounting for a merchandising concern through the use of special journals including adjusting and closing entries and financial statements. Introduces accounting for notes payable and receivable as well as valuation for receivables, inventories, and plant assets.

**ACTG 103 Accounting Procedures III****[formerly CTBU 201 Applied Accounting III]****3 cr. (3 lec/wk) Prerequisite:** ACTG 102. (F, Sp)

Introduces advanced accounting topics. Includes voucher systems, accounting procedures for partnerships and corporations, statement of cash flows, analysis of financial statements, and an overview of departmental and manufacturing accounting.

**ACTG 125 QuickBooks****[formerly CTBU 106 QuickBooks]****3 cr. (3 lec/wk) Prerequisite:** ACTG 101, ACTG 102.

Studies QuickBooks, an accounting system for small-business owners and bookkeepers. Topics of this course include creating a company, setting up company lists, editing a preset chart of accounts, entering opening balances, entering sales and invoices, receiving payments and making deposits, handling expenses and bills, working with bank accounts, analyzing financial data, tracking and paying sales tax, managing inventory, and preparing payroll.

**ACTG 180 Payroll Accounting****[formerly CTBU 103 Payroll Accounting]****3 cr. (3 lec/wk) Prerequisite:** ACTG 101. (F, Sp)

Introduces the various aspects of the Fair Labor Standards Act and other laws that affect payroll operations and employment practices. Emphasizes the methods of computing wages and salaries, the methods of keeping records, and the preparation of government reports. Includes a project requiring students to record all of the payroll information for a business.

## Accounting

### Business Administration

**(406) 657–2295****ACTG 201 Principles of Financial Accounting****[formerly ACCT 233 Principles of Accounting I]**

**3 cr. Corequisite:** M 095 or M 098 or student has tested out of M 095 or M 098. (F, Sp, Su) Introduces the concepts and terminology of accounting and financial reporting for modern business enterprises. The course will focus on analyzing and interpreting accounting information for use in making decisions about organizations. Problem solving, critical thinking, and communication skills that are necessary to use accounting information, to form conclusions about businesses and to communicate these conclusions to others will be emphasized.

**ACTG 202 Principles of Managerial Accounting****[formerly ACCT 234 Principles of Accounting II]**

**3 cr. Prerequisite:** ACTG 201. (F, Sp, Su) Introduces the concepts and terminology of accounting and managerial reporting for modern business enterprises. The course will focus on the selection and analysis of accounting information for internal use by management. Problem solving, critical thinking, and communication skills that are necessary to use accounting information, to form conclusions about businesses and to communicate these conclusions to others will be emphasized.

**ACTG 294 Seminar****[formerly ACCT 292 Seminar]**

**V1-3 cr.** Provides students an opportunity to investigate topics pertinent to the field of Accounting.

**ACTG 301 Intermediate Accounting I****[formerly ACCT 301 Intermediate Accounting I]****3 cr. Prerequisite:** ACTG 201, ACTG 202.

**Admission to upper division standing *not* required.** (F) Covers the conceptual framework underlying financial accounting and the development of generally accepted accounting principles. Emphasizes proper income statement and balance sheet presentations in accordance with current professional pronouncements. Present value concepts and accounting for cash, receivables, inventory, and the related revenue and expense accounts are covered.

**ACTG 302 Intermediate Accounting II**  
[formerly ACCT 302 Intermediate Accounting II]  
**3 cr. Prerequisite:** ACTG 201, ACTG 202, ACTG 301. **Admission to upper division standing not required. (Sp)** Considers the proper accounting for plant assets, intangible assets, current liabilities and long-term liabilities. Covers accounting for investments, derivative securities and earnings per share. Various aspects of stockholders' equity are also covered.

**ACTG 303 Intermediate Accounting III and Theory**  
[formerly ACCT 303 Intermediate Accounting III and Theory]  
**3 cr. Prerequisites:** ACTG 201, ACTG 202, ACTG 301, ACTG 302. **Admission to upper division standing is not required. (F, Su)** Covers accounting for pensions and leases, accounting changes, analysis of financial statements, the statement of cash flows, revenue recognition, income taxes, contemporary issues in accounting theory, as well as accounting research techniques.

**ACTG 321 Accounting Information Systems I**  
[formerly ACCT 421 Accounting Systems and Controls]  
**3 cr. Prerequisites:** Admission to upper division standing and ACTG 302. **(Sp)** Reviews the components of automated accounting systems and emphasizes control considerations in these systems.

**ACTG 401 Principles of Federal Taxation-Individuals**  
[formerly ACCT 433 Income Tax]  
**3 cr. Prerequisites:** Admission to upper division standing and ACTG 301. **(F)** Covers the federal income tax code and regulations as applied to individual taxpayers. Emphasizes understanding tax law with less attention given to preparing tax returns.

**ACTG 402 Advanced Income Tax**  
[formerly ACCT 434 Advanced Income Tax]  
**3 cr. Prerequisites:** Admission to upper division standing and ACTG 401. **(Sp)** Covers advanced topics in federal tax law as applied to corporations, S corporations, partnerships, and other selected topics. Emphasizes understanding tax law with less attention given to preparing tax returns.

**ACTG 410 Cost/Management Accounting I**  
[formerly ACCT 343 Cost Accounting]  
**3 cr. Prerequisite:** ACTG 202. **Admission to upper division standing is not required. (F)** Considers the fundamental principles of cost accounting as applied to job order, process, and standard cost systems, and introduces the use of cost information by management in the decision-making process.

**ACTG 411 Auditing I**  
[formerly ACCT 428 Auditing and Assurance Services]  
**3 cr. Prerequisites:** Admission to upper division standing and ACTG 302. **(F)** Presents a theory of auditing by considering the auditing environment, auditing standards, professional ethics, techniques of internal control, audit evidence, audit approaches and the auditor's report.

**ACTG 412 Auditing II**  
[formerly ACCT 429 Advanced Auditing Assurance Services]  
**3 cr. Prerequisites:** Admission to upper division standing and ACTG 411. **(Sp)** Strengthens the student's understanding of the auditing process by building on the material presented in ACTG 411. Students perform audit case studies, are introduced to current auditing trends and techniques, and study various audit approaches.

**ACTG 415 Governmental and Not-For-Profit Accounting**  
[formerly ACCT 342 Governmental and Not-For-Profit Accounting]  
**3 cr. Prerequisites:** ACTG 201, ACTG 202, ACTG 301 **(Admission to upper division standing is not required). (Sp)** Includes accounting principles, budgeting and cost determination as they apply to governmental units and nonprofit organizations.

**ACTG 435 Volunteer Income Tax Assistance (VITA)**  
[formerly ACCT 435 Volunteer Income Tax Assistance (VITA)]  
**3 cr. (Sp)** Provides practical experience preparing federal and state income tax returns for low-income taxpayers.

**ACTG 436 Advanced Accounting**  
[formerly ACCT 438 Advanced Accounting]  
**3 cr. Prerequisites:** Admission to upper division standing, ACTG 302 and ACTG 303 or concurrent enrollment in ACTG 303. **(F)** Introduces the theory and practice relative to business combinations and foreign currency transactions and translations.



**ACTG 491 Special Topics****[formerly ACCT 492 Seminar]**

**V1-3 cr. Prerequisite:** Admission to upper division standing. (F, Sp, Su) Provides advanced students an opportunity to intensively investigate topics pertinent to the field of Accounting.

**ACTG 492 Independent Study****[formerly ACCT 491 Independent Study]**

**V1-3 cr. Prerequisites:** Admission to upper division standing, consent of department, and approval of the College of Business Academic Programs Committee (CBAPC). (F, Sp, Su) Provides outstanding junior and senior students an opportunity to explore material not covered by regular Accounting courses. Students must complete a Request for Independent Study form and have it approved by the instructor and the Department Chair.

**ACTG 494 Seminar/Workshop (F, Sp, Su)****ACTG 498 Internship (F, Sp, Su)**

## **Allied Health: Athletic Training Health & Human Performance (406) 657-2370**

**AHAT 210 Prevention and Care of Athletic Injuries****[formerly HHP 362 Principles of Athletic Training]**

**3 cr. (F)** Explores concepts and techniques concerned with the scientific and clinical foundations of athletic training.

**AHAT 469 Advanced Athletic Training****[formerly HHP 462 Evidence Based Therapeutic Interventions]**

**3 cr. Prerequisite:** AHAT 210. Examines therapeutic interventions used in rehabilitation in context of evidence-based practice. Emphasizes strength of evidence in choosing application of treatment, assessment and management of injury and rehabilitation.

## **Allied Health: Medical Coding/Insurance Billing City College**

**AHMS 144 Medical Terminology****[formerly HLTH 150 Health Occupations Terminology I]****3 cr. (3 lec/wk) (F, Sp, Su)**

Introduces the student to the specialized language of the medical profession and builds a background vocabulary in this area using a word-building system which provides a solid foundation for understanding medical terms. Basic word-building concepts are taught with emphasis on spelling, pronunciation, and definitions.

**AHMS 160 Beginning Procedural Coding****[formerly CODE 110 CPT-4 Procedure Coding]****3 cr. (3 lec/wk) Prerequisite:** Health Care Core prerequisites. (F, Sp)

Develops the knowledge, skills, and abilities necessary for students to correlate a numerical code to a handwritten or typed procedure description generated by clinical staff in the health care setting for insurance purposes utilizing the principles of Current Procedural Terminology 4<sup>th</sup> edition (CPT-4). This course is required for the Medical Coding and Insurance Billing Certificate.

**AHMS 162 Beginning Diagnosis Coding****[formerly CODE 120 ICD-9 Diagnosis Coding]****3 cr. (3 lec/wk) Prerequisite:** Health Care Core prerequisites. (F, Sp)

Develops the knowledge, skills, and abilities necessary for a student to correlate a numerical code to a handwritten or typed diagnosis description generated by clinical staff in the health care setting for insurance purposes utilizing published ICD-CM. Also emphasizes the standards for accuracy in medical coding. This course is required for the Medical Coding and Insurance Billing Certificate.

**AHMS 175 Medical Law and Ethics****[formerly HLTH 255 Medical Law and Ethics]****3 cr. (3 lec/wk) (Sp)**

Addresses legal and ethical issues relevant to the healthcare field. Students will learn the importance of a professional code of ethics and the consequences of illegal or unethical behavior in health care. The course will also help the student distinguish among law, ethics, bioethics, etiquette, and protocol.

**AHMS 201 Medical Science****3 cr. (3 lec/wk)**

Provides beginning healthcare students with an understanding of common diseases, anomalies, treatments, and corrective procedures needed to analyze health care documentation including abstracting, coding, transcribing, auditing, and reimbursement.

**AHMS 220 Medical Office Procedures****[formerly HLTH 251 Medical Office Procedures]****3 cr. (3 lec/wk) (F, Sp)**

Emphasizes the standards for accuracy in health insurance claims processing and professional reporting which includes accurate claim form completion, an introduction to national coding requirements, medical ethics and legal responsibilities, and medical and insurance terminology.

**AHMS 250 Advanced Medical Coding****[formerly CODE 150 Advanced Coding and Auditing]****3 cr. (3 lec/wk) Prerequisite: Health Care Core prerequisites. (F, Sp)**

Develops the knowledge, skills, and abilities necessary for students to correlate a numerical code to a handwritten or typed procedure description generated by clinical staff in the health care setting for insurance purposes utilizing the principles of CPT-4, ICD-CM, and HCPCS Coding. This course is required for the Medical Coding and Insurance Billing Certificate.

**AHMS 255 Medical Transcription I****[formerly CTBU 153 Medical Transcription]****3 cr. (2 lec/2 lab/wk) Prerequisite: TASK 202. (F)**

Provides students with opportunities to transcribe taped medical reports from chapters organized by medical specialty. Students are required to use medical references skillfully while improving their transcribing skills. The taped material presents realistic report excerpts.

**AHMS 299 Capstone Project****1 cr.**

Evaluates and expands the student's knowledge of medical coding, insurance billing, and individual professionalism through job shadowing with a local coder, completing a resume building session, and attending test preparation sessions with focus on the national coding exam.

## Allied Health: Radiologic Technology City College

**AHXR 101 Patient Care in Radiology****[formerly RAD 105 Patient Care in Radiology]****3 cr. (3 lec/wk) (F)**

Provides students with an introduction to radiologic technology including the history of radiology, patient care and the radiographer's role in health care, medical ethics, infection control, radiology organizations, and radiologic technology certification.

**AHXR 108 Introduction to Radiologic Physics****[formerly RAD 104 Introduction to Radiologic Physics]****3 cr. (3 lec/wk) Corequisites: AHXR 150, AHXR 195A. (F)**

Provides the student with an introduction to radiologic physics including electricity, radiation, radiographic equipment, and the processes involved in radiographic imaging. X-ray production and the interaction of radiation with matter are examined in detail.

**AHXR 150 Radiological Technology I****[formerly RAD 101 Radiological Technology I]****3 cr. (3 lec/wk) Corequisite: AHXR 195A & AHXR 151. (F)**

Presents the fundamentals of producing radiographic images, radiation protection, and radiographic equipment. Radiographic positioning and anatomy are included for chest, abdomen, and extremity procedures.

**AHXR 151 Radiology I Positioning Lab****[formerly RAD 103 Radiology I Positioning Lab]****1 cr. (2 lec/wk) Corequisites: AHXR 150 & AHXR 195A. (F)**

Provides laboratory practice in radiographic positioning, anatomy, and patient care for radiographic examinations covered in corequisite course in preparation for competency-based testing at the clinic site.

**AHXR 160 Radiological Technology II****[formerly RAD 151 Radiologic Technology II]****4 cr. (4 lec/wk) Prerequisite: AHXR 150. (Sp)**

Continues examination of the fundamentals of radiographic imaging, radiographic anatomy, pathology, and radiographic procedures including the total spine, bony thorax, fluoroscopic, and other diagnostic imaging procedures.

**AHXR 161 Radiology II Positioning Lab**  
[formerly RAD 153 Radiology II Positioning Lab]  
1 cr. (2 lec/wk) Corequisites: AHXR 160 & AHXR 195B. (Sp)

Provides laboratory practice in radiographic positioning, anatomy, and patient care for radiographic examinations covered in corequisite course in preparation for competency-based testing at the clinic site.

**AHXR 181 Radiology III Positioning Lab**  
[formerly RAD 183 Radiology III Positioning Lab]  
1 cr. (2 lec/wk) Corequisite: AHXR 195C. (Su)

Provides laboratory practice in radiographic positioning, anatomy, and patient care for radiographic examinations covered in corequisite course in preparation for competency-based testing at the clinic site.

**AHXR 195 Clinical Radiology Intersession**  
[formerly RAD 108 Clinical Radiology Intersession]  
1 cr. (40 total) Prerequisites: AHXR 150 & AHXR 195A. (Sp)

Provides students the opportunity to perform radiographic examinations on patients at the clinical sites and participate in scheduled clinical assignments under the direct supervision of the clinical instructor or registered technologist.

**AHXR 195A Radiographic Clinical I**  
[formerly RAD 102 Clinical Radiology I]  
5 cr. (15 clinical/wk) Corequisite: AHXR 150 & AHXR 151. (F)

Instructs students in radiographic examinations in the clinical environment. The students are required to perform radiographic examinations on patients and to participate in scheduled clinicals under the direct supervision of the clinical instructor or registered technologist. Students will be oriented into patient care methodologies. CPR certification is required.

**AHXR 195B Radiographic Clinical II**  
[formerly RAD 152 Clinical Radiology II]  
6 cr. (18 clinical/wk) Prerequisites: AHXR 150 & AHXR 195A. Corequisites: AHXR 160 & AHXR 161. (Sp)

Provides sequential clinical instruction on application, critical analysis, integration, synthesis, and evaluation of concepts and theories required to perform radiologic procedures. Patient centered clinical practice labs and professional development will be taught through competency-based assignments in the clinical setting.

**AHXR 195C Radiographic Clinical III**  
[formerly RAD 182 Clinical Radiology III]  
9 cr. (27 clinical/wk) Prerequisite: AHXR 195B. Corequisite: AHXR 181. (Su)

Continues to provide sequential clinical instruction in radiographic procedures. Patient-centered clinical practice labs and professional development will be taught through competency-based assignments in the clinical setting.

**AHXR 225 Radiobiology/Radiation Protection**  
[formerly RAD 110 Radiation Physics and Biological Principles]

3 cr. (3 lec/wk) (Sp)

Emphasizes radiation safety and the biological effects of radiation on the human body. Explores the various modalities including equipment requirements, design and quality assurance.

**AHXR 250 Radiologic Technology III**  
[formerly RAD 201 Radiologic Technology IV]  
4 cr. (4 lec/wk) Prerequisite: AHXR 160. (F)

Continues to examine radiographic anatomy, radiographic procedures, and radiographic critique in coordination with clinical radiography courses. Includes fluoroscopic and other diagnostic imaging modalities.

**AHXR 260 Radiologic Technology IV**  
[formerly RAD 251 Radiologic Technology V]  
2 cr. (2 lec/wk) Prerequisite: AHXR 250. (Sp)

Continues to examine radiographic anatomy and diagnostic imaging procedures. Includes a review of program content in conjunction with registry review.

**AHXR 270 Radiographic Registry Review**  
[formerly RAD 271 Registry Review]  
2 cr. (2 lec/wk) Prerequisite: AHXR 250. (Sp)

Provides a comprehensive review of the Radiologic Technology course material in preparation for the national certification examination.

**AHXR 295A Radiographic Clinical IV**  
[formerly RAD 202 Clinical Radiology IV]  
8 cr. (24 clinical/wk) Prerequisite: AHXR 195C. Corequisite: AHXR 250. (F)

Provides sequential clinical instruction of the analysis and evaluation of concepts and theories required to perform radiographic procedures. Patient-centered clinical practice labs will be taught through competency-based assignments in the clinical setting.

**AHXR 295B Radiographic Clinical V**  
[formerly RAD 252 Clinical Radiology V]  
**8 cr. (24 clinical/wk) Prerequisites:** AHXR 250,  
**202. Corequisite:** AHXR 260. (Sp)

Provides the clinical practice and experience necessary for the performance of advanced radiographic procedures. Includes the study of pathology and rotations through the different modalities within radiology.

## **Anthropology**

### **Social Sciences and Cultural Studies**

**(406) 657-2311**

**\* ANTY 217 Physical Anthropology and Archaeology**  
[formerly SOCL 212 Physical Anthropology and Archaeology]

**3 cr.** Study of humans as biological organisms; human evolution; fossil humans; genetics; racial classifications and human variability; primate behavior. Biological bases and emergence of language and culture; development of culture; survey of world prehistory and human migrations. Consideration of method and theory in physical anthropology and archaeology.

**\* ANTY 220 Culture and Society**  
[formerly SOCL 211 Cultural Anthropology]  
**3 cr.** The meaning and significance of culture. Survey of world culture areas and peoples; organization and functioning of societies, their diverse forms and degrees of elaboration. Symbolic behavior systems and expression. Intercultural contacts and relations. Dynamics of cultural change and continuity. History and methods of cultural anthropology.

## **Art History**

### **Art**

**(406) 657-2324**

**\* ARTH 150 Introduction to Art History**  
[formerly ART 132 Art History Survey]  
**3 cr. (Lec) (F, Sp, Su)** Surveys world art from prehistory through the present day with the objective of developing a critical understanding of art forms in their historical and cultural context.

**\* ARTH 160 Global Visual Culture**  
[formerly ART 131 Global Visual Culture]  
**3 cr. (Lec) (F, Sp, Su)** Examines visual culture, which includes painting, sculpture, photography, the Internet, performance, cinema, advertising, and television, as our primary means of communication and of understanding our postmodern world. Explores the effects of global visual culture on specific cultures and societies. Special emphasis on the importance of race, ethnicity, gender, sexuality, and the body in visual culture.

**ARTH 321 Renaissance and Baroque Art**  
[formerly ART 331 Renaissance and Baroque Art]  
**3 cr. (Lec) Prerequisite:** ARTH 150 or permission of instructor. (even F) Surveys the major artistic developments in Europe from the fifteenth through the seventeenth centuries. In addition to examining the stylistic evolution of Renaissance and Baroque art, this course also addresses the relationship of cultural production to social customs, intellectual trends, political systems, and religious beliefs. Emphasis on the works of Jan Van Eyck, Donatello, Botticelli, Leonardo da Vinci, Michelangelo, Albrecht Durer, Titian, Caravaggio, Artemisia Gentileschi, Bernini, Rubens, Velazquez, and Rembrandt.

**ARTH 342 Modern Art**  
[formerly ART 332 Modern Art]  
**3 cr. (Lec) Prerequisite:** ARTH 150 or permission of instructor. (even Sp) Surveys major developments in European and American art from the late eighteenth century to the present. Focuses on the aesthetics and philosophies of modernism and postmodernism and their cultural and political contexts.

**ARTH 352 Visual Theory and Criticism**  
[formerly ART 352 Visual Theory and Criticism]  
**3 cr. (Lec) Prerequisite:** ARTH 150, WRIT 101. (F) Covers reading, research and discussion of the thought of historic and contemporary art critics and theoreticians, relating them to the practice of creating art.

**ARTH 435 Art of the United States**  
[formerly ART 435 Art of the United States]  
**3 cr. (Lec) Prerequisite:** WRIT 101; Preferred background ARTH 150. Reviews the art and architecture of the United States from colonial times to the present.

**ARTH 436 The History of Women in Art**  
[formerly ART 436 History of Women in Art]  
**3 cr. (Lec) Prerequisite: WRIT 101; Preferred background ARTH 150. (odd F)** Provides a thematic and chronological survey of women as creators, collectors, and the subject of art, beginning with the medieval period and finishing in the present day. Emphasizes the institutional and ideological factors that have made it difficult for women to achieve equal status in the arts, the Women's Art Movement of the 1970's, and contemporary feminist art.

**ARTH 439 American Indian Art (crosslisted with NASX 439)**  
[formerly ART 439 Survey of American Indian Art]  
**3 cr. (Lec) (even F)** Presents an overview and analysis of Native American art forms, techniques, and traditions. Background and interpretation of traditional and contemporary styles and symbols important to both tribal and individual expression. Includes discussion of tribal arts and crafts associations, markets and exhibitions, and federal laws.

**ARTH 451 Contemporary Art**  
[formerly ART 437 Contemporary Art]  
**3 cr. (Lec) Prerequisite: WRIT 101; Preferred background ARTH 150. (odd Sp)** Surveys developments in the world of art since 1970.

**ARTH 455 Art and the Environment**  
[formerly ART 434 Art and the Environment]  
**3 cr. (Lec) Prerequisites: WRIT 101 or ENST 210; Preferred background: ARTH 150. (even Sp)** Explores the relationship between artistic expression and the natural environment from a cross-cultural and historical perspective. Emphasis on landscape painting, architectural site planning, earthworks, land art and the impact of environmentalism, eco-feminism and holistic worldviews on contemporary art production.

**ARTH 492 Independent Study**  
[formerly ART 491 Independent Study]  
**V1-5 cr. Prerequisites: consent of instructor and department chairperson.** Provides outstanding students an opportunity to explore material not covered by regular Art courses.

**ARTH 494 Seminar/Workshop**  
[formerly ART 492 Seminar]  
**V1-3 cr.** Provides advanced students an opportunity to intensively investigate topics pertinent to the field of Art.

**ARTH 495 Practicum in Art**  
[formerly ART 490 Practicum in Art]  
**V1-5 cr. Prerequisites: Senior level standing in Art and consent of department chairperson.** Provides experience in a responsible appointment as an assistant in some specialized area of the Art Program.

**ARTH 498 Internship/Cooperative Education**  
[formerly ART 496 Cooperative Education/Internship]  
**V1-9 cr.** Provides university credit for a work experience in the area of Art supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Visual Arts

### Art

(406) 657-2324

**\* ARTZ 101 Art Fundamentals**  
[formerly ART 110 Introduction to Studio Art for Non-Art Majors]  
**3 cr. (Stu) (F, Sp)** Encourages enhancement of two- and three-dimensional artistic skills for the general student. Traditional and experimental materials, techniques, and concepts are emphasized. Expect improvement of individual art abilities and understandings. (Lab fee)

**ARTZ 102 Fundamentals of Art for Elementary Teachers**  
[formerly ART 101 Fundamentals of Art for Elementary Teachers]  
**(Stu) 2 cr. Prerequisite: Restricted to majors in Elementary Education and Special Education. (F, Sp)** Provides experiences with two- and three-dimensional materials and techniques appropriate for elementary teachers. Includes selected components of art history, art criticism and aesthetics (modern paradigm) and the post-modern paradigm. (Lab fee)

**ARTZ 104 Studio Safety**  
**1 cr. (1 lec/wk) Corequisite: ARTZ 108. (F, Sp)** Provides students with safety protocols and information throughout multiple disciplines in art creation. Includes information on material handling, personal protective equipment, proper use of equipment, and mitigation of hazardous environments.

**\* ARTZ 105 Visual Language-Drawing****[formerly ART 161 Introduction to Drawing]**

**3 cr. (Stu) (F, Sp)** Introduces the beginning student to the basic fundamentals of drawing including line, form, value, composition, and linear perspective. Instruction will include drawing of various subjects and many include the nude figure. Lab fee.

**ARTZ 106 Visual Language-2-D Foundations****[formerly ART 151 Two-Dimensional Design]**

**3 cr. (Stu) (F, Sp)** Provides the student with the basic fundamentals to plan and organize two-dimensional expression through painting, graphic design, color theory and composition. Student will be exposed to both content (what artists want to say) and form (how an artist says it). An emphasis will be placed on creativity and critical thinking skills. Lab fee.

**ARTZ 108 Visual Language-3-D Foundations****[formerly ART 152 Three-Dimensional Design]**

**3 cr. (Stu) (F, Sp)** Introduces the basic principles of designing in three dimensions with an emphasis on form, structure, and terminology in media such as wood, paper fibers, metal, plaster, clay, etc. Assignments focus on aesthetic concepts and technical skills and involve broad-based themes of art, the role of the artist, and creative and critical thinking skills. Lab fee.

**\* ARTZ 131 Ceramics for Non-Majors****[formerly ART 142 Introduction to Pottery]**

**3 cr. (Stu) (F, Sp)** Develops the ability to design three-dimensional clay forms using manual dexterity. Provides the individual with opportunities for creative experiences and an understanding of basic artistic developments in design, process and content of the ceramic object. (Lab fee)

**ARTZ 209 Introduction to Professional Practices**

**1 cr. Prerequisite: Sophomore level standing; Art majors and minors only. (F)** Covers the initial development of visual portfolio, photographing and exhibiting artwork, artist statement, and other preparation for the BFA Portfolio and Transcript Review and upper-division coursework in Art History.

**ARTZ 211 Drawing I****[formerly ART 261 Figure Drawing]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 105. (F)** Continues and expands on the understanding of the fundamentals, the theories and the content of drawing with an emphasis on the human figure. Lab fee.

**ARTZ 221 Painting I****[formerly ART 272 Introduction to Painting]**

**4 cr. (Rct 2, Stu 2) Prerequisites: ARTZ 106 and ARTZ 105 or permission of instructor. (Sp)**

Introduces the principles of painting through the use of various painting media. (Lab fee)

**ARTZ 231 Ceramics I****[formerly ART 242 Introduction to Ceramics]**

**4 cr. (Rct 2, Stu 2) Preferred background: ARTZ 108. (Sp)** Introduces basic forming skills, glaze techniques and firing processes with emphasis on craftsmanship and aesthetic judgment. (Lab fee)

**ARTZ 251 Sculpture I****[formerly ART 281 Introduction to Sculpture]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 108 or permission of instructor. (F)** Introduces the basic concepts of space and volume as they relate to sculpture as well as the basic methods of forming various materials into sculpture. Lab fee.

**ARTZ 258 New Media I****[formerly ART 258 New Media I]**

**4 cr. Prerequisite: Basic computer literacy and ARTZ 106 or permission of the instructor. (F)** Explores the creative potential of computer-based digital technology on an introductory level: creative research and experimentation in contemporary artistic expression including two-dimensional and three-dimensional digital applications, and large-format printing. Work includes instruction on software programs used by studio artists with emphasis on theory, aesthetics, and technology for fine art applications. Digital camera required. (Lab fee)

**ARTZ 271 Printmaking I****[formerly ART 215 Introduction to Printmaking]**

**4 cr. (Rct 2, Stu 2) Preferred background: ARTZ 106 and ARTZ 105 or permission of the instructor. (Sp)** Provides basic concepts in areas of serigraphy, intaglio, and relief as means of contemporary expression. (Lab fee)

**ARTZ 273 Printmaking I-Lithography****[formerly ART 217 Introduction to Lithography]**

**4 cr. (Rct 2, Stu 2) Preferred background: ARTZ 106 and ARTZ 105 or permission of instructor.** Provides concepts and techniques of printmaking through the technical means of lithography. (Lab fee)

**ARTZ 284 Photography I-Techniques and Processes**  
**[formerly ART 211 Introduction to Photography]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 106 or permission of instructor. (F)** Provides instruction in black-and-white film photography while investigating problems of design, content, criticism and expression in the photographic medium with emphasis on theory, aesthetics, and technology for fine art applications. Course is taught in a chemical darkroom with some projects being completed on the computer. Required: manual film SLR camera and digital camera (digital SLR recommended). (Lab fee)

**ARTZ 294 Seminar/Workshop**

**[formerly ART 292 Seminar]**

**V1-3 cr.** Provides students an opportunity to investigate topics pertinent to the field of Art.

**ARTZ 294 Seminar/Workshop**

**[formerly ART 293 Workshop]**

**V1-4 cr.** Provides an opportunity for study in an area of Art.

**ARTZ 298 Internship/Cooperative Education**

**[formerly ART 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Art supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**ARTZ 311 Drawing II**

**[formerly ART 361 Intermediate Drawing]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 211.** Stresses further exploration and application of drawing from the human figure. Students are exposed to various approaches and disciplines both as to medium and concept. (Lab fee)

**ARTZ 321 Painting II**

**[formerly ART 372 Intermediate Painting]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 221. (F)** Provides experimentation in various directions to develop personal style and techniques in painting with the use of various painting media. (Lab fee)

**ARTZ 331 Ceramics II**

**[formerly ART 342 Intermediate Ceramics]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 231. (F)** Develops technical skills in the forming of clay design concepts and glaze technology. Emphasis is placed on the growth of personal development. (Lab fee)

**ARTZ 351 Sculpture II**

**[formerly ART 381 Intermediate Sculpture]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 251. (Sp)** Provides exploration and laboratory experience in a variety of materials in the production of three-dimensional art forms. (Lab fee)

**ARTZ 358 New Media II**

**[formerly ART 358 New Media II]**

**4 cr. (Stu 6 hrs/wk) (Sp) Prerequisite: ARTZ 258.** Continues the development of new media skills on an intermediate level: creative research and experimentation in contemporary artistic expression with an emphasis on time-based and interactive applications, including video installation, media performance, and interactive animation. Work includes instruction on software programs used by studio artists with emphasis on theory, aesthetics, and technology for fine art applications. Digital camera required; video camera recommended. (Lab fee)

**ARTZ 371 Printmaking II**

**[formerly ART 315 Intermediate Printmaking]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 271.** Continues the study of printmaking with extensive exploration in artistic expression and printing techniques. (Lab fee)

**ARTZ 372 Printmaking II-Lithography**

**[formerly ART 317 Intermediate Lithography]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 273.** Continues the study of printmaking in the area of lithography as a means of contemporary artistic expression. (Lab fee)

**ARTZ 384 Photography II-Theory, Criticism, Practice**

**[formerly ART 311 Intermediate Photography]**

**4 cr. (Rct 2, Stu 2) Prerequisite: ARTZ 284. (Sp)** Provides continuing experience in variety of photographic techniques, expanding on darkroom, camera, computer, and digital printing skills, while exploring experimental and aesthetic possibilities of the medium in the context of contemporary art. Required: manual film SLR camera and digital camera (digital SLR recommended). (Lab fee)

**ARTZ 402 Teaching Art I—K-12**

**3 cr. (3 lec/wk) Prerequisite:** Admission to Educator Preparation Program. **Corequisite:** EDU 354. (F)

Provides pre-service K-12 art teachers with modern and postmodern theories and practical strategies for planning, facilitating, and assessing student learning. Art production, history/heritage, criticism, and aesthetics are addressed from age-appropriate perspectives and as related to the disciplines. Field experience is a focus. Presents an overview of technology, inclusion of special populations, health/safety aspects, and art-related career opportunities.

**ARTZ 406 Gallery Professional Practices**

**3 cr. (odd Sp)** Introduces students to standards, practices, and methods of the art gallery profession. Provides hands-on training in all aspects of the operations of the Northcutt Steele Gallery. Includes assigned readings, writings, guest presentations, visits to local/regional art institutions, and a research project that connects hands-on experiences to broader issues in contemporary gallery and museum practices.

**ARTZ 409 Advanced Professional Practices**

**[formerly ART 498 Resume and Artist Statement]**

**1 cr. (Lec) Prerequisites:** Junior or senior level standing; Art majors and minors only. (F) Covers the development of visual and/or written portfolio, the writing of a resume and artist statement, and other preparation for the Senior Project/Capstone. Other topics include art venue possibilities, financial aspects, graduate programs, and careers in art. Class may be taken concurrently with ARTZ 499 Senior Project/Capstone.

**ARTZ 410 Advanced Research-Drawing**

**[formerly ART 461 Advanced Drawing]**

**4 cr. (Rct 2, Stu 2) R-24. Prerequisite:** ARTZ 311. Development of the student's personal expression and style. Includes the principles of drawing exemplified in works of historic and contemporary masters. Emphasis will be placed on the use of drawing as a finished art product. Lab fee.

**ARTZ 420 Advanced Research-Painting**

**[formerly ART 472 Advanced Painting]**

**4 cr. (Rct 2, Stu 2) R-24. Prerequisite:** ARTZ 321. (F) Emphasizes advanced exploration in various painting media. (Lab fee)

**ARTZ 430 Advanced Research-Ceramics**

**[formerly ART 442 Advanced Ceramics]**

**4 cr. (Rct 2, Stu 2) R-24. Prerequisite:** ARTZ 331. (F) Employs advanced technical problems and emphasizes personal expression in the medium. (Lab fee)

**ARTZ 451 Advanced Research-Sculpture**

**[formerly ART 481 Advanced Sculpture]**

**4 cr. (Rct 2, Stu 2) R-24. Prerequisite:** ARTZ 351. (Sp) Involves advanced level sculptural exploration emphasizing personal expression and style. (Lab fee)

**ARTZ 458 New Media III**

**[formerly ART 458 New Media III]**

**4 cr. (Stu 6 hrs/wk) R-24 Prerequisite:** ARTZ 358. (Sp) Explores the creative potential of computer-based digital technology on an advanced level. Students will create several assignment-guided and self-proposed projects. These can include site-specific media installation, video installation, net art, art video games, media performances, community projects, etc. Work includes instruction on software programs used by studio artists with emphasis on theory, aesthetics, and technology for fine art applications. (Lab fee)

**ARTZ 470 Advanced Research-Printmaking**

**[formerly ART 415 Advanced Printmaking]**

**4 cr. (Rct 2, Stu 2) R-24. Prerequisite:** ARTZ 371. Extends the study of serigraphy, intaglio, or relief printmaking with extensive exploration in artistic expression and printing techniques. (Lab fee)

**ARTZ 474 Advanced Research-Lithography**

**[formerly ART 417 Advanced Lithography]**

**4 cr. (Rct 2, Stu 2) R-24. Prerequisite:** ARTZ 372. Extends the study of lithography with extensive exploration in artistic expression and printing techniques. (Lab fee)

**ARTZ 486 Advanced Research-Photography**

**[formerly ART 411 Advanced Photography]**

**4 cr. (Rct 2, Stu 2) R-24. Prerequisite:** ARTZ 384. (Sp) Involves advanced level photographic exploration and production emphasizing photography as a fine art medium and a means to personal expression. Students will create several assignment-guided and self-proposed projects. Required: manual film SLR camera and digital camera (digital SLR recommended). (Lab fee)

**ARTZ 492 Independent Study**

**[formerly ART 491 Independent Study]**

**V1-5 cr. Prerequisites:** consent of instructor and department chairperson. Provides outstanding students an opportunity to explore material not covered by regular Art courses.



**ARTZ 495 Practicum in Art****[formerly ART 490 Practicum in Art]****V1-5 cr. Prerequisites: Senior level standing in Art and consent of department chairperson.** Provides experience in a responsible appointment as an assistant in some specialized area of the Art Program.**ARTZ 499 Senior Project/Capstone****[formerly ART 499 Senior Show, Portfolio and Review]****1 cr. (Lec) Prerequisite: Junior or senior level standing in Art. Art majors or minors only. (F, Sp)** Involves arranging for all details necessary to present a show of work done during the two years prior to graduation in conjunction with a formal review. The art history student will prepare for the formal review through written documents and recitation. The student will work with his/her advisor.

## **Auto Service Technician City College**

**AST 106 Automotive Manual Drive Train and Axles  
[formerly AUTO 110 Manual Drive Train and Axles]****2 cr. (2 lec/wk) (F)**

Includes a study of the basic theory and principles of gearing, and reconditioning of automotive power train components. Components covered include clutches, transmissions, differentials, axles, transaxles, and transfer cases.

**AST 107 Automotive Manual Drive Train and Axles Lab****[formerly AUTO 111 Manual Drive Train and Axles Lab]****2 cr. (4 lab/wk) Corequisite: AST 106. (F)**

Provides a study of the service, repair, and reconditioning of automotive power train components. Components covered include clutches, transmissions, differentials, axles, transaxles, and transfer cases.

**AST 114 Automotive Brakes****[formerly AUTO 160 Automotive Brake Systems]****2 cr. (2 lec/wk) (Sp)**

Provides a study in the design and operation of today's sophisticated braking and related systems. Subject matter includes brake systems fundamentals, safety, master cylinders, power assist units, hydraulic lines and valves, disk and drum brakes, antilock systems, parking brakes, and brake electrical and electronic components.

**AST 115 Automotive Brakes Lab****[formerly AUTO 161 Automotive Brake Systems Lab]****2 cr. (4 lab/wk) Corequisite: AST 114. (Sp)**

Provides a study in the diagnosis and service of today's sophisticated braking and related systems. Subject matter includes brake system safety, master cylinders, power assist units hydraulic lines and valves, disk and drum brakes, antilock systems, parking brakes, and brake electrical/electronic components.

**AST 162 Automotive Engine Diagnostics****[formerly AUTO 182 Diagnosis and Tune-Up]****3 cr. (3 lec/wk) Prerequisites: TRID 170 and TRID 180. (Sp)**

Studies the theory of fuel systems, emission control systems, ignition systems, and engine mechanical tests. Proper testing with modern diagnostic equipment will also be discussed.

**AST 163 Automotive Engine Diagnostics Lab****[formerly AUTO 183 Automotive Diagnosis and Tune-Up Lab]****3 cr. (6 lab/wk) Prerequisites: TRID 170 & TRID 180. Corequisite: AST 162. (Sp)**

Examines diagnosis, testing, and repair of fuel systems, emission control systems, ignition systems, and engine mechanical tests. This course provides training on the proper uses of modern engine diagnostic equipment.

**AST 175 Engine Rebuild Lab****[formerly AUTO 172 Engine Rebuild]****5 cr. (2 lec/6 lab/wk) Prerequisite: TRID 170. (Sp)**

Gives an overview of the design, operation, diagnosis, and service procedures of modern automotive engines. Students participate in the disassembly and re-assembly of engine units. Service and technical engine data are presented to prepare the students for practical experience in engine servicing.

**AST 220 Automotive Steering and Suspension****[formerly AUTO 210 Automotive Suspension and Steering Systems]****2 cr. (2 lec/wk) Prerequisite: M 111 or equivalent. (F)**

Provides a study in the design and operation of modern automotive suspension, steering, and related systems.

**AST 221 Automotive Steering and Suspension Lab**  
**[formerly AUTO 211 Automotive Suspension and Steering Systems Lab]****2 cr. (4 lab/wk) Prerequisite:** M 111 or equivalent.  
**Corequisite:** AST 220. (F)

Provides a practical study in the diagnosis and service of modern automotive suspension, steering, and related systems. Alignments are performed on computerized four-wheel alignment systems. This class is designed to provide the student with the training necessary to perform chassis-related service on automobiles and light trucks.

**AST 230 Electrical/Electronics Systems II**  
**[formerly AUTO 220 Automotive Electrical/Electronic Systems]****2 cr. (2 lec/wk) Prerequisite:** TRID 180. (F)

Studies electrical/electronic systems and applications found in today's automotive industry. This course is designed to give the student a strong background in the theory of operation of electrical and electronic systems. Upon completion of this course, the student will have acquired the knowledge necessary to effectively diagnose modern automobiles.

**AST 231 Electrical/Electronics Systems II Lab**  
**[formerly AUTO 221 Automotive Electrical/Electronic Systems Lab]****2 cr. (4 lab/wk) Prerequisite:** TRID 180.**Corequisite:** AST 230. (F)

Studies electrical/electronic systems and applications found in today's automotive industry. This course is designed to give the student a strong background in the operation, diagnosis, and repair of electrical/electronic systems. Upon completion of this course, the student will have acquired the knowledge and developed the skills necessary to effectively diagnose and repair the vehicles and equipment presently used in the industry.

**AST 260 Advanced Automotive Diagnostics**  
**[formerly AUTO 222 Automotive Engine Performance]****3 cr. (3 lec/wk) Prerequisites:** TRID 170, TRID 180, AST 162 and AST 230. (Sp)

Covers the theory of operation for General Motors, Ford, Chrysler, Toyota, and Bosch computerized systems. The student will obtain the necessary knowledge required to use the specialized test equipment designed for diagnosis and repair of domestic and foreign automotive systems.

**AST 261 Advanced Automotive Diagnostics Lab**  
**[formerly AUTO 223 Automotive Engine Performance Lab]****3 cr. (6 lab/wk) Prerequisites:** TRID 170, TRID 180, AST 162, AST 230. **Corequisite:** AST 260. (Sp)

Covers operation and testing for General Motors, Ford, Chrysler, Toyota, and Bosch computerized systems during practical exercises. This course focuses on the diagnosis and repair of computerized engine control systems. The student will obtain the necessary hands-on training required to use the specialized test equipment to diagnose and repair domestic and foreign automotive systems.

**AST 270 Automatic Transmissions and Transaxles**  
**[formerly AUTO 256 Automatic Transmission/Transaxles]****3 cr. (3 lec/wk) Prerequisites:** AST 106, TRID 180. (Sp)

Covers automatic transmissions including theory of operation, design, and construction for the purpose of understanding the functions, servicing, and trouble-shooting procedures of modern automatic transmissions and transaxles.

**AST 271 Automatic Transmissions and Transaxles Lab****[formerly AUTO 257 Automatic Transmission/Transaxles Lab]****3 cr. (3 lab/wk) Prerequisites:** AST 106, TRID 180. (Sp)

Covers automatic transmissions including demonstration and student participation in disassembly and re-assembly of selected transmissions for the purpose of understanding function, construction, operation, servicing, and trouble-shooting procedures of modern automatic transmissions and transaxles.

**AST 280 Applied Lab Experience and Light Repair**  
**[formerly AUTO 255 Applied Automotive Service Operations]****4 cr. (4 lab/wk) Prerequisites:** TRID 150, TRID 152, TRID 170, TRID 180, AST 106, AST 114, AST 220, AST 162, AST 230. (Sp)

Provides in-depth, practical analysis and repair of components related to engine, chassis, power trains systems, and standard power trains systems. This course simulates service department operations as found in industry.

**AST 285 ASE Exam Prep: Section One**  
[formerly AUTO 202 ASE Exam Preparation]  
**1 cr. (2 lec/wk for 7 wks) Prerequisites:** TRID 170, TRID 150, TRID 180, AST 106, AST 162, AST 175, or consent of instructor. (F, Sp)

Prepares students for automotive technician ASE exams in the Automobile/Light Truck Test Series including eight certification areas: Engine Repair (A1), Automatic Transmission/Transaxle (A2), Manual Drive Train and Axles (A3), Suspension and Steering (A4), Brakes (A5), Electrical/Electronic Systems (A6), Heating and Air Conditioning (A7), and Engine Performance (A8). Emphasis of certification areas covered will be determined by the general make up of the student body per semester (i.e., if all students are registering for A5-Brakes, the course content will use examples from the brakes area). At the conclusion of this course, students will take four of the automotive technician ASE certification exams.

**AST 294 Seminar/Workshop**  
[formerly AUTO 292 Seminar]  
**V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of automotive technology.

**AST 294 Seminar/Workshop**  
[formerly AUTO 293 Workshop]  
**V1-3 cr.**

Provides an opportunity for experimental study in an area of automotive technology.

**AST 298 Automotive Internship**  
[formerly AUTO 296 Cooperative Education/Internship]  
**V1-9 cr. (45 hours/credit) (F, Sp, Su)**

Provides university credit for a sophomore work experience in the area of Automotive Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Astronomy

### Biological & Physical Sciences (406) 657–2812

**\* ASTR 110 Introduction to Astronomy**  
[formerly PHYS 201 Introduction to Astronomy]  
**3 cr. (Sp)** Surveys the historical highlights and traditional topics in classical and modern astronomy, such as the solar system, sun, planets, galaxies, and the universe. Examines exotic objects such as quasars, pulsars, and black holes. Presents discussion of recent discoveries, modern cosmological theories, and current unsolved problems. Background in high school algebra is strongly advised.

**\* ASTR 111 Introduction to Astronomy Lab**  
[formerly PHYS 203 Introduction to Astronomy Lab]

**1 cr. Corequisite: ASTR 110. (Sp)** Introduces students to the night sky. Illustrates the difference between real and apparent motions in the heavens. Develops useful observational techniques and an appreciation by the student of the broad range of phenomena in the Universe.

**ASTR 191 Special Topics**  
[formerly PHYS 202 Special Topics in Astronomy]  
**3 cr. Prerequisite: ASTR 110.** Provides the opportunity for students who have completed the survey course to explore a number of special topics in depth. These may include the Big Bang and alternate cosmologies, the dark matter problem, the galaxy formation problem, the dark sky paradox, supernovae, black holes, and/or other topics of current interest.

## Biochemistry

### Biological & Physical Sciences (406) 657–2812

**BCH 380 Biochemistry**  
[formerly CHEM/BIOL 361 Biochemistry]  
**3 cr. Prerequisites:** BIOB 160, CHMY 211 or CHMY 323. **Corequisite: BCH 381. (F)** Covers structure and function of biomolecules, biocatalysis, bioenergetics, as well as metabolism and its control.

**BCH 381 Biochemistry Lab**  
[formerly CHEM/BIOL 371 Biochemistry Lab]  
**1 cr. Corequisite: BCH 380. (F)** Complements the lecture material presented in the corequisite.

**BCH 480 Advanced Biochemistry I**  
[formerly CHEM/BIOL 463 Advanced Biochemistry]**3 cr. Prerequisite:** BCH 380. **Corequisite:** BCH 481.**(Sp)** Provides students with an opportunity to study advanced topics in biochemistry. Serves as an extension of BCH 380 exposing students to advanced aspects of biomolecular structure and function as well as metabolism and its regulation.**BCH 481 Advanced Biochemistry I Lab**  
[formerly CHEM/BIOL 473 Advanced Biochemistry Lab]**1 cr. Prerequisite:** BCH 380. **Corequisite:** BIOB 425.**(Sp)** Exposes students to advanced research methodologies in biochemistry. Utilizes project-based labs to complement the lecture material in the corequisite.**BCH 491 Special Topics****V1-12 cr. Prerequisite:** determined as needed.

Provides students with an opportunity to take courses not required in any curriculum for which there is a particular need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

## Business Finance

### Business Administration

**(406) 657–2295****BFIN 267 Real Estate Theory and Law**  
[formerly FIN 276 Real Estate]**3 cr. Prerequisite:** ECNS 201 or consent of department. Real estate principles as they apply to appraisal of residential, commercial, and industrial property; to sales of real estate; to leasing and management of property; and to subdividing, developing, and zoning of land.**BFIN 305 Financial Planning**  
[formerly FIN 305 Financial Planning]**3 cr. Prerequisite:** Junior standing. *Offered ONLY Online.* **(Sp, Su)** Organizing and Managing Your Financial Resources, Protecting Your Financial Resources, and Investing and Long-Term Planning. Provides students of all disciplines with an understanding of the strategies and techniques necessary for analyzing financial situations and investment opportunities from an individual's perspective.**BFIN 316 Quantitative Methods in Business and Economics**  
[formerly FIN 316 Quantitative Methods in Business and Economics]**3 cr. Prerequisite:** Admission to upper division standing or consent of department chair. **(F, Sp)**

Focuses on basic quantitative techniques and models used by business, finance, and economic decision makers to make optimum decisions in real world situations.

**BFIN 322 Business Finance**  
[formerly FIN 351 Principles of Financial Management]**3 cr. Prerequisite:** Admission to upper division standing or consent of department. **(F, Sp, Su)** Treats all forms of business organizations. Emphasizes control, corporate securities, capital and income management, valuation and capitalization, security markets, and other selected topics.**BFIN 420 Investments**  
[formerly FIN 451 Investments]**3 cr. Prerequisites:** Admission to upper division standing and BFIN 322 or consent of department.**(F)** Acquaints students with the characteristics of various types of investment securities, the evaluation of certain risks and rewards associated with investment securities, and an understanding of the principles underlying the selection of a portfolio of investment securities.**BFIN 422 Intermediate Business Finance**  
[formerly FIN 453 Intermediate Financial Management]**3 cr. Prerequisites:** Admission to upper division standing and BFIN 322 or consent of department. **(F)** Gives students who are especially interested in finance an opportunity to learn in greater detail subjects covered in BFIN 322 and to study advanced concepts and techniques useful in the financial world by use of real world case analyses.**BFIN 455 Money and Banking**  
[formerly FIN 352 Money and Banking]**3 cr. Prerequisites:** Admission to upper division standing and BFIN 322, or consent of department. **(F, Sp)** Covers the mechanics of financial markets, the impact of fiscal and monetary policies, banking and financial institutions and instruments used by business and government, the relationships between interest rates, security prices, risk, exchange rates and world financial markets.

**BFIN 460 Futures and Options****[formerly FIN 452 Futures and Options]**

**3 cr. Prerequisites:** BFIN 322, BFIN 455, BFIN 420 or consent of department. (Sp) Provides an introduction to derivative securities, their markets and the relation to the markets for real and financial assets. Focuses on the trading and valuation of futures, options and swaps; their uses and misuses; and their role in financial risk management.

**BFIN 490 Undergraduate Research (crosslisted with ECNS 490)****[formerly FIN/ECON 480 Research in Finance and Economics]**

**3 cr. Prerequisites:** ECNS 300, ECNS 302, ECNS 403 or consent of department. Combines statistical and econometric techniques with economic and financial theories to conduct rigorous research projects in the areas of economics and finance. The project is similar to a thesis and is the sole factor used to determine the course grade.

**BFIN 492 Independent Study****[formerly FIN 491 Independent Study]**

**V1-3 cr. Prerequisites:** Admission to upper division standing, consent of department, and approval of the College of Business Academic Policy Committee (CBAPC). (F, Sp, Su) Provides outstanding junior and senior students an opportunity to explore material not covered by regular Finance courses. Students must complete a Request for Independent Study form and have it approved by CBAPC.

**BFIN 494 Seminar/Workshop****[formerly FIN 492 Seminar]**

**V1-3 cr. Prerequisites:** Admission to upper division standing and consent of department. (F, Sp, Su) Provides advanced students an opportunity to intensively investigate topics pertinent to the field of Finance.

## General Business

### Business Administration

**(406) 657-2295****\* BGEN 105 Introduction to Business****[formerly BUS 101 Introduction to Business]**

**3 cr. (F, Sp, Su)** Surveys several aspects of business including the U.S. economic environment, social responsibility of business, small business and alternative forms of ownership. Presents concepts of general management, human resource management, marketing, finance, accounting and management information systems for decision making.

**BGEN 235 Business Law****[formerly BUS 205 Business Law I]**

**3 cr. (F, Sp, Su)** Covers the nature, origin and philosophy of law and civil procedure. Provides a comprehensive treatment of contracts and also emphasizes the advantages and disadvantages of different organizational forms.

**BGEN 294 Seminar****[formerly BUS 292 Seminar]**

**V1-3 cr.** Provides students an opportunity to investigate topics pertinent to the field of Business.

**BGEN 298 Internship****[formerly BUS 285 Experiential Learning]**

**V1-9.** Provides university credit for work experience in the business area, supervised by faculty. Learning agreement must be completed prior to registration (restricted). One hour of seminar per week.

**BGEN 299 Capstone: Brewing & Fermentation  
2 cr. (90 hours) (P/NP)**

Provides students an individual opportunity to engage in education and training not covered by regular coursework. Students will be working directly for a brewery, distillery, or winery. Students, through advising with course instructor, must select either the 90 hour professional internship or professional project option (business, scientific, brew house/mechanical, etc.) in consultation with the site supervisor for their capstone experience.

**BGEN 315 Applied Business Decisions****[formerly BUS 315 Applied Business Decisions]**

**3 cr. Prerequisite:** Admission to upper division standing. (F, Sp) Provides opportunity to reinforce and integrate fundamental business knowledge including accounting, economics, quantitative and technology in applied decision making. Focuses on commonly used, business decision-making practices including financial statement analysis, market analysis using descriptive statistics, and risk analysis. Students will participate in an integrated business simulation using business knowledge and technology.

**BGEN 360 International Business****[formerly MGMT 456 International Business]****3 cr. Prerequisites: Admission to upper division standing and BMGT 335 or consent of department.**

**(Sp)** Engages students with the complexities and challenges of doing business in a global economy. Emphasis is on learning about cultural diversity and different approaches to management and negotiation, theories of international trade, exchange rates, and an introduction to elements of importing and exporting. Country analyses and a cross national negotiation simulation are required.

**BGEN 405 Laws, Regulations and Research****[formerly BUS 405 Business Law II]**

**3 cr. Prerequisites: Admission to upper division standing and BGEN 235. (Sp)** Covers legal topics, such as a professional's legal liability and ethical issues, secured transactions, debtor-creditor relationships, agency, bankruptcy, and negotiable instruments. Coverage also includes additional topics such as administrative law, consumer, labor, and includes employment, antitrust, landlord tenant, real and personal property and insurance law.

**BGEN 440 Business and the Environment****[formerly BUS 440 Business and the Environment]**

**3 cr. Prerequisite: Admission to upper division standing and BMGT 335 or consent of instructor.**

**(F)** Investigates the interaction between business and its physical environment. Material comes from a variety of sources and perspectives, including ecology, economics and public policy. Emphasis is on the evolving concept of sustainability, and emerging best practices in areas of eco-efficiency, product/service design, and closed loop manufacturing.

**BGEN 450 Business and Society****[formerly BUS 450 Business and Society]**

**3 cr. Prerequisite: BMGT 335 or consent of department chair.** Analyzes changing expectations and relationships between business and society as well as the responsibilities of business to society and its impact on decision making. Topics include the role of business organizations in society, business and government in a global society, impacts of technological and social changes, building relationships with stakeholders, and business and ethical considerations.

**BGEN 494 Seminar****[formerly BUS 492 Seminar]**

**V1-3 cr. Prerequisite: Admission to Upper Division Standing. (F, Sp, Su)** Provides advanced students an opportunity to intensively investigate topics pertinent to the field of Business.

**BGEN 498 Internship****[formerly BUS 490 Internship]**

**V1-9 cr. Prerequisite: Admission to upper division standing. (F, Sp, Su)** Provides student managerial level work experience integrating theoretical and applied learning in a business setting. Requires written assignments and classroom participation supervised by faculty. Position and student must be approved through the Guidelines outlined by the College of Business. (Guidelines available in the COB Student Service Center or the Career Services.)

**BGEN 499 Capstone****[formerly BUS 485 Capstone]**

**3 cr. Prerequisite: All 200 and 300 level courses in the online Business degree. Offered ONLY Online. (Sp)** Covers strategic analysis and planning for managerial decision making through integration of the functional areas of business. Theoretical class work is applied through multiple pedagogical methods. The course is the capstone business course in the online Bachelor of Science in Business Administration major with an option in General Business.

**BUS 486 Advanced Business Geographics****3 cr. Prerequisites: BMIS 352 or BMIS 360.**

Emphasizes application of business of business geographics techniques to client projects. More advanced applications will be covered. Capstone course for students completing the minor in Business Geographics.

## General Business

### City College

**BGEN 105 Introduction to Business****[formerly CTBU 171 Introduction to Business]****3 cr. (3 lec/wk) (F, Sp)**

Provides an overall picture of business operations. Specialized fields within business organizations are presented and analyzed. The role of business in today's society is examined and career opportunities in business are explored.

**BGEN 110 Applied Business Leadership****3 cr. (3 lec/wk) (F)**

Focuses on the aspect of leadership in business and management. Topics include leadership skills for motivation, organizational change, teamwork, empowerment, ethics, communication, decision-making, conflict management, and diversity. Personality traits will be examined and how personalities contribute to team dynamics.

**BGEN 220 Business Ethics and Social Responsibility**  
**3 cr. (3 lec/wk) (Sp, Su)**

Provides students with an overview of business ethics and ethical management practices with emphasis on the process of ethical decision-making and working through contemporary ethical dilemmas faced by business organizations, managers, and employees. The course is intended to demonstrate how ethics can be integrated into strategic business decisions, and can be applied to students' careers. The course uses a case study approach to encourage the student in developing analytical, problem solving, critical thinking, and decision-making skills.

**BGEN 235 Business Law**  
**[formerly CTBU 165 Business Law]**  
**3 cr. (3 lec/wk) (Sp)**

A broad-based survey approach to the study of business law. Traditional areas of business law are covered. Includes an introduction to law; the creation of contracts; sales, agency, and consumer protection; commercial paper; and emerging topic in law. Presents a basic overview of the concepts and terminology essential to understanding the field of business law.

**BGEN 280 Business Planning**  
**3 cr. (3 lec/wk) Prerequisites: BMGT 235, BMKT 225, BMGT 210. Corequisite: ACTG 102. (Sp)**  
Provides students with knowledge and skills necessary for a small business manager or entrepreneur to develop a business plan. Topics include concepts of mission statements, goals and objectives, business and community compatibility, development of product or service idea, determination of market feasibility, determination of financial feasibility, development of marketing strategy, development of operations outline, and application of financial concepts.

**BGEN 294 Seminar**  
**V1-3 cr.** Provides students an opportunity to investigate topics pertinent to the field of Business.

**BGEN 299 Capstone: Brewing & Fermentation**  
**2 cr. (90 hours) (P/NP)**  
Provides students an individual opportunity to engage in education and training not covered by regular coursework. Student will be working directly for a brewery, distillery, or winery. Students, through advising with course instructor, must select either the 90 hour professional internship or professional project option (business, scientific, brew house/mechanical, etc.) in consultation with the site supervisor for their capstone experience.

## General Biology

### Biological & Physical Sciences

**(406) 657-2341**

**\* BIOB 101 Discover Biology**  
**[formerly BIOL 101 Survey of Biology]**  
**3 cr. (F, Sp, Su)** Includes discussion of the most important concepts in biology. Lectures cover cells (structure and physiology), genetics (cellular reproduction, genes, the nature of heredity and evolution), and the diversity of life (plants, animals, microorganisms and their ecological relationships). General Education course for non-science majors.

**\* BIOB 102 Discover Biology Laboratory**  
**[formerly BIOL 115 Survey of Biology Lab]**  
**1 cr. Corequisite: BIOB 101. (F, Sp, Su)** Includes laboratory exercises from different areas of Biology. Introduces students to experiments designed to examine major conceptual ideas in Biology such as cells, cell reproduction, metabolism, molecular genetics, evolution, and diversity. Students currently enrolled in an online section of BIOB 101 will be given preferential access to an online section of BIOB 102.

**\* BIOB 121 Fundamentals of Biology for Allied Health**  
**3 cr. (3 lec/wk) (F, Sp)** Includes discussion of basic biological principles, beginning with the molecules of life and ending with the evolution of the major human organ systems. Emphasizes the fields of biochemistry, cell biology, genetics, and evolution, focusing specifically on the roles they play in current human form and function. Recommended General Education course for non-science majors pursuing a career in health care.

**\* BIOB 122 Fundamentals of Biology: Evolution, Ecology and Biodiversity**  
**3 cr. (3 lec/wk) (F)** Includes discussion of basic biological principles, beginning with the molecules of life and ending with ecosystem processes. Emphasizes the fields of evolution and ecology, focusing specifically on the roles they play in generating and maintaining biological diversity. Recommended General Education course for non-science majors pursuing careers other than in health care fields.

**\* BIOB 123 Fundamentals of Biology: The Nature of Nutrition**

**3 cr. (3 lec/wk) (F, Sp)** Addresses the core principles of biology from the perspective of nutrition science. Focuses on the roles of biological molecules in animal and plant organisms, cellular function and energy metabolism, genetic expression and mutations, evolution of mechanisms for nutrient procurement and utilization, and the human role in the food chain and its impact on the biosphere. Introduces contemporary issues such as genetically-modified organisms, microbiota and food-borne illness, and sustainability of food supplies. Recommended General Education course for non-science majors pursuing a career in education, social or health sciences, or human services.

**\* BIOB 160 Principles of Living Systems [formerly BIOL 178 Principles of Biology]**

**3 cr. Corequisite: BIOB 161. (F, Sp)** Emphasizes principles of biology related to the unity of life. Covers cell structure and function, cellular metabolism and mechanisms of energy trapping, cellular reproduction, genetics, evolution, and a brief introduction to ecology, classification and biological diversity.

**\* BIOB 161 Principles of Living Systems Laboratory**

**[formerly BIOL 188 Principles of Biology Lab]**  
**1 cr. Corequisite: BIOB 160. (F, Sp)** Includes laboratory exercises related to topics discussed in BIOB 160.

**BIOB 170 Principles of Biological Diversity [formerly BIOL 179 Biodiversity]**

**3 cr. Prerequisites: BIOB 160. Corequisite: BIOB 171. (Sp)** Emphasizes the diversity of life. Covers viruses, bacteria, protists, fungi, plants and animals. Focuses on eukaryotes.

**BIOB 171 Principles of Biological Diversity Laboratory**

**[formerly BIOL 189 Biodiversity Lab]**  
**1 cr. Corequisite: BIOB 170. (Sp)** Includes laboratory exercises related to topics discussed in BIOB 170.

**BIOB 180 Human Genetics**

**[formerly BIOL 253 Human Genetics]**  
**3 cr. Prerequisites: BIOB 101, BIOB 160, or SCIN 101 & 103. (even F)** Introduces fundamental concepts and technological advances in human genetics. The course will provide students with an understanding of the genetic basis for human disease and the rational basis for the clinical management of these disorders by addressing what genes are and how they function and interact with each other and the environment.

**BIOB 260 Cellular and Molecular Biology [formerly BIOL 263 Introduction to Cell Biology]**

**3 cr. Prerequisites: BIOB 160, BIOB 161.**

**Corequisite: BIOB 261. (F)** Covers the molecular basis of eukaryotic cell structure and function. Topics include nuclear structure and function, intracellular compartmentalization and protein storing, membrane structure and function, signal transduction pathways, mechanisms and regulation of the mitotic and meiotic cell cycles, and tissue formation and maintenance.

**BIOB 261 Cellular and Molecular Biology Laboratory**

**[formerly BIOL 273 Introduction to Cell Biology Lab]**

**1 cr. Prerequisites: BIOB 160, BIOB 161.**

**Corequisite: BIOB 260. (F)** Complements the lecture material presented in the corequisite.

**BIOB 294 Seminar/Workshop**

**[formerly BIOL 292 Sophomore Seminar]**

**V1-6 cr.** Provides students with specific deficiencies the opportunity to take selected portions of the required Biology sequence. Lectures and laboratories to be attended, and credits to be earned are determined by biology faculty.

**BIOB 298 Internship/Cooperative Education [formerly BIOL 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Biology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**BIOB 315 Animal Development**

**[formerly BIOL 320 Animal Development]**

**3 cr. Prerequisite: BIOB 260. (even F)** Introduces the reproductive and developmental patterns in animals. Covers the embryonic and postembryonic developmental processes emphasizing cellular differentiation, the generation of form and shape, growth regulation, and developmental control mechanisms. The second half of the course emphasizes the genetic and molecular control of development, organized around our current understanding of commonly studied model organisms.



**BIOB 375 General Genetics****[formerly BIOL 353 Genetics]****3 cr. Prerequisites:** BIOB 260, BIOB 261.**Corequisite:** BIOB 376. (Sp) Covers the basic principles of genetics from both the classical and molecular point of view. Topics include Mendelian and non-Mendelian concepts, chromosome theory of inheritance, linkage and gene mapping, structure and function of DNA, regulation of gene expression, mutations and fundamentals of population genetics.**BIOB 376 General Genetics Lab****[formerly BIOL 354 Genetics Lab]****1 cr. Corequisite:** BIOB 375. (Sp) Includes laboratory exercises related to topics in BIOB 375.**BIOB 410 Immunology****[formerly BIOL 443 Immunology]****3 cr. Prerequisites:** BIOB 260, BIOB 375, BIOB 425 is recommended. (odd Sp) Includes fundamentals of immuno-chemistry, cellular immunology, immunogenetics and clinical immunology. Lab required.**BIOB 425 Advanced Cell and Molecular Biology****[formerly BIOL 363 Molecular Biology]****3 cr. Prerequisites:** BIOB 375, BIOB 376, BCH 380, BCH 381 and CHMY 323. **Corequisite:** BIOB 426.

(Sp) Covers the molecular basis of gene expression and inheritance in prokaryotic and eukaryotic cells. Topics include transcription, RNA processing, translation, regulation of gene expression and DNA replication. Emphasis is placed on understanding the experimental underpinnings of molecular biology.

**BIOB 426 Advanced Cell and Molecular Biology Lab****[formerly BIOL 373 Molecular Biology Lab]****1 cr. Corequisite:** BIOB 425. (Sp) This laboratory complements the lecture material presented in the corequisite.**BIOB 487 Bioinformatics****[formerly BIOL 485 Bioinformatics]****3 cr. Prerequisite:** BIOB 375. **Corequisite:** BCH 380. (odd F) Introduces the field of bioinformatics through a combined lecture-computer laboratory format.

Provides students with an overall view of genomics and proteomics through hands-on experience with biologically relevant databases, DNA sequence comparisons, structure analysis of macromolecules, phylogenetics, microarrays and proteomics.

**BIOB 490 Undergraduate Research****[formerly BIOL 495 Biological Research]****V1- 6 cr. Prerequisites:** Junior standing in Biology or consent of advisor. Involves intensive study of a specific problem related to biology. A contract describing the study must be completed at the time of enrollment.**BIOB 491 Special Topics****V1-12 cr. Prerequisite:** determined as needed.

Provides students with an opportunity to take courses not required in any curriculum for which there is a particular need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

**BIOB 492 Independent Study****[formerly BIOL 491 Independent Study]****V1-3 cr. Prerequisites:** Junior standing in Biology or consent of instructor. Provides advanced students an opportunity to explore material not covered by regular Biology courses. A contract describing the study must be completed at the time of enrollment.**BIOB 494 Seminar/Workshop****[formerly BIOL 492 Seminar]****V1-3 cr. Prerequisites:** Junior standing in Biology or consent of instructor. Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Biology.**BIOB 494 Seminar/Workshop****[formerly BIOL 493 Workshop]****V1-3 cr. Prerequisites:** Junior standing in Biology or consent of instructor. Provides an opportunity for experimental study in an area of Biology.**BIOB 495 Fieldwork****[formerly BIOL 497 Field Study]****V1-3 cr. Prerequisites:** BIOB 170 and BIOB 171 or consent of instructor. Provides an opportunity through summer field experience at the MSU Billings Biological Field Station or tour courses to study quantitatively and/or qualitatively the fauna and flora of ecosystems.**BIOB 498 Internship/Cooperative Education****[formerly BIOL 490 Biology Internship]****V1-3 cr. Prerequisites:** A grade of "A" or "B" in the course in which the internship will be done. Allows the student to earn credit for assisting in teaching biology laboratory classes.

**BIOB 498 Internship/Cooperative Education**  
[formerly BIOL 496 Cooperative Education/Internship]

**V1-9 cr.** Provides university credit for a work experience in the area of Biology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**BIOB 499 Senior Thesis/Capstone**  
[formerly BIOL 498 Capstone Seminar]

**1 cr. Prerequisite:** Senior standing in Biology. (F, Sp) Exit course that integrates and synthesizes knowledge and experience developed through the various courses in the biology program. Provides students opportunities to learn about current research in various scientific fields by attendance at seminars presented by science faculty and other guest speakers. Also provides a forum for students to present results of independent research projects and topics as assigned.

**BIOB 499 Senior Thesis/Capstone**  
[formerly BIOL 499 Honors Thesis]

**1cr. Prerequisite:** Junior or Senior standing in Biology and/or concurrent enrollment in BIOB 490. Involves intensive study of a specific problem related to biology requiring the writing and submission of a thesis to graduate with departmental honors. To graduate with honors, it is also necessary to have an overall GPA of 3.25 or better and a GPA of 3.5 or better in the major. A thesis proposal describing the study and a thesis review committee must be completed at the time of enrollment.

## Ecological Biology

### Biological & Physical Sciences

(406) 657-2341

**BIOE 202 Introduction to Environmental Ecology**  
[formerly BIOL 202 Introduction to Environmental Ecology]

**3 cr. Prerequisites:** BIOB 101 or BIOB 160. (Sp) Introduces interactions of organisms with each other and with their physical surroundings in the context of populations, communities, ecosystems, and landscapes. Emphasizes major global problems, energy resources, pollution, and sustaining biodiversity and ecological integrity.

**BIOE 370 General Ecology**  
[formerly BIOL 355 Ecology and Evolution]

**3 cr. Prerequisites:** BIOB 160, BIOB 161.

**Corequisite:** BIOE 371. (F) Covers the concepts of evolution and ecology. Includes speciation, physiological, behavioral, population and community ecology as well as energetics and nutrient cycling.

**BIOE 371 General Ecology Laboratory**  
[formerly BIOL 356 Ecology and Evolution Lab]

**1 cr. Corequisite:** BIOE 370. (F) Includes laboratory exercises related to topics in BIOE 370.

**BIOE 483 Evolution and Ecology**  
[formerly BIOL 456 Advanced Evolution and Ecology]

**3 cr. Prerequisites:** BIOE 370 and BIOE 371.

**Corequisite:** BIOE 484. (odd Sp) Examines advanced topics in evolutionary biology and ecology, focusing on critical discussion of theory and the literature. Content varies but topics may include mechanisms of evolutionary change, evolutionary genetics, sexual selection, evolutionary biogeography, coevolution, and evolutionary developmental biology among others.

**BIOE 484 Evolution and Ecology Lab**  
[formerly BIOL 457 Advanced Evolution and Ecology Lab]

**1 cr. Corequisite:** BIOE 483. (odd Sp) Includes discussion of primary literature and computer simulations related to topics in BIOE 483.

## Human Biology

### City College

**BIOH 101 Foundations of Human Biology**  
[formerly HLTH 101 Essentials of Anatomy and Physiology]

**3 cr. (3 lec/wk) (F, Sp, Su)**

Provides students with a basic understanding of human anatomy and physiology. Concepts of the body plan and homeostasis will be introduced. Students will also learn the basic structure, function, and interaction of the integumentary, skeletal, muscular, nervous, endocrine, blood, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems.

**BIOH 105 Basic Human Biology Lab**  
**1 cr. (2 lab/wk) Corequisite:** BIOH 104 or BIOH 101. (F, Sp) *Offered ONLY Online.*

Introduces the student to the structure and function of the human body in a lab course.

**BIOH 201 Human Anatomy and Physiology I**  
**[formerly BIOL 213 Human Anatomy and Physiology I]****3 cr. (3 lec/wk) Corequisite: BIOH 202.**

Introduces functional human anatomy and physiology at the molecular, cellular, tissue, and organ levels. This course is appropriate for those individuals entering allied health fields. Topics include chemistry, cell biology, histology, and a detailed overview of the anatomy and physiology of the integumentary, skeletal, muscular, and nervous systems. Entry is restricted to City College at MSU Billings students only.

**BIOH 202 Human Anatomy and Physiology I Laboratory**  
**[formerly BIOL 214 Human Anatomy and Physiology I Laboratory]****1 cr. (2 lab/wk) Corequisite: BIOH 201.**

Supplements concepts of human anatomy and physiology introduced in BIOH 201 with hands-on laboratory experience. Entry is restricted to City College at MSU Billings students only.

**BIOH 211 Human Anatomy and Physiology II**  
**[formerly BIOL 216 Human Anatomy and Physiology II]****3 cr. (3 lec/wk) Prerequisites: BIOH 201, BIOH 202. Corequisite: BIOH 212.**

Continues the examination of functional human anatomy and physiology at the molecular, cellular, tissue, and organ levels introduced in BIOH 201. Topics include the sensory, endocrine, blood, cardiovascular, respiratory, lymphatic, digestive, urinary, and reproductive systems. Entry is restricted to City College at MSU Billings students only.

**BIOH 212 Human Anatomy and Physiology II Laboratory**  
**[formerly BIOL 217 Human Anatomy and Physiology II Laboratory]****1 cr. (2 lab/wk) Prerequisites: BIOH 201, BIOH 202. Corequisite: BIOH 211.**

Supplements concepts of human anatomy and physiology introduced in BIOH 211 with hands-on laboratory experience. Entry is restricted to City College at MSU Billings students only.

## Human Biology

### Biological & Physical Sciences

**(406) 657–2341****BIOH 301 Human Anatomy and Physiology I**  
**[formerly BIOL 341 Human Anatomy and Physiology I]****3 cr. Prerequisites: CHMY 121 or CHMY 141 and one General Education course chosen from the Life Sciences category (BIOB 121 is preferred).**

**Recommended: CHMY 123. (F)** Includes detailed study of the physiology of cells, tissues, bone, muscle, and the nervous system. This is primarily a course for pre-professional students and those with a major in the health sciences.

**BIOH 302 Human Anatomy and Physiology I Lab**  
**[formerly BIOL 343 Human Anatomy and Physiology I Lab]**

**1 cr. Prerequisite: One General Education course chosen from the Life Sciences category or concurrent enrollment in BIOH 301. (F)** Includes detailed study of the anatomy of skeletal, integumentary, muscle, and nervous systems. Involves examination of body parts at both the gross and microscopic levels.

**BIOH 311 Human Anatomy and Physiology II**  
**[formerly BIOL 345 Human Anatomy and Physiology II]**

**3 cr. Prerequisite: A grade of “C-” or better in BIOH 301, or consent of instructor. Corequisite: BIOH 312. (Sp)** Includes detailed study of sensory physiology, cardiovascular system, respiratory physiology, gastrointestinal system, renal physiology, endocrinology, and reproduction. Lab required.

**BIOH 312 Human Anatomy and Physiology II Lab**  
**[formerly BIOL 346 Human Anatomy and Physiology II Lab]**

**1 cr. Corequisite: BIOH 311. (Sp)** Includes a study of physiology of the nervous, cardiovascular, endocrine, respiratory, renal, gastrointestinal, and reproductive systems using the laboratory approach.

**BIOH 382 Fundamentals of Medical Histology**

**2 cr. (1 lec/2 lab/wk) Prerequisite: BIOH 301 or consent of instructor. (Odd Sp)** Provides a focused study of microscopic structure and function of human cells, tissues, and organs. The course integrates both lecture and laboratory experiences. Laboratory experience will emphasize identification of specimens via light microscopy.

**BIOH 383 Biology of Human Reproduction**

**2 cr. (2 lec/wk) Prerequisite:** BIOH 301 or consent of instructor. **(Even Sp)** Provides a focused study of the structure and function of the various human reproductive organs. Emphasis will be placed on the roles of the endocrine and nervous systems in influencing virtually all aspects of human reproduction. Clinical correlations involving typical pathologies will be included.

**BIOH 405 Hematology**

**[formerly BIOL 425 Hematology]**

**3 cr. Prerequisites:** BIOH 301/302; BIOH 311/312. **Corequisite:** BIOH 406. **(odd F)** Studies the function, biochemistry, cell biology, and pathology of blood and its constituents.

**BIOH 406 Hematology Laboratory**

**[formerly BIOL 426 Hematology Laboratory]**

**1 cr. Prerequisites:** BIOH 301/302; BIOH 311/312. **Corequisite:** BIOH 405. **(odd F)** Covers methods for examining white blood cells, red blood cells, and platelets. Includes the examination of abnormal blood cells, hemostasis, and fluorescent antibody cell sorting analysis.

**BIOH 470 Summer Clinical Laboratory**

**[formerly BIOL 435 Summer Clinical Laboratory]**

**V12-15 cr. Prerequisite:** Consent of instructor. Studies clinical immunohematology, clinical chemistry theory, theory and practice of phlebotomy, clinical hemostasis, clinical microscopy and urinalysis, clinical body fluids, theory of modern transfusion techniques, and theory of clinical microbiology. This is the first part of the year-long professional training core. Clinical lab science fee applies.

**BIOH 471 Professional Training I**

**[formerly BIOL 436 Professional Training I]**

**V12-15 cr. Prerequisite:** Consent of Instructor. Provides training at a clinical laboratory affiliate. Reviews clinical immunohematology, clinical chemistry theory, theory and practice of phlebotomy, clinical hemostasis, clinical microscopy and urinalysis, clinical body fluids, theory of modern transfusion techniques, and theory of clinical microbiology. Performs actual patient laboratory testing under the guidance of trained professionals. This is the second part of the year-long professional training core. Clinical lab science fee applies.

**BIOH 472 Professional Training II**

**[formerly BIOL 437 Professional Training II]**

**V12-15 cr. Prerequisite:** Consent of Instructor.

Provides training at a clinical laboratory affiliate. Covers financial and quality management information for the clinical laboratory, advanced immunohematology, clinical chemistry, clinical microbiology, and clinical hematology. This is the third part of the year-long professional training core. Clinical lab science fee applies.

**BIOH 491 Special Topics: Human Biology**

**[formerly BIOL 480 Topics in Human Biology]**

**V1-2 cr. R-3 Prerequisite:** BIOH 301 and consent of instructor. **(Sp)** Provides advanced study of selected topics in human biology. Course content will vary and may include explorations of human reproductive biology, neurobiology, or microscopic anatomy.

## Microbiology

### Biological & Physical Sciences

**(406) 657-2341**

**BIOM 208 Applied Brewing Microbiology**

**3 cr. (2 lec/3 lab/wk) (F)**

Introduces the fundamental aspects of yeast fermentation and microbiology relevant to brewing. Some basic microbiological principles will be presented, followed by explanations of the various brewing/quality-impacting processes brought about by biological activity, as well as means of monitoring the brewing process. This course includes laboratory exercises.

**BIOM 250 Microbiology for Health Sciences**

**[formerly BIOL 251 Microbiology for the Health Sciences]**

**3 cr. Prerequisites:** One General Education course chosen from the Life Sciences category or BIOH 201. **Recommended:** CHMY 123 and BIOH 301. **(F, Sp, Su)** Surveys the fundamental principles of microbiology, while emphasizing the relationship of microorganisms to infectious disease. Designed as an introductory course in microbiology for nurses and health-related majors. Lab optional.

**BIOM 251 Microbiology for Health Sciences Lab**  
[formerly BIOL 261 Microbiology for the Health Sciences Lab]

**1 cr. Corequisite: BIOM 250. (F, Sp)** Emphasizes techniques for the isolation, identification and control of microorganisms. The lab is intended for allied health science students requiring an introductory microbiology laboratory.

**BIOM 360 General Microbiology**

[formerly BIOL 340 General Microbiology]

**3 cr. Prerequisites: BIOB 260, BIOB 261, two years of Chemistry. Corequisite: BIOM 361. (F)**

Introduces the anatomy, physiology, metabolism and genetics of bacteria and viruses. Surveys the roles of microorganisms in industrial and environmental microbiology as well as infectious disease.

**BIOM 361 General Microbiology Lab**

[formerly BIOL 350 General Microbiology Lab]

**1 cr. Corequisite: BIOM 360. (F)** Emphasizes fundamental techniques for the isolation, manipulation and identification of bacteria. An experimental approach is used to solving problems in microbiology.

**BIOM 400 Medical Microbiology**

[formerly BIOL 452 Medical Microbiology]

**3 cr. Prerequisite: BIOM 250 or BIOM 360. (even Sp)** Includes a study of pathogenic microorganisms and the diseases they cause. Pathogenic mechanisms, host resistance, control and epidemiology of the major bacterial, viral, fungal and protozoan diseases are discussed. Lab optional.

**BIOM 401 Medical Microbiology Lab**

[formerly BIOL 462 Medical Microbiology Lab]

**1 cr. Prerequisite: BIOM 251 or BIOM 361. (even Sp)** The laboratory emphasizes diagnostic methods and culturing techniques.

**BIOM 427 General Parasitology**

[formerly BIOL 427 Parasitology]

**2 cr. Prerequisite: BIOB 260, BIOB 375. (odd Sp)**

Studies the life cycles, biochemistry, molecular parasitology, pathogenesis, identification and treatment of the major parasitic groups, including parasitic protozoa, monogeneans, digeneneans, cestodes, nematodes, acanthocephalans, and parasitic arthropods.

**BIOM 491 Special Topics**

**V1-12 cr. Prerequisite: determined as needed.**

Provides students with an opportunity to take courses not required in any curriculum for which there is a particular need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

## Organismal Biology

### Biological & Physical Sciences

(406) 657-2341

**BIOO 412 Animal Physiology**

[formerly BIOL 424 Animal Physiology]

**3 cr. Prerequisite: BIOB 260. (odd F)** Includes a description of physiological processes in the major animal phyla. This course considers nervous and endocrine integration, electrolyte and fluid balance, gas exchange, movement, and energetics.

**BIOO 422 Morphology and Anatomy of Vascular Plants**

[formerly BIOL 420 Morphology and Anatomy of Vascular Plants]

**3 cr. Prerequisite: BIOB 261. Corequisite: BIOO 423. (odd F)** Covers the external form and internal structure of vascular plants. Includes major concepts in plant anatomy and morphology, and relates structural characteristics of plants to their associated functions in the natural environment. Lab required.

**BIOO 423 Morphology and Anatomy of Vascular Plants Lab**

[formerly BIOL 421 Morphology and Anatomy of Vascular Plants Lab]

**1 cr. Prerequisite: BIOB 261. Corequisite: BIOO 422. (odd F)** Complements lecture material presented in the corequisite through investigations of the external form and internal structure of vascular plants while also introducing techniques used for such investigations.

**BIOO 433 Plant Physiology**

[formerly BIOL 465 Plant Physiology]

**3 cr. Prerequisites: BIOB 376, BIOE 370. (odd Sp)**

Examines the physiological basis of plant survival, including water movement, mineral nutrition, gas exchange, solute transport, photosynthesis and environmental plant physiology. Includes physiological aspects of plant growth and development, including hormones, morphogenesis, biological clocks and plant responses to temperature. Integrates plant physiology from biochemical and physiological perspectives.

**BIOO 434 Plant Physiology Laboratory**  
[formerly BIOL 475 Plant Physiology Lab]  
**1 cr. Corequisite: BIOO 433. (odd Sp)** Includes exercises related to lecture topics in BIOO 433, with emphasis on the physiology of selected plants in Montana. Examines physiological aspects of plant growth, development and survival by acquainting students with a variety of methods used to investigate physiological processes in plants.

**BIOO 435 Plant Systematics**  
[formerly BIOL 315 Plant Systematics]  
**2 cr. Prerequisites: BIOB 170 and BIOB 171. Corequisite: BIOO 436. (even F)** Includes systems and methods of plant classifications as well as collection, identification and preservation of the local flora.

**BIOO 436 Plant Systematics Lab**  
[formerly BIOL 325 Plant Systematics Lab]  
**2 cr. Corequisite: BIOO 435. (even F)** This laboratory complements the lecture material presented in the corequisite.

**BIOO 437 Plant Development**  
[formerly BIOL 330 Plant Development]  
**3 cr. Prerequisite: BIOB 260. (even Sp)** Provides an in-depth exploration of reproductive and developmental patterns in plants. Covers embryonic and postembryonic developmental processes, emphasizing cellular differentiation, generation of form and shape, growth regulation, developmental control mechanisms, genetic and molecular control of development.

**BIOO 438 Plant Development Lab**  
[formerly BIOL 331 Plant Development Lab]  
**1 cr. Prerequisite: BIOB 260. Corequisite: BIOO 437. (even Sp)** Complements the lecture material presented in the corequisite with laboratory exercises emphasizing angiosperm development. Includes exercises on gametophyte development, embryology, and development of roots, leaves and stems.

**BIOO 450 Vertebrate Zoology**  
[formerly BIOL 458 Vertebrate Zoology]  
**3 cr. Prerequisites: BIOB 170 and BIOB 171. (even Sp)** Surveys the vertebrate classes, focusing on classification, morphology, physiology, ecology, behavior, and evolutionary history of each group.

**BIOO 451 Vertebrate Zoology Lab**  
[formerly BIOL 460 Vertebrate Zoology Lab]  
**1 cr. Corequisite: BIOO 450. (even Sp)**  
Complements the lecture material presented in the corequisite, with an emphasis on identification of Montana vertebrates.

## Business Management City College

**BMGT 102 Business Basics for Brewing and Distillery**  
**3 cr. (3 lec/wk) (Sp)**  
Provides an overall picture of business operations in micro-brewing and distillery. Specialized business concepts within brewery business are presented and analyzed. This course will cover functional concepts and fundamentals required to start and operate a craft brewery. Areas of focus include regulations, operations, finance, and marketing.

**BMGT 180 Employment Law and Practices**  
[formerly HR 180 Employment Law and Practices]  
**3 cr. (3 lec/wk) (F, Sp)**  
Introduces students to laws and practices affecting the employer-employee relationship. Students gain a general knowledge of employment law, diversity management, equal employment opportunity, record-keeping requirements, and affirmative action.

**BMGT 210 Small Business Entrepreneurship**  
**3 cr. (3 lec/wk) Prerequisites: BGEN 105, BGEN 110, ACTG 101, BMKT 225. Corequisite: BGEN 235. (Sp)**  
Introduces the essentials of starting, managing, and growing a small business. Topics will include the role of the entrepreneur, pricing, advertising, financing, layout of facilities, inventory control, staffing, purchasing, vendor selection, and relevant laws affecting small business.

**BMGT 222 Principles of Project Management**  
**3 cr. (3 lec/wk) (Sp, Su)**  
Covers project management concepts including project definition, strategic planning process, organizational structure, culture, roles, stakeholder management, portfolio management, leadership, teambuilding, conflict management, risk management, cost estimation and budgeting, scheduling and project closeout, and termination. Critical Project Management Body of Knowledge elements are also covered in this course.

**BMGT 230 Business Logistics****3 cr. (3 lec/wk) (Sp)**

Provides a general knowledge of current management practices in logistics management. The focus of the course will be planning, organizing, and controlling of these activities. The course will introduce the student to transport, inventory, location strategies, customer service goals, and organization control.

**BMGT 235 Management****[formerly CTBU 280 Principles of Applied Management]****3 cr. (3 lec/wk)**

Introduces students to the study of 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, and handling disciplinary problems.

**BMGT 237 Human Relations in Business****3 cr. (3 lec/wk) (F)**

Focuses on the aspects of human relations and effective communication in the business environment. This course will include focus on creating strong one-on-one and group communication channels that promote healthy interaction with others for effective and strong business relationships. Subsets of the course will include communication, empathy, stress management, conflict resolution, tactfulness, dealing with conflict, listening skills, and establishing rapport.

**BMGT 245 Customer Service Management****3 cr. (3 lec/wk) (Sp)**

Focuses on the relationship between business and consumer. This course will enable the student to understand the relationship of self to customers, problem solve, and learn the importance of communicating effectively with customers. Specific emphasis is given to managing customer expectations by building positive customer rapport.

**BMGT 250 Employment and Compensation Strategies****[formerly HR 250 Employment and Compensation Strategies]****3 cr. (3 lec/wk) (F)**

Introduces students to the recruiting and selection process, including interviewing techniques and the legal implications in the recruiting and hiring process. Explores different labor market approaches and organizational recruiting activities. Examines compensation practices and differentiates organizational culture, philosophies, strategies, and objectives that impact compensation.

**BMGT 281 Risk Management, Safety and Security [formerly HR 281 Risk Management, Safety, and Security]****3 cr. (3 lec/wk) (F, Sp)**

Introduces students to legal and record-keeping requirements affecting health and safety. Students explore safety management activities and policies, workplace health issues, health promotion, workplace violence, and security management.

**BMGT 282 Organizational Training and Development****[formerly HR 282 Organizational Training and Development]****3 cr. (3 lec/wk)**

Introduces students to the training and change management process associated with organizational development and planning. The student will explore training needs and objectives, delivery approaches, levels of training evaluation, adult learning techniques, and coaching strategies.

**BMGT 298 Internship****[formerly HR 296 Cooperative Education/Internship]****V1-9 cr. (45 hours/credit)**

Provides students with an opportunity for experimental study in the varied areas of human resource management. Students complete a specific assignment in a pre-arranged employer setting. Examples of assignments may include developing an Exit Interview, New Employee Orientation Program, or Training Program, auditing records, assisting with personnel files, or writing job descriptions.

## Business Management

### Business Administration

(406) 657–2295

#### **BMGT 322 Operations Management**

**[formerly MGMT 322 Operations Management]**

**3 cr. Prerequisites: Admission to upper division standing or consent of department. (F, Sp, Su)**

Surveys the tasks which must be accomplished in that part of the organization which produces its service or products. Presents selected critical quantitative models from a managerial perspective. Introduces students to the design of services and products, planning and control, inventory systems and the management of quality.

#### **BMGT 329 Human Resource Management**

**[formerly MGMT 452 Human Resource Management]**

**3 cr. Prerequisites: BMGT 335 and Admission to upper division standing, or consent of department. (F, Sp)**

Presents an overview of the laws and practices involved in providing an organization with the needed skilled workforce. Topics include best practices for handling recruiting and selecting employees, evaluating employee performance, making promotion and discipline decisions, creating fair compensation systems, dealing with sexual harassment and various discrimination issues, and handling union-management relations.

#### **BMGT 335 Management and Organization**

**[formerly MGMT 321 Principles of Management]**

**3 cr. Prerequisite: Junior standing or consent of department. (F, Sp, Su)** Introduces the principles of managing organizations (both public and private). The course familiarizes the student with the skills needed by managers and the best practices used by organizations in a changing global environment. Topics include diversity, globalization, motivation, social responsibility, leadership, strategic planning, group dynamics, and organizational change.

#### **BMGT 353 Organizational Behavior**

**[formerly MGMT 353 Organizational Behavior]**

**3 cr. Prerequisites: Admission to upper division standing and BMGT 335 or consent of department. (F)**

Studies individual and group behavior in organizations. The course examines how issues such as personality, attitudes, motivation, group dynamics, power, leadership, and conflict management affect individual and organizational performance. The course focuses on how these issues can be managed and utilized to improve employee performance in the workplace.

#### **BMGT 422 Project Management**

**[formerly MGMT 422 Project Management]**

**3 cr. Prerequisites: BMGT 335 and BMGT 322, or consent of department. (F, Sp)**

Covers all aspects of project management including project definition, methods and strategy, resource scheduling and allocation, leadership, managing teams, partnering, minimizing risks, benchmarking project progress and performance and project termination and review. Students utilize Microsoft Project to implement and manage a project.

#### **BMGT 448 Entrepreneurship**

**[formerly MGMT 439 Entrepreneurship]**

**3 cr. Prerequisites: BMGT 335, BMKT 325, BFIN 322. Offered ONLY Online. (F)**

Addresses issues typically faced by managers of businesses. Accounting and inventory systems, financial analysis, means of raising capital, management and marketing techniques, and guidelines for writing a business plan are presented. Students will write a business plan.

#### **BMGT 461 Small Business Management**

**[formerly MGMT 438 Small Business Management and Entrepreneurship]**

**3 cr. Prerequisites: BGEN 315, BMGT 335, BMKT 325, BFIN 322, or consent of department. (F, Sp)**

Addresses issues typically faced by managers of smaller businesses. Accounting and inventory systems, financial analysis, means of raising capital, management and marketing techniques, and guidelines for writing a business plan are presented, emphasizing the needs of smaller businesses. Students will write a business plan.



**BMGT 492 Independent Study**  
[formerly MGMT 491 Independent Study]  
**V1-3 cr. Prerequisites:** Admission to upper division standing, consent of department, and approval of the College of Business Academic Policy Committee (CBAPC). (F, Sp, Su) Provides outstanding junior and senior students an opportunity to explore material not covered by regular Management courses. Students must complete a Request for Independent Study form and have it approved by CBAPC.

**BMGT 494 Seminar/Workshop**  
[formerly MGMT 492 Seminar]  
**V1-3 cr. Prerequisite:** Admission to upper division standing or consent of department. (F, Sp, Su)  
Provides senior students an opportunity to intensively investigate topics pertinent to the field of Management.

## **Business Management Information Systems Business Administration (406) 657-2295**

**\* BMIS 150 Computer Literacy**  
[formerly MIS 150 Information Access and Organization]  
**3 cr. (F, Sp)** Explores access to information, organization of information, retrieval, and decision-making models for analysis and presentation of information in a wide variety of environments and formats.

**BMIS 210 System Analysis and Design (crosslisted with BMIS 499)**  
[formerly MIS 210 Systems Analysis and Design]  
**3 cr. Prerequisites:** BMIS 352 or CMP 112.  
**Corequisite:** MIS 365. (F) Introduces the theory, principles and methodologies of systems analysis and design. Seniors will complete a major project assignment. (crosslisted with City College)

**BMIS 294 Seminar**  
[formerly MIS 292 Seminar]  
**V1-3 cr.** Provides an opportunity for students to investigate areas of Information Systems.

**BMIS 310 Web Design, Development, and Implementation**  
[formerly MIS 310 Web Design, Development and Implementation]  
**3 cr. (F, Sp, Su)** Provides students with basic concepts, theories, and tools to design, develop and implement Web pages. Includes advanced Internet researching techniques and skills.

**BMIS 311 Management Information Systems**  
[formerly MIS 330 Principles of Management Information Systems]  
**3 cr. Prerequisite:** CAPP 131 or equivalent, junior standing. (F, Sp, Su) Introduces the fundamental concepts of management information systems in business organizations.

**BMIS 352 Microcomputer Database Design and Implementation**  
[formerly MIS 352 Microcomputer Database Design and Implementation]  
**3 cr. (Su)** Covers the concepts and design of microcomputer database management systems. Extensive hands-on with data base programs. Students complete a large database management system for a small business.

**BMIS 360 Advanced Database Programming**  
[formerly MIS 372 Advanced Database Programming]  
**3 cr. Prerequisites:** Admission to upper division standing, CSCI 100 and MIS 365. Introduces fourth generation languages using database programming techniques. The application of SQL programming language on micro-computers will be included. 4GL programming will include RISC environment applications.

**BMIS 461 Interactive Web Development for Business**  
[formerly MIS 461 Interactive Web Development]  
**3 cr. Prerequisite:** BMIS 310. Provides students with skills needed to create animation and interactive elements for website creation. Covers advanced theory and application of web design.

**BMIS 462 Advanced Web Development for Business**  
[formerly MIS 462 Advanced Web Development]  
**3 cr. Prerequisite:** BMIS 310. Provides students with advanced web programming and design skills needed to create sophisticated website creation. Covers advanced theory and application of web design.

**BMIS 492 Independent Study****[formerly MIS 491 Independent Study]**

**V1-3 cr. Prerequisites:** Admission to upper division standing, consent of department, and approval of the College of Business Academic Policy Committee (CBAPC). (F, Sp, Su) Provides outstanding junior and senior students an opportunity to explore material not covered by regular Information System courses. Students must complete a Request for Independent Study form and have it approved by CBAPC.

**BMIS 494 Seminar****[formerly MIS 492 Seminar]**

**V1-3 cr. Prerequisite:** Admission to upper division standing. (F, Sp, Su) Provides students an opportunity to extensively investigate topics pertinent to Information Systems.

**BMIS 499 Capstone: System Analysis and Design (crosslisted with BMIS 210)****[formerly MIS 410 Systems Analysis and Design]****3 cr. Prerequisites:** BMIS 352 or CMP 112.

**Corequisite:** MIS 365. (F) Introduces the theory, principles and methodologies of systems analysis and design. Seniors will complete a major project assignment. (crosslisted with City College)

## Business Marketing

### City College

**BMKT 112 Applied Sales****3 cr. (3 lec/wk) (F)**

Provides basic principles and techniques for selling, and practical application. Includes selling as a profession, preparation for relationship selling, the selling process, and planning and managing a sales territory.

**BMKT 225 Marketing****[formerly CTBU 270 Introduction to Sales & Marketing]****3 cr. (3 lec/wk)**

Provides students with the fundamental principles and concepts of sales practices and procedures as well as an introduction into marketing terminology and strategies. Topics covered include: personal selling, product development, the marketing concept, consumer behavior, marketing research, pricing, channels of distribution, and promotion.

## Business Marketing

### Business Administration

**(406) 657–2295****BMKT 325 Principles of Marketing****[formerly MKT 340 Principles of Marketing]**

**3 cr. Prerequisite:** Junior standing or consent of department. (F, Sp, Su) Presents behavioral patterns and legal and economic constraints affecting marketing decisions. Introduces analytic and control techniques for effective product planning, promotion, pricing and physical distribution.

**BMKT 337 Consumer Behavior****[formerly MKT 341 Consumer Behavior]**

**3 cr. Prerequisites:** Upper division standing, BMKT 325 or consent of department. (Sp, Su) Covers the consumer-firm relationship using concepts from contemporary behavioral sciences. Emphasizes the many problems encountered in marketing to various groups of consumers and the role theory plays in problem solving.

**BMKT 342 Marketing Research****[formerly MKT 448 Market Research]**

**3 cr. Prerequisites:** Admission to upper division standing, BMKT 325, or consent of department. (F, Sp) Surveys the influence of market research on the decision-making process. Includes problem formulation, research design, observational and sampling requirements, data analysis, interpretation and reporting.

**BMKT 343 Integrated Marketing Communications****[formerly MKT 343 Integrated Marketing Communications]**

**3 cr. Prerequisites:** Admission to upper division standing and BMKT 325 or consent of department. (F) Emphasizes theories and practices of advertising, sales promotion and public relations in the marketing program. Includes promotional planning and strategy, program integration and effectiveness and relevant communications concepts.

**BMKT 350 Social Media Marketing**

**3 cr. Prerequisite:** BMKT 325 or consent of instructor. (F) Explores the background, concepts, and skills of the social media manager. Students are given many opportunities to practice the requisite skill, as well as discuss related topics of diversity, globalization, quality, ethics, and social responsibility as it pertains to social media marketing.

**BMKT 411 Services/Relationship Marketing**  
**[formerly MKT 475 Services Marketing/Management]**

**3 cr. Prerequisites:** Upper division standing, BMKT 325 and BMGT 335. (Sp) Provides practical techniques for defining and meeting the needs of each set of an organization's external and internal customers. Emphasizes the key drivers of service, e.g., creating a culture of service, customer focused information systems, incentives for customer service, empowered employees, customer satisfaction, and market orientation. Additionally, the leadership role of senior, middle, and lower levels of management will be examined.

**BMKT 436 Sales and Sales Management**  
**[formerly MKT 344 Professional Selling]**

**3 cr. Prerequisites:** Admission to upper division standing. **Corequisite:** BMKT 325 or consent of department. (F, Sp) Includes the principles of professional selling through strategically planning, making the sales call, strengthening communications, and building partnerships.

**BMKT 441 International Marketing**  
**[formerly MKT 460 International Marketing]**

**3 cr. Prerequisite:** BMKT 325. Explores the unique aspects of international marketing for both small entrepreneurial firms and for large multinational corporations. Operating in an international context provides unique challenges for small businesses. In order to be successful, firms must adapt to the social, technological, economic, and political environment (STEP) in which they operate. The first part of the course examines how the STEP environment alters international marketing practice. The second part of the course is designed to help students manage the marketing mix (product, promotion, pricing, distribution) in international markets.

**BMKT 446 Marketing for Entrepreneurs**

**3 cr. (3 lec/wk) Prerequisites:** BMKT 325 and Admission to upper division standing, or consent of department. *Offered ONLY Online.* (F) Develops the student's knowledge of marketing entrepreneurship, including having online students work with community clients to understand how to identify opportunities and create value.

**BMKT 449 Strategic Marketing Management**  
**[formerly MKT 449 Strategic Marketing Management]**

**3 cr. Prerequisites:** Admission to upper division standing, BMKT 325, BMKT 337 and BMKT 342 or consent of department. (Sp) Covers the methods and techniques employed in marketing management, including study of consumers, retailers, product, and controlling the total marketing program.

**BMKT 460 Marketing High-Technology Products and Innovation**

**3 cr. (3 lec/wk) Prerequisites:** BMKT 325 and Admission to upper division standing, or consent of department. *Offered ONLY Online.* (Sp) Develops the student's knowledge of product development, marketing, and competitive positioning from the customer's perspective.

**BMKT 470 Supply Chain Management**  
**[formerly MKT 470 Supply Chain Management]**

**3 cr. Prerequisites:** Upper division standing and BMKT 325. Provides the fundamentals of supply chain management through class lecture, cases, and discussions. Topics include internal and external environments, customer service, logistics, strategy, global dimensions, distribution, planning and forecasting.

**BMKT 490 Undergraduate Research**  
**[formerly MKT 480 National Advertising Campaign]**

**3 cr. Prerequisites:** Admission to upper division standing, BMKT 325 and consent of department. Provides senior level students with an opportunity to research, develop, and present a professional quality advertising campaign to a nationally recognized panel of professionals and clients. Relies on a team approach and group projects.

**BMKT 492 Independent Study**  
**[formerly MKT 491 Independent Study]**

**V1-3 cr. Prerequisites:** Admission to upper division standing, consent of department, and approval of the College of Business Academic Policy Committee (CBAPC). (F, Sp, Su) Provides outstanding junior and senior students an opportunity to explore material not covered by regular Marketing courses. Students must complete a Request for Independent Study form and have it approved by CBAPC.

**BMKT 494 Seminar/Workshop****[formerly MKT 492 Seminar]****V1-3 cr. Prerequisite: Admission to upper division standing or consent of department. (F, Sp, Su)**

Provides senior students an opportunity to intensively investigate topics pertinent to the field of Marketing.

## Computer Applications

### City College

**CAPP 110 Short Courses: MS Outlook****[formerly CMP 121 Introduction to Microsoft Outlook]****1 cr. (1 lec/wk) Prerequisite: CAPP 120.**

Instructs students in the full functional usage of Microsoft Outlook as a tool. Students will learn the special features for the application such as: Scheduling, Managing Contacts and Emails, and Integrating Outlook with other applications.

**CAPP 120 Introduction to Computers****[formerly CMP 105 Introduction to Computers and Applications]****3 cr. (3 lec/wk)**

Instructs students in fundamental computing skills. Concepts include the creation and manipulation of files, use of a common Operating System, a basic understanding of computer hardware, and a functional knowledge of common business applications such as: word processing, spreadsheets, Internet and email, and presentation software. The course is performed in a lab setting with access to computers and necessary software.

**CAPP 131 Basic MS Office****[formerly MIS 225 Introduction to Productivity Application Software]****3 cr. (3 lec/wk) (F, Sp)**

Provides introductory concepts of computers, Windows operating system, Internet, spreadsheets, and word processing.

**CAPP 153 MS PowerPoint****[formerly CMP 122 Introduction to Microsoft PowerPoint]****2 cr. (1 lec/2 lab/wk) Prerequisite: CAPP 120.**

Instructs students in the features of PowerPoint and its usage as a tool for presentations. Students will learn the full host of features available in PowerPoint to create, modify, and enhance presentations and slide-shows. Further, students will be instructed in design techniques and how to give presentations.

**CAPP 154 MS Word****[formerly CMP 118 Word]****3 cr. (3 lec/wk) Prerequisite: CTBU 112 and CAPP 120.**

Provides hands-on experience in word processing on the microcomputer using Word for Windows software. The process of creating and formatting business documents includes editing, search and replace, pagination, document assembly, merging, macros, printing, headers and footers, columns and file management.

**CAPP 156 MS Excel****[formerly CMP 119 Excel]****3 cr. (3 lec/wk) Prerequisite: CAPP 120.**

Introduces students to business applications using spreadsheets. Emphasis is placed on the essential functions of spreadsheet operation, as well as introduction to some advanced functions such as lookup functions and database management. Content emphasizes mastery of spreadsheet concepts and applications and development of analytical thinking skills.

**CAPP 158 MS Access****[formerly CMP 262 Microsoft Access]****3 cr. (3 lec/wk) Prerequisite: CAPP 120.**

Examines the process of database design using a relational model. Use of applications software focuses on data query, report generation, multiple file relationships and interface techniques.

**CAPP 172 Advanced Software Applications****[formerly DSGN 204 Advanced Software Applications]****3 cr. (2 lec/2 lab/wk) Prerequisite: CAPP 120. (F, Sp)**

Expands the student's base of technical expertise with discussions and lab exercises utilizing current software applications. Licensing policies, LAN and Internet communication commands and issues, and a broad variety of current software are used to further reinforce and broaden the background of the computer user.

**CAPP 291 Special Topics****[formerly CMP 292 Seminar]****V1-3 cr. Prerequisite: CAPP 120.**

Investigates intensively topics pertaining to an area of data processing.

## Computer Applications

### Business Administration

(406) 657-2295

#### **CAPP 131 Basic MS Office**

**[formerly MIS 225 Introduction to Productivity Application Software]**

**3 cr. (F, Sp)** Provides introductory concepts of computers, Windows operating system, Internet, spreadsheets, and word processing.

## Chemistry

### Biological & Physical Sciences

(406) 657-2812

#### **CHMY 104 Preparation for Chemistry**

**3 cr. (3 lec/wk) (F and/or Sp)** Prepares students to succeed in the one-semester CHMY 121 or two-semester CHMY 141/CHMY 143 College Chemistry series by developing necessary mathematical and scientific problem-solving skills. This course focuses on developing the knowledge and skills required to look at the world on the atomic scale. Students will solidify thinking patterns used to solve chemical problems, such as recognizing mathematical relationships in data and manipulating mental models to explain macroscopic phenomena. The course will demystify the theories and concepts for incoming students. The course will focus on the following topics: scientific method and measurement, the periodic table, chemical formulas and equations, stoichiometry, and gas laws. Each topic will include a special focus on the procedural math associated with related problem-solving tasks.

#### **\* CHMY 121 Introduction to General Chemistry [formerly CHEM 104 Fundamentals of General Chemistry]**

**3 cr. Prerequisite: M 095 or equivalent. (F, Sp, Su)** Covers the fundamental definitions of chemistry, structure, chemical equations, solutions, equilibrium, oxidation-reduction, and acid/base chemistry. This is primarily a course for pre-nursing and allied health students.

#### **\* CHMY 122 Introduction to General Chemistry Laboratory [formerly CHEM 105 Fundamentals of General Chemistry Lab]**

**1 cr. Corequisite: CHMY 121. (F, Sp, Su)** Provides laboratory experiences that complement and extend the lecture materials.

#### **CHMY 123 Introduction to Organic and Biochemistry**

**[formerly CHEM 106 Fundamentals of Organic and Biochemistry]**

**3 cr. Prerequisites: CHMY 121 and CHMY 122. (Sp, Su)** Covers the basic functional groups, nomenclature and reactions of organic chemistry and provides an overview of biomolecules, biocatalysis and metabolism with clinically relevant correlations.

#### **\* CHMY 141 College Chemistry I**

**[formerly CHEM 115 General Chemistry I]**

**3 cr. Prerequisite: M 095 or satisfactory math placement score. Corequisite: CHMY 142. (F, Su)** Introduces the student to the fundamental concepts of chemistry, including: elements and compounds, the periodic table, atomic structure, chemical equations, stoichiometry, solution concentrations, gas laws, heat and energy, quantum theory, and chemical bonding. Primarily intended for science majors/minors, pre-engineering, and allied health students.

#### **\* CHMY 142 College Chemistry Laboratory I**

**[formerly CHEM 118 General Chemistry I Lab]**

**1 cr. Corequisite: CHMY 141. (F, Su)** Lab to accompany CHMY 141. Introduces the tools and techniques of experimental chemistry such as weighing, solution preparation, titration and standardization.

#### **CHMY 143 College Chemistry II**

**[formerly CHEM 116 General Chemistry II]**

**3 cr. Prerequisites: CHMY 141 and CHMY 142.**

**Corequisite: CHMY 144. (Sp, Su)** Introduces the student to the additional fundamental concepts of chemistry, including: molecular geometry, solutions and condensed phases, chemical and phase equilibria, kinetics, thermodynamics, and electrochemistry.

#### **CHMY 144 College Chemistry Laboratory II**

**[formerly CHEM 119 General Chemistry II Lab]**

**1 cr. Prerequisite: CHMY 142. Corequisite: CHMY 143. (Sp, Su)** Lab to accompany CHMY 143. Introduces qualitative analysis and other topics to complement the lecture material.

**CHMY 145 College Chemistry Recitation**

**1 cr. (1 lec/wk) R Corequisite: CHMY 141 or CHMY 143. (F, Sp)** Provides a small class environment where students can ask questions that require answers too extensive or too specific for the lecture setting. The course is designed to enhance the CHMY 104/CHMY 141/CHMY 143 lecture experience by actively engaging students in real life chemical problem solving. Students will use their newly acquired chemistry skill sets to solve multi-faceted chemical problems in small group settings. Students can ask questions about lecture material or homework assignments and receive more individual attention.

**CHMY 170 Applied Brewing Chemistry**

**3 cr. (2 lec/3 lab/wk) (F)** Introduces the fundamental aspects of malting and fermentation chemistry. Some basic chemical principles will be presented, followed by explanations of the underlying chemistry of steps in the brewing process and quality control monitoring. This course includes laboratory exercises.

**CHMY 211 Elements of Organic Chemistry  
[formerly CHEM 220 Principles of Organic Chemistry]**

**3 cr. Prerequisites: CHMY 143, CHMY 144. (Sp)** Covers the unique characteristics of carbon, bonding, structure, reactions, nomenclature, and a look into the major organic functional groups. This is a one-semester introduction to organic chemistry.

**CHMY 212 Elements of Organic Chemistry  
Laboratory**

**[formerly CHEM 221 Principles of Organic Chemistry Lab]**  
**1 cr. Prerequisites: CHMY 143, CHMY 144. Corequisite: CHMY 211. (Sp)** Introduces the basic techniques used in an organic chemistry lab including crystallization, extraction, distillation, chromatography, and synthesis.

**CHMY 292 Independent Study**

**[formerly CHEM 291 Independent Study]**  
**V1-4 cr. Prerequisite: Consent of instructor and department chairperson.** Provides an opportunity for freshman and sophomore students to explore material not covered by regular Chemistry courses. A contract describing this study must be completed at the time of enrollment.

**CHMY 298 Internship/Cooperative Education  
[formerly CHEM 296 Cooperative  
Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Chemistry, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**CHMY 311 Analytical Chemistry-Quantitative  
Analysis  
[formerly CHEM 320 Quantitative Chemical  
Analysis]**

**3 cr. Prerequisite: CHMY 143 and CHMY 144. Corequisite: CHMY 312. (F)** Covers the theoretical foundations of quantitative chemical analysis, as well as an introduction to fundamental instrumental techniques.

**CHMY 312 Analytical Chemistry Laboratory-  
Quantitative Analysis  
[formerly CHEM 325 Quantitative Chemical  
Analysis Lab]**

**1 cr. Prerequisite: CHMY 144. Corequisite: CHMY 311. (F)** Lab to accompany CHMY 311 covering gravimetric, titrimetric, electrochemical and spectrometric analysis techniques.

**CHMY 321 Organic Chemistry I  
[formerly CHEM 330 Organic Chemistry I]  
3 cr. Prerequisites: CHMY 143 and CHMY 144. Corequisite: CHMY 322. (F)** Covers the nomenclature, structure, reactions and reaction mechanisms of organic functional groups - alkanes through alcohols.

**CHMY 322 Organic Chemistry Laboratory I  
[formerly CHEM 331 Organic Chemistry I Lab]  
1 cr. Corequisite: CHMY 321. (F)** Introduces the common techniques used in an organic chemistry lab, including crystallization, extractions, distillations, chromatography, and synthesis.

**CHMY 323 Organic Chemistry II  
[formerly CHEM 334 Organic Chemistry II]  
3 cr. Prerequisites: CHMY 321 and CHMY 322. Corequisite: CHMY 324. (Sp)** Continuation of CHMY 321. Covers the functional groups: aromatics, aldehydes, ketones, acids, acid derivatives, and amines. Also introduces organic spectroscopy.

**CHMY 324 Organic Chemistry Laboratory II  
[formerly CHEM 335 Organic Chemistry II Lab]  
1 cr. Corequisite: CHMY 323. (Sp)** Continuation of CHMY 322. Provides additional techniques and skills common in an organic chemistry lab, including synthesis and spectroscopic techniques.

**CHMY 371 Physical Chemistry-Quantum Chemistry and Spectroscopy**  
[formerly CHEM 340 Physical Chemistry I]  
**3 cr. Prerequisites:** CHMY 323, M 171, M 172 and PHSX 232. **Corequisite:** CHMY 372. (odd F)  
Introduces the fundamental concepts of quantum mechanics, atomic and molecular structure, chemical bonding, and the theoretical basis of experimental spectroscopy.

**CHMY 372 Physical Chemistry Laboratory I**  
[formerly CHEM 341 Physical Chemistry I Lab]  
**1 cr. Corequisite:** CHMY 371. (odd F) Demonstrates and amplifies concepts presented in CHMY 371.

**CHMY 373 Physical Chemistry-Kinetics and Thermodynamics**  
[formerly CHEM 344 Physical Chemistry II]  
**3 cr. Prerequisite:** M 171, M 172, PHSX 232, CHMY 143. **Corequisite:** CHMY 374. (even Sp) Introduces the fundamental concepts of equilibrium, thermodynamics equilibria, and phenomenological kinetics.

**CHMY 374 Physical Chemistry Laboratory II**  
[formerly CHEM 345 Physical Chemistry II Lab]  
**1 cr. Corequisite:** CHMY 373. (even Sp)  
Demonstrates and amplifies concepts presented in CHMY 373.

**CHMY 401 Advanced Inorganic Chemistry**  
[formerly CHEM 355 Advanced Inorganic Chemistry]  
**3 cr. Prerequisites:** CHMY 143 and CHMY 144. **Corequisite:** CHMY 402. (even Sp) Covers the chemistry of the main group and transition elements. The course includes group theory and its application to modern bonding theories. These bonding theories will be used to explore topics in coordination, organometallic, and bioinorganic chemistries.

**CHMY 402 Advanced Inorganic Chemistry Laboratory**  
[formerly CHEM 356 Advanced Inorganic Chemistry Lab]  
**1 cr. Prerequisites:** CHMY 143 and CHMY 144. **Corequisite:** CHMY 401. (even Sp) Includes advanced techniques in inorganic synthesis, spectroscopy, and computational chemistry.

**CHMY 411 Advanced Organic Chemistry**  
[formerly CHEM 430 Advanced Organic Chemistry]  
**3 cr. Prerequisites:** CHMY 323 and CHMY 324. **Corequisite:** CHMY 412. (odd F) Covers additional and more advanced topics in organic synthesis, reaction mechanisms, and spectroscopy.

**CHMY 412 Advanced Organic Chemistry Laboratory**  
[formerly CHEM 431 Advanced Organic Chemistry Lab]  
**1 cr. Corequisite:** CHMY 411. (odd F) Provides exposure to more advanced techniques used in organic synthesis and the spectroscopy used for structure determination.

**CHMY 421 Advanced Instrument Analysis**  
[formerly CHEM 420 Instrumental Analysis]  
**3 cr. Prerequisites:** CHMY 311 and CHMY 371. **Corequisite:** CHMY 422. (odd Sp) Covers the foundations of modern instrumental analysis theory and techniques. Techniques studied include instrumental design, atomic and molecular spectroscopy, electrochemistry and chromatography. Lab required.

**CHMY 422 Advanced Instrument Analysis Laboratory**  
[formerly CHEM 421 Instrumental Analysis Lab]  
**2 cr. Prerequisite:** CHMY 312. **Corequisite:** CHMY 421. (odd Sp) Lab to accompany and demonstrate the techniques covered in CHMY 421.

**CHMY 490 Undergraduate Research**  
[formerly CHEM 499 Chemical Research]  
**V1-3 cr. Prerequisite:** consent of instructor.  
Students will carry out a contained research project under the supervision of a faculty member, including library and experimental research as appropriate, analysis of the results and the submission of a formal research report upon completion of the project.

**CHMY 491 Special Topics**  
**V1-12 cr. Prerequisite:** determined as needed.  
Provides students with an opportunity to take courses not required in any curriculum for which there is a particular need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

**CHMY 492 Independent Study****[formerly CHEM 491 Independent Study]**

**V1-3 cr. Prerequisites:** Consent of instructor and department chairperson. Provides outstanding students an opportunity for research in chemistry. A contract describing the study must be completed at the time of enrollment.

**CHMY 494 Seminar/Workshop****[formerly CHEM 475 Senior Seminar]**

**1 cr. Prerequisite:** senior standing in a science major or consent of the instructor. Students are expected to research and give an hour seminar on a topic from chemistry or a closely related field, and write a paper on the topic as if for publication.

**CHMY 494 Seminar/Workshop****[formerly CHEM 492 Seminar]**

**V1-3 cr. Prerequisite:** Chemistry major or minor, or consent of instructor. Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Chemistry.

**CHMY 494 Seminar/Workshop****[formerly CHEM 493 Workshop]**

**V1-4 cr. Prerequisite:** consent of instructor.

Provides an opportunity for experimental study in an area of Chemistry.

**CHMY 498 Internship/Cooperative Education****[formerly CHEM 490 Internship]**

**1 cr. Prerequisite:** Consent of department chairperson and an "A" or "B" grade in the course in which the internship is to be done. Provides experience in a position of responsibility in some aspect of the chemistry program with an opportunity for early exploration of teaching interests.

**CHMY 498 Internship/Cooperative Education****[formerly CHEM 496 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a work experience in the area of Chemistry, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**CHMY 499 Senior Thesis/Capstone****[formerly CHEM 498 Honors Thesis]**

**1 cr. Prerequisites:** Junior or Senior standing in Chemistry and/or concurrent enrollment in CHMY 490. Involves an intensive study of a specific problem related to chemistry requiring the writing and submission of a thesis to graduate with departmental honors. To graduate with honors, it is also necessary to have an overall GPA of 3.25 or better and a GPA of 3.5 or better in the major. A thesis proposal describing the study and a thesis review committee must be completed at the time of enrollment.

## Community Health

### Health & Human Performance

**(406) 657-2370****CHTH 250 Introduction to Public Health**

**3 cr. (3 lec/wk) (F, Sp)** Introduces students to the field of public health, essential public health services, and the complexities that are confronted as public policy meshes with the science that underlies understanding of health and disease. Explores the primacy of public health interventions rather than medical care as each affects life expectancy and quality of life. Focuses on evidence based decision-making, as the goals in policy decisions are seldom solely evidence based due to the complexity of conflicts between the diverse stakeholders involved in all public health interventions.

**CHTH 317 Health Behavior Theories****[formerly HHP 330 Health Behavior Theories]**

**3 cr. Prerequisite:** Junior level status. (F, Sp)

Provides an overview of the various behavior change theories with specific attention given to individual health behavior, interpersonal health behavior, and group intervention models of health behavior change. Behavior change theories are discussed in terms of their application to curriculum development and program planning models.

**CHTH 355 Theory and Practice of Community Health Education****[formerly HHP 265 Foundations of Health Promotion]**

**3 cr. (F)** Explores the historical, philosophical, theoretical, and ethical foundations of the health education and health promotion profession. Students will learn about the process of health promotion through the examination of school, community, worksite, and hospital health education settings.



**CHTH 355 Theory and Practice of Community Health Education****[formerly HHP 335 Methods of Health Promotion]**

**3 cr. (F)** Focuses on the planning and implementation of health promotion programs by health promotion specialists in a variety of settings. Students explore the “What,” “When,” “Where,” and “Why” of health promotion.

**CHTH 410 High Level Wellness Through Decision Making****[formerly HHP 433 High Level Wellness Through Decision Making]**

**3 cr. (even F)** Introduces the concept of wellness and presents strategies for adoption of a wellness life-style.

**CHTH 435 Human Response to Stress****[formerly HHP 436 Stress Management and Emotional Health]**

**3 cr. (Sp)** Examines the interrelationship of human stress and emotions on health and performance. Explores theories, research and strategies to enhance human performance and manage stress.

**CHTH 450 Worksite Health Promotion****[formerly HHP 450 Worksite Health Promotion]**

**3 cr. (odd Sp)** Provides students with an overview of the theory and practice of occupational health promotion. It is assumed that the students have some background in health promotion and may be interested in pursuing a career as a health promotion specialist.

## Computers

### City College

**CMP 111 Lotus 1-2-3**

**3 cr. Prerequisite: CAPP 120.**

Introduces students to business applications using spreadsheets. Emphasis is placed on the essential functions of spreadsheet operation, as well as introduction to some advanced spreadsheet functions such as macros and database management. Emphasizes mastery of spreadsheet concepts and applications and development of analytical thinking skills.

**CMP 114 Integrated Software Applications**

**3 cr. Prerequisite: CAPP 120.**

Examines the use of an integrated computer software package containing word processor, spreadsheet and database modules for the business environment. Time is spent learning not only the individual programs, but how they can work together to simplify office tasks.

**CMP 115 Introduction to Desktop Publishing**

**3 cr. (3 lec/wk) Prerequisite: CAPP 120.**

Presents the current processes to incorporate text, photographs, and graphics to create eye-catching brochures, ads, catalogs, magazines, newsletters, books, reports, and other printed materials. Students in this hands-on course become proficient with the features of desktop publishing software by learning about page layout, typography, image manipulation, and color management while designing and creating professional quality publications.

**CMP 116 WordPerfect**

**3 cr. Prerequisites: CTBU 112 and CAPP 120.**

Introduces students to word processing using WordPerfect software. Basic and advanced functions used in the office and home are learned including the essentials of editing and formatting a document to desktop publishing.

**CMP 123 Introduction to Microsoft Publisher**

**1 cr. (2 lab/wk) Prerequisite: CAPP 120.**

Instructs students in Desktop Publishing using Microsoft Publisher. Students will learn to integrate text and graphics in documents to create newsletters, brochures, letterhead, and even web pages.

**CMP 204 Advanced Applied Software and Utilities**

**3 cr. (3 lec/wk) Prerequisite: CAPP 120.**

Provides the student with exposure to current applications of commonly used software. Licensing policies, communication devices and a variety of software are used to further reinforce and broaden the background of the computer user.

**CMP 205 Computer Skills Aide**

**2 cr. (4 lab/wk) Prerequisite: Approval from the appropriate instructor and department chairperson.**

Allows students the opportunity to enhance their own skills while assisting other students in the development of technical and academic skills as a computer classroom instructional aide. The student must have completed the same course with a grade of "B" or better. Students are allowed to aide in one computer course per semester and only once per course.

**CMP 236 Advanced Web Programming**

**3 cr. (2 lec/2 lab/wk) Prerequisite: CSCI 211.**

Provides students with advanced programming skills to create and maintain dynamic web sites using technologies such as Java Server Pages and languages such as PHP and JavaScript. Students will gain skills in developing interactive web sites that perform both client-side and server-side processing while interacting with databases.

**CMP 293 Workshop****V1-3 cr.**

Provides an opportunity for experimental study in an area of data processing.

## Coaching

### Health & Human Performance

**(406) 657-2370****COA 205 Introduction to Coaching****[formerly HHP 249 Foundations of Coaching]**

**3 cr. (F)** Covers introductory principles needed in becoming an effective coach. Topics include development of a coaching philosophy, basic sport psychology, sport safety, basic legal aspects, and program and athlete management principles.

**COA 240 Coaching Volleyball****[formerly HHP 240 Coaching Volleyball]**

**3 cr. (Sp)** Acquaints the student with those skills necessary to teach volleyball on the secondary level. The course will cover such areas as volleyball rules, teaching individual skills, team strategies, offensive patterns, defensive patterns, organizing practices, and scouting. Course includes a 1 credit practicum.

**COA 242 Coaching Football****[formerly HHP 241 Coaching Football]**

**3 cr.** Acquaints the student with those skills necessary to coach football in high school. Course includes a 1 credit practicum.

**COA 245 Coaching Basketball****[formerly HHP 242 Coaching Basketball]**

**3 cr. (Sp)** Acquaints the student with those skills necessary to coach basketball in high school. Course includes a 1 credit practicum.

**COA 246 Coaching Softball/Baseball****[formerly HHP 247 Coaching Softball/Baseball]**

**3 cr. (Sp)** Acquaints the student with a variety of methods for teaching basic softball/baseball skills, with particular emphasis on fastpitch softball. Emphasis is placed on teaching progression, practice drills and common error coaching hints. Current rules and regulations as well as strategies are also covered for all phases of the game. Course includes a 1 credit practicum.

**COA 248 Coaching Soccer****[formerly HHP 245 Coaching Soccer]**

**3 cr.** Prepares students to coach competitive/recreational soccer with a focus on teaching skills, techniques, and tactics. A one credit hour (minimum 45 contact hours) coaching practicum is included as a required element of this course.

**COA 256 Coaching Track/Field****[formerly HHP 244 Coaching Track/Field]**

**3 cr. (Sp)** Acquaints the student with those skills necessary to coach track and field in high school. Course includes a 1 credit practicum.

**COA 260 Coaching Gymnastics****[formerly HHP 246 Coaching Gymnastics]**

**3 cr.** Acquaints the student with skills necessary to coach beginning gymnastics. Course includes a 1 credit practicum.

**COA 291 Special Topics: Coaching (Current Sport)****[formerly HHP 248 Coaching (Current Sport)]**

**3 cr.** Designed to present skills and strategies related to coaching a given sport. Course includes a 1 credit practicum.

**COA 395 Practicum: Coaching****[formerly HHP 380 Coaching Practicum]**

**1 cr.** Provides supervised practical experiences for students who wish to enter the coaching profession. Students work as a head or assistant coach for an athletic team for a minimum of 45 contact hours.

**COA 406 Legal Aspects of Sport****[formerly HHP 465 Legal Aspects of Sport]**

**3 cr. Prerequisite: COA 409 or permission of instructor.** Analysis of the legal aspects of sport, athletics, and other physical activity in contemporary society. Includes use of the case study method. Particular emphasis is given to tort liability and risk management in coaching.

**COA 409 Psychology of Coaching****[formerly HHP 410 Psychology of Coaching]**

**3 cr. Prerequisite: Junior Standing. (Sp)** Covers the psychological aspects of coaching that are essential in all coaching, not specific to one sport. Examines both the intra- and interpersonal aspects of sport achievement from an applied perspective, emphasizing effective leadership of athletics. Connects study of the topical areas of sport psychology to coaching.

## Computer Sciences

### Mathematics

(406) 657–2228

#### **COMP 100 Topics in Computer Programming**

**3 cr. R-9. Prerequisite: M 095 or equivalent.**

Introduces the logic and techniques of computer programming. Computer languages will vary; may be repeated for credit when different languages are offered. Possible topics include BASIC, LOGO or Introductory Pascal.

#### **COMP 292 Seminar**

**V1-3 cr.** Provides students an opportunity to investigate topics pertinent to the field of Computer Science.

#### **COMP 293 Workshop**

**V1-8 cr.** Provides an opportunity for experimental study in an area of Computer Science.

#### **COMP 311 Digital Logic Design**

**3 cr. Prerequisite: CSCI 132. Corequisite: COMP**

**312.** Covers number representation, fundamental codes, concepts of Boolean algebra, basic logic algorithms, arithmetic, logic units, and computer architecture.

#### **COMP 312 Logic Design Lab**

**2 cr. Prerequisite: PHSX 205. Corequisite: COMP**

**311.** Covers digital logic circuit design with software assistance. Hands-on experience in the design and construction of digital logic circuits. (Lab fee required.)

#### **COMP 390 Practicum**

**1 cr. Prerequisite: CSCI 246.** Provides practical experience in the administration of a desktop laboratory. Includes both hardware and software troubleshooting.

#### **COMP 402 Artificial Intelligence**

**3 cr. Prerequisites: CSCI 246 and some programming experience.** Covers data representation, production systems, search strategies, expert systems. Leads to competence with an AI language such as LISP.

#### **COMP 491 Independent Study**

**V1-3 cr. Prerequisites: consent of instructor and department chairperson.** Provides outstanding students an individual opportunity to explore material not covered by regular Computer Science courses.

#### **COMP 492 Seminar**

**V1-3 cr. Prerequisite: Mathematics major or minor, or consent of instructor.** Investigates intensively topics pertinent to the area of Computer Science.

#### **COMP 493 Workshop**

**V1-3 cr.** Provides an opportunity for experimental study in an area of Computer Science.

## Communication

### City College

#### **\* COMX 106 Communicating in a Dynamic Workplace**

**[formerly COMT 109 Human Relations]**

**3 cr. (3 lec/wk) (F, Sp, Su)**

Offers a theoretical and practical understanding of communication processes in the working environment, self-awareness in that environment, and the individual's participation in these relationships. The course aims to develop the student's perception and expression skill to communicate successfully in a variety of work contexts.

## Communication

### Communication & Theatre

(406) 657–2178

#### **\* COMX 111 Introduction to Public Speaking [formerly COMT 130 Introduction to Public Speaking]**

**3 cr. (F, Sp, Su)** Develops the student's speaking abilities. Students acquire an understanding of basic rhetorical theory and its application in a variety of speech situations. Listening, speaking and critiquing abilities are emphasized. This course addresses the following topics: speech preparation and delivery, forming and fielding questions, audience analysis, listening skills, critiquing and speaker anxiety.

#### **\* COMX 115 Introduction to Interpersonal Communication**

**[formerly COMT 110 Interpersonal Communication]**

**3 cr. (F, Sp)** Empowers students to understand and apply effective interpersonal skills to improve their communication and bolster relationships. This course examines several vital areas of communication and relationships, including self-concept, perception, listening, language, nonverbal communication, conflict management, and culture.

**COMX 200 Exploring Communication Studies**  
**[formerly COMT 200 Exploring Communication Studies]**

**3 cr. (F, Sp, Su)** Explores the major strands of study in the discipline of communication while exposing students to the various contexts, methods, and expectations for the academic study of communication. The course is a prerequisite for all upper-level communication courses.

**COMX 210 Communication in Small Groups**  
**[formerly COMT 210 Group Dynamics]**

**3 cr. (F)** Increases the student's awareness of communication processes in small group discussions. The course should help the student to become more comfortable in group situations, to learn to observe discussions more capably, to listen carefully to the ideas of others, to develop techniques to facilitate group decision-making, and to become aware of the function of roles in communication situations.

**COMX 211 Advanced Public Speaking**  
**[formerly COMT 230 Advanced Public Speaking]**

**3 cr. Prerequisite: COMX 111 or Consent of Instructor. (Sp)** Enhances the public skills of students who have already mastered the basic principles of oral communication. Emphasizes audience analysis and adaptive speech behaviors with the goal of developing speakers with polished skills for a variety of real world situations.

**\* COMX 212 Introduction to Intercultural Communication**  
**[formerly COMT 160 Introduction to Intercultural Communication]**

**3 cr. (F, Sp)** Examines communicative encounters among people of different cultural, ethnic, and minority groups. Local, national, and global in scope, the course also analyzes identity, verbal and nonverbal communication, popular culture, intercultural relationships, and multicultural communication in applied settings. Practical guidelines for enhancing intercultural interactions will be offered while noting the layers of complexity in communicating across cultural boundaries.

**COMX 294 Seminar/Workshop**  
**[formerly COMT 292 Seminar]**

**V1-3 cr. Prerequisite: consent of instructor.** Provides students an opportunity to investigate intensively topics pertinent to the field of Communication and Theatre.

**COMX 298 Internship: Media**  
**[formerly COMT 290 Internship: Media]**

**V1-3 cr. Prerequisites: JRNL 270 and/or consent of instructor.** Provides on-site observational opportunities with related forms of mass media.

**COMX 298 Internship: Cooperative Education**  
**[formerly COMT 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Communication and Theatre supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**COMX 320 Principles of Organizational Communication****[formerly COMT 310 Organizational Communication]**

**3 cr. Prerequisite: COMX 200 or consent of department chair. (F, Sp, Su)** Introduces material related to organizational socialization, structure, climate, leadership, power, and conflict management.

**COMX 330 Principles of Media Studies**  
**[formerly COMT 320 Introduction to Mass Communication]**

**3 cr. Prerequisite: COMX 200 or consent of department chair. (F, Su)** Introduces students to each of the major media of mass communication, focusing on historical development, commercial functions, societal impact, cultural contributions, and contemporary controversies surrounding each. Media forms explored include television, radio, the Internet, magazines, newspapers, film, and recorded music. Media support industries (advertising, public relations), media regulation, and media ethics are also surveyed. For COMX majors concentrating in Media Studies, this class serves as the introduction to the "inner core" sequence of media study courses.

**COMX 331 Theories of Media and Society**  
**[formerly COMT 321 Theories of Media and Society]**

**3 cr. Prerequisite: COMX 200, COMX 330 or consent of department chair. (alternating Sp)** Examines the role of mass media in modern societies and the effects and influences of media institutions and mediated messages on individuals, communities, societies, and culture. Presents and critically examines a range of theories, scholarly opinions, and research approaches regarding media-society interrelationships.

**COMX 340 Visual Rhetoric**

[formerly COMT 325 Introduction to Visual Communication]

**3 cr. Prerequisite:** COMX 200 or consent of department chair. (every other Sp & Su) Surveys the entire spectrum of visual media, and introduces students to the fundamentals of communication (theoretical models, the role of codes and conventions, etc.). Addresses formal developments in visual communication. Serves as a springboard to several of the more specialized offerings in the Mass Communication program.

**COMX 341 History and Theory of Persuasion**

[formerly COMT 330 Persuasion]

**3 cr. Prerequisite:** COMX 200 or consent of department chair. (F, Sp, Su) Explores the history, literature, and theory of persuasive communication affording students the opportunity to examine the dynamics of change in a variety of contexts.

**COMX 351 Principles of Public Relations**

[formerly COMT 322 Principles of Public Relations]

**3 cr. Prerequisite:** COMX 200, JRNL 270 or consent of department chair. (F, Sp, Su) Explores the fundamentals of the public relations field and develops the skills necessary for the public relations practitioner, providing the student with practical experience in the development of public relations materials such as brochures and press releases, as well as the skills to implement communication programs.

**COMX 400 Communication Theory**

[formerly COMT 465 Communication Theory]

**3 cr. Prerequisite:** COMX 200, consent of department chair or junior standing. (F, Sp) Provides the student with a theoretical/conceptual framework for understanding human communication.

**COMX 414 Communication in Personal Relationships**

[formerly COMT 410 Advanced Interpersonal Communication]

**3 cr. Prerequisite:** COMX 200 or consent of department chair. (Sp) Presents theoretical materials and case studies related to the communicational foundation of human relationships. Issues considered include: perceptual variances in cross-cultural and familial interactions, gender differences, elements of verbal/nonverbal communication, listening, developing/sustaining/struggling/ending relationships, conversing with friends, and interpersonal communication in the workplace.

**COMX 420 Issues in Organizational Communication**

[formerly COMT 414 Issues in Organizational Communication]

**3 cr. Prerequisite:** COMX 200, COMX 320 or consent of department chair. (F, Su) Presents material related to the relationship between corporations and public decision-making, the nature of democracy in the workplace, a multiple stakeholder model of communication, diversity, negotiation, organizational politics, and dialogic communication.

**COMX 426 Leadership and Communication (crosslisted with COMT 516)**

[formerly COMT 416 Leadership and Communication]

**3 cr. Prerequisite:** COMX 200 or consent of department chair. *Offered ONLY Online.* (every other Sp & Su) Presents material related to leadership theories, leader-participant relations, vision/mission/goals, structure and design, culture, capacity building, and social responsibility.

**COMX 429 The Law of Public Communication (crosslisted with COMT 529)**

[formerly COMT 429 The Law of Public Communication]

**3 cr. Prerequisite:** COMX 200 or consent of department chair. (alternating F) Examines major principles in communication law that influence media and public relations professionals. Students will become familiar with landmark court decisions and contemporary issues in first amendment jurisprudence.

**COMX 431 Communicating Online (crosslisted with COMT 521)**

[formerly COMT 421 Communicating Online]

**3 cr. Prerequisite:** COMX 200 or consent of department chair. *Offered ONLY Online.* (every other year) Examines the major principles influencing the construction and dissemination of online communication. May address topics such as the conventions of web page design, effective utilization of the internet as a communication channel, differentiating useful messages from spam, and identifying the strengths and limitations of online communication.

**COMX 434 Political Communication (crosslisted with COMT 531)**  
**[formerly COMT 431 Political Communication]**  
**3 cr. Prerequisite:** COMX 200 or consent of department chair. **(even F)** Explores communication methods and strategies employed by political campaigns to influence voters. Students will analyze political discourse produced by national, state, and local campaigns in order to understand the communication patterns and interactions that occur.

**COMX 435 Media Criticism (crosslisted with COMT 525)**  
**[formerly COMT 425 Media Criticism]**  
**3 cr. Prerequisites:** COMX 200, COMX 330, COMX 331 or consent of department chair. **(every other year)** Engages students in the in-depth exploration, analysis, and criticism of the media as foundational components of democracies, as economic institutions, as producers of text (rhetoric), and as meaning-making systems. Students will learn a variety of critical methods and apply them to the analysis of pressing contemporary issues of media and society.

**COMX 436 Popular Culture and Cultural Studies (crosslisted with COMT 540)**  
**[formerly COMT 440 Popular Culture and Cultural Studies]**  
**3 cr. Prerequisites:** COMX 200, COMX 330, COMX 331 or consent of department chair. **(every other year)** Provides an introduction to the history, theory, and practice of studying popular culture. Explores a variety of theoretical approaches to pop culture, including classical Marxism, the Frankfurt School, structuralism, feminism, and postmodernism. Throughout the course, theoretical methodologies will be illustrated through their ability to interpret and/or decode cultural objects ranging from HBO television to science fiction to hip hop. Students will be encouraged to take these applications as models for their own work in choosing, reading, and analyzing specific instances of pop culture.

**COMX 438 Multicultural Mass Communication (crosslisted with COMT 561)**  
**[formerly COMT 461 Multicultural Mass Communication]**  
**3 cr. Prerequisites:** COMX 200, COMX 330, COMX 331 or consent of department chair. **(every other year)** Explores and critically analyzes mass mediated communication in a multicultural world and the U.S. as a multicultural nation. Provides an understanding of the roles of media corporations and media texts in the construction of cultural, subcultural, and individual identities. Considers media as transnational businesses, as expressive forms, and as mirrors and shapers of culture. Investigates theories, practices, and outcomes of mediated cultural imperialism and the unique role played by U.S. media organizations and U.S.-produced texts.

**COMX 452 Issues in Public Relations (crosslisted with COMT 522)**  
**[formerly COMT 422 Issues in Public Relations]**  
**3 cr. Prerequisite:** COMX 200, COMX 351 or consent of department chair. **(Su)** Explores advanced public relations strategies and the role of public relations in society. Topics may include (but are not limited to) Corporations and their publics, Not-for-profit public relations, Socially responsible marketing, Public relations theory, Crisis communication, and Public Relations for Multicultural Audiences.

**COMX 456 Case Studies in Public Relations (crosslisted with COMT 526)**  
**[formerly COMT 426 Case Studies in Public Relations]**  
**3 cr. Prerequisite:** COMX 200 or consent of department chair. **(alternating Sp)** Uses actual cases to assess strategic decisions concerning internal and external publics and appreciate the accompanying ethical, legal, economic, psychological, organizational, political, and media impact of such decisions.

**COMX 457 Public Relations Ethics (crosslisted with COMT 527)**  
**[formerly COMT 427 Public Relations Ethics]**  
**3 cr. Prerequisite:** COMX 200 or consent of department chair. **(alternating Sp)** Explores ethical issues in public relations from a case study approach. Students will critically examine the structures, work, and business of the public relations industry and discuss the implications of ethical standards applied to the field.

**COMX 480 Health Communication (crosslisted with COMT 580)****[formerly COMT 480 Health Communication]**

**3 cr. Prerequisite:** COMX 200 or consent of department chair. (every other year) Explores key findings in health communication research and practice, focusing on a wide range of media (e.g., brochures, posters, radio, television, telephone hotlines, Internet) and a wide range of health objectives (e.g., STD/HIV prevention, smoking cessation, cardiovascular disease prevention). We will examine the literature and key health communication campaigns to determine what are the key ingredients of successful or effective approaches in each medium, for different types of messages and target audiences.

**COMX 481 Media for Social Change (crosslisted with COMT 581)****[formerly COMT 481 Media for Social Change]**

**3 cr. Prerequisite:** COMX 200 or consent of department chair. (every other year) Examines the application of commercial campaign technologies to the analysis, planning, execution, and evaluation of programs designed to influence the voluntary behavior of target audiences in order to improve their personal welfare and that of their society.

**COMX 482 Women, Media and Society****[formerly COMT 482 Women, Media and Health]****3 cr. Corequisites:** COMX 480, COMX 481.

Provides students an opportunity to become familiar with feminist rhetorical scholarship, to be able to apply academic research to an original research project on a contemporary issue of topical importance, and to evaluate local community organizations and/or campaigns that appeal to women on the bases of ethicality and effectiveness.

**COMX 491 Special Topics****[formerly COMT 488 Topics in Communication]**

**3 cr. Prerequisite:** Senior class standing or consent of instructor. Provides Senior students with the opportunity to research, prepare, and present before the faculty a final project that exemplifies the culmination of their course of study as Communication and Theatre majors.

**COMX 492 Independent Study****[formerly COMT 491 Independent Study]**

**V1-3 cr. Prerequisites:** consent of instructor and chairperson of department. Provides an opportunity for students of outstanding ability to explore material not covered by regular Communication and Theatre courses.

**COMX 494 Seminar/Workshop****[formerly COMT 492 Seminar]****V1-3 cr. Prerequisite:** consent of instructor.

Provides students an opportunity to investigate intensively topics pertinent to the field of Communication and Theatre. **This course may be offered ONLY Online.**

**COMX 498 Internship****[formerly COMT 490 Internship]**

**V1-3 cr. Prerequisite:** consent of instructor. (F, Sp, Su) Provides on-site observational opportunities.

**COMX 498 Internship****[formerly COMT 490 Media Internship: Senior Project]****V1-3 cr. Prerequisite:** consent of instructor.

Provides onsite observational opportunities with selected forms of mass media.

**COMX 498 Internship: Cooperative Education****[formerly COMT 496 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a work experience in the area of Communication and Theatre, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**COMX 499 Capstone****[formerly COMT 470 Capstone Project]****3 cr. Prerequisite:** COMX 200 and consent of

department chair. (F, Sp, Su) Explores how people apply their knowledge of communication in practical contexts. Addresses applied topics such as dealing with conflict, conducting meetings, leading effectively, managing rumors, advocacy, and political communication.

## Criminal Justice

### Social Sciences and Cultural Studies

**(406) 657-2119****CJUS 226 Introduction to Probation****[formerly CRIM 226 Introduction to Probation]****3 cr. Prerequisites:** SOCI 101 or SOCI 201 and

**SOCI 221.** Provides an in-depth examination of the role of probation in the criminal justice system. Topics include caseloads, pre-sentence investigations, practices and procedures, and issues associated with supervising offenders in the community.

**CJUS 227 Introduction to Policing**  
[formerly CRIM 227 Introduction to Policing]  
**3 cr. Prerequisites:** SOCI 101 or SOCI 201 and SOCI 221. Examines the police as a component of the criminal justice system. Provides an overview of law enforcement agencies at the local, state, and federal levels. Issues and trends in law enforcement will be examined.

**CJUS 228 Diversity in Criminal Justice**  
[formerly CRIM 228 Race, Class, Gender and Crime]  
**3 cr. Prerequisite:** SOCI 101 or SOCI 201. Examines the experiences of diverse social groups in the criminal justice system. Includes an analysis of populations as both offenders and victims. Considers practical and policy implications of diversity awareness for the criminal justice system.

**CJUS 294 Seminar/Workshop**  
[formerly CRIM 292 Seminar]  
**3 cr.** Provides freshman and sophomores an opportunity to investigate intensively topics pertinent to the field of Criminal Justice.

**CJUS 413 Administration of Law Enforcement**  
[formerly CRIM 413 Administration of Law Enforcement]  
**3 cr. Prerequisite:** SOCI 101 or SOCI 201.  
**Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines the structure and organization of law enforcement agencies. Students will learn how to manage police departments and sheriff's departments. Topics include law enforcement organizational patterns, goal identification, planning, personnel management, and budgeting.

**CJUS 421 Criminal Justice Ethics**  
[formerly CRIM 421 Criminal Justice Ethics]  
**3 cr. Prerequisites:** SOCI 101 or SOCI 201 and SOCI 221. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines ethical issues in law enforcement, courts, and corrections. Students will learn moral and ethical standards that can be used to resolve dilemmas they encounter in the criminal justice system.

**CJUS 437 Mass Incarceration and Prisoner Reentry**  
**3 cr. (3 lec/wk) Prerequisite:** SOCI 101 or SOCI 201 and SOCI 221. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. (F) Explores factors contributing to mass incarceration in the United States, as well as the impacts of mass incarceration on individuals, communities, parole systems, and prisoner reentry. Provides an examination of post-incarceration needs for men and women, and highlights the difficulties associated with successful reentry after incarceration. Identifies important policy and program considerations with regard to incarceration and prisoner reentry.

**CJUS 440 Gender, Crime and Justice**  
**3 cr. (3 lec/wk) Prerequisite:** SOCI 101 or SOCI 201 and SOCI 221. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. (F) Examines gender-based differences in crime and criminal justice outcomes. Considers factors associated with men's and women's involvement in crime. Explores differences in men's and women's criminal behaviors. Identifies the influence of gender on experiences with police, the legal system, and corrections.

**CJUS 494 Seminar/Workshop**  
[formerly CRIM 492 Seminar]  
**3 cr. Prerequisite:** SOCI 101 or SOCI 201. Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Criminal Justice.

## Creative Writing English, Philosophy & Modern Languages (406) 657-2348

**\* CRWR 240 Introductory Creative Writing Workshop**  
[formerly ENGL 204 Fundamentals of Creative Writing]  
**3 cr. Prerequisite:** WRIT 101. (F, Sp) Introduces the principles and techniques of various kinds of creative writing, ranging from personal expression in simple narrative and description to basic elements of fiction and poetry.

**CRWR 294 Seminar/Workshop**  
**V1-3 cr.** Provides freshmen and sophomores an opportunity to investigate intensively topics pertinent to the fields of composition, literature and language.



**CRWR 294 Seminar/Workshop**

**V1-3 cr.** Provides freshmen and sophomores an opportunity for experimental study in an area of English or the teaching of English.

**CRWR 310 Intermediate Fiction Workshop  
[formerly ENGL 321 Writing Fiction]**

**3 cr. Prerequisite: CRWR 240 or consent of instructor. (F)** Provides extensive practice in the writing of the short story. Considers various narrative and stylistic techniques through discussion of selected professional and class-produced work and through exercises. Promotes versatility in writing style. Affords individual conferences.

**CRWR 311 Intermediate Poetry Workshop  
[formerly ENGL 322 Writing Poetry]**

**3 cr. Prerequisite: CRWR 240 or consent of instructor. (Sp)** Promotes the writing of fresh, imaginative, distinctive poetry. Covers many elements of the writing process, including the use of imagery, figurative language, metrical techniques, and specific poetic forms. Enables students, through the production of numerous poems, to sharpen their sensitivity to the precise employment of their own language.

**CRWR 312 Intermediate Nonfiction Workshop  
[formerly ENGL 326 Creative Nonfiction]**

**3 cr. Prerequisite: CRWR 240. (Sp)** Provides extensive practice in the writing of creative nonfiction. Considers various stylistic and technical approaches through discussion of selected professional and student-produced work and through exercises. Promotes versatility. Includes individual conferences. (\$10 photocopying fee).

**CRWR 360 Magazine Article Writing  
[formerly ENGL 323 Magazine Article Writing]**

**V1-3 cr. Prerequisite: WRIT 101 or consent of instructor. (odd Sp)** Provides guidance and practice in all stages of the magazine article writing process from idea through publication. Completed articles will be the primary basis for student evaluation and the objectives of the course will be met through submission/publication of at least one article.

**CRWR 410 Advanced Fiction Workshop  
[formerly ENGL 421 Advanced Fiction Writing]**

**3 cr. Prerequisite: CRWR 310 and consent of instructor. (F)** Provides advanced practice in the writing of the short story. Considers various narrative and stylistic techniques through discussion of selected professional and class-produced work. Promotes versatility in writing style. Affords individual conferences.

**CRWR 411 Advanced Poetry Workshop**

**[formerly ENGL 422 Advanced Poetry Writing]**

**3 cr. Prerequisites: CRWR 311 and consent of instructor. (Sp)** Provides advanced practice in writing fresh, imaginative, distinctive poetry. Offers continued discussion of the use of imagery, figurative language, metrical techniques, and specific poetic forms through discussion of professional and class-produced work. Enables students to sharpen their sensitivity to the precise employment of their own language.

**CRWR 412 Advanced Nonfiction Workshop**

**[formerly ENGL 426 Advanced Creative Nonfiction]**

**3 cr. Prerequisites: CRWR 312 and consent of instructor. (Sp)** Provides advanced practice in the writing of the creative nonfiction. Considers various stylistic and technical approaches through discussion of selected professional and student-produced work. Promotes versatility. Includes individual conferences.

**CRWR 491 Special Topics**

**[formerly ENGL 467 Topics in Creative Writing]**

**V1-3 cr. R-6. Prerequisite: upper division status.** Provides advanced study and practice in creative writing for experienced writers serious about their craft. Course content will vary, and the course may be repeated for credit.

**CRWR 492 Independent Study**

**V1-3 cr. Prerequisites: consent of instructor and chairperson of the department.** Provides outstanding students with an opportunity for individually guided research and study in English. A contract describing the study must be completed at the time of enrollment and filed in the English Department office. (Note: Not more than 6 credits of CRWR 492 may be allowed toward any program in English.)

**CRWR 494 Seminar/Workshop**

**V1-3 cr.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of English.

**CRWR 494 Seminar/Workshop**

**V1-3 cr.** Provides an opportunity for experimental study in an area of English and the teaching of English.

**CRWR 498 Cooperative Education/Internship**

**V1-9 cr.** Provides university credit for a work experience in the area of English, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Computer Science/Programming City College

### **CSCI 109 Introduction to Programming Lab** [formerly CST 244 Introduction to Programming Lab Companion Course]

**2 cr. (4 lab/wk) Corequisite: CSCI 100.**

Applies and practices the concepts learned in CSCI 100 through the use of exercises and case problems.

### **CSCI 111B Programming with Java I** [formerly CST 220 Applied Introduction to Java]

**4 cr. (3 lec/2 lab/wk) Prerequisite: CAPP 120.**

Demonstrates the power of Object-Oriented programming through the use of the Java Programming language. Students will learn specifics about the Java programming language and how to use that programming language to create objects, Graphical User Interfaces, Applets, and other basic Java applications.

### **CSCI 113 Programming with C++ I**

**3 cr. (2 lec/2 lab/wk) (Sp)**

Provides students with understanding of the logical structures, control structures, functions, arrays, points, and pointers in the C++ language. Students will also apply the principles of object-based programming in the development of C++ programs. In addition, students will learn how to interface external data logging devices to acquire, store, and manipulate data in C++ programs.

### **CSCI 114 Programming with C#**

**3 cr. (2 lec/2 lab/wk) Prerequisite: Instructor approval. (Sp)**

Provides students with the knowledge and skills required to program in the high-level, strongly-typed "C" language family. The course provides the skills required to compile program code, work with .NET framework class library, and create user-defined types. The course also teaches students how to troubleshoot coding errors, logic errors, and run-time errors. Students will also develop skills to work with built-in numeric types as well as more complex types that represent a wide variety of logical constructs, such as the file system, network connections, collections and arrays of objects, and dates.

### **CSCI 116 Introduction to Python Programming**

**3 cr. (2 lec/2 lab/wk) (F)**

Provides instruction for students in a scripting language that is being used to work with major application such as network applications, robotics, machine interfaces, geographic information systems, and document imaging.

### **CSCI 121 Programming with Java II**

**[formerly CST 221 Applied Intermediate Java]**

**4 cr. (3 lec/2 lab/wk) Prerequisite: CSCI 111B or consent of instructor.**

Consolidates students' knowledge concerning Java and then proceeds into more advanced areas. The course begins with a rapid review of concepts covered in CSCI 111B, then dives into more advanced subjects such as Swing, Java Database Connectivity (JDBC), Java Server Pages (JSP), Servlets, Advanced Collections, Networking, and Java Utilities.

### **CSCI 124 Advanced C#/.NET**

**3 cr. (2 lec/2 lab/wk) Prerequisite: CSCI 114 or consent of instructor. (Sp)**

Provides students with an understanding of basic data structures such as arrays and array lists and their usefulness in manipulating data. This course will provide students with learning experiences in connecting to database applications and external measurement devices and manipulating, analyzing, and displaying the data acquired by those means to develop C#/.NET dynamic applications.

### **CSCI 181 Web Design & Programming**

**[formerly CMP 135 Introduction to Web Design]**

**3 cr. (3 lec/wk)**

Provides students with the necessary skills to design, create, and maintain a complete website on a server. The class will cover many of the elements of web design, including HTML5, CSS, scripting, visual information design, and usability/information architecture techniques. This course also covers basic tools for developing websites such as Notepad++ and Dreamweaver.

### **CSCI 211 Client Side Programming**

**[formerly CMP 235 Advanced Web Design and Development]**

**3 cr. (3 lec/wk) Prerequisite: CSCI 181 or consent of instructor.**

Provides students with scripting skills required to create and maintain interactive and dynamic web content, data validation, and management of CSS scripts using the Javascript language along with AJAX, jQuery, and other javascript extensions.

**CSCI 214 Server-Side Web Programming & Administration**

**3 cr. (2 lec/2 lab/wk) Prerequisite:** CSCI 181 or consent of instructor. (Sp)

Provides students with a working knowledge of the PHP Web Server language, including logic structures, control structures, include statements, database connectivity, registration forms, password encryption, and web server administration.

**CSCI 223 Software Development**

**[formerly CST 231 Software Development and Documentation]**

**3 cr. (3 lec/wk) Prerequisite:** CST 230.

Examines standard methodologies for developing software and documenting that software. This course will instruct students how to model and diagram applications using Unified Modeling Language, how to decompose problems into base pieces, and how to manage projects. Further, the course will also focus on maintaining solid documentation of any program developed.

**CSCI 240 Databases and SQL**

**[formerly CST 233 Deploying Databases with Microsoft SQL Server]**

**3 cr. (2 lec/2 lab/wk) Prerequisite:** CAPP 158 or CSCI 114 or CSCI 116 or NTS 104 or consent of instructor.

Initiates the student into the art of deploying database applications. The class will focus on designing and creating databases, Structured Query Language, integration with Visual Basic .NET applications, deployment of such databases, and various maintenance and setup issues. Coursework relies heavily on hands-on projects and working within the SQL Server and Visual Basic .NET environments.

**CSCI 241 PL/SQL**

**3 cr. (2 lec/2 lab/wk) Prerequisites:** CAPP 158 or CSCI 240 or consent of instructor. (Sp)

Provides students with experience in developing Oracle database applications, including an understanding of the general structure of PL/SQL statements, designing forms and reports, and understanding Oracle decision making and looping constructs.

**CSCI 299 Thesis/Capstone**

**[formerly CST 211 Programming Capstone Project]**  
**3 cr. (1 lec/4 lab/wk) Prerequisite:** CSCI 120.

Strives to grant students real-world experience by requiring that they create a fully functioning application that meets specified criteria. This course will cover most every aspect of programming from requirements gathering to design to actual coding and testing of the application.

**Computer Science/Programming Mathematics, (406) 657–2228****Business Administration, (406) 657–2295****CSCI 100 Introduction to Programming**

**[formerly MIS 245 Introduction to Programming]**

**3 cr. Prerequisite:** M 143. Covers structured concepts for problem solving, programming and data representation. Includes structured charts and diagrams. Students gain hands-on experience on an object oriented programming language such as Visual Basic or C++.

**CSCI 111A Programming with Java I**

**[formerly COMP 101 Fundamentals of Computer Science]**

**4 cr. Prerequisite:** M 095. (F, Sp) Introduces programming in Java. Presents algorithms and problem solving, data structures in Java, searching and sorting, procedures and functions, and elements of program life cycle.

**CSCI 132 Basic Data Structures and Algorithms**

**[formerly COMP 102 Data Structures]**

**4 cr. Prerequisite:** CSCI 111A. (Sp) Investigates the essential properties of data structures and algorithms for operating on them. Covers the use of data structures as tools in algorithms design. Provides exposure to searching, sorting, and hashing techniques using the Java language.

**CSCI 232 Data Structures and Algorithms**

**[formerly COMP 200 Advanced Topics in Computer Programming]**

**4 cr. Prerequisite:** COMP 100 or CSCI 111A. M 172 is prerequisite when Fortran is taught. Computer language Java and software development will be used as the vehicles to introduce applet and its application to computer representations of various important concepts and their applications.

**CSCI 246 Discrete Structures****[formerly COMP/MATH 305 Discrete Structures I]****4 cr. Prerequisite: M 172 and CSCI 111A. (F)**

Covers logic, recursion, induction and basic data models. Surveys combinatorics and the theory of algorithms with attention to design analysis and verification techniques.

**CSCI 260 Object Oriented Programming I****[formerly MIS 255 Object Oriented Programming]**

**3 cr. Prerequisite: CAPP 131.** Familiarizes students with principles of Object-Oriented Programming. Includes Object-Oriented features in selected software packages; creating classes; object hierarchies and collections; Active X components; ADO objects. Juniors will complete a major programming project (Cross-listed with City College).

**CSCI 320 Numerical Methods****[formerly COMP/MATH 371 Numerical Computing]**

**4 cr. Prerequisite: M 333.** Presents floating-point arithmetic, approximate solution of equations and systems of equations, polynomial interpolation, numerical integration and differentiation, and the approximate solution of ordinary differential equations. Exact topics may vary from year to year.

**CSCI 346 Advanced Discrete Structures****[formerly COMP/MATH 306 Discrete Structures II]**

**4 cr. Prerequisites: CSCI 246. (Sp)** Discusses algorithm design in the context of graph theory. Introduces automata and formal languages. Covers logic, computability, artificial intelligence and robotics.

**CSCI 360 Object Oriented Programming II****[formerly MIS 355 Object Oriented Programming]**

**3 cr. Prerequisite: CAPP 131.** Familiarizes students with principles of Object-Oriented Programming. Includes Object-Oriented features in selected software packages; creating classes; object hierarchies and collections; Active X components; ADO objects. Juniors will complete a major programming project (Cross-listed with City College).

## Computer Systems Technology City College

**CST 111 Applied Intermediate Programming Concepts Using Visual Basic .NET****5 cr. (2 lec/6 lab/wk) Prerequisite: CSCI 110.**

Instructs students in more advanced programming techniques using the Visual Basic .NET programming language. This course will strengthen the students' skill in Visual Basic .NET programming and will further enhance that skill through the creation of web-based applications.

**CST 169 Administering Web Servers****3 cr. (2 lec/2 lab/wk)**

Examines and instructs students in the tasks and concerns for deploying, administering, and maintaining web servers. Students will work with Apache and Internet Information Server web servers applying techniques learned in class and gaining familiarity with both. Topics will include setting up servers, securing servers, optimizing services, and managing access and logs.

**CST 217 Microsoft Certified Applications Developer Exam Preparation****2 cr. (2 lec/wk) Prerequisite: CSCI 120.**

Prepares the student to take the three exams required to gain Microsoft's Certified Applications Developer certification. The class will review the topics for the test and take many practice tests.

**CST 227 Sun Certified Java Programmer Exam Preparation****1 cr. (1 lec/wk) Prerequisite: CSCI 121.**

Prepares the student to take Sun's Java Programmer examination. The class will review the topics for the test and take many practice tests.

**CST 230 Systems Analysis and Design****3 cr. (3 lec/wk) Prerequisite: ITS 160.**

Provides a thorough introduction to the features and methodologies of structures systems analysis and design. A variety of techniques and disciplines are explored in the course.

**CST 252 Microcomputer Hardware Maintenance – Lab****3 cr. (6 lab/wk) Prerequisite: CAPP 120 or Instructor Approval. Corequisite: ITS 280.**

Provides students with a supporting lab course designed to provide students with the skills necessary to install and troubleshoot hardware devices. Topics include system setup, RAM, hard and floppy drives, data buses, power supplies, IO cards, and diagnostic tools.

**CST 263 Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure****3 cr. (2 lec/2 lab/wk) Prerequisite: ITS 162.**

Provides students with the knowledge and skills necessary to install, configure, and administer Microsoft Windows Active Directory directory services. The course also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers.

**CST 268 Designing a Microsoft Windows Server 2003 Active Directory and Network Infrastructure****3 cr. (2 lec/2 lab/wk) Prerequisite: ITS 210.**

Provides students with the knowledge and skills necessary to design a Microsoft Windows networking services solution for enterprise networks.

**CST 280 Integration of Microsoft Windows 2000, Novell NetWare and Unix****3 cr. (2 lec/2 lab/wk)**

Provides students with the knowledge and skills required to integrate the Microsoft Windows 2000 Server network operating system with a Novell NetWare network; migrate users, files, directories, and permissions from a NetWare environment to a Windows NT Server-based domain, and implement a single network login for NetWare users in a multiple-server network. This course also provides students with the knowledge and skills required to integrate the Microsoft Windows 2000 Server network operating system with a UNIX network, as it applies to working in mixed (UNIX and Windows 2000) environment. This will be accomplished by comparing the two operating systems, services, tasks, and concepts.

**CST 281 Computerized Inventory and Asset Tracking****3 cr. (2 lec/2 lab/wk) Prerequisites: CAPP 158.**

Introduces the student to applications in Auto ID technology, including bar coding and magnetic striping, for use in inventory control and asset tracking in all organizations.

**CST 296 Cooperative Education/Internship V1-9 cr. (45 hours/credit)**

Provides university credit for a sophomore work experience in the area of Computer Systems Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Construction Trades City College

**CSTN 108 Introduction to Flooring Installation [formerly TRID 125 Introduction to Flooring Installation]****4 cr. (2 lec/4 lab/wk)**

Introduces basic concepts, practices, and procedures related to the floor covering installation trade. It covers proper safety procedures in the operation of hand and power tools that are related to the trade. This course also reviews and applies math related to floor covering installation.

**CSTN 120 Carpentry Basics and Rough-in Framing [formerly CARP 120 Carpentry Basics and Rough-in Framing]****4 cr. (2 lec/4 lab/wk) Corequisite: CSTN 160.**

Introduces the carpentry trade, including history, career opportunities, and requirements. This course covers a variety of building materials, fasteners, and adhesives. It also covers installation procedures for windows and exterior doors. Skills required for framing a simple structure are studied and practiced.

**CSTN 145 Exterior Finishing, Stair Construction, and Metal Stud Framing [formerly CARP 130 Exterior Finishing, Stair Construction, and Metal Stud Framing]****4 cr. (2 lec/4 lab/wk) Prerequisites: CSTN 120, CSTN 160, CSTN 147. Corequisite: CSTN 161.**

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

**CSTN 147 Blueprint Reading**

[formerly TRID 112 Blueprint Reading for Construction]

**3 cr. (3 lec/wk)**

Concentrates on concepts associated with blueprint reading, sketching, and interpreting light commercial and residential drawings. It includes instruction in the recognition of construction materials, procedures, specifications, and methods of estimating construction costs from blueprints. This course also covers trade-specific symbols found on construction drawings.

**CSTN 148 Blueprint Codes and Estimating**

[formerly DSGN 107 Quantity Estimating]

**2 cr. (2 lec/lab/wk) Prerequisites:** DDSN 110 or DDSN 111, and M 065 and M 114. (F)

Studies estimates, specifications and plans of residential and light commercial structures. Estimates of excavation and backfill, structural, finish and other construction materials are prepared.

**CSTN 160 Construction Concepts and Building Laboratory**

[formerly CARP 150 Carpentry Basics Laboratory]

**5 cr. (10 lab/wk) Corequisite:** CSTN 120.

Provides hands-on experience in which the student applies, with direct supervision, the basic skills and knowledge presented thus far in the NCCER Carpentry Program. The course is designed as a practical task-oriented application utilizing the skills covered in prerequisites as well as in parts of CSTN 145.

**CSTN 161 Construction Concepts and Building Laboratory II**

[formerly CARP 152 Intermediate Carpentry Laboratory]

**4 cr. (8 lab/wk) Prerequisites:** CSTN 120, CSTN 160, CSTN 100, CSTN 147. **Corequisite:** CSTN 145.

Provides hands-on experience in which the student applies, with direct supervision, the basic skills and knowledge presented thus far in the NCCER Carpentry Program. The course is designed as a practical task-oriented application utilizing the basic skills learned in CSTN 120 and CSTN 145. The course will emphasize basic application in the areas of exterior finishing and interior finishing.

**CSTN 220 Interior Finishing**

[formerly CARP 220 Interior Finishing]

**4 cr. (2 lec/4 lab/wk) Prerequisites:** CSTN 230 and CSTN 295. **Corequisite:** CSTN 299.

Covers materials and installation techniques for interior trim, countertop, base cabinet, and wall cabinet. It also covers suspended ceiling materials, layout, and installation as well as wood and metal door installation.

**CSTN 230 Advanced Roof, Floor, Wall, and Stair Systems**

[formerly CARP 230 Advanced Roof, Floor, Wall, and Stair Systems]

**4 cr. (2 lec/4 lab/wk) Prerequisites:** CSTN 120, CSTN 145, CSTN 160, CSTN 161, or instructor's approval. **Corequisite:** CSTN 295.

Covers the installation methods and materials for various roofing systems. It covers a variety of flooring applications as well as interior wall construction for residential and commercial structures. It also covers advanced staircase construction.

**CSTN 270 Foundations of Construction Project Management**

**3 cr. (3 lec/wk) Corequisite:** CSTN 272. (Sp)

Introduces topics including licensing, code jurisdictions, building inspection, record keeping, timelines, project development, ordering materials, supervision of construction, OSHA, employee rights, safety requirements, subcontractors, construction loans, fundamentals of cost and profit estimating, advertising, marketing, insurance, contracts, and construction finance. Also includes the topics of general contractor requirements and registration procedures for the State of Montana Department of Labor, and business name selection and registration with the Montana Secretary of State. Students will learn and be able to interpret zoning maps and identify trends through current and future growth projections, covenants, and restrictions. Course will culminate with students presenting a personal business and project plan from inception to end of project.

**CSTN 272 Construction Estimating Using Databases**

**1 cr. (1 lec/wk) Corequisite:** CSTN 270. (Sp)

Provides the student with an appropriate professional set of tools for executing takeoffs and cost projections/estimates. The course is aligned with CSTN 270 to model a complete business plan including bidding, time management, projected costs, overhead, profit, taxes, and required fees. This course furthers the transformation of the student as a competent and professional business person.

**CSTN 295 Construction Concepts and Building Laboratory III**

**[formerly CARP 250/CSTN 260 Advanced Carpentry Laboratory]**

**5 cr. (10 lab/wk) Prerequisites:** CSTN 145, CSTN 161, or instructor's approval. **Corequisite:** CSTN 230.

Provides hands-on experience in which the student applies with supervision the skills and knowledge presented thus far in the NCCER Carpentry Program. The course is designed as a practical task-oriented application emphasizing the advanced applications in floor, wall, roof, and stair systems learned in CSTN 230.

**CSTN 299 Capstone: Carpentry**

**[formerly CARP 252 Capstone Carpentry Laboratory]**

**4 cr. (8 lab/wk) Prerequisites:** CSTN 230 and CSTN 295. **Corequisite:** CSTN 220.

Provides hands-on experience in which the student applies with supervision the skills and knowledge presented thus far in the NCCER Carpentry program. The course is designed as a practical task-oriented application emphasizing the applications of interior finishing learning in CSTN 220.

## Business

### City College

**CTBU 111 Basic Keyboarding**

**2 cr. (1 lec/2 lab/wk)**

Provides intense practice in basic keyboarding skills. Students with no previous training on the keyboard or who have difficulty with keyboarding tasks should complete this course before attempting TASK 115 Keyboard Applications/Ten Key.

**CTBU 166 Principles of Applied Supervision**

**3cr. (3 lec/wk) Prerequisite:** CAPP 120 or consent of instructor.

Introduces students to supervision functions, principles, and contemporary issues in the modern workplace. Emphasis will be placed on practical applications and insights regarding supervisory applications, individual and group performance, workplace dynamics and change, and team-oriented environments. Students will explore key skills needed for effective supervision, supervisory challenges of the 21<sup>st</sup> century, and how supervisors operate in real situations.

**CTBU 167 Organizational Leadership Applications**  
**3 cr. (3 lec/wk) Prerequisite:** CAPP 120 or consent of instructor.

Introduces students to leadership principles and the application thereof. The course will focus on various dimensions of leadership, including leadership styles; leadership components; and the development of an understandable, usable definition of leadership. Students will discover how these principles will apply to work and life by engaging the theories of leadership and organizational culture in life-like simulations.

**CTBU 175 Current Issues in Business**

**3 cr. (3 lec/wk) Prerequisite:** CAPP 120.

Focuses on contemporary issues in business from emerging concerns to more controversial problems. Various instructional formats, including guest speakers, print media, the Internet, and discussion groups will be used to gather information and research business issues.

**CTBU 267 Applied Organizational Planning**

**3 cr. (3 lec/wk) Prerequisite:** CAPP 120 or consent of instructor.

Introduces students to three different types of organizational planning: 1) workforce planning and scheduling to meet current business needs, 2) project planning and management, and 3) strategic planning. Emphasis will be placed on practical applications regarding the contemporary issues regarding workforce planning, the project management process, and the strategic management process. The student will explore key skills and tools needed for effective planning to meet current needs and future goals, various ways in which technology is used for planning, and current planning challenges facing supervisors.

**CTBU 268 Customer Service**

**2 cr. (2 lec/wk) Prerequisite:** CAPP 120 or consent of instructor.

Introduces students to customer service strategies, practices, and systems which are required in the 21<sup>st</sup> century business environment. Emphasis will be placed on practical applications regarding customer service strategies. The student will explore strategic customer service, internal and external customers, work processes and customer/supplier relationships within a work process, the impact of technologies, current trends, and best practices.

## Dance

### Health & Human Performance (406) 657–2370

**DANC 155 Square Dance**

[formerly HHP 124 Dance, Square]

**1 cr.** Develop the basic movement skills in square dance and appreciate it as a lifetime activity and community involvement.

**DANC 156 Ballroom Dance**

[formerly HHP 135 Dance, Ballroom]

**1 cr.**

**DANC 158 Folk Dance**

[formerly HHP 123 Dance, Folk]

**1 cr.** Learn fundamental dances which represent many nations.

## Drafting Design

### City College

**DDSN 110 Technical Drawing Lecture**

[formerly DRFT 109 Introduction to Technical Drawing]

**4 cr. (4 lec/wk) (F, Sp)**

Presents basic mechanical drafting principles and techniques in a lecture format. Topics covered include geometric figures, multi-view working drawings, auxiliary views, sectional drawings, pattern drawings, and pictorial drawings. Correct application of CAD techniques and commands are also emphasized and integrated through the course to provide a solid foundation for future CAD classes. These CAD techniques include layer control, dimensioning techniques, file management, and the use of prototype drawings.

**DDSN 111 Technical Drawing Lab**

[formerly DRFT 110 Technical Drawing Lab]

**3 cr. (3 lab/wk) (F, Sp)**

Uses computers to apply the mechanical drafting principles and techniques from DDSN 110 to specific assignments. Utilizing a CAD station, students create geometric figures, multi-view working drawings, auxiliary drawings, sectional drawings, pattern drawings, and pictorial drawings. Students then reproduce assigned drawings on a variety of output devices. Correct application of CAD techniques and commands are emphasized as additional subject matter is presented.

**DDSN 114 Introduction to CAD**

[formerly DRFT 108 Introduction to CAD]

**3 cr. (2 lec/2 lab/wk) (F, Sp)**

Introduces the student to CAD software. Commands relating to settings, drawing, editing, dimensioning, and viewing are used to create two-dimensional working drawings.

**DDSN 116 3D CAD**

[formerly DRFT 128 3D Applications]

**3 cr. (2 lec/2 lab/wk) (F, Sp)**

Introduces the student to the concepts of 3-dimensional drafting and design. The topics of viewing, coordinate systems, and object creation are applied to the construction of models and working drawings.

**DDSN 135 SolidWorks**

[formerly DSGN 214 SolidWorks]

**3 cr. (2 lec/2 lab/wk) Prerequisite: DDSN 114 or DDSN 110 and DDSN 111. (F, Sp)**

Utilizes the SolidWorks software to produce three-dimensional models of mechanical objects and assemblies. Topics include sketching a part feature, providing dimensions and constraints to tie the features together, converting a sketch into a solid object, and creating and editing full assemblies. Working drawings are created from the part design, including a variety of views and dimension styles.

**DDSN 145 Structural Drafting**

[formerly DRFT 138 Structural Drafting]

**3 cr. (2 lec/2 lab/wk) Prerequisites: DDSN 110 and CAPP 120. (Sp)**

Prepares the student to enter the discipline of structural drafting. The structural drafting areas of concrete, steel, joist and deck roof systems, structural wood, and emerging systems are explored through the creation of working drawings. Communication interaction between construction entities is also incorporated.

**DDSN 160 Architectural Lecture**

[formerly DRFT 102 Building Construction]

**2 cr. (2 lec/wk) Prerequisites: DDSN 110 or DDSN 111. (F)**

Studies methods and materials of construction for residential, light commercial and commercial buildings along with mechanical systems, electrical systems and specifications.

**DDSN 161 Architectural Lab**

[formerly DSGN 112 Architectural Lab]

**5 cr. (10 lab/wk) Prerequisites: DDSN 110 or DDSN 111. (F)**

Prepares architectural, electrical and mechanical working drawings for residential, light commercial and commercial buildings.



**DDSN 186 CAD 2****[formerly DSGN 148 CAD Customization]****3 cr. (2 lec/2 lab/wk) Prerequisite: DDSN 110 and CAPP 120. (Sp)**

Familiarizes the student with the rationale and sequence for customizing a major CAD software. The topics of discipline-oriented customization, symbol libraries, symbol library access, data creation and data exchange methods are explored and applied to the creation of a custom overlay.

**DDSN 240 Civil Lecture****[formerly DRFT 104 Civil Technology]****2 cr. (2 lec/wk) Prerequisites: DDSN 110 or DDSN 111. (Sp)**

Field notes from surveys are reduced using calculators, traverses balanced, elevations determined, contours interpolated and areas determined. U.S. Public Land surveys are studied. Legal descriptions are written. Earthwork quantities are calculated from roadway cross-sections. Transportation and utility plans are studied.

**DDSN 241 Civil Lab****[formerly DSGN 114 Civil Lab]****5 cr. (10 lab/wk) Prerequisites: DDSN 110 or DDSN 111. (Sp)**

Land surveys, contour maps, plats, drainage and grading plans, roadway plans, utility plans, profiles and cross-sections are drawn using a standard CAD station. GIS and GPS data is incorporated into drawings. Field surveys are performed.

**DDSN 244 GIS Mapping****[formerly DSGN 116 GIS for Civil Applications]****2 cr. (1 lec/2 lab/wk) Prerequisites: DDSN 110, DDSN 111, and M 114. (Sp)**

Occupationally-related problems are solved using geographic information systems (GIS) and cartographic principles integrated with computer aided design (CAD).

**DDSN 256 SDS/2 Structural Detailing****[formerly DSGN 218 SDS/2 Structural Detailing]****3 cr. (2 lec/2 lab/wk) Prerequisite: DDSN 145. (F, Sp)**

Prepares the student to use the SDS/2 structural detailing software in the professional environment. Setup procedures, connection types, frame input, erection and detail sheet creation, and editing processes are covered.

**DDSN 294 Seminar****[formerly DRFT 292 Seminar]****V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of drafting technology.

**DDSN 294 Workshop****[formerly DRFT 293 Workshop]****V1-3 cr.**

Provides an opportunity for experimental study in an area of drafting technology.

**DDSN 294 Seminar****[formerly DSGN 292 Seminar]****V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of drafting technology.

**DDSN 294 Workshop****[formerly DSGN 293 Workshop]****V1-3 cr.**

Provides an opportunity for experimental study in an area of drafting technology.

**DDSN 294A Project Development Lecture****[formerly DSGN 230 Project Development Lecture]****3 cr. (3 lec/wk) Prerequisite: All 100-level Drafting and Design classes or permission of instructor.****Corequisites: DDSN 295A, DDSN 299. (F, Sp)**

Provides an advanced level of CAD application interaction relating to major drafting disciplines. An emphasis on 3D inclusion and multiple CAD software brand interaction is used to prepare drawings in the areas of mechanical, civil, and architectural commercial drafting. A team approach is used for the development of major projects.

**DDSN 295A Project Development Lab****[formerly DSGN 229 Project Development Lab]****3 cr. (6 lab/wk) Prerequisite: All 100-level Drafting and Design classes or permission of instructor.****Corequisites: DDSN 294A, DDSN 299. (F, Sp)**

Companion lab for DDSN 294A.

**DDSN 298 Cooperative Education/Internship****[formerly DRFT 296 Cooperative Education/Internship]****V1-9 cr. (45 hours/credit)**

Provides university credit for a sophomore work experience in the area of Drafting Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**DDSN 298 Cooperative Education/Internship**  
**[formerly DSGN 296 Cooperative Education/Internship]****V1-9 cr. (45 hours/credit)**

Provides university credit for a sophomore work experience in the area of Drafting Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**DDSN 299 Capstone: Project Development**  
**[formerly DSGN 231 Project Development Capstone]****1 cr. (3 lab/wk) Prerequisite:** All 100-level Drafting and Design classes or permission of instructor.**Corequisites:** DDSN 295A, DDSN 294A. (F, Sp)

Prepares the student for employment through the exploration of off-campus applications in their discipline while compiling their portfolio and preparing for employment. Students are also evaluated against program, state, and national standards through the National Occupational Certification Testing Institute (NOCTI) exam.

**CTDR 206 Programming Calculators****2 cr. Prerequisite:** M 065.

Programmable hand-held calculators are used to solve a variety of mathematical problems ranging from moderate to advanced. Keystroke, programming and printing functions are covered as programs are created involving geometry and trigonometry. Documentation techniques are also reviewed.

## Dental

### College of Allied Health Professions

**(406) 896-5830**

**DENT 305 Introduction to Dental Hygiene Research**  
**3 cr. Prerequisite:** AAS Dental Hygiene from a program accredited by The Commission on Dental Accreditation of the American Dental Association.

*Offered ONLY Online.* (F) Provides an introduction to the fundamentals of dental hygiene research including methodologies and data analysis. Students will develop the ability to evaluate scientific writing and the components of research studies and complete an action research study based on an environmental problem.

**DENT 360 Educational Methods in Dental Hygiene**  
**3 cr. Prerequisite:** AAS Dental Hygiene from a program accredited by The Commission on Dental Accreditation of the American Dental Association.

*Offered ONLY Online.* (F) Provides dental hygienists with an opportunity to study, reflect, question, become knowledgeable about, and develop skills in instructional methods while applying and practicing these methods in the dental setting.

**DENT 380 Contemporary Issues in Dental Hygiene**  
**3 cr. Prerequisite:** AAS Dental Hygiene from a program accredited by The Commission on Dental Accreditation of the American Dental Association.

*Offered ONLY Online.* (Sp) Examines current societal and professional issues and their impacts on dental hygiene practice. Course components aim to stimulate interaction among learners around important, current, and emerging issues facing the profession of dental hygiene.

**DENT 470 Leadership in Dental Hygiene**  
**3 cr. Prerequisite:** AAS Dental Hygiene from a program accredited by The Commission on Dental Accreditation of the American Dental Association.

*Offered ONLY Online.* (Sp) Promotes the development of leadership skills for dental hygienists related to personal behavior, communication, and organization to enhance the dental hygiene professional.

**DENT 499 Capstone**  
**3 cr. Prerequisite:** AAS Dental Hygiene from a program accredited by The Commission on Dental Accreditation of the American Dental Association.

*Offered ONLY Online.* (Sp) Integrates the knowledge and skills acquired in dental hygiene coursework through the development of a culminating project which demonstrates the alignment of individual course achievements with dental hygiene learning outcomes.

## Diesel Service Technician City College

### **DST 101 Power Trains** [formerly DIES 101 Powertrains]

**2 cr. (1 lec/2 lab/wk) (Sp)**

Instructs students in the design and operation of manual transmissions. Emphasis will be placed on diagnosis and service procedures for clutches, transmissions, drivelines, and differentials in on and off highway trucks, heavy equipment, and agricultural applications. Students will be expected to perform service tasks on clutches, transmissions, differentials, and drivelines using supplied training equipment.

### **DST 117 Introduction to Diesel Fuel Systems** [formerly DIES 117 Introduction to Diesel Fuel Systems]

**4 cr. (1 lec/6 lab/wk) Prerequisite: DST 140 and DST 141. (Sp)**

Introduces students to diesel fuel hydromechanical injection systems. Students are required to disassemble and reassemble assorted diesel fuel system components. Students will be exposed to mechanical inline and distributor pumps, unit, poppet, and pintle injectors and nozzles, and basic electronic control methods. The course will also cover manufacturer-specific systems including Detroit, Caterpillar, Cummins PT, and John Deere pumps, injectors, and governors.

### **DST 132 Diesel Engine Overhaul** [formerly DIES 132 Diesel Engine Overhaul]

**6 cr. (3 lec/6 lab/wk) Prerequisite: TRID 170. (F)**

Provides a detailed overview of the design, operation, and repair procedures for diesel engines. The lecture portion of this class covers procedures for overhauling, machining, and dynamometer performance testing. Students are then required to apply lectured topics in the lab portion of this class.

### **DST 140 Introduction to Hydraulics** [formerly DIES 113 Introduction to Hydraulics]

**2 cr. (2 lec/wk) Corequisite: DST 141. (F)**

Presents the theories of basic hydraulic principles and their uses in heavy-duty truck, heavy equipment, and agricultural applications. Students are exposed to the application of standard fluid power schematic symbols.

### **DST 141 Introduction to Hydraulics Lab** [formerly DIES 114 Introduction to Hydraulics Lab]

**2 cr. (4 lab/wk) Corequisite: DST 140. (F)**

Provides students a means to demonstrate knowledge of basic principles on live work stations, as well as disassemble and reassemble components. Students will work with linear and rotary actuators, directional valves, fixed displacement gear pumps, and pressure controls.

### **DST 155 Advanced Hydraulics and Pneumatics** [formerly DIES 155 Advanced Hydraulics and Pneumatics]

**4 cr. (2 lec/4 lab/wk) Prerequisite: DST 140 & DST 141. (Sp)**

Instructs students on fluid power system pressure, flow, and directional controls. Students receive training on fluid conductors, seals, and fixed and variable displacement pumps. Diagnosis and repair of controls, conductors, seals, and pumps are also covered. Students will be required to understand, describe, and design fluid power systems using standard schematic symbols.

### **DST 202 Advanced Power Trains** [formerly DIES 202 Advanced Powertrains]

**2 cr. (1 lec/3 lab/wk) Prerequisites: DST 141, DST 140. (Sp)**

Instructs students in the design and operation of automated twin counter shafts, automatic, and powershift transmissions. Emphasis will be placed on diagnosis and service procedures for twin counter shaft, powershifts, and automatic transmissions in on and off highway truck, heavy equipment, and agricultural applications. Students will be expected to perform service tasks on twin counter shafts, powershifts, and automatic transmissions using supplied training equipment.

### **DST 250 Heavy Duty Chassis** [formerly DIES 250 Heavy Duty Chassis]

**6 cr. (2 lec/8 lab/wk) Prerequisites: DST 140 & DST 141, TRID 150. (F)**

Instructs students on suspension and braking systems for on- and off-road truck, heavy equipment, and agricultural applications. Studies will include heavy duty truck suspension diagnosis, repair, and alignment procedures, as well as hydraulic and pneumatic braking systems.

**DST 256 Applied Diesel Service Operation I**  
**[formerly DIES 256 Applied Diesel Service Operations I]****2 cr. (4 lab/wk) (F)**

Applies diagnosis and repair procedures for chassis, powertrains, preventative maintenance, and engine systems for on and off road trucks and heavy equipment. The course will simulate an actual shop environment.

**DST 257 Applied Diesel Service Operation II**  
**[formerly DIES 257 Applied Diesel Service Operations II]****2 cr. (4 lab/wk) (Sp)**

Applies diagnosis and repair procedures for chassis, powertrains, preventative maintenance, and engine systems for on and off road trucks and heavy equipment. The course will simulate an actual shop environment.

**DST 260 Diesel Engine Diagnosis and Troubleshooting**  
**[formerly DIES 260 Diesel Engine Diagnosis and Troubleshooting]****5 cr. (2 lec/8 lab/wk) Prerequisites: DST 140 & DST 141, DST 117, DST 132, TRID 170, TRID 180. (F)**

Coordinates diagnosis and testing of diesel engine problems using electrical test equipment and an engine dynamometer. This course will expand on engine assembly and startup procedures, as well as tuning and performance testing.

**DST 277 Advanced Fuel Systems and Diesel Engine Controls****[formerly DIES 277 Advanced Fuel Systems and Diesel Engine Controls]****6 cr. (2 lec/8 lab/wk) Prerequisites: DST 140 & DST 141, DST 117, DST 132, DST 155, DST 260, TRID 180. (Sp)**

Provides an in-depth study of modern diesel fuel systems used in on- and off-road truck, heavy equipment, agricultural, and stationary engine applications. The course will cover engine and powertrain electronic management systems used for common high speed diesel engines. Students will also be exposed to stationary industrial engine electronic control systems.

**DST 294 Seminar**  
**[formerly DIES 292 Seminar]****V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of diesel technology.

**DST 294 Workshop**  
**[formerly DIES 293 Workshop]****V1-3 cr.**

Provides an opportunity for experimental study in an area of diesel technology.

**DST 298 Cooperative Education/Internship**  
**[formerly DIES 296 Cooperative Education/Internship]****V1-9 cr. (45 hours/credit) (F, Sp, Su)**

Provides university credit for a sophomore work experience in the area of Diesel Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Economics

### Business Administration

**(406) 657–2295****\* ECNS 201 Principles of Microeconomics**  
**[formerly ECON 200 Principles of Microeconomics]****3 cr. (F, Sp)** Introduces the analytical tools of economists as they pertain to microeconomic theory and applications. This course emphasizes price theory, production theory, theory of economic organizations, and factor markets.**\* ECNS 202 Principles of Macroeconomics**  
**[formerly ECON 201 Principles of Macroeconomics]****3 cr. (F, Sp, Su)** Introduces the analytical tools of economists as they pertain to macroeconomic theory and applications. This course emphasizes the behavior of markets in the context of a national economy. Introduces theories of national income and employment, economic growth and stabilization theory, money and banking, and international economics.**ECNS 300 Intermediate Microeconomics**  
**[formerly ECON 324 Intermediate Microeconomic Theory]****3 cr. Prerequisite: Admission to upper division standing or consent of department. (F)** Covers price determination and resource allocation under competitive and noncompetitive market structures. Includes theories of demand, production, and income distribution.**ECNS 302 Intermediate Macroeconomics**  
**[formerly ECON 325 Intermediate Macroeconomic Theory]****3 cr. Prerequisite: Admission to upper division standing or consent of department. (Sp)** Considers the determinants of aggregate levels of employment, output, and income of an economy.

**ECNS 313 Money and Banking**  
[formerly ECON/FIN 352 Money, Capital Markets and Institutions]

**3 cr. Prerequisite:** Admission to upper division standing and BFIN 322, or consent of department. (F, Sp) Covers the mechanics of financial markets, the impact of fiscal and monetary policies, banking and financial institutions and instruments used by business and government, the relationships between interest rates, security prices, risk, exchange rates and world financial markets.

**ECNS 314 International Economics**  
[formerly ECON 331 International Economics]

**3 cr. Prerequisite:** Admission to upper division standing or consent of department. Considers classical and modern theories of international trade with applications to selected international economic problems.

**ECNS 403 Introduction to Econometrics**  
[formerly ECON 443 Business and Economic Forecasting]

**3 cr. Prerequisite:** Admission to upper division standing or consent of department. (Sp) Covers forecasting techniques used in business; assembly, interpretation and use of economic data; analysis of business conditions; construction of firm and industry sales forecasts.

**ECNS 406 Industrial Organization**  
[formerly ECON 446 Industrial Organization]

**3 cr. Prerequisite:** Admission to upper division standing or consent of department. Covers the organization and structure of production in the U.S. economy; determinants of market structures, business behavior, and economic performance; implications for antitrust policy.

**ECNS 435 Energy and Natural Resource Economics**  
[formerly ECON 442 Energy and Natural Resource Economics]

**3 cr. Prerequisite:** Admission to upper division standing or consent of department. Introduces principles useful in analyzing problems and policies of energy and natural resource use, development, and conservation.

**ECNS 457 Economics of Organizations**  
[formerly ECON 457 Economics of Organizations]  
**3 cr. Prerequisite:** ECNS 300 or department.

Applies microeconomic, contract and agency theories to understanding the structure and scope of organizations. Examines incentive structures, issues in accountability, responsibility and productivity measurements, and ownership structures of business.

**ECNS 490 Undergraduate Research**  
[formerly ECON/FIN 480 Research in Finance and Economics]

**3 cr. Prerequisite:** ECNS 300, ECNS 302, ECNS 403 or consent of department. Combines statistical and econometric techniques with economic and financial theories to conduct rigorous research projects in the areas of economics and finance. The project is similar to a thesis and is the sole factor used to determine the course grade.

**ECNS 492 Independent Study**  
[formerly ECON 491 Independent Study]

**V1-3 cr. Prerequisites:** Admission to upper division standing, consent of department, and approval of the College of Business Academic Policy Committee (CBAPC). (F, Sp, Su) Provides outstanding junior and senior students an opportunity to explore material not covered by regular Economics courses. Students must complete a Request for Independent Study form and have it approved by CBAPC.

**ECON 494 Seminar**  
[formerly ECON 492 Seminar]

**V1-3 cr. Prerequisites:** Admission to upper division standing and consent of department. (F, Sp, Su) Provides advanced students an opportunity to intensively investigate topics pertinent to the field of Economics.

## **Emergency Care Provider & Paramedic City College and Health & Human Performance**

**ECP 100 First Aid and CPR**  
[formerly HHP 210 First Aid and CPR]

**2 cr. (F, Sp)** Considers the emergency care to be given victims of accident or sudden illness. Develops safety consciousness and prevention as well as stresses individual responsibility, rights and wrongs in times of disaster. Standard First Aid and CPR certification awarded upon successful completion of the course.

**ECP 103 Basic Lifeguard Training****[formerly HHP 142 Lifeguard Training: Basic]**

**2 cr. (Sp)** The student who successfully completes this course receives certificates in the following American Red Cross courses: CPR for the Professional Rescuer and Lifeguarding.

**ECP 111 Water Safety Instructor****[formerly HHP 143 Water Safety Instructor]**

**3 cr. Prerequisite:** Consent of instructor. This course is designed to train instructor candidates to teach a wide variety of swimming and water safety courses.

**ECP 112 Lifeguarding Instructor/Head****Lifeguard/Waterfront Modules****[formerly HHP 144 Lifeguarding Instructor/Head Lifeguard/Waterfront Modules]**

**2 cr. Prerequisite:** Consent of instructor. (Sp) After successfully completing this course the student is qualified to teach several courses within the American Red Cross Lifeguard Training program. Additionally, the successful student is qualified for Head Lifeguarding and may qualify for other modules or courses with additional work within the course.

**ECP 120 Emergency Medical Responder****[formerly HHP 212 First Responder Emergency Care]**

**3 cr. Prerequisite:** Basic First Aid preferred. (Sp) Covers first responder techniques, equipment, and prevention content areas are covered. Development of first responder skills, including assessment, surveys, treatment, and prevention techniques. Specialized areas of pre-professional CPR, oxygen therapy, resuscitation mask, and spinal back boarding are included. Awards certification for First Responder and CPR upon successful completion of requirements.

**ECP 122 Wilderness First Responder****[formerly HHP 230 Wilderness First Responder]**

**3 cr.** Covers First Responder applications in wilderness settings. Addressed are issues of short- and long-term patient care, backcountry rescue techniques, and survival skills. Training will include emergency care for environmental illnesses and injuries, using special equipment and techniques particular to non-urban rescuers, and managing transport as well as other high-level emergency care skills. Participants who successfully complete the course and exam will receive Wilderness First Responder certification. (Due to course content and instructor and physical requirements, the class may not be held on MSU Billings main campus.)

**ECP 200 Transition to Paramedic Care****[formerly PARA 101 Transition to Paramedicine]****3 cr. (3 lec/wk) (Sp)**

Provides an opportunity to start learning the cognitive, psychomotor, and behavioral differences between an EMT and paramedic. Topics covered include roles and responsibilities of the paramedic, EMS systems, licensure/recertification requirements, medical legal, patient evaluation, radio communication, documentation, and current issues that impact the EMS profession.

**ECP 201 Paramedic Fundamentals****[formerly PARA 130 Paramedic Fundamentals]****3 cr. (3 lec/wk) (F)**

Prepares the paramedic student in the basic knowledge and skills needed in the pre-hospital environment. Topics covered include roles and responsibilities of the paramedic, medical legal considerations, communications, rescue and disaster operations, initial patient assessment and management, airway management and ventilation, pathophysiology of shock, and emergency pharmacology.

**ECP 202 Paramedic Fundamentals Lab****[formerly PARA 131 Paramedic Fundamentals Skills Lab]****1 cr. (2 lab/wk) (F)**

Practices and gains the manipulative skills necessary to effectively manage the tasks in ECP 201.

**ECP 206 EMS Case Studies****[formerly PARA 120 EMS Case Studies]****4 cr. (4 lec/wk) (F)**

Provides an opportunity to study and manage trauma and respiratory emergencies from a case study perspective. Trauma topics covered include shock, head, spinal, thoracic, abdominal, burns, and environmental. Respiratory topics covered include asthma, emphysema, chronic bronchitis, pneumonia, pulmonary edema, and embolism.

**ECP 207 Cardiology****[formerly PARA 240 Cardiology]****4 cr. (4 lec/wk) (F)**

Provides an in-depth study in the pathophysiology and management of cardiovascular disease and related emergencies. Topics include anatomy and physiology of the heart and circulatory system, basics of electrophysiology, assessment of the cardiac patient, pathophysiology of atherosclerosis, specific conditions resulting from atherosclerotic heart disease, peripheral vascular emergencies, pharmacologic intervention, dysrhythmia recognition, and specific management of cardiac emergencies.

**ECP 208 Cardiology Lab and ACLS****[formerly PARA 241 Cardiology Lab & (ACLS)]****1 cr. (2 lab/wk) Corequisite: ECP 207. (Sp)**

The student practices and gains manipulative skills to satisfactorily manage the task in ECP 207. Upon completion, the student receives provider certification in Advanced Cardiac Life Support.

**ECP 216 Hospital Clinical I****[formerly PARA 135 Hospital Internship I]****5 cr. (15 clinical/wk) Prerequisites: ECP 201, ECP 202, ECP 230, ECP 232 and ECP 233. (F)**

Provides the opportunity to apply, in a clinical setting, the didactic knowledge and skills developed in the classroom and lab. Serves as the first stage in assisting the student to become an employable EMS provider. Clinical skills addressed include patient assessment and evaluation, vital signs management, development of airway management skills, autopsy observation, development of communication skills, introduction to various skills necessary for patient care, and development of safety practices.

**ECP 220 Special Considerations****[formerly PARA 244 Special Considerations]****1 cr. (1 lec/wk) (Sp)**

Provides an opportunity to study and manage behavioral emergencies. Students are taught to recognize symptoms of abnormal behavior and responses. Students learn techniques to manage the suicide patient.

**ECP 221 OB/Neonate/Pediatrics****[formerly PARA 245 OB/Neonate/Pediatrics]****2 cr. (2 lec/wk) (Sp)**

Provides the student with the opportunity to participate in normal and abnormal obstetrical problems. Anatomy and physiology of the female reproductive system, assessment of the gynecologic patient, deliveries (normal, abnormal and complicated), routine care of the neonate, care of the distressed infant, neonatal emergencies, and neonatal transport are addressed.

**ECP 222 OB/Neonate/Pediatrics Lab and NRP and PALS****[formerly PARA 246 OB/Neonate/Pediatrics Lab & (NRP) & (PALS)]****1 cr. (2 lab/wk) Corequisite: ECP 221. (Sp)**

Practices and gains the manipulative skills necessary to effectively manage the tasks in ECP 221. Upon completion, the student receives provider certification in Neonatal Resuscitate Program (NRP) and Pediatric Advanced Life Support (PALS).

**ECP 230 Trauma****[formerly PARA 132 Trauma]****2 cr. (2 lec/wk) (F)**

Provides an intense course in the pathophysiology and the management of trauma to include assessment of the trauma patient, management of head injuries, chest injuries, abdominal injuries, spinal injuries, orthopedic injuries, management of the multi-trauma patient, management of special airway problems, and current trends in trauma management.

**ECP 232 Pulmonary****[formerly PARA 133 Pulmonary]****2 cr. (2 lec/wk) (F)**

Provides an in-depth study of the anatomy of the respiratory system, its relationship to the other systems of the body, the pathophysiology of diseases of the respiratory system, and treatment modalities of pulmonary disease. Topics included are anatomy of the respiratory system, measurements of pulmonary function, respiration and gas exchange, assessment of the respiratory system, pathophysiology and management of respiratory disorders, and principles and management of acute respiratory insufficiency.

**ECP 233 Trauma/Pulmonary Lab and PHTLS****[formerly PARA 134 Trauma/Pulmonary Lab & (PHTLS)]****1 cr. (2 lab/wk) (F)**

Practices and gains the manipulative skills necessary to effectively manage the tasks in ECP 230 and ECP 232. Upon completion, the student receives provider certification in Pre-Hospital Trauma Life Support.

**ECP 242 Medical****[formerly PARA 242 Medical]****2 cr. (2 lec/wk) (Sp)**

Provides an intense course in the pathophysiology and management of medical emergencies to include endocrine, nervous system, the acute abdomen, anaphylaxis, toxicology and substance abuse, infectious diseases, environmental, geriatric and pediatric emergencies.

**ECP 243 Medical Lab****[formerly PARA 243 Medical Lab]****1 cr. (2 lab/wk) Corequisite: ECP 242. (Sp)**

Practices and gains the manipulative skills necessary to effectively manage the tasks in ECP 242.

**ECP 246 Hospital Clinical II****[formerly PARA 247 Hospital Internship II]****6 cr. (18 clinical/wk) Prerequisites:** ECP 201, ECP 202, ECP 230, ECP 232, ECP 233, ECP 207, ECP 208, ECP 242, ECP 243, ECP 220, ECP 221, ECP 222. (Sp)

A continuation of the clinical skills initiated in ECP 216. Provides the opportunity to apply in the clinical setting, the didactic knowledge and skills developed in the classroom and lab. Serves as a final stage in assisting the student to become an employable EMS provider. Clinical skills addressed include electrocardiology, assessment and management of acute and chronic disease, pediatric advanced life support skills, obstetrical and neonatal care, and behavioral intervention techniques.

**ECP 250 NREMT Exam Preparation****[formerly PARA 252 National Registry Exam Preparation]****3 cr. (3 lec/wk) Corequisite:** ECP 251. (Su)

Prepares the paramedic student for the national registry paramedic exam. It is a review of the core curriculum taught throughout 2nd and 3rd semester of the paramedic program.

**ECP 251 NREMT Exam Preparation Lab****[formerly PARA 253 National Registry Exam Preparation Lab]****1 cr. (2 lab/wk) Corequisite:** ECP 250. (Su)

Prepares the paramedic student for the national registry paramedic exam. It is a review of the psychomotor skills taught throughout 2nd and 3rd semester of the paramedic program.

**ECP 291 Special Topics****[formerly PARA 291 Special Topics]****V1-3 cr.**

Provides an opportunity for students to investigate intensively in an area of Paramedicine.

**ECP 294 Seminar/Workshop****[formerly PARA 294 Seminar/Workshop]****V1-6 cr.**

Provides students an opportunity for experiential study on topics pertinent to the field of Paramedicine.

**ECP 295 Field Internship****[formerly PARA 254 Field Internship]****8 cr. (24 clinical/wk) Prerequisites:** ECP 201, ECP 202, ECP 230, ECP 232, ECP 233, ECP 216, ECP 207, ECP 208, ECP 242, ECP 243, ECP 220, ECP 221, ECP 222, ECP 246. (Su)

Provides the opportunity to apply in the clinical setting, the didactic knowledge and skills developed in the classroom and lab. It serves as the final stage in assisting the student to become an employable EMS provider. Cognitive, psychomotor, and affective evaluation skills addressed include patient assessment, history gathering, treatment prioritizing, diagnostic impression, protocol knowledge, radio communication, written documentation, airway management, fluid/drug management, cardiac management, trauma/medical management, attitude, professionalism, assertiveness, team leader qualities.

**ECP 312 Wilderness Medicine****4 cr. (Sp)** Covers Wilderness Medicine and First

Responder applications in wilderness settings. Issues addressed are short- and long-term patient care, backcountry rescue techniques, and survival skills. Training will include emergency care for environmental illnesses and injuries, using special equipment and techniques particular to non-urban rescuers, and managing transport, as well as other high-level emergency care skills. Participants who successfully complete the course and exam will receive Wilderness First Responder certification. (Due to course content and instructor and physical requirements, the class may not be held on the MSU Billings main campus.)

## Curriculum and Instruction

### Educational Theory & Practice

**(406) 657–2315****EDCI 430 Environmental Education for Teachers**

**3 cr.** Explores the philosophy and rationale for environmental education. Considers the ecological foundations required of environmental studies programs and deals with issues in multidisciplinary curriculum design and instructional procedures.



## Early Childhood Education

### Educational Theory & Practice

(406) 657–2315

#### **EDEC 130 Health, Safety and Nutrition in Early Childhood**

**2 cr. (2 lec/wk) (F)** Provides information regarding the importance of nutritional needs, principle health and movement issues, and safety considerations that help early childhood professionals provide an environment in which children can grow and develop to their full potential. Includes developmentally appropriate physical movement methods and information about issues and problems related to contemporary alcohol, tobacco, and other drug use, misuse, and abuse.

#### **EDEC 265 Leadership and Professionalism in Early Childhood Education**

**[formerly EC 289 Professional Roles and Expectations]**

**3 cr. (Sp)** Provides the student with an understanding of roles and responsibilities of professional staff and paraprofessionals when working with families. Emphasis on professional standards of conduct including the requirements of confidentiality. A field experience is integrated into the course and assignments. Valid criminal background check required.

#### **EDEC 292 Independent Study**

**[formerly EC 291 Independent Study]**

**V1-6 cr. Prerequisites: Consent of instructor and Department Chairperson.** Provides an opportunity for freshman and sophomore students to explore material not covered by the regular college courses.

#### **EDEC 294 Seminar/Workshop**

**[formerly EC 292 Seminar]**

**3 cr.** Investigates topics pertinent to the area of Early Childhood Education.

#### **EDEC 294 Seminar/Workshop**

**[formerly EC 293 Workshop]**

**V1-6 cr.** Provides an opportunity for study in an area of Early Childhood Education.

#### **EDEC 296 Fieldwork/Practicum**

**[formerly EC 294 Clinic]**

**V1-7 cr. Prerequisite: consent of instructor.**

Provides freshmen and sophomores with an opportunity to explore and develop applications of study in a particular area. Uses selected pupils for demonstration purposes. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice. Valid criminal background check required.

#### **EDEC 298 Internship**

**[formerly EC 290 Internship]**

**V1-6 cr.** Provides freshmen and sophomores with a supervised experience in a licensed setting providing services to young children and/or families. The internship setting and requirements are arranged with the student's advisor in conjunction with the Office of Licensure, Standards and Clinical Practice. The student will spend 45 contact hours during the academic semester for each semester hour of credit. Valid criminal background check required.

#### **EDEC 310 Child in the Family**

**[formerly EC 437 Child In The Family System]**

**3 cr. (Sp)** Focuses on the reciprocal relationship between the child, family and environment. This course includes knowledge and experience necessary to assist and support the parents (of both typically developing and children with special needs) in their role as primary caregivers and informal teachers of young children. A field experience is integrated into the course experience.

#### **EDEC 352 Math and Science in Early Childhood**

**3 cr. (3 lec/wk) Prerequisites: EDEC 381 and EDEC 385. (F)**

Focuses on developmentally appropriate, research-based curriculum, methods, and assessment in early childhood mathematics and science. Examines state and national standards and key concepts and skills in science and math curriculum. Develops high quality, meaningful science and math experiences that emphasize hands-on exploration and investigation of meaningful content with young children.

#### **EDEC 381 Early Childhood Curriculum and Methods**

**[formerly EC 283 Curriculum and Adaptations]**

**3 cr. (F)** Provides the student with an understanding of developmentally appropriate curriculum. Curricular adaptations for individual learners including appropriate technology and equipment will be addressed. A field experience is integrated into the course and assignments. Valid criminal background check required.

**EDEC 385 Integrated Curriculum in Early Childhood Education****3 cr. (2 lec/wk + 45 hrs practicum) Prerequisite:****EDEC 381. (Sp)** Provides the student with an understanding of integrated developmentally appropriate curriculum, including The Project Approach and developmentally appropriate integration of educational technology. Various theoretical approaches and methods of early childhood curriculum design will be emphasized. Students will develop relevant and meaningful curriculum for young children with an emphasis on full integration of all content areas and will apply their learning with a 45 hour practicum in a preschool classroom during the semester. Can be taken concurrently with EDEC 381.**EDEC 430 Social/Emotional Development in Young Children****[formerly EC 336 Social/Emotional Development In Young Children]****3 cr. Prerequisite: EDU 240. (Sp)** Provides the student with a knowledge and experiential base related to the social and emotional development of young children, to include guidance techniques. An emphasis will be placed on issues of the developing self while emphasizing the critical role of supportive and engaged adults. Classroom observation and interaction with children required.**EDEC 492 Independent Study****[formerly EC 491 Independent Study]****V1-6 cr.** Provides an opportunity for students of superior academic standing to explore material not covered by the regular college courses.**EDEC 494 Seminar/Workshop****[formerly EC 492 Seminar]****V1-8 cr.** Investigates topics pertinent to the area of Early Childhood Education.**EDEC 494 Seminar/Workshop****[formerly EC 493 Workshop]****V1-8 cr. (Sp, Su)** Provides an opportunity for study in an area of Early Childhood Education.**EDEC 495 Early Childhood Student Teaching****V 9 or 12 cr. Prerequisite: Approved application to student teach and co-registration in EDU 406 if not completed. (F, Sp)**Places the student in a supervised field experience in an early childhood (preschool – 3<sup>rd</sup> grade) setting that allows the student to demonstrate teaching skills in the classroom with a variety of learners. Students, in collaboration with the mentor teacher, engage students in learning and participate in related experiences associated with the teaching profession. On-site mentoring and university supervision are integral to this experience. Students participate in the Capstone Seminar scheduled throughout the professional semester. Lab fee required. Valid criminal background check required.**EDEC 496 Advanced Practicum****[formerly EC 494 Clinic]****V1-6 cr.** Provides an opportunity through use of selected pupils for demonstration purposes for students to explore and develop applications of theoretical study in a particular area. Infield contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice. Lab fee required. Valid criminal background check required.**EDEC 498 Internship****[formerly EC 490 Internship]****V1-6 cr. Prerequisites: Consent of advisor.** Allows the student to assume the full range of teaching duties in an exemplary early childhood setting. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice and require 45 hours of contact time for each semester hour of credit. Lab fee required. Valid criminal background check required.

## Special Education

### Educational Theory & Practice

**(406) 657–2315****EDSP 204 Introduction to Teaching Exceptional Learners****[formerly SPED 260 Introduction to Teaching Exceptional Learners]****3 cr.** Considers the characteristics of children with exceptional learning needs. Examines the services and strategies to provide for the needs of each individual with exceptional needs in the least restrictive environment. This course includes a field experience. Valid criminal background check required.

**EDSP 205 Adult and Child Interaction Skills**  
**[formerly SPED 210 Adult/Child Interaction Skills]**

**3 cr.** Provides the student with basic knowledge of adult-child interaction, support strategies, literacy development, and observation techniques. A field experience is integrated into the course and assignments. Valid criminal background check required.

**EDSP 292 Independent Study**  
**[formerly SPED 291 Independent Study]**

**V1-6 cr.** Provides an opportunity for freshman and sophomore students to explore, under supervision, material not covered by regular college courses. Approval of department chair required.

**EDSP 294 Seminar/Workshop**  
**[formerly SPED 292 Seminar]**

**V1-3 cr.** Provides students an opportunity to investigate topics pertinent to the field of Special Education.

**EDSP 298 Internship**  
**[formerly SPED 290 Internship]**

**V1-6 cr.** Provides freshman and sophomore students with a supervised field experience in an appropriate setting specifically related to the student's major/minor area. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice. Valid criminal background check required.

**EDSP 301 Teaching Students with Learning Disabilities**

**[formerly SPED 310 Teaching Students with Learning Disabilities]**

**3 cr. Prerequisite: Admission to Educator Preparation Program.** Introduces a historical and theoretical background for teaching students with learning disabilities. Presents a variety of approaches to teaching students with learning disabilities from preschool level through adult life.

**EDSP 302 Teaching Students with Emotional or Behavioral Disorders**

**[formerly SPED 311 Teaching Students with Emotional Disturbance]**

**3 cr. Prerequisite: Admission to Educator Preparation Program.** Introduces a historical and theoretical background for teaching students with emotional disturbance. Presents identification procedures and the variety of community and system options for these children, as well as classroom techniques and procedures for teaching students in the public schools.

**EDSP 303 Teaching Students with Intellectual Disabilities**

**[formerly SPED 312 Teaching Students with Intellectual and Developmental Disabilities]**

**3 cr. Prerequisite: Admission to Educator Preparation Program.** Provides a historical and theoretical background for teaching students with developmental disabilities. Presents skills in assessment, instruction, and evaluation of students in school and community settings. Valid criminal background check required.

**EDSP 310 Supporting Diverse Learners through Collaboration**

**3 cr. Prerequisites: EDSP 204 and one Methods course. (F, Sp, Su)** Focuses on collaboration among the general educators, special educators, and other educational specialists to meet the needs of diverse learners in the classroom. The course will use a case study approach to emphasize teaming skills necessary for effective decision making, selection of evidence based practices, and implementation of school-wide prevention models.

**EDSP 402 Individualizing Curriculum**  
**[formerly SPED 415 Individualizing Curriculum (Preschool-12th Grade)]**

**3 cr. Prerequisites: admission to the Educator Preparation Program and EDSP 301, and either EDSP 302 or EDSP 303.** Covers aspects of effective teaching with emphasis on curriculum familiarity, curriculum analysis, evaluation, individualizing programs, implementing programs, decision-making, and preparing children for success in general education classrooms. An in-class practicum is included in this class. Lab fee required. Valid criminal background check required.

**EDSP 404 Teaching Special Populations**  
**[formerly SPED 420 Teaching Special Populations]**

**2 cr. Prerequisite: Admission to Educator Preparation Program; two of the following courses: EDSP 301, EDSP 302, EDSP 303; and consent of instructor.** Provides students with 65 hours of supervised practical experience. Involves observation, assessment, lesson planning and implementation, data collection, and data-based decision making. Includes seminars covering such topics as classroom organization and management and teaching students with special educational needs. Lab fee required. Valid criminal background check required.

**EDSP 405 Assessment of Students with Exceptionalities**

**[formerly SPED 405 Assessment of Students with Disabilities]**

**3 cr. Prerequisite:** EDSP 301, EDSP 302, EDSP 303, and admission to Educator Preparation Program.

Presents measurement principles and procedures and application of norm referenced, criterion referenced, and classroom-based procedures for students with disabilities. Valid criminal background report required.

**EDSP 461 Positive Behavior Supports**

**[formerly SPED 375 Teaching, Learning and Behavior in the Schools]**

**3 cr. Prerequisites:** Admission to Educator Preparation Program. Introduces principles of learning as conceptualized in applied behavior analysis. Addresses classroom and school-wide discipline models. Provides information and conducting functional behavior assessment, and emphasizes a collaborative problem-solving approach.

**EDSP 462 Special Education Law, Policy and Practices**

**[formerly SPED 400 Legal and Current Issues in Special Education]**

**3 cr. Prerequisite:** admission to Educator Preparation Program and one of the following: EDSP 301, EDSP 302, EDSP 303. Focuses on the legal precepts of special education and current issues in implementation of the law.

**EDSP 492 Independent Study**

**[formerly SPED 491 Independent Study]**

**V1-6 cr.** Provides an opportunity for junior and senior students to explore, under supervision, material not covered by regular college courses. Approval of department chair required.

**EDSP 494 Seminar/Workshop**

**[formerly SPED 492 Seminar]**

**V1-3 cr. Prerequisite:** Admission to Educator Preparation Program. Provides students an opportunity to investigate topics pertinent to the field of Special Education.

**EDSP 495 Field Work/Clinical/Practicum: Student Teaching in Special Education**

**[formerly SPED 484 Special Education Student Teaching]**

**9 cr. Prerequisite:** Approved student teaching application and completion of the special education course requirements. Places the student in a supervised field experience in a special education P-12 setting that allows the student to demonstrate teaching skills in the classroom with a variety of learners. Students, in collaboration with the mentoring teacher, engage students in learning and participate in related experiences associated with the teaching profession. On-site mentoring and university supervision are integral to this experience. Lab fee required. Valid criminal background check required.

**EDSP 496 Service Learning: Special Education Clinic**

**[formerly SPED 494 Clinic]**

**V1-6 cr.** Provides an opportunity for students to explore and develop applications of theoretical study in a particular area. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice. Lab fee required. Valid criminal background check required.

**EDSP 498 Internship**

**[formerly SPED 490 Internship]**

**V1-3 cr. Prerequisite:** Consent of department chairperson and completion of student teaching or approved equivalent experience. Provides junior and senior students with a supervised field experience in an appropriate setting specifically related to the student's major/minor area. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice. Lab fee required. Valid criminal background check required.

## Education

### Educational Theory & Practice

(406) 657-2315

**\* EDU 105 Education and Democracy**

**[formerly EDF 100 Education and Democracy]**

**3 cr. (F, Sp, Su)** Explores what it means to be an educated person in a democratic society. Although schooling is generally the primary formal means whereby societies educate citizens, this course focuses on education broadly to examine a) the ways people create and share knowledge, b) society's responsibilities to provide the rich and varied opportunities needed by all citizens who would be educated, c) the consequences of disenfranchising anyone from those opportunities, and d) the critical link between democratic society and education.

**EDU 200 Introduction to Education**

**[formerly EDF 120 Society, Schools and Teachers]**

**3 cr. (F, Sp, Su)** Provides prospective educators with a historical and social overview of education to inform the student's decision about undertaking serious study in the profession. Also examines education within its contemporary and comparative context, focusing on breadth of social diversity as it affects education. Addresses continuing professional topics and issues. Valid criminal background check required.

**EDU 211 Multicultural Education**

**[formerly EDCI 441 Multicultural Education]**

**3 cr. (odd Sp)** Acquaints students with the history, philosophy, goals, teaching strategies, curricula, and practices of multicultural education in order to prepare teachers for dealing with and affirming the diversity of America's increasingly pluralistic classrooms. Deals with racial, cultural, and other forms of diversity in the United States and Montana.

**EDU 220 Human Growth and Development**

**[formerly EDF 225 Human Development in Education]**

**3 cr. (F, Sp, Su)** Presents a comprehensive introduction to the study of Human development including the developmental capabilities and needs of Humans at different ages with respect to the physical, psychomotor, cognitive, social, emotional, and psychological domains that affect all education. The course includes a practicum with community-based services for children and youths so students need to plan accordingly. Lab fee required. Valid criminal background check required.

**EDU 221 Educational Psychology and Measurement**  
**[formerly EDF 250 Educational Psychology]**

**3 cr. (F, Sp, Su)** Focuses on Human learning as it provides the basis for instruction and classroom management. Provides comprehensive coverage of the principles, concepts, and implications of Human learning from classical, operant, social learning, and cognitive paradigms. Covers measurement, similarities and differences in learners, management and discipline strategies, and related corollaries of human learning applied to instruction.

**EDU 232 Foundations of Reading**

**[formerly RD 288 Foundations of Reading]**

**3 cr. Prerequisite: Admission to AA Program of Study in Education.** Introduces essential background related to reading, develops understanding of features and functions of print, presents materials for building mastery of reading subskills and examines common instructional practices. Areas covered include emergent reading, reading programs, reading processes, word attack strategies, vocabulary development, phonics and phonemic awareness, comprehension, and fluency.

**EDU 240 Behavior Management**

**[formerly EC/SPED 210 Adult/Child Interaction Skills]**

**3 cr.** Provides the student with basic knowledge of adult-child interaction, support strategies, literacy development, and observation techniques. A field experience is integrated into the course and assignments.

**EDU 270 Instructional Technology**

**[formerly EDCI 210 Educational Technology Applications]**

**3 cr.** Prepares students to use computer applications in the classroom, including adaptive technology, databases, multimedia, telecommunications, and word processing.

**EDU 292 Independent Study**

**[formerly EDCI 291 Independent Study]**

**V1-3 cr. Prerequisites: consent of the faculty supervisor and advisor.** Provides an opportunity for freshman and sophomore students of superior academic standing to explore material not covered by the regular college courses.

**EDU 294 Seminar/Workshop**

**[formerly EDCI 292 Seminar]**

**V1-3 cr.** Investigates intensively topics pertinent to the area of Education.

**EDU 294 Seminar/Workshop****[formerly EDCI 293 Workshop]**

**V1-5 cr.** Provides an opportunity for experimental study in an area of Education.

**EDU 294 Seminar/Workshop****[formerly EDF 292 Seminar]**

**V1-3 cr.** Provides the opportunity for the department to offer lower division courses of particular topical interest which are not offered as a part of the regular offering of courses.

**EDU 294 Seminar/Workshop****[formerly EDF 293 Workshop]**

**V1-3 cr.** Provides an opportunity for the department to offer lower division, non-course exploration into topics not covered in regular course offerings.

**EDU 294 Seminar/Workshop****[formerly RD 292 Seminar]**

**3 cr.** Provides students an opportunity to investigate intensively topics pertinent to the field of Reading Education.

**EDU 294 Seminar/Workshop****[formerly RD 293 Workshop]**

**V1-8 cr.** Provides an opportunity for students of superior academic standing to explore material not covered by the regular college courses.

**EDU 296 Clinic****[formerly EDCI 294 Clinic]**

**V1-5 cr. Prerequisite: consent of instructor.**

Provides freshman and sophomores with an opportunity to explore and develop applications of study in a particular area. Uses selected students for demonstration purposes. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice. Valid criminal background check required.

**EDU 298 Internship****[formerly EDCI 290 Internship]**

**V1-5 cr. Prerequisites: consent of department chairperson.** Provides freshman and sophomores with a supervised experience in an area of the school program. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice. This course is offered as a Pass/No Pass course only. Valid criminal background check required.

**EDU 298 Internship****[formerly EDF 290 Internship]**

**V1-3 cr.** Avails freshmen and sophomores of opportunities for experiences in various non-classroom settings under faculty and on-site supervision. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice.

**EDU 298 Internship****[formerly RD 290 Internship]**

**V3-8 cr.** Provides freshmen and sophomores with an experience in an appointment as an assistant in some area of the school program under supervision. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice.

**EDU 315 IEFA in the Montana Classroom****2 cr. Prerequisites: EDU 380, EDU 381, or EDCI**

**500. (F, Sp)** Provides instruction and practice on how to develop lesson plans with IEFA essential understandings infused into regular content areas. Use of Montana Content Standards and Indian Education for All Essential Understandings to write lesson plans and critique lesson plans will be the focus of the class. Fulfills IEFA requirement for Montana State Licensure.

**EDU 330 Emergent Literacy (crosslisted with RD 512)****[formerly RD 412/512 Emergent Literacy]****3 cr. Prerequisite: EDU 397A or consent of**

**instructor. (Sp)** Provides a view of the stages of literacy development including areas of language, writing, perception, behavior and cognitive development. Curriculum and instruction analyses are related to various stages of literacy development. Contains a field experience with children, relating theory to practice. Valid criminal background check required.

**EDU 331 Literature and Literacy for Children****3 cr. Prerequisite: Admission to Educator**

**Preparation Program and EDU 397A.** Examines literature for children in grades K-8. Students study key aspects of the history of children's literature and current children's literature, and develop an understanding of literacy features in books, including genre, illustration, text structures, and literary elements. Provides students with an overview of diverse literature, including Indian Education for All. Students consider instructional approaches for engaging children with literature.

**EDU 333 Reading and Writing Across the Curriculum**

**[formerly RD 310 Reading and Writing Across the Curriculum]**

**3 cr. Prerequisite: Admission to Educator Preparation Program or consent of instructor. (F, Sp, Su)** Introduces pre-service teachers to basic concepts about reading and writing to learn, provides strategies for making content area text more accessible to readers, includes techniques for assessment of text difficulty and student competence in reading content text, and examines designs for approaching content area study using reading and writing as tools for the development of content subject concepts.

**EDU 336 Cognitive and Language Development in Young Children**

**[formerly RD/EC 335 Cognitive and Language Development in Young Children]**

**3 cr. (Lec 2; Clinic 1) (even F)** Focuses on current theory and practice related to understanding and enhancing the young child's cognitive and language development. Provides the student with opportunities to apply child development and learning theory to assessment, curriculum, and interaction patterns with young children. A field experience is integrated into the course experience and assignments. Valid criminal background check required.

**EDU 343 Strategies for Managing Diverse Learners**

**2 cr. (F, Sp)** Provides students with an opportunity to examine various models of classroom management strategies and practical techniques to help create a classroom environment that encourages student learning.

**EDU 353 Junior Field Experience**

**[formerly EDCI 385 Junior Field Experience]**

**2 cr. Prerequisite: Admission to Educator Preparation Program AND consent of instructor. Corequisite: coregistration with at least two of EDU 397A, EDU 397B, EDU 397C, EDU 397D or EDU 397E. (F, Sp)** Students will engage in 90 hours of supervised practical experience in an elementary classroom. This experience includes: structured observation focusing on cultural and developmental characteristics of children; working with teachers on individual diagnosis of student needs and prescription of student activities; and assisting small groups of students in accomplishing learning tasks. Lab fee required. Valid criminal background check required.

**EDU 354 Secondary Junior Field**

**2 cr. Prerequisites: Admission to Educator Preparation Program and consent of instructor.**

Students will engage in 65 hours of supervised practical experience in a K-12 or secondary classroom, with five seminars. This experience includes structured observation focusing on cultural and developmental characteristics of children, working with teachers on individual diagnosis of student needs and prescription of student activities, and assisting small groups of students in accomplishing learning tasks. Lab fee required. Valid criminal background check required.

**EDU 355 Reading Junior Field**

**2 cr. Prerequisites: EDU 397A, EDU 433. (F, Sp)**

Includes scaffolded observation and instructional experiences in reading/language arts and developing appropriate instruction and intervention. Provides participants with opportunities to teaching individuals and small groups under direct supervision.

**EDU 380 Introduction to Curriculum Planning/Practice**

**[formerly EDCI 310 Curriculum and Instruction for Middle School, High School, & K-12 Teachers]**

**2 cr. Prerequisite or concurrent enrollment in EDU 220, EDU 221, EDSP 204. (F, Sp)** Introduces middle school, high school, and K-12 pre-service teachers to several major curriculum models and a variety of instructional practices appropriate for use with preadolescent and adolescent students in contemporary school settings. Teaches students to integrate technology and multicultural issues into the curriculum.

**EDU 381 Curriculum Theory and Design**

**[formerly EDCI 300 Curriculum Theory and Design]**

**3 cr. Prerequisite or concurrent enrollment in EDU 220, EDU 221, EDSP 204. (F, Sp, Su)** Introduces pre-service elementary and middle school teachers to the various historical, philosophical, psychological, sociological, and developmental concerns in designing school curricula. Philosophies of and practical strategies for integration of computer technologies and multicultural perspectives in to curricula are explored.

**EDU 383 Assessment in Education**

**3 cr. Prerequisite:** Admission Educator Preparation Program. Gives pre-service education candidates foundations of assessment, measurement, and evaluation, including choosing, designing, administering, and interpreting assessments and a variety of evaluation tools. Candidates will learn the professional and ethical responsibilities of assessment as well as its cultural, social, and political issues. Candidates will be introduced to decision making and program planning for students, including those with exceptional learning needs and from culturally or linguistically diverse backgrounds.

**EDU 397A Methods: K-8 Language Arts**  
[formerly EDCI 301 Teaching Language Arts and Children's Literature]

**3 cr. (3 lec/wk) Prerequisites:** EDU 381, admission to Educator Preparation Program, and General Education categories Writing Skills and Oral Skills completed. (F, Sp, Su) Provides strategies for integration of reading, writing, listening, viewing and visually representing, and speaking across the curriculum. Provides hands-on experiences with the writing process and forms of writing (including spelling and handwriting), evaluation of student writing, grammar teaching, and intervention for development of expressive effectiveness.

**EDU 397B Methods: K-8 Social Studies**  
[formerly EDCI 302 Teaching Social Studies in the Elementary School]

**3 cr. Prerequisites:** Admission to Educator Preparation Program, EDU 381 and completion of History, Social Science and Global Studies categories of General Education or equivalencies. (F, Sp, Su) Includes theories and practices for teaching social studies in the elementary and middle school. Students plan for teaching social science concepts and skills using developmentally and culturally appropriate instructional practices, involvement learning strategies, and a variety of evaluation procedures. Techniques for collaborating with professional colleagues and integrating multimedia computer technologies into social studies instruction are included in the course.

**EDU 397C Methods: K-8 Mathematics**  
[formerly EDCI 303 Teaching Mathematics in the Elementary School]

**3 cr. Prerequisites:** Admission to Educator Preparation Program and M 131. (F, Sp, Su) Provides preservice elementary teachers with theories and practical strategies for planning, facilitating, and assessing student learning. Also, the course deals with incorporation of technology into the elementary mathematics classroom and the appropriate use of manipulatives and other instructional materials. Curriculum adaptation to meet the needs of all students is addressed.

**EDU 397D Methods: K-8 Science**  
[formerly EDCI 304 Teaching Science in the Elementary School]

**3 cr. Prerequisites:** Admission to Educator Preparation Program and completion of Science General Education category. (F, Sp, Su) Focuses upon methods of teaching science inquiry skills, content and attitudes in the elementary classroom. Provides experiences which enhance student understanding of how children learn science and construct knowledge regarding K-6 science curricula. Addresses curriculum adaptation to meet the needs of all students.

**EDU 397E Methods: K-8 Art**  
[formerly EDCI 305 Teaching Art in the Elementary School]

**3 cr. Prerequisites:** ARTZ 102, EDU 381. (F, Sp, Su) Examines the purposes, media, and teaching strategies of art at elementary and middle school levels. Studio, aesthetics, criticism and history topics (modern paradigm) addressed as separate topics and linked to other disciplines. Includes technology, individualization/collaboration, developmentally appropriate practice, planning, assessment, and post-modern components directed at art instruction. (Lab fee).

**EDU 397F Methods: K-8 Music**  
[formerly EDCI 306 Teaching Music in the Elementary School]

**3 cr. Prerequisites:** Admission to Educator Preparation Program, MUSI 101, and EDU 381. (F, Sp, Su) Examines the purposes, materials, and teaching methodologies of music as a separate discipline and as a program within the 3 curriculum models (technical, practical and critical). Links with other elementary school disciplines provided. Performance, aesthetic, and historical topics are also included.



**EDU 397G Methods: 5-12 Science**  
**[formerly EDCI 314 Teaching Science in the Middle and Secondary School]**

**2 cr. Prerequisite:** Admission to Educator Preparation Program. (even Sp) Emphasizes teaching strategies, learning enhancements, school problems, safety procedures, and curriculum materials regarding the teaching of science in the middle and secondary schools.

**EDU 397H Methods: K-12 Art**  
**[formerly EDCI 315 Teaching Art K-12]**

**3 cr. Prerequisite:** Admission to Educator Preparation Program. (F, Sp) Provides pre-service K-12 art teachers with modern and post-modern theories and practical strategies for planning, facilitating, and assessing student learning. Art production, history/heritage, criticism, and aesthetics are addressed from age-appropriate perspectives and as related to the disciplines. Field experience is a focus. Presents an overview of technology, inclusion of special populations, health/safety aspects, and art-related career opportunities. (Lab fee)

**EDU 397I Methods: K-12 Music**  
**[formerly EDCI 316 Teaching Music K-12]**

**2 cr. Prerequisite:** Admission to Educator Preparation Program. (F, Sp) Provides the student with the methods and materials necessary for teaching music in a K-12 setting. Specifically, the areas to be covered are: elementary general music, elementary instrumental music, middle school instrumental and choral music, and high school instrumental and choral music.

**EDU 397J Methods: 5-12 Speech and Drama**  
**[formerly EDCI 317 Teaching Speech and Drama in the Middle and Secondary School]**

**3 cr. Prerequisite:** Admission to Educator Preparation Program. (F, Sp) Introduces middle and secondary speech and drama pre-service teachers to major curriculum models, instructional strategies and contemporary practices. Teaches students to plan, organize, teach and assess speech and drama lessons. All students complete 45 hours of speech and drama secondary junior field experience in an instructional setting. Valid criminal background check required.

**EDU 397K Education Methods: Health Enhancement Strategies in the Elementary School K-8**

**[formerly HHP 314 Health Enhancement Strategies in the Elementary School K-8]**

**3 cr. Prerequisite:** Admission to Educator Preparation Program. (F, Sp, Su) Covers methods of Health Enhancement education for the elementary education major and minor K-8. Students write lesson plans, participate in teaching activities and evaluate the activities. Methods discussed are applied to the following health content areas: mental and emotional health, family living, growth and development, nutrition, personal health, substance use and abuse, communicable and chronic diseases, injury prevention and safety including pedestrian and bicycle safety, and consumer and environmental community health. Additionally, methods of teaching basic movement education, such as dance and rhythmic movement, physical fitness, gymnastics and related skills, and cooperative games, are presented.

**EDU 397M Methods: K-8 Integrating the Arts into the Curriculum**

**4 cr. Prerequisite:** Admission to EPP. (F, Sp, Su) Develops knowledge of and experience with effective methods, techniques, and materials for teaching visual arts, drama, and music to children as part of an integrated curriculum in the elementary grades. Students engage in creative and critical experiences with the arts. They design integrated arts instruction while learning how to document and assess student progress utilizing strategies to address the needs of diverse learners. Students work directly with children in microteaching or field-based teaching experiences.

**EDU 406 Philosophical, Legal and Ethical Issues in Education**

**[formerly EDF 450 Philosophical, Legal and Ethical Issues in Education]**

**3 cr. Prerequisite:** Admission to Educator Preparation Program. (F, Sp, Su) Focuses on analysis of the philosophical, legal and ethical issues in the context of education in a pluralistic society. Provides the student with a background in the philosophies of education and allows the student to study legal and ethical issues relevant to modern education in America.

**EDU 412 Teaching the Bilingual/Multicultural Student****[formerly EDCI 443 Teaching the Bilingual/Multicultural Student]**

**3 cr. Prerequisites:** EDU 381 and completion of NASX 105. Provides a basic background for multicultural and bilingual teaching. Includes foundations and emphasis on the development of bilingual education, the development of minority group children, sociolinguistic and psycholinguistic issues, and the variety of program responses to addressing the needs of minority group children. Also includes a theory-into-practice component which explores curricular approaches to the specific subject areas.

**EDU 413 Developing Student Writing****[formerly RD 413/513 Developing Student Writing]**

**3 cr. (odd F)** Provides students with a view of the writing process, methods for engaging children in writing activity in the classroom, assessments of and interventions into the writing efforts of children, and understanding of writing-reading connections consistent with current practices in reading education.

**EDU 418 Development of Literacies in Multicultural/Multilingual Communities****[formerly RD 418 Development of Literacies in Multicultural/Multilingual Communities]**

**3 cr.** Provides theoretical background and practical experience in approaching literacy acquisition and development in multilingual and multicultural communities. Offers consideration of the nature of literacy itself vis-à-vis linguistic, cultural, socio-economic, gender, racial, ethnic and intellectual diversities.

**EDU 430 Teaching Reading K-3****[formerly RD 414/514 Teaching Reading K-3]**

**3 cr. Prerequisites:** EDU 397A and EDU 433. (F) Introduces students to developmentally appropriate methods for teaching and assessing reading and literacy in early elementary classrooms. This course will focus on the instruction of Reading in the primary grades (K-3) as reflected in best practices and current research.

**EDU 432 Literature and Literacy for Young Adults [formerly RD 427 Literacy Development in Middle and Secondary Schools]****3 cr. Prerequisite:** EDU 397A and EDU 433. (F)

Provides the reading specialist and 5-12 certification preservice teachers with a view of literacy development consistent with the abilities, interests and needs of upper grade and secondary students. Offers instructional practices in reading/writing appropriate to and supportive of middle and secondary curricula.

**EDU 433 Reflective Practices in Teaching Reading [formerly RD 401 Reflective Practices in Teaching Reading]****3 cr. (3 lec/wk) Prerequisite:** EDU 397A. (F, Sp, Su)

Introduces students to visual cueing systems in print and the reading and writing processes. Discusses approaches to teaching reading and writing, including the gradual release of responsibility model and the workshop model. Provides the students with a foundation in literacy assessment, as well as reading/writing applications for subject matter content.

**EDU 434 Reading Round Table****[formerly RD 419 Reading Round Table]**

**V1-3 cr. (Su)** Provides students with literature study routines and materials for nine juvenile/young adult trade books; discussion and engagement focuses on one title at a time using a literature workshop method. Examination of reading practices which employ trade books in middle and secondary schools is included.

**EDU 435 Theories in Reading****[formerly RD 415 Theories in Reading]****3 cr. Prerequisite:** EDU 397A and EDU 433. (F)

Acquaints the student with a variety of theories of reading and writing instruction. Designed to extend the theoretical understanding of literacy development.

**EDU 436 Storytelling****[formerly RD 431/531 Storytelling]**

**3 cr. (Sp)** Provides students with background in the nature of oral narrative, offers developmental experience for the novice teller, and ties storytelling and practices in oral narrative in general to language acquisition and development.

**EDU 438 Literacy Assessment, Diagnosis and Instruction****[formerly RD 417 Diagnostic Teaching of Reading]****3 cr. Prerequisite:** EDU 397A and EDU 433;

**admission to Educator Preparation Program or consent of instructor.** (F, Sp, Su) Focuses on the literacy development of children experiencing difficulty with classroom reading/writing instruction. Effective teaching strategies are studied and applied. Contains a field experience with children, tying theory to practice. Lab fee required. Valid criminal background check required.

**EDU 439 Practicum: Literacy Assessment, Diagnosis and Instruction****1 cr.** Valid criminal background check required.

**EDU 442 Reading Diagnosis and Interventions in the Classroom****[formerly EDU 484 Assessment in Remedial Reading]**

**3 cr. Prerequisites:** EDU 397A. (F, Sp) Examines how children acquire literacy skills and reasons that some children struggle to acquire these skills. Students will learn a variety of assessment techniques to specifically diagnose reading problems. Students will also learn strategies to help these students, as well as appropriate reading instruction suitable for students at a variety of reading levels.

**EDU 457 Learning Mathematics and Science in Cross-Cultural Settings****[formerly EDCI 445 Learning Mathematics and Science in Cross-Cultural Settings]**

**3 cr.** Surveys the history of mathematical and scientific ideas from ancient times to the present day; explores the development of mathematical and scientific concepts in various cross-cultural settings; applies relevant research to the study of mathematical and scientific ideas among American Indians.

**EDU 492 Independent Study****[formerly EDCI 491 Independent Study]**

**V1-3 cr. Prerequisite:** Admission to Educator Preparation Program, and consent of faculty supervisor and advisor. (F, Sp, Su) Provides an opportunity for students of superior academic standing to explore material not covered by the regular college courses.

**EDU 494 Seminar/Workshop****[formerly EDF 492 Seminar]**

**V1-3 cr. (F, Sp, Su)** Provides the opportunity for the department to offer upper division courses of particular topical interest which are not offered as a part of the regular offering of courses.

**EDU 495A Student Teaching: K-12****[formerly EDCI 484 Student Teaching (K-12)]**

**9 cr. (8 credits student teaching, 1 credit seminar). Prerequisite:** Approved application to student teach. (F, Sp) Places the student in a supervised field experience in a K-12 setting that allows the student to demonstrate teaching skills in the classroom with a variety of learners. Students, in collaboration with the mentor teacher, engage students in learning and participate in related experiences associated with the teaching profession. On-site mentoring and university supervision are integral to this experience. Students participate in the Capstone Seminar scheduled throughout the professional semester. Lab fee required. Valid criminal background check required.

**EDU 495B Student Teaching: K-8****[formerly EDCI 485 Student Teaching (Elementary)]**

**9 or 12 cr. (8/11 credits student teaching, 1 credit seminar). Prerequisite:** Approved application to student teach. (F, Sp) Places the student in a supervised field experience in an elementary setting that allows the student to demonstrate teaching skills in the classroom with a variety of learners. Students, in collaboration with the mentor teacher, engage students in learning and participate in related experiences associated with the teaching profession. On-site mentoring and university supervision are integral to this experience. Students participate in the Capstone Seminar scheduled throughout the professional semester. Lab fee required. Valid criminal background check required.

**EDU 495C Student Teaching: 5-12****[formerly EDCI 486 Student Teaching (Secondary)]**

**9 cr. (8 credits student teaching, 1 credit seminar). Prerequisite:** Approved application to student teach. (F, Sp) Places the student in a supervised field experience in a secondary setting that allows the student to demonstrate teaching skills in the classroom with a variety of learners. Students, in collaboration with the mentor teacher, engage students in learning and participate in related experiences associated with the teaching profession. On-site mentoring and university supervision are integral to this experience. Students participate in the Capstone Seminar scheduled throughout the professional semester. Lab fee required. Valid criminal background check required.

**EDU 495D Reading Student Teaching I**

**3 cr. Prerequisites:** EDU 438 and reading coursework. (F, Sp) Provides unique community placement with an educational agency that services children and youth for purposes of delivering one-on-one and small group reading instruction.

**EDU 495E Reading Student Teaching II**

**3 cr. Prerequisites:** EDU 438, EDU 495D and reading coursework. (F, Sp) Provides unique school placement to follow Elementary Education Student Teaching with the intent of exposing the student to one-on-one and small group delivery of reading instruction for special purposes.

**EDU 496 Clinic****[formerly EDCI 494 Clinic]****V1-5 cr. Prerequisites: Admission to Educator Preparation Program or Consent of department chairperson, and consent of faculty supervisor.**

Provides an opportunity through use of selected pupils to explore and develop applications of theoretical study in particular area. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Licensure, Standards and Clinical Practice, Room 114, COE. Lab fee required. Valid criminal background check required.

**EDU 496 Clinic****[formerly RD 494 Clinic]**

**V1-8 cr.** Selected practice opportunities allow students to explore and develop reading/writing applications in one-on-one settings. Reflective teaching capacities emerge through direct observation, assessment and responsibility for instructional design.

**EDU 497A Methods: 5-12 Social Studies****[formerly EDCI 312 Teaching Social Studies in the Middle and Secondary School]**

**2 cr. Prerequisite: Admission to Educator Preparation Program. (F)** Prepares pre-service teachers to teach middle and high school students the fields of history and the social sciences. Students explore major models used in teaching social studies and current curriculum trends and instructional strategies in the field. Students learn how to plan, organize, teach, and assess lessons and units which integrate contemporary practices such as computer technology and cooperative learning.

**EDU 497B Methods: 5-12 Mathematics****[formerly EDCI 313 Teaching Mathematics in the Middle and Secondary School]**

**2 cr. Prerequisite: Admission to Educator Preparation Program. (F)** Prepares pre-service teachers to teach mathematics to middle and secondary school students.

**EDU 497C Methods: K-12 Modern Language [formerly EDCI 319 Teaching Foreign Languages K-12]**

**2 cr. Prerequisite: Admission to Educator Preparation Program. (F)** Examines the unique set of concerns and challenges facing the K-12 teachers of foreign languages. Instruction is offered in: language acquisition practice, classroom teaching techniques, curricular design, testing and evaluation, media-based instruction and technology, instructional materials development, and classroom behavioral management.

**EDU 497D Methods: 5-12 English****[formerly EDCI 424 Teaching English]**

**2 cr. Prerequisites: Admission to Educator Preparation Program. (F)** Prepares pre-service middle and secondary language arts teachers to implement instruction and facilitate and assess student learning. Provides practice in using a variety of methods and approaches for teaching students to develop functional reading, writing, speaking, listening, viewing, and critical thinking skills.

**EDU 497R Methods: 5-8 Mathematics**

**3 cr. (Sp)** Provides effective techniques in presenting materials, planning class activities, and creating good learning experiences: methods of teaching and evaluating arithmetic, remedial mathematics, basic geometry, introductory algebra, and reading/writing mathematics.

**EDU 498 Internship****[formerly EDCI 490 Internship]**

**V1-5 cr. Prerequisite: Consent of department chairperson. (F, Sp)** Provides experience in a responsible appointment as an assistant in some specialized area of the college program. In-field contact time is 45 hours per semester credit. Field placements are arranged through the Office of Educational Theory and Practice. Lab fee required. Valid criminal background check required.

## Electrical Engineering

### Mathematics

**(406) 657-2228****EELE 201 Circuits I for Engineering****[formerly EE 206 Circuits I]**

**4 cr. (Lec. 3/Lab 1 – Lab required) Prerequisite: M 172. Corequisites: PHSX 232 & PHSX 233. (Sp)** Introduces students to circuit analysis including Ohm's and Kirchhoff's Laws; nodal and mesh methods; network theorems; resistors, capacitors, inductors, independent and dependent sources, and diodes; ideal OP-AMP and transistor circuits; R-L, R-C, and R-L-C responses; complex frequency and phasors; and steady-state AC circuits.

*This course is offered online with only the lab portion at MSU Billings.*

## Engineering: General Biological & Physical Sciences (406) 657–2031

**EGEN 105 Introduction to General Engineering**  
**2 cr. (1 lec/2lab/wk) (F, Sp)** Provides students an opportunity to explore the fields of engineering, engineering technology, and computer science. Other topics include engineering design, career opportunities, professionalism, and ethics.

**EGEN 201 Engineering Mechanics—Statics**  
**3 cr. (3 lec/wk) Prerequisite: PHSX 220 & PHSX 221. Corequisite: M 273. (F, Sp)** Covers the equilibrium of particles and rigid bodies; static analysis of structures including trusses, beams, frames, and machines; coulomb friction, area and mass centroids; and moments and products of inertia.

**EGEN 202 Engineering Mechanics—Dynamics**  
**3 cr. (3 lec/wk) Prerequisite: EGEN 201. (Sp)** Covers kinematics, kinetics, work-energy, and impulse-momentum for particles and rigid bodies.

**EGEN 205 Mechanics of Materials**  
**3 cr. (3 lec/wk) Prerequisite: EGEN 201. (Sp)** Covers stress and strain, Hooke's Law, thermal strain, torsion, bending of beams, combined stress, limit analysis, energy methods, virtual work, and column theory.

## Electrical Technology City College

**ELCT 130 Electric Motors and Generators**  
**[formerly SET 170 Electric Motors and Generators]**  
**3 cr. (2 lec/2 lab/wk) Prerequisite: ETEC 101.** Introduces terminology and basic principles of DC and AC motors and generators. Students will study single-phase and three-phase motors and generators and operational controls. Common AC and DC power generation equipment and testing techniques will also be covered.

**ELCT 241 Electric Motor Controls**  
**3 cr. (2 lec/2 lab/wk) Prerequisite: ELCT 130 (F)** Orients students to the study of electromechanical control system concepts. Experiments are designed to illustrate the principles, applications, connection, and installation procedures of electrical controllers. Special emphasis is placed on the analysis and development of control circuits.

**ELCT 250 Programmable Logic Controllers**  
**[formerly SET 280 Programmable Logic Controllers]**

**3 cr. (3 lec/wk) Prerequisite: ETEC 103.**

Introduces a variety of programmable logic controllers (PLCs). The application, operation, and programming of PLCs will be covered, with an emphasis on programming. Computers and manual methods will be used to program PLCs.

## Environmental Studies Social Sciences and Cultural Studies (406) 657–2311

**ENST 210 Introduction to Environmental Studies**  
**[formerly EVST 230 Introduction to Environmental Studies]**

**3 cr. Prerequisite: WRIT 201 or consent of instructor.** Presents an orientation to the field of environmental studies as an academic discipline and as public service. Provides students with experiential opportunities with local agencies and organizations designed to facilitate individual interests and educational goals relative to the study and practice of environmental problem solving. Students will acquire information literacy skills through the process of identifying, accessing, analyzing, and evaluating secondary source material, audiovisual media, and computer-based information. Course requires students to complete a community-based environmental project.

**ENST 294 Seminar/Workshop**  
**[formerly EVST 293 Workshop]**

**V1-6 cr.** Provides freshmen and sophomore an opportunity for experimental study in an area of environmental studies.

**ENST 298 Internship/Cooperative Education**  
**[formerly EVST 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Environmental Studies supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**ENST 335 The Environmental Vision**  
**3 cr. (3 lec/wk) Prerequisite: Upper division status or permission of instructor. (F)** Considers nature and the environment as represented in literature and culture. Readings may include landmarks of literary nature writing and environmental advocacy, as well as representative works in various genres.

**ENST 381 Law and Society****[formerly EVST 351 Law and Society]**

**3 cr.** Studies the role of the American legal system in society; course emphasis varies from year to year, depending on which topics have current, wide-ranging social and philosophical implications; typical topics include environmental and toxic torts, intellectual property, death penalty issues, and invasion of privacy in cyberspace.

**ENST 382 Environmental Law (crosslisted with HON 352)****[formerly EVST 352 Environmental Law]**

**3 cr. Prerequisites: 6 credits of WRIT 101, WRIT 201, WRIT 220, or WRIT 221.** Provides a broad overview of the major federal and Montana environmental statutes, including attention to how the statutes attempt to balance long-view goals (i.e., needs of future generations) and broad-view goals (i.e., needs of ecological systems). Course content also examines how the statutes are administratively and judicially enforced, as well as the social benefits and burdens associated with criminal punishments and civil litigations. Course content will address the complexities inherent to a regulatory system that is generated within federal, state, and local jurisdictions. Course assignments will include at least one important writing assignment (i.e., term paper assignment).

**ENST 385 Environmental Impact and Policy Analysis****[formerly EVST 360 Environmental Impact and Policy Analysis]**

**3 cr. Prerequisite: Junior standing or permission of instructor.** Explores human environmental impact, impact assessment, and environmental policy. Topics include pollution impact and mitigation, energy policy, natural resources management, environmental impact assessment and impact statement methods.

**ENST 490 Undergraduate Research  
[formerly EVST 495 Environmental Studies Research]**

**V1-4 cr. Prerequisites: Junior or senior in the EVST program, 3.0 or better GPA in major, 3.0 or better GPA overall, BIOE 202, PHL 324.** Involves intensive study of a specific problem related to environmental studies. A contract describing the study must be completed at the time of enrollment.

**ENST 492 Independent Study****[formerly EVST 491 Independent Study]**

**V1-6 cr.** Provides an opportunity for students of superior academic standing to explore material not covered by the regular college courses.

**ENST 494 Seminar/Workshop****[formerly EVST 492 Seminar]**

**V1-6 cr. Prerequisites: 6 credits of WRIT 101, WRIT 201, WRIT 220, or WRIT 221.** Provides advanced students an opportunity to investigate topics pertinent to the field of Environmental Studies. Each seminar must include at least one important writing assignment (i.e. term paper assignment). [Can repeat course number as different seminar topic.]

**ENST 494 Seminar/Workshop****[formerly EVST 493 Workshop]**

**V1-6 cr.** Provides an opportunity for experimental study in an area of environmental studies.

**ENST 498 Internship/Cooperative Education  
[formerly EVST 490 Environmental Studies Internship]**

**V1-3 cr.** Allows the student to earn credit for assisting in teaching Environmental Studies courses and/or for assisting in courses requiring fieldtrip activities.

**ENST 498 Internship/Cooperative Education  
[formerly EVST 496 Cooperative Education/Internship]**

**V3-6 cr.** Provides university credit for a work experience in the area of Environmental Studies, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**ENST 499 Senior Thesis/Capstone****[formerly EVST 498 Capstone Seminar]**

**3 cr. Prerequisite: ENST 385, PHL 324, BIOE 202, senior standing.** Provides an opportunity for students in the environmental studies program to demonstrate proficiency in the skills presented in the environmental studies curriculum.

**Geoscience: Earth Systems****Biological & Physical Sciences****(406) 657–2341****ERTH 202 Montana's Geological Environment  
[formerly EASC 201 Montana: Its Geological Environment]**

**3 cr.** Examines the geological evolution of Montana utilizing a regional approach. Considers Montana's resources and the roles that they have played in the historical development of the state's past, present and future. Field trips required.

**ERTH 303 Weather and Climate****[formerly EASC 220 Meteorology]****4 cr. (Lec. 3; Lab 1). (even S)** Presents a semi-technical approach to the elements and controls of weather. Lab required.**ERTH 401 Geologic Field Methods****[formerly EASC 440 Geologic Field Methods]****4 cr. Prerequisite: GEO 309 and consent of instructor. (even F)** Presents the techniques used by the geologist to conduct field surveys. Standard geologic surveying equipment will be utilized by the student to conduct an investigation and prepare a geological map of an area of moderately complex structure. Extensive field work required.**ERTH 491 Special Topics****V1-12 cr. Prerequisite: determined as needed.****(offered as needed)** Provides students with an opportunity to take courses not required in any curriculum for which there is a particular need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.**ERTH 494 Seminar/Workshop****[formerly EASC 492 Seminar/EASC 493 Workshop]****V1-3 cr. Prerequisite: consent of instructor.**

Provides advanced students an opportunity to intensively investigate topics pertinent to the field of Earth Sciences.

**ERTH 498 Internship/Cooperative Education****[formerly EASC 490 Internship/EASC 496 Cooperative Education]****1 cr. Prerequisite: Consent of instructor.** Provides instructional experience in the Earth Sciences program with an opportunity for early exploration of teaching interests.

## Electronics Technology

### City College

**ETEC 101 AC/DC Electronics I****[formerly SET 160 AC/DC Electronics I]****3 cr. (2 lec/2 lab/wk) (Sp)**

Introduces safety rules, concepts, and operating characteristics of direct current (DC) and alternating current (AC) electrical circuits. Selection, inspection, use, and maintenance for common electrical test equipment are also covered.

**ETEC 103 AC/DC Electronics II****[formerly SET 180 AC/DC Electronics II]****3 cr. (2 lec/2 lab/wk) Prerequisite: ETEC 101.**

Expands the students' knowledge of AC/DC electronics. Safety rules, concepts, and operating characteristics of electrical circuits will be emphasized. Capacitors, inductors, low voltage power supplies, diodes, transistors, and triodes will be introduced and analyzed.

**ETEC 192 Fundamentals of Energy Technicians I****4 cr. (2 lec/4 lab/wk) (F)**

Introduces students to the National Electrical Code, device boxes, hand bending, raceways and fittings, conductors and cables, basic electrical construction drawings, residential electrical services, and electrical test equipment. Upon successful course completion, students will receive National Center for Construction Education and Research Electrical Level 1 certification.

**ETEC 193 Fundamentals of Energy Technicians II****4 cr. (2 lec/4 lab/wk) (Sp)**

Expands on the content covered in Fundamentals of Energy Technicians I. The course covers electrical lighting, conduit bending, pull and junction boxes, conduit installations, cable tray, conductor terminations and splices, grounding and bonding, and circuit breakers and fuses. Upon successful course completion, students will receive NCCER Electrical Level 2 certification.

**ETEC 220 Electrical Power and Distribution I****[formerly SET 260 Electrical Power and Distribution I]****3 cr. (3 lec/wk) Prerequisite: ETEC 103.**

Introduces generation of electrical power and moving that power through a local transmission system to a substation where a customer will purchase the generated power. Safely working with components of a high voltage transmission system will also be covered.

**ETEC 230 Electrical Power and Distribution II****[formerly SET 264 Electrical Power and Distribution II]****3 cr. (3 lec/wk) Prerequisite: ETEC 220.**

Expands content covered in the Electrical Power and Distribution I course. This course covers the generation of electrical power and moving that power through a local transmission system to a substation where a customer will purchase the generated power.

**ETEC 231 Electronic Drive Systems****[formerly SET 270 Electronic Drive Systems]****3 cr. (2 lec/2 lab/wk) Prerequisite: ETEC 103.**

Exposes students to advanced electronic drive systems used in industrial applications. Electronic control of DC and AC motors, transmission and solid-state controllers, and electronic control of power generation equipment will be discussed.

**ETEC 284 Digital Electronics****[formerly SET 284 Digital Electronics]****4 cr. (2 lec/4 lab/wk) Prerequisite: ETEC 103.**

Introduces basic digital circuits and their use in microprocessors and other digital devices. Reading digital logic schematics and building, testing, and troubleshooting digital circuits are also covered.

**Film****Communication & Theatre, (406) 657–2178****English, Philosophy & Modern Languages, (406) 657–2348****\* FILM 160 Introduction to World Cinema****[formerly COMT 155 Global Cinema]**

**3 cr. (F)** Offers students an artistic appreciation of the diversity of cinema around the world. Develops a broadened multicultural perspective through surveying films from Asia, Europe, North and South America. Encourages students to view cinema as a means of interpreting culture. (Special fee).

**FILM 324 Writing for Stage and Screen****[formerly ENGL 324 Writing for Stage and Screen]****3 cr. Prerequisite: CRWR 240. (alternating Sp)**

Provides extensive practice in the writing of scenes, plays, and screenplays. Develops various writing skills such as convincing dialogue, believable and interesting characterization, correct pacing of plot and action, appropriate use of setting, and screenwriting techniques. Develops analytical skill through discussion of selected professional and student work. (\$10 photocopying fee).

**FILM 424 Advanced Writing for Stage and Screen**  
**[formerly ENGL 424 Advanced Writing for Stage & Screen]****3 cr. Prerequisite: FILM 324. (alternating Sp)**

Provides advanced practice in writing scenes, plays, and screenplays. Advances various writing skills such as convincing dialogue, believable and interesting characterization, correct pacing of plot and action, appropriate use of setting, and screenwriting techniques. Provides further development of analytical skill through discussion of selected professional and student work.

**Fire Science****City College****FIRE 105 Fire Apparatus, Equipment and Hydraulics****3 cr. (3 lec/wk) Prerequisite M 114.**

Acquire the basic knowledge of various types of fire apparatus used in the fire service and their unique requirements needed to provide emergency services. Assess the equipment and its applications used for suppressing fires and applications to other emergency responses. Learn to apply the principles used in hydraulics for the delivery of water in fire protection and supply systems. Demonstrate proficiency of this knowledge by using applied field operational hydraulics.

**FIRE 115 Fire Fighter I Essentials****3 cr. (2 lec/2 lab/wk) (F)**

Introduces the students to the fire service career. Through lecture and practice, the course provides a history of fire service skills and illustrates all the basic requirements of the firefighter in the performance of his/her duty from suppression, code enforcement, technical rope rescue through basic hazardous materials training.

**FIRE 130 Fire Service Management and Law****3 cr. (3 lec/wk) Prerequisite: COMPASS test proficiency/WRIT proficiency for placement into WRIT 101, 122, or 123.**

Acquire a basic knowledge and overview of the organization and management used in the fire service. Review relationships with other governmental agencies and departments. Analyze federal, state, and local laws relating to emergency services and responses. Learn standards of care, torts, liability, and review of federal and state court cases affecting the fire service.



**FIRE 172 Wildlands Standards for Survival****3 cr. (3 lec/wk) (Sp)**

Directs the students in the identification, description, and reaction to situations and conditions that would be considered dangerous to the wildland firefighter. The course content will also provide the student with a better understanding of fire behavior. The course includes federal requirement qualifications needed for beginning wildland firefighting.

**FIRE 180 Incident Command****3 cr. (3 lec/wk) (Sp)**

Acquaints the student with basic principles of emergency incident management. The components of management and chain of command will be emphasized. A computer simulator will be used to give hands-on training with incident success as the goal.

**FIRE 214 Inspection Codes and Practice****3 cr. (3 lec/wk) (F)**

Provides essential information concerning the background and evolution of fire prevention, code interpretation and applicability, hazard identification and abatement, risk assessment, operation of a fire prevention bureau, design and operation of fire protection systems and equipment, and the basic concepts of fire investigation. Emphasizes building construction and associated hazards.

**FIRE 255 Cause and Origin****2 cr. (2 lec/wk) (F)**

Instructs students in basic investigative techniques for fire causes and origin. Fire behavior in structures is discussed as well as legal requirements of fire service personnel for evidence preservation.

**FIRE 275 Fire Service Instructor****3 cr. (3 lec/wk) (Sp)**

Develops the student's speaking and creative skills as well as the ability to use instructional tools and various media in an educational environment. Emphasis will be placed on developing lesson plans and evaluation instruments. Students will give instructional presentations using the aforementioned tools.

**French****English, Philosophy & Modern Languages****(406) 657-2348****FRCH 101, 102 Elementary French I, II****[formerly FREN 101, 102 Elementary French I, II]**

**4, 4 cr. (F, Sp)** A sequence course; student must pass FRCH 101 before enrolling in FRCH 102. Offers oral-aural methods and objectives; inductive approach to grammar necessary for simple spoken and written French; reading texts of appropriate level.

**FRCH 201, 202 Intermediate French I, II****[formerly FREN 201, 202 Intermediate French I, II]**

**3, 3 cr. Prerequisite: FRCH 102 or equivalent. (F, Sp)** A sequence course; student must pass FRCH 201 before enrolling in FRCH 202. Presents a systematic review of French grammar, intensive oral drills, reading and discussion of one literary work per semester, compositions beginning with 202.

**FRCH 292 Independent Study****FRCH 492 Independent Study****[formerly FREN 491 Independent Study]**

**V1-5 cr. Prerequisites: consent of instructor and chairperson of the department.** Offers an opportunity for students of outstanding ability to explore material not covered by regular courses in Languages.

**FRCH 494 Seminar/Workshop****[formerly FREN 492 Seminar]**

**V1-3 cr. Prerequisites: Senior status and consent of instructor and chairperson of department.** Offers an opportunity to investigate intensively topics pertinent to the field of French Language and Literature.

**FRCH 498 Internship/Cooperative Education****[formerly FREN 490 Internship]**

**V1-3 cr. Prerequisites: Completion of 60 credit hours or upper division standing in French, 3.0 overall GPA, consent of advisor, and approval of the Department Chair.** Provides an opportunity for students to acquire field experience and material not covered by regular classes in French; can only be taken on a Pass/No Pass basis.

**FRCH 498 Internship/Cooperative Education****[formerly FREN 496 Cooperative Education]**

**V1-8 cr.** Provides university credit for a paid work experience in the area of French supervised by faculty and requiring written assignments.

## Geoscience: Geology Biological & Physical Sciences (406) 657–2341

**\* GEO 101 Introduction to Physical Geology**  
[formerly EASC 100 Lithosphere and Hydrosphere]  
**3 cr. Corequisite:** GEO 102. (F) Presents an introduction to the study of the earth through a study of its materials and composition, structure, geologic processes, surface and ground waters, physical, chemical and biological oceanography.

**\* GEO 102 Introduction to Physical Geology Laboratory**  
[formerly EASC 101 Lithosphere and Hydrosphere Lab]  
**1 cr. Corequisite:** GEO 101. (F) Enhances the lecture material of GEO 101 through the usage of experiential activities.

**GEO 105 Oceanography**  
[formerly EASC 105 Oceanography]  
**3 cr.** Introduces students to the basic workings of the ocean. The course covers the origin of the ocean's basin; the evolution of its coastlines; the motion of currents, waves, and tides and their destructive power; the source and composition of seawater; the biology of the ocean; and the role of the ocean in local and global climate, both present and past.

**GEO 205 Mineralogy**  
[formerly EASC 200 Earth Materials]  
**4 cr. Prerequisite:** GEO 101. (odd F) Surveys crystallography, chemistry and physics of minerals, and mineral field occurrences and associations. Studies will also include identification, classification, and interpretation of origin, chemistry, and mineralogical compositions of igneous, sedimentary, and metamorphic rocks. Lab included. Field trips required.

**GEO 211 Earth History and Evolution**  
[formerly EASC 120 Historical Geology and Paleontology]  
**3 cr. Corequisite:** GEO 212. (S) Presents a systematic study of the earth through geologic time by analysis of the geological evolution of earth and its sequence of life forms reconstructed from the paleontological record. Lab required.

**GEO 212 Earth History and Evolution Laboratory**  
[formerly EASC 121 Historical Geology and Paleontology Lab]  
**1 cr. Corequisite:** GEO 211. (S) Enhances the lecture material of GEO 211 through the usage of experiential activities.

**GEO 309 Sedimentation and Stratigraphy**  
[formerly EASC 320 Sedimentation and Stratigraphy]  
**3 cr. Prerequisite:** GEO 101. (even F) Introduces and studies the processes of sedimentation, mechanical analysis sediments, environments of deposition, origin and classification of sedimentary rocks, principles and techniques utilized in measuring sedimentary rock strata, facies changes, tectonic framework, biostratigraphic units and paleo-environments. Extensive field and lab work required.

**GEO 490 Undergraduate Research**  
**V1-6 cr. Prerequisite:** Junior standing or consent of instructor. Provides students the opportunity to conduct a research project under the supervision of a faculty member, including library and experimental research as appropriate, analysis of the results, and the submission of a formal research report upon completion of the project.

**GEO 491 Special Topics**  
**V1-12 cr. Prerequisite:** determined as needed. Provides students with an opportunity to take courses not required in any curriculum for which there is a particular need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

**GEO 492 Independent Study**  
[formerly EASC 491 Independent Study]  
**V1-3 cr. Prerequisite:** consent of instructor. Provides advanced students an opportunity to explore material not covered by regular Earth Science courses. A contract describing the study must be completed at the time of enrollment.

## Geoscience: Geography Biological & Physical Sciences (406) 657–2341

**\* GPHY 111 Introduction to Physical Geography**  
[formerly GEOG 101 Physical Geography]  
**3 cr. (F)** Stresses the understanding of the broad concepts of physical geography. Includes topography, climate and other geographic aspects of the earth's environment. Laboratory required.

**\* GPHY 112 Introduction to Physical Geography Laboratory**

**[formerly GEOG 100 Physical Geography Lab]**

**1 cr. Corequisite: GPHY 111. (F)** Enhances the lecture material of GPHY 111 through the use of experiential activities.

**\* GPHY 121 Human Geography**

**[formerly GEOG 120 Environment and Culture]**

**3 cr. (F, Sp)** Analyzes the interrelationships between man and his environment, including such topics as race, origin and dispersal of technology, livelihood patterns and settlement.

**\* GPHY 141 Geography of World Regions**

**[formerly GEOG 102 World Geography]**

**3 cr. (F, Sp)** Covers the regions of the world as the home of mankind, showing people's adaptation to their physical environment.

**GPHY 222 Introduction to Economic Geography**

**[formerly GEOG 202 Economic Geography]**

**3 cr. Prerequisite: a geography or economics course, or consent of instructor.** Examines the spatial aspects of geography as they relate to people's economic adjustment to the physical environment.

**GPHY 240 Landscape and People of North America**

**[formerly GEOG 220 Landscape and People of North America]**

**3 cr. Prerequisite: a geography course or consent of instructor.** Analyzes the natural environment, historical spread and impact of settlement and land use, and present demographic, agricultural, industrial and urban situations of the United States and Canada.

**GPHY 282 Mapping Techniques**

**[formerly GEOG 201/EVST 201 Mapping Techniques]**

**3 cr. (F)** Introduces map interpretation, computer cartography, spatial data and Geographic Information Systems.

**GPHY 380 Principles of GIS**

**[formerly GEOG/EVST 301 Principles of Geographic Information Systems]**

**3 cr. Prerequisite: GPHY 282. (Sp)** Introduces GIS, spatial analysis, map production, and spatial data handling.

**GPHY 440 Geography of Montana**

**[formerly GEOG 410 Geography of Montana]**

**3 cr. Prerequisite: GPHY 240 or ENST 210 or consent of instructor.** Considers the physical geography and resources of Montana with emphasis on its location in the nation with respect to transportation, economy and future development.

**GPHY 460 Urban Policy and Development**

**3 cr. (once every other year)** Explores the complexity of the city as an evolving social and ecological landscape. The primary emphasis is understanding the ensemble of economic, political, social, and environmental forces that shape and are shaped by contemporary urban areas. Issues include the evolution of urban spatial forms, policy and governance, and the city as an increasingly globalizing entity. Specific consideration will be given to the experience of Billings, MT, and the role of the energy, medical, and public sectors as underpinning geographies in the urban economy and social and physical landscape.

**GPHY 484 Applied GIS/Spatial Analysis**

**3 cr. (1 lec/2 lab/wk) Prerequisite: GPHY 380. (Sp)**

Applies GIS to a project-based curriculum where students propose, research, and develop a course-long project of their choosing. Students gain experience in spatial data handling, database theory and application, sensor networks, and real-time data analysis.

**GPHY 485 Internet GIS**

**3 cr. (2 lec/1 lab/wk) Prerequisite: GPHY 380. (Sp)**

Introduces students to web-based GIS including web design, programming using ArcGIS for Server, open-source web-server applications, online charting and graphing, real-time data processing, and spatial analysis. Web-based mapping experience gained through this class can be applied to geography, environmental science, business, medicine, and history.

**GPHY 487 Remote Sensing/Raster GIS**

**3 cr. (2 lec/1 lab/wk) Prerequisite: GPHY 282. (F)**

Introduces students to remote sensing and photogrammetry using aerial and satellite imagery. Students gain experience with the classification of imagery, object detection and extraction, spectral analyses of plants, and 2D/3D data collection and processing. Remote sensing is used in environmental analyses to detect and monitor fire hazards, pollution, climate change, and agriculture.

**GPHY 491 Special Topics****V1-12 cr. Prerequisite: determined as needed.**

Provides students with an opportunity to take courses not required in any curriculum for which there is a particular need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

**GPHY 492 Independent Study****[formerly GEOG 491 Independent Study]**

**V1-3 cr. Prerequisites: Consent of instructor and department chairperson.** Provides advanced students an opportunity to explore material not covered in regular geography courses. A contract describing the study must be completed at the time of enrollment.

**GPHY 494 Seminar/Workshop****[formerly GEOG 492 Seminar]****V1-3 cr. Prerequisite: Consent of instructor.**

Provides advanced students an opportunity to investigate intensively topics pertinent to the area of Geography.

**GPHY 494 Seminar/Workshop****[formerly GEOG 493 Workshop]****V1-3 cr. Prerequisite: Consent of instructor.**

Provides an opportunity for advanced study in an area of Geography.

**German****English, Philosophy & Modern****Languages****(406) 657-2348****GRMN 101, 102 Elementary German I, II****[formerly GERM 101, 102 Elementary German I, II]****4, 4 cr. A sequence course; student must pass****GRMN 101 before enrolling in GRMN 102. (F, Sp)**

Introduces modern German. Presents the vocabulary and grammar necessary for simple spoken and written German.

**GRMN 201, 202 Intermediate German I, II****[formerly GERM 201, 202 Intermediate German III]****3, 3 cr. Prerequisite: GRMN 102 or equivalent. (F,**

**Sp)** A sequence course; a student must pass GERM 201 before enrolling in GERM 202. Provides a systematic review and expanded study of German grammar and increased development of oral, reading and writing skills.

**GRMN 292 Independent Study V1-5 cr.****GRMN 492 Independent Study****[formerly GERM 491 Independent Study]**

**V1-5 cr. Prerequisites: consent of instructor and chairperson of department.** Offers an opportunity for students of outstanding ability to explore material not covered by regular courses in Languages.

**GRMN 494 Seminar/Workshop****[formerly GERM 492 Seminar]**

**V1-3 cr. Prerequisites: Consent of instructor and chairperson of department.** Offers an opportunity to investigate intensively topics pertinent to the field of German Language and Literatures.

**GRMN 494 Seminar/Workshop****[formerly GERM 493 Workshop]**

**3 cr. Prerequisite: consent of instructor.** Provides an opportunity for experimental study in an area of German Language and Literatures.

**GRMN 498 Internship/Cooperative Education****[formerly GERM 490 Internship]**

**V1-3 cr. Prerequisites: Completion of 60 credit hours or upper division standing in German, 3.0 overall GPA, consent of advisor, and approval by the Department Chair.** Provides an opportunity for students to acquire field experience and material not covered by regular classes in German. Can only be taken on a Pass/No Pass basis.

**GRMN 498 Internship/Cooperative Education****[formerly GERM 496 Cooperative Education]**

**V1-8 cr.** Provides university credit for a paid work experience in the area of German supervised by faculty and requiring written assignments.

**GRMN 499 Senior Thesis/Capstone****[formerly GERM 499 Senior Paper]****1 cr. Prerequisite: Senior standing in German.**

Major research paper to be defended in German.

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**GERM 301, 302 German Conversation and Composition I, II****3, 3 cr. Prerequisite: GERM 202 or equivalent.**

Consists of class discussion on previously assigned materials, and the practice of various reading strategies designed to rapidly enlarge students' passive and active vocabulary. Composition writing provides strategic self-improvement component promoting research and review of spelling, grammar, and sentence structures.

**GERM 423 German for International Trade****3 cr. Prerequisite:** GERM 202 or equivalent.

Introduces students to the specialized German terminology of business and economics. Includes recent and current economic and political changes in Europe and offers cultural insights into customs and practices in the world of German and European business, as well as into the economic interdependence of Europe with the United States. Serves as preparation for the “Prüfung Wirtschaftsdeutsch International” (International Business German exam).

## Health Administration

**(406) 896–5830****HADM 305 Survey of the U.S. Healthcare System**

**3 cr. Offered ONLY Online. (F, Sp)** Provides a comprehensive overview of the U.S. healthcare system, including history, organization, reimbursement, health professions, community health and disease, system reform, current issues, and healthcare systems in other countries compared with the U.S.

**HADM 307 Health Informatics**

**3 cr. Prerequisite:** HADM 305 or consent of instructor. *Offered ONLY Online. (F)* Explores the resources, devices, and methods required to optimize the acquisition, storage, retrieval, and use of health information to strengthen the organization’s operational performance and market position. The course will explore how information technology can be used to restructure work processes and systems, as well as facilitate change within the healthcare organization.

**HADM 310 Healthcare Economics**

**3 cr. Prerequisites:** HADM 305, ECNS 201, or consent of instructor. **(Sp)** Examines the health care industry from an economic perspective. To better understand the factors and influences on the decision-making process within the health care industry. To apply economic concepts to the unique characteristics of the health care industry in business and consumer decision making.

**HADM 325 Principles of Marketing for Healthcare Organizations**

**3 cr. Prerequisite:** HADM 305. *Offered ONLY Online. (Sp)* Introduces theories, ethics, and strategies specifically for the health industry including hospitals, clinics, pharmacies, insurance, and medical devices and products. The course incorporates experiential learning affecting marketing decisions and provides analytic and control techniques for effective product/service planning, promotion, pricing, and physical distribution.

**HADM 335 Health Law and Ethics****3 cr. Prerequisites:** HADM 305. *Offered ONLY*

*Online. (F)* Provides students with information regarding the central legal issues in U.S. healthcare delivery and how these relate to the operational practices of healthcare administrators including labor relations, malpractice, patient rights, information management and confidentiality of patient records, patient safety, contracts, legal reporting requirements, and risk management practices. The course will also allow students an opportunity to understand the key components of legal issues relevant to medical and business ethics and the link between the law and health policy development.

**HADM 355 Rural/Frontier Health Care Delivery**

**3 cr. Prerequisites:** HADM 305 or consent of instructor. *Offered ONLY Online.* Familiarizes students with issues facing health care providers and administrators in rural/frontier settings. Topics to be discussed include governance, financing, management, quality of health care services, and the recruitment and retention of health care professionals to the rural community.

**HADM 360 Long-Term Care Management**

**3 cr. Prerequisites:** HADM 305 or consent of instructor. *Offered ONLY Online.* Provides the student with information regarding the fundamental management principles and special concerns and problems of long-term care management including the aging of America, the financing of long-term care services, and the public policies impacting on long-term care delivery systems.

**HADM 365 Managing the Continuum of Long-Term Care Services**

**3 cr. Prerequisite:** HADM 305. *Offered ONLY Online. (Su)* Provides students with a basic overview of the management of long-term care organizations and services including emerging, new models of care with an emphasis on the changing long-term care environment.

**HADM 405 Evidence in Research and Evaluation**

**3 cr. Prerequisites:** HADM 305, STAT 216, and upper division standing or consent of instructor. *Offered ONLY Online. (Sp)* Provides an overview of evaluation research methods in health organizations, including a conceptual framework for organizational evaluation, basic evaluation research methods, and use of evidence to assess and improve health organization performance.

**HADM 409 Aging in America and Long-Term Care**  
**3 cr. Prerequisite:** HADM 305 or consent of instructor. Explores changes in life expectancy, health status, the pace of growth of the over 65 year old population in America, and the overall graying of America, in order to gain a comprehensive understanding of how long-term care systems and policies can be managed to meet these new “aging” needs.

**HADM 422 Operations, Outcomes, and Quality**  
**3 cr. Prerequisites:** HADM 305, STAT 216, and upper division standing or consent of instructor. *Offered ONLY Online.* (F) Provides an overview of concepts and techniques for designing, planning, and improving the quality of health operations, including operations analysis, coordinating and planning health operations, and quality improvement methods to improve work processes.

**HADM 425 Financial Management and Budgeting in Healthcare**  
**3 cr. Prerequisites:** HADM 305, BFIN 322, and upper division standing or consent of instructor. *Offered ONLY Online.* (Sp) Creates an understanding of the use of financial management concepts and techniques in health management decision-making.

**HADM 440 Managerial Epidemiology and the Public's Health**  
**3 cr. Prerequisites:** HADM 305, STAT 216, and upper division standing or consent of instructor. *Offered ONLY Online.* (F) Provides a systematic approach to the evidence-based practice of epidemiological preventive care to promote population health. Students will learn about the traditional epidemiologic model of disease as well as various conceptual models and frameworks that are used to expand the traditional model to include community-based networks, health care systems, and collaborative partnerships. The application of these models to health services management represents the evolution of epidemiology for use in health services management.

**HADM 445 Managing Healthcare Organizations**  
**3 cr. Prerequisites:** HADM 305, BMGT 335, and upper division standing or consent of instructor. *Offered ONLY Online.* (Sp) Examines the daily operations of health care organizations. The course addresses management, staff support, and the implementation of business strategies. The course focuses on the effective management of health care professionals and identifies unique human resource elements in health care organizations. The course will provide students with strategies for becoming effective leaders in health care.

**HADM 450 Health Policy and Politics**  
**3 cr. Prerequisites:** HADM 305 or consent of instructor. (Sp) Provides students with an overview of the political context of healthcare organization and delivery. Specific attention will focus on health care regulations, payment sources, and policy formulation and implementation.

**HADM 452 Case Management**  
**3 cr. HADM 305 or consent of instructor. Offered ONLY Online.** Explains how to use case management to coordinate care in order to improve care delivery and patient outcomes while managing costs. Topics include the role of the case manager; assessment, planning, implementation, and evaluation techniques; and negotiating reimbursement and service delivery across care settings.

**HADM 462 Supervision in Healthcare**  
**3 cr. HADM 305, BMGT 335 or consent of instructor. Offered ONLY Online.** Provides an integrated overview of management and organization principles and practices for supervisors. Introduces students to a general management framework and fundamental tools from management and organization science that supervisors use to meet strategic and technical organization goals. Course topics focus on the supervisor's job, managing individuals and groups in organizations, managing operations, and managing the environment.

**HADM 492 Independent Study**  
**[formerly HADM 491 Independent Study]**  
**V1-3 cr. Prerequisite:** Consent of instructor. Provides opportunities for juniors and seniors to explore material not offered through regular courses.

**HADM 494 Seminar/Workshop**  
**[formerly HADM 492 Seminar]**  
**V1-3 cr. Prerequisite:** Consent of instructor. Provides students an opportunity to intensively investigate topics in Health Administration.

**HADM 498 Cooperative Education/Internship**  
[formerly HADM 496 Cooperative Education/Internship]

**3 cr. Repeatable once. Prerequisites:** HADM 305, HADM 307, HADM 335, HADM 340, HADM 425, HADM 445, and consent of instructor. Integration of didactic coursework, knowledge and skills acquired enable the student to demonstrate a broad mastery of learning throughout the curriculum. This is accomplished through an in-depth analysis of a specific problem/issue or an in-depth audit of management practices in a specific functional area (in consultation with the cooperative education preceptor). Learning agreement must be completed prior to registration (restricted).

**HADM 499 Capstone**

**3 cr. Prerequisites:** HADM 305, HADM 307, HADM 335, HADM 340, HADM 425, HADM 445, and consent of instructor. **Corequisite:** HADM 498. (F, Sp, Su) Integrates didactic coursework, knowledge, and skills acquired, and the cooperative education (internship) experience to enable the student to demonstrate a broad mastery of learning throughout the curriculum. This is accomplished through an in-depth analysis of a specific problem/issue (in consultation with the cooperative education preceptor) or an in-depth audit of management practices in a specific functional area.

## Health Enhancement

### Health & Human Performance

(406) 657-2370

**HEE 303 Methods of Lifetime Fitness Activities**  
[formerly HHP 344 Physical Education Techniques I]

**3 cr. (Sp)** Identifies developmentally appropriate techniques, skills, strategies, and progressions for teaching competitive and lifelong leisure team and individual activities.

**HEE 305 Methods of Teaching Movement Exploration**  
[formerly HHP 346 Physical Education Techniques II]

**3 cr. (F)** Identifies developmentally appropriate techniques, skills, strategies, and teaching progressions for teaching fundamental elementary health enhancement activities, rhythms, dance, gymnastics, and Native American/low organized games activities.

**HEE 306 Methods of Conditioning Activities**  
[formerly HHP 348 Physical Education Techniques III]

**3 cr. (Sp)** Identifies developmentally appropriate techniques, skills, strategies, and teaching progressions for teaching fitness, wellness activities, and basic strength and conditioning fundamentals.

**HEE 308 Methods of Physical Education K-12**  
[formerly HHP 370 Methods of Physical Education K-12]

**3 cr. Prerequisite:** Admission to Educator Preparation Program. (F) Provides the Health and Human Performance teacher education major or minor with opportunities to investigate appropriate strategies for teaching Health Enhancement in the K-12 school. The student will gain experience writing developmentally and culturally appropriate lesson plans for teaching the following activities: fundamental movements including locomotor, non-locomotor, and manipulative skills; body management skills; rhythmic skills and gymnastics; game skills, relays, and personal challenges; and sport-specific skills. In addition, students will gain experience planning for physical fitness and wellness activities. Legal considerations associated activities with activity-based education will also be discussed. Students will briefly discuss evaluation, classroom management and discipline, and rainy day activities in and out of the gym setting. The integration of physical activities with health education and other disciplines is also discussed.

**HEE 309 Health Enhancement Strategies K-8**

**3 cr. (3 lec/wk) (F, Sp)** Covers methods of health enhancement education for the elementary education major and minor K-8. Students write lesson plans, participate in teaching activities, and evaluate the activities. Methods discussed are applied to the following health content areas: mental and emotional health, family living, growth and development, nutrition, personal health, substance use and abuse, communicable and chronic diseases, injury prevention and safety including pedestrian and bicycle safety, and consumer and environmental community health. Additionally, methods of teaching basic movement education, such as dance and rhythmic movement, physical fitness, gymnastics and related skills, and cooperative games are presented.

**HEE 310 Methods of Adapted Health Enhancement  
[formerly HHP 365 Special Populations in Health  
and Physical Education]****2 cr. Prerequisite: KIN 205 or Consent of instructor.**

**(Sp)** Focuses on understanding and developing the skills needed to appropriately adapt health and physical education for students who cannot participate safely or successfully in health and physical education classes without modifications. Since students receiving adapted physical education may receive instruction in a variety of settings (i.e. educational environments), adapted physical education practices vary widely and this course surveys the range of modifications that are needed to provide appropriate participation for all students. Hands-on activities are an essential component of the course and participation is expected of all students.

**HEE 340 Methods of Health Education  
[formerly HHP 340 Health Education Strategies]**

**3 cr. Prerequisite: Admission to Educator Preparation Program. (Sp)** Develops the ability of students to plan and implement health instruction programs in school, workplace, and community settings. Students will explore the “WHAT,” “WHEN,” “WHERE,” and “HOW” of health education. The course will focus on: Planning for health instruction (curriculum and content), Writing effective behavioral objectives, Learner-centered instructional strategies, Teaching sensitive health-related content, The relationship of instructional strategies to behavioral outcomes, and Evaluating student learning. Students will also investigate cultural and global perspectives as well as the integration of health issues with other academic disciplines.

**HEE 410 Organization and Administration in Sport  
Fitness**

**[formerly HHP 461 Organization and  
Administration in Health Enhancement]**

**3 cr. Prerequisite: Admission to Educator Preparation Program. (Sp)** Examines important principles related to planning, organizing, leading, and administering health enhancement programs.

**Health and Human Performance****Health & Human Performance****(406) 657–2370****HHP 455 Technological Applications in the Health  
Sciences**

**3 cr.** Explores current and future uses of technology in health promotion fields. Examples of application include: health promotion and the Internet, computer-assisted learning, computer health assessments, common applications in health promotion (i.e., spreadsheet, database, presentation, and desktop publishing software).

**Health Information Technology  
City College****HIT 101 Introduction to Health Care Informatics****3 cr. (3 lec/wk) (F, Sp)**

Introduces how multidisciplinary fields use health information technology. This course provides an overview of the subject including history, basic knowledge of health care technology, and information and tools as applied in support of health care delivery. Students will gain an introduction to the complexities of health care and how information technology fits within the U.S. health care system.

**HIT 265 Electronic Health Record in Medical  
Practice****3 cr. (3 lec/wk) Prerequisites: CAPP 120, AHMS  
220. (Sp)**

Introduces concepts of use and maintenance of Electronic Health Record (EHR) systems. Includes skill development for navigation, implementation, and how to achieve a paperless office environment. Explores issues around privacy, security, government regulations, and ethical/legal aspects involved with medical records in a health information technology environment.



## Health Science City College

### **HLTH 100 Survey of Health Occupations** **1 cr. (1 lec/wk)**

Introduces the student to health occupations career options by providing an overview of each career path offered by City College at MSU Billings. After completion of this course, students will be able to make an informed decision regarding the health care path most appropriate to their interests.

### **HLTH 104 Introduction to Nursing Skills** **2 cr. (2 lec/wk)**

Introduces the health care system, the health care team, and basic health care skills. Classroom theory and basic skills are integrated and practiced in the campus laboratory.

### **HLTH 105 Drug Dosage Calculations** **1 cr. (1 lec/wk) Prerequisites: Successful completion of M 065 or appropriate math placement test score.**

Prepares the health occupations student for the mathematics required by the profession. Topics presented include working with English, apothecary and metric measurement systems and conversions, and the calculation of adult and pediatric dosages (using dimensional analysis) for oral, parenteral and intravenous orders.

### **HLTH 112 Math Fundamentals for Health Occupations** **3 cr. Prerequisites: Passing M 065 or appropriate placement test score.**

Prepares the health occupations student for the mathematics required by the profession. Topics presented include working with whole numbers; proportions; English, Apothecary, and Metric measurement systems; conversions; and dosage calculation (dimensional analysis) for the adult and child. Emphasizes the skills and knowledge necessary to prepare and administer drugs safely.

### **HLTH 252 Medical Coding** **3 cr. (3 lec/wk) Prerequisites: BIOH 101, AHMS 144, or permission of instructor.**

Develops the knowledge, skills, and abilities necessary to code medical documentation for insurance purposes. Emphasizes standards of accuracy required in medical coding. This course will be taught fall semester only.

**HLTH 292 Seminar: Special Projects**  
**Credit varies. Prerequisite: Student must be in last semester of the Practical Nurse Program or have successfully completed a practical nursing course.** Special projects and independent study are available for students by special arrangements. Such projects are classified as advanced studies and prerequisites might be required.

### **HLTH 293 Workshop** **V1-3 cr.**

Provides an opportunity for experimental study in an area of health occupation.

## Honors University Honors Program (406) 657–2046

*In addition to these courses, there will be Honors sections in integrated science, education, law and society, social science, communications, economics, and other topics. For actual courses being offered at any specific time consult the University Honors Program's web site at [www.msubillings.edu/honors](http://www.msubillings.edu/honors), or contact the Director at (406) 657-2908 or [honors@msubillings.edu](mailto:honors@msubillings.edu) or in College of Education 106.*

### **\* HONR 111 Perspectives and Understanding** **[formerly HON 121 Perspectives and Understanding]**

**3 cr.** Explores classic and contemporary works of literature, art, and philosophy with an emphasis on cultural and historical contexts in order to develop critical and multi-disciplinary analytical skills. This course will serve as an introduction to Honors and will be required for University Honors students.

**HONR 292 Independent Study**  
**[formerly HON 291 Independent Study]**  
**V1-3 cr. Prerequisite: Consent of Director or Associate Director of Honors Program.** Provides an opportunity to receive credit for individualized or special experimental learning opportunities and to count up to 3 credits towards the University Honors Program's 21-credit requirement for Honors Scholar designation.

**HONR 294 Seminar****[formerly HON 292 Seminar]****3 cr. Prerequisite: Consent of instructor or the University Honors Program. (once per semester)**

Provides an opportunity to investigate and explore, at a lower-division level, basic themes and concepts—especially in a multidisciplinary manner—in the humanities, natural sciences, and/or social sciences.

**HONR 298 Internship****[formerly HON 290 Internship]**

**V1-3 cr. Prerequisite: Approval of Honors Director and instructor.** Provides an opportunity for students to engage in field experience not offered in other courses. Contains a research component to be developed in conjunction with supervising faculty member.

**HONR 311 Advanced Perspectives and Understanding**

**3 cr. (3 lec/wk) (F, Sp)** Explores classic and contemporary works of literature, art, and philosophy with an emphasis on cultural and historical contexts in order to develop critical and multi-disciplinary analytical skills. Course assignments link these skills to students' major, program, or professional goals. Recommended for junior and senior students.

**HON 352 Environmental Law (crosslisted with ENST 382)**

**3 cr. Prerequisites: 6 credits of WRIT 101, WRIT 201, WRIT 220, or WRIT 221.** Provides a broad overview of the major federal and Montana environmental statutes, including attention to how the statutes attempt to balance long-view goals (i.e., needs of future generations) and broad-view goals (i.e., needs of ecological systems). Course content also examines how the statutes are administratively and judicially enforced, as well as the social benefits and burdens associated with criminal punishments and civil litigations. Course content will address the complexities inherent to a regulatory system that is generated within federal, state, and local jurisdictions. Course assignments will include at least one important writing assignment (i.e., term paper assignment).

**HONR 492 Independent Study****[formerly HON 491 Independent Study]**

**V1-3 cr. Prerequisite: Consent of Director or Associate Director of Honors Program.** Provides an opportunity to receive credit for individualized or special experimental learning opportunities (including a senior thesis) at an upper-division level and to count up to 3 credits towards the University Honors Program's 21-credit requirement for Honors Scholar designation.

**HONR 494 Honors Seminar****[formerly HON 492 Seminar]****3 cr. Prerequisite: Consent of instructor or the University Honors Program. (once per semester)**

Provides an opportunity to investigate and explore, at an upper-division level, basic themes and concepts—especially in a multidisciplinary manner—in the humanities, natural sciences, and/or social sciences.

**HONR 498 Internship****[formerly HON 490 Internship]**

**V1-3 cr. Prerequisite: Approval of Honors Director and instructor.** Provides an opportunity for students to engage in field experience not offered in other courses. Contains a research component to be developed in conjunction with supervising faculty member. Publication strongly encouraged.

**HONR 499 Honors Capstone**

**3 cr. (Sp)** Investigates a current problem in Billings or in a Billings organization. Develops research, problem-solving, and teamwork skills by having students serve as an interdisciplinary team. The course culminates in a public presentation of the students' work to a group of stakeholders.

## Human Resources City College

**HR 285 Collective Bargaining and Labor Relations  
1 cr. (1 lec/wk)**

Introduces students to labor relations, the bargaining process itself, major provisions of collective bargaining agreements, and current labor relations issues. Emphasis will be placed on the legal framework of collective bargaining, labor management interactions, various approaches to labor management relations, trends in union membership, and how changes in competition and globalization are influencing labor-management interactions.

## Human Services

### Rehabilitation & Human Services (406) 896–5830

**HS 201 Survey of the Human Services**

**3 cr. (F)** Presents an orientation to the general field of Human Services as a helping profession, academic discipline, and public social service. Includes fundamental information regarding the historical and contemporary development of the field.

**HS 292 Independent Study**  
**[formerly HS 291 Independent Study]**

**V1-3 cr.** Provides an experience for students of superior academic standing to explore material not covered by regular college courses.

**HS 298 Cooperative Education/Internship**  
**[formerly HS 296 Cooperative Education/Internship]**

**3 cr. Prerequisite: Permission of Instructor.** Provides university credit for a freshman level field experience in the area of Human Services supervised by faculty. Learning agreement must be completed prior to registration.

**HS 335 Introduction to Counseling**

**3 cr. Prerequisites: Admission to Human Services Program, HS 201, HS 395 and HS 394. (F)** Designed to provide an overview of counseling theories and the fundamental skills of counseling.

**HS 345 Legal, Ethical and Professional Issues in the Human Services**

**3 cr. Prerequisites: HS 201 or REHA 201. (F)** Presents a review of the current and historical legal decisions which effect client rights and service provisions. Legal and ethical issues of due process and appropriate treatment in the least restrictive settings, the right to treatment and other significant legal ramifications relative to client advocacy and professional responsibility are discussed. Students are exposed to various professional standards in Human Services. Similarly, legal and professional issues such as confidentiality and privileged communication are discussed.

**HS 385 Behavioral Pharmacology and Human Services**

**3 cr. Prerequisites: HS 201 and CHS 335, or consent of instructor.** Provides an introduction to the conceptual issues and methods of behavioral analysis of drug action and effect upon personality and behavior. Examines issues of psychopharmacology and the diagnostic, behavioral and social rationale for the application of chemical therapy. Examines the complexity of drug analysis, and explains the multifaceted analytical procedure that has been developed in response to the prescription of behavior changing medicine.

**HS 394 Professional Seminar I in the Human Services**  
**[formerly HS 387 Professional Seminar I in the Human Services]**

**1 cr. Prerequisite: HS 201, SOCI 101, and PSYX 100. Corequisite: HS 395. (Sp)** Provides an academic and supportive environment to freshman and sophomore students to discuss and share their field experiences and intensively investigate topics pertinent to the field of human services and an agency setting.

**HS 395 Supervised Field Experience I in the Human Services**  
**[formerly HS 386 Supervised Field Experience I in the Human Services]**

**3 cr. Prerequisites: HS 201, SOCI 101, and PSYX 100. Corequisite: HS 394. (Sp)** Provides students an initial supervised agency field experience in the human services designed to facilitate the information necessary to explore and formulate individual interests, abilities and educational goals relative to the field and practice of human services.

**HS 452 Human Services Management**

**3 cr. Prerequisite: Admission to Human Services Program. (F)** Discusses concepts applied in providing the organization with the people needed to perform its functions. Covers critical areas such as recruiting, selection, training and performance appraisal. Also covers relevant laws which guide the organization in selecting and promoting its workers.

**HS 481 Abuse, Neglect in the Family and the Helping Process in Human Services**

**3 cr. Prerequisite: HS 335, or consent of instructor. (F)** Explores the various theories of family dysfunction and relative social problems surrounding marital and family disruption. Discusses the various types of family abuse and neglect and the impact on child development and psychological status on family members. Effects of dysfunctional communication and its etiology are discussed. Community reaction and support systems are presented in the context of human services practice and delivery systems.

**HS 483 Introduction to Addiction Counseling**

**3 cr.** Introduces addiction counseling and presents various perspectives of causation relative to abusive and harmful use of drugs and alcohol, including eating disorders and other forms of behavioral and social addictions such as gambling and excessive-compulsive sexual problems. Provides a basic knowledge of ASAM and DSM IV placement criteria and treatment planning and documentation. Students will participate in a field experience at an AA group meeting or another similar support group.

**HS 485 Suicidal Ideation and Behaviors**

**3 cr. Prerequisite:** consent of instructor. Presents clinical aspects of suicide and discusses various perspectives of suicidal behaviors within the context of social conditions in human life. Presents an introduction to the study of Thanatology and issues surrounding self-destructive behavior with emphasis on mental health and human service interventions.

**HS 492 Independent Study**

**[formerly HS 491 Independent Study]**

**V1-3 cr.** Provides an experience for students of superior academic standing to explore material not covered by regular college courses.

**HS 494 Workshop**

**[formerly HS 493 Workshop]**

**V1-3 cr.** Provides an opportunity for experimental study in an area of human services.

**HS 494A Professional Seminar II in Human Services  
[formerly HS 487 Professional Seminar II in Human Services]**

**1 cr. Prerequisites:** Admission to the Human Services Program, HS 395, HS 394, and HS 335.

**Corequisite:** HS 495A. (F) Provides students who are currently enrolled in HS 495A, Supervised Field Experience I in the Human Services, with a forum for discussing their internship experiences in a supportive, confidential, and academic setting. Another important purpose of the Pro-seminar is to facilitate the active integration of a theoretical knowledge base to practical field experiences and applications. Students engage in the HS 495A /494A and 495B/494B sequence consecutively during their senior year after completion of a significant portion of academic coursework in the Human Services discipline.

**HS 494B Professional Seminar III in the Human Services**

**[formerly HS 489 Professional Seminar III in the Human Services]**

**1 cr. Prerequisites:** Admission to the Human Services Program, HS 395, HS 394, HS 335, and HS 495A/494A. **Corequisite:** HS 495B. (Sp) Provides students who are currently enrolled in HS 495B, Supervised Field Experience II in Human Services, with a forum for discussing their internship experiences in a supportive, confidential, and academic setting. Another important purpose of the Pro-seminar is to facilitate the active integration of a theoretical knowledge base to practical field experiences and applications. Students engage in the HS 495A /494A and 495B/494B sequence consecutively during their senior year after completion of a significant portion of academic coursework in the Human Service discipline.

**HS 495A Supervised Field Experience II in Human Services**

**[formerly HS 486 Supervised Field Experience II in Human Services]**

**3 cr. Prerequisites:** Admission to the Human Services Program, HS 395, HS 394, and HS 335.

**Corequisites:** HS 494A. (F) Provides students with progressive learning situations in which they have the opportunity to assume responsibility for productive tasks in a practical setting in a Human services agency or organization in which they are placed. A series of opportunities to integrate theory, methodology and practice are available. Each section (486 and 488) constitutes a separate internship, providing a block learning experience.

**HS 495B Supervised Field Experience III in the Human Services**

**[formerly HS 488 Supervised Field Experience III in the Human Services]**

**3 cr. Prerequisite:** Admission to the Human Services Program, HS 395, HS 394, HS 335, and HS 495A/494A. **Corequisite:** HS 494B. (Sp) Provides

students with progressive learning situations in which they have the opportunity to assume responsibility for productive tasks in a practical setting in a human services agency or organization in which they are placed. A series of opportunities to integrate theory, methodology, and practice are available. Each section (486 and 488) constitutes a separate internship, providing a block learning experience.

**HS 498 Cooperative Education/Internship**

[formerly HS 496 Cooperative Education/Internship]

**3 cr. Prerequisite:** Permission of Instructor.

Provides university credit for a junior or senior level field experience in the area of Human Services supervised by faculty. Learning agreement must be completed prior to registration.

## American History

### History

(406) 657-2119

**\* HSTA 101 American History I**

[formerly HIST 204 United States History to 1877]

**3 cr. (F, Sp)** Surveys American history from the establishment of the colonies to the end of the Reconstruction period after the Civil War. Includes such topics as the English political and cultural heritage, independence, creation of the Constitution, early national period, increasing democracy, economic problems, manifest destiny, slavery, sectionalism, disunion, war, and reunion.

**\* HSTA 102 American History II**

[formerly HIST 205 United States History Since 1877]

**3 cr. (F, Sp)** Surveys the political, economic, and social development of the U.S. since Reconstruction. Deals with industrialization and the agrarian reaction, Progressive Era, U.S. reaction to World War I, 1920s, Depression and New Deal, background to involvement in World War II, Cold War leadership (including Korea and Vietnam), and domestic changes since WWII.

**HSTA 200 Historian as Detective**

**3 cr. (F, Sp, Su)** Examines the basic research methods of History. Includes basic research writing and information gathering skills appropriate to History. Students will be instructed in the use of the Turbiano/Chicago Manual of Style system of documentation. The course also prepares students to delve more deeply into the discipline of History by equipping them with the tools they need to succeed in more advanced study through upper division courses in the History program.

**HSTA 298 Internship**

[formerly HIST 296 Cooperative Education/Internship]

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of History supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**HSTA 309 The Atlantic World 1492-1763**

[formerly HIST 309 Creating Empire and Identity in the Atlantic World 1492-1763]

**3 cr. Prerequisite:** HSTA 101 or HSTR 102 or consent of instructor. Explores the nature of the encounters between people and cultures from the Americas, Europe, and Africa from Columbus to the end of the French and Indian War. Emphasis will be on how global trade patterns and technological developments gave rise to different kinds of relationships; the formation of new economic, demographic, political, and cultural configurations; and how the identities of people fundamentally changed during the time period, particularly in a colonial context. The class will study the Atlantic world's various geographic segments (i.e. Europe, Africa, North America, Latin America) in a comparative and/or integrated way.

**HSTA 313 American Colonial and Revolutionary History to 1789**

[formerly HIST 312 The American Colonial and Revolutionary Era to 1787]

**3 cr. Prerequisite:** HSTA 101 suggested or consent of instructor. (every third semester) Examines the origins and evolution of colonial America, the development of a distinct American identity, the birth of the United States, the struggle for independence from Great Britain, and the problems and challenges of a new nation.

**HSTA 315 Early American Republic 1787-1848**

[formerly HIST 314 The New and Expanding Nation, 1789-1846]

**3 cr. Prerequisite:** Consent of instructor. (every third semester) Examines the early Constitutional era, the political, social, and diplomatic issues of Jeffersonian and Jacksonian America, the emergence of the two party political system, the evolution of social reform movements, and the growing complexities of territorial conquest and expansion.

**HSTA 316 American Civil War Era**

[formerly HIST 316 The American Civil War Era, 1846-1877]

**3 cr. Prerequisite:** Consent of instructor. (every third semester) Considers the social, political, and economic background of events culminating in the sectional and constitutional crises of the 1850s, the American Civil War of the 1860s, and the subsequent reconstruction of the United States in the 1870s.

**HSTA 320 Birth of Modern United States**  
**[formerly HIST 317 The Birth of Modern United States, 1877-1929]**

**3 cr. Prerequisite:** Consent of instructor. (every third semester) Covers the period 1877-1929 with special emphasis on those events which were crucial to America's emergence as a great power. Particular attention will be given to the rise of industrialism and the city, the decline of American agriculture, the rise of the United States' worldwide empire, the Progressive Era, United States involvement in the First World War, and the 1920's.

**HSTA 321 America in Crisis**  
**[formerly HIST 318 The United States from Depression to Prosperity, 1929-1960]**

**3 cr. Prerequisite:** Consent of instructor. (every third semester) Covers the period 1929-1960 in an effort to focus on America's response to world turmoil characteristic of that era. The Depression of the 1930's, the Second World War, the beginning of the Cold War, and increasing economic disparity represent the principle upheavals in which the United States found itself involved.

**HSTA 325 United States since 1960**  
**[formerly HIST 319 The United States since the New Frontier, 1960-Present]**

**3 cr. Prerequisite:** Consent of instructor. (every third semester) Considers the problems of the United States since the beginning of the Kennedy administration including such topics as the Cold War, Vietnam, domestic politics, the radical left and the radical right, and the end of the Cold War. The social, cultural, and economic problems created by such forces in American life as Far- and Middle Eastern affairs, presidential politics, and the global electronic economy will be examined in detail.

**HSTA 408 Gender in America**

**3 cr. (3 lec/wk) Prerequisite:** Permission of instructor. (Sp) Explores the history of women in American history from colonial times through the present day. The main focus will be on understanding of gender as a historically specific social construct and how ideas regarding gender related to broader themes in the political, social, and cultural history of the United States.

**HSTA 428 Historical Archeology in the Americas**  
**[formerly HIST 425 Historical Archeology in the Americas]**

**3 cr. Prerequisite:** Consent of instructor. (even Sp) Explores how archaeological research contributes to the understanding of American history. The class examines the development of historical cultures and sub-cultures in the New World from 1500 to the recent past. Focus will be on the importance of material culture; the intimate relationship between archaeology and primary documents; and a review of current models, theories, and paradigms used in archaeological interpretation. A secondary focus will be the use of technology in the process of archaeological analysis.

**HSTA 460 Montana and the West**  
**[formerly HIST 424 Montana History]**

**3 cr. Prerequisite:** Consent of instructor. (F, some Su) Traces the political, social, economic, and cultural development of Montana from pre-contact period through the present. Special emphasis on Montanan's changing historical relationship with natural environment, the contest of cultures, and twentieth century issues. Course includes occasional field trips to historic sites.

**HSTA 464 Trans-Mississippi West**  
**[formerly HIST 421 The American West]**

**3 cr. Prerequisite:** ENST 210 or consent of instructor. (Su) Examines various cultures that have historically resided in and interacted with the unique western natural environment. Special emphasis on the West's role in the larger history of the United States, the 20th Century West, "the new western history," Hollywood's image of the West, and the region's ongoing relationship with the federal government.

**HSTA 470 American Environmental History**  
**[formerly HIST 470 American Environmental History]**

**3 cr. Prerequisite:** Consent of instructor. (every third semester/summer) Focuses on human interaction with and within the variety of North American environments. Compares Native American, European, and American philosophies and mythologies surrounding nature. Special emphasis on technology and nature, the American West, and the historical roots of recent ecological movements and controversies in Montana, the region, and the nation.

**HSTA 480 Constitutional Law: Civil Liberties**  
(crosslisted with PSCI 472)  
[formerly HIST/POLS 423 Constitutional Law:  
Civil Liberties]

**3 cr. Prerequisite:** HSTA 101 or consent of instructor or PSCI 210. (even F) Examines major Supreme Court decisions in the field of individual rights. Provides an overview of civil liberties decisions with emphasis on the recent past, or may consider specific constitutional issues (i.e., church and state, freedom of speech and press, the death penalty) over the course of American history.

**HSTA 481 Constitutional Law: Powers and Structures** (crosslisted with PSCI 473)  
[formerly HIST/POLS 427 Constitutional Law:  
Powers and Structures]

**3 cr. Prerequisite:** HSTA 101 or consent of instructor or PSCI 210. (odd F) Introduces the evolution and structure of the United States constitutional system, focusing on the federal relationship, the separation of powers, and the judicial review, relying primarily upon the case method of analysis.

**HSTA 492 Independent Study**  
[formerly HIST 491 Independent Study]

**V1-5 cr. Prerequisites:** Consent of instructor and chairperson of the department. Provides outstanding students an individual opportunity to explore material not covered by regular History courses. The student's proposal for independent study must be approved before registering and the student's GPA in previous History courses must be at least 3.00.

**HSTA 494 Seminar/Workshop**  
[formerly HIST 492 Seminar]

**3 cr. Prerequisite:** Consent of instructor. Provides advanced students an opportunity to investigate intensively topics pertinent to the field of History.

**HSTA 494 Seminar/Workshop**  
[formerly HIST 493 Workshop]

**V1-8 cr. Prerequisite:** Consent of instructor. Provides an opportunity for experimental study in an area of History.

**HSTA 498 Internship/Cooperative Education I, II, III**

[formerly HIST 490 Internship: Public History]  
**V1-6 cr. Prerequisite:** Consent of instructor. Provides public history opportunities for students in local organizations which utilize public historians.

**HSTA 498 Internship/Cooperative Education I, II, III**

[formerly HIST 496 Cooperative  
Education/Internship]

**V1-9 cr. Prerequisite:** Consent of instructor.

Provides university credit for a work experience in the area of History supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**HSTA 499 Senior Capstone: Historical Methodology**

[formerly HIST 499 Historical Methodology]

**3 cr. Prerequisite:** 12 semester hours of history or consent of instructor. (F, Sp) Analyzes how historians ask methodological and interpretive questions and how they answer those questioned intellectually and technically. Aids the student in developing an understanding of the historical profession and the tasks of the historian through research and writing exercises, the investigation and evaluation of primary and secondary materials, and study of various methodologies employed by historians.

## World History

### History

(406) 657–2119

**\* HSTR 101 Western Civilization I**  
[formerly HIST 104 The West and the World to 1648]

**3 cr. (F, Sp)** Examines the development of western civilization from its origins through the Middle Ages, and the mutual influence western civilization and world civilizations had on each other. Particular attention is paid to the social, economic, political, religious, and cultural issues which shape the world today.

**\* HSTR 102 Western Civilization II**  
[formerly HIST 105 The West and the World since 1648]

**3 cr. (F, Sp)** Examines the development of western civilization since the early modern era, and the mutual influence western civilization and world civilizations had on each other. Particular attention is paid to the social, economic, political, religious, and cultural issues which shape the world today.

**\* HSTR 103 Honors Western Civilization I**  
**[formerly HIST 106 Honors: History of Western Civilization to 1500]**

**3 cr. Prerequisite:** Consent of instructor. Covers the development of Western Civilization from its origins through the Middle Ages. Particular attention is paid to the social, economic, political, and cultural issues which shape the western world today.

**\* HSTR 104 Honors Western Civilization II**  
**[formerly HIST 107 Honors: History of Western Civilization Since 1500]**

**3 cr. Prerequisite:** Consent of instructor. Covers the development of Western Civilization from the Italian Renaissance to the present. Particular attention is paid to the social, economic, political, and cultural issues which shape the western world today.

**HSTR 298 Internship**  
**[formerly HIST 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of History supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**HSTR 302 Ancient Greece**  
**[formerly HIST 332 Ancient Greece]**

**3 cr. Prerequisite:** Consent of instructor. (odd F)  
Examines the civilization of Ancient Greece from the Minoan Crete period (c. 2600-1400 B.C.) to the fall of the Corinth in 146 B.C. with emphasis on the contributions of politics, art, literature, and philosophy to the western tradition.

**HSTR 304 Ancient Rome**  
**[formerly HIST 333 Ancient Rome]**

**3 cr. Prerequisite:** Consent of instructor. (even Sp)  
Covers the history of ancient Rome from its earliest point through the years of the Republic and Empire.

**HSTR 305 Middle Ages**  
**[formerly HIST 335 Middle Ages: Creation and Climax of Medieval Europe]**

**3 cr. Prerequisite:** Consent of instructor. (even F)  
Considers the collapse of ancient civilization and the emergence of a new distinctive European civilization in the millennium between 300 and 1300 A.D. Emphasis is placed on the decline and fall of Rome; the integration of Greco-Roman, Christian, and German elements in a new culture; and the creation of European political, economic, social, and intellectual institutions.

**HSTR 317 Renaissance & Reformation**  
**[formerly HIST 336 Renaissance and Reformation Europe]**

**3 cr. Prerequisite:** HSTR 101 or equivalent or consent of instructor. (odd Sp)  
Explores the events and ideas from the waning of the Middle Ages through conclusion of the Thirty Years War. Examines the impact of the Hundred Years War, the bubonic plague, the roots of the modern nation state, civic and northern humanism as well as the social, political, cultural, and religious issues from the beginning of Luther's protest to the end of the religious wars in Europe.

**HSTR 318 Enlightenment & Revolution 1648-1815**  
**[formerly HIST 338 Enlightenment and Revolution, 1648-1815]**

**3 cr. Prerequisite:** Consent of instructor. (odd F)  
Explores social, political, cultural, and intellectual issues in Europe from the end of the religious wars to Napoleon's downfall. Central themes are the nature of baroque culture and its use by absolute monarchies in continental Europe and the character of the Enlightenment and its role as a precursor to the French Revolution. The French Revolution and the rule of Napoleon will be examined in detail. Moreover, this course examines many diverse aspects of seventeenth- and eighteenth-century European history.

**HSTR 322 19<sup>th</sup> Century Europe**  
**[formerly HIST 340 19<sup>th</sup> Century Europe: 1815-1918]**

**3 cr. Prerequisite:** Consent of instructor. (odd F)  
Explores social, political, cultural, and intellectual developments from Napoleon's downfall to the end of the Great War. Central themes are the phenomenon of the industrial revolution and the frustration and fulfillment of modern nationalistic and liberal agendas in Europe, all culminating in World War I. Moreover, this course examines many diverse aspects of the history of the "long nineteenth century."

**HSTR 324 20<sup>th</sup> Century Europe**  
**[formerly HIST 342 Twentieth-Century Europe, 1918-2001]**

**3 cr. Prerequisite:** Consent of instructor. (odd Sp)  
Explores social, political, cultural, and intellectual developments since World War I. Central themes are the Great Depression and the rise of totalitarian regimes in Europe, World War II, the postwar recovery of Europe, the Cold War, and European unification. Moreover, this course examines many diverse aspects of the history of the "short twentieth century."



**HSTR 326 Contemporary Europe**

**3 cr. Prerequisite:** Consent of instructor. (alternate F) Examines various aspects of European culture, society, and politics since World War II. This includes investigating the legacies of such topics as the war and Holocaust, the Cold War, decolonization, immigration, and globalization.

**HSTR 330 History of Mexico**

**[formerly HIST 459 History of Mexico]**

**3 cr. Prerequisite:** Consent of instructor. (odd Sp)

Surveys the Mexican colonial background, War for Independence, and political, social, and economic development to the present. Emphasis on Santa Anna, Juarez, the Diaz dictatorship, the Revolution of 1910, and recent political and economic developments.

**HSTR 332 Pre-Columbian & Colonial Latin America**

**[formerly HIST 357 Pre-Columbian and Colonial Latin America]**

**3 cr. Prerequisite:** Consent of instructor. (odd F)

Covers the history of Latin America before the arrival of the Europeans, conquest and colonialism, paying particular attention to the interchange between native and European cultures, the place of the Church in the colonial period, and pre-independence political and economic development.

**HSTR 336 Modern Latin America**

**[formerly HIST 358 Modern Latin America]**

**3 cr. Prerequisite:** ENST 210 or consent of instructor. (even Sp) Deals with selective topics such as the independence movement, the social/cultural/political/economic development of Latin American countries, with special emphasis on U.S.-Latin American relations in the nineteenth and twentieth centuries.

**HSTR 365 History of Ancient Near East**

**[formerly HIST 331 The Ancient Near East]**

**3 cr. Prerequisite:** Consent of instructor. (odd F)

Examines the course of human development in the fertile crescent and Egypt from the furthest horizon of history to the Hellenistic period of the fourth century BCE. Analyzes the political, military, economic, social, and artistic evolution of Mesopotamia, Ancient Israel, and Egypt in the intercultural milieu that compromised the “trade basin” of the ancient Near East. Considerable attention will be given to primary sources and archaeological contributions.

**HSTR 366 Middle East in the 20<sup>th</sup> Century**  
**[formerly HIST 453 The Middle East in the Twentieth Century]**

**3 cr. Prerequisite:** Consent of instructor. (even F)

Considers the Arab Awakening and examines the Middle East in its contemporary setting with emphasis on the Arab-Israel conflict and the rise of nationalism in Turkey, Iran, Israel, and the Arab states. It explores the recent revolutionary changes in the Arab World and Iran as well as the impact of Islamic fundamentalism on contemporary Middle East.

**HSTR 417 Early Modern Science: The Scientific Revolution**

**3 cr. (3 lec/wk) (Sp every 2 years)** Examines the growth of “science” at the cusp of “modernity” and the role of social, political, religious, and commercial developments that both hindered and made possible such landmark theories as heliocentrism, elliptical paths of the planets, the circulation of the blood, and gravity. This course highlights interdisciplinary pursuits, as students of history, philosophy, biology, chemistry, physics, etc. all bring unique disciplinary knowledge to a subject that exists beyond those boundaries.

**HSTR 420 Ancient and Medieval Archaeology**  
**[formerly HIST/HON 420 Archaeology of the Classical World]**

**3 cr. Prerequisite:** Consent of instructor. (odd Sp)

Examines the material culture (i.e. art, architecture, and artifacts) of ancient and medieval worlds from the dawn of civilization through the sixteenth century CE. The course explores the following: an introduction to archaeology as a tool for understanding the past, dating systems, archaeological methods, the material culture of the ancient and medieval worlds, the formation and perpetuation of the western traditions in art and architecture, urban planning and construction techniques, architectural orders, artistic styles, and the process of archaeological reconstruction.

**HSTR 439 Colonial and Independent Africa since 1884**

**[formerly HIST 471 Colonial and Independent Africa, 1884-present]**

**3 cr. Prerequisite:** Consent of instructor. Examines the political, economic, social, and cultural development of Africa from the Congress of Vienna to the present, emphasizing the results of European conquest and the legacy of colonialism in independent Africa.

**HSTR 440 Topics in Southern Asia since 1750**  
**[formerly HIST 463 History of Southern Asia Since 1750]**

**3 cr. Prerequisite: Consent of instructor.** Surveys the political, economic, social, and cultural development of southern Asia, from the decline of the Mughal Empire to the rise of post-colonial nations, with particular emphasis placed on religious and philosophical development of the Asian subcontinent.

**HSTR 447 Modern Asia**  
**[formerly HIST 465 Topics in Modern Asian History]**

**3 cr. Prerequisite: Consent of instructor.** Explores the development of modern Asia. Topics, which will vary by semester, include Japan, Korea, and China. Students will study these states from their early foundations to their emergence as modern states. Special emphasis is placed on cultural development, particularly religion, literature, and music. The course focuses on turning points in a given country's (or region's) history as well as various issues related to identity, social life, and government. This course shall be repeatable for up to 6 credits with instructor approval.

**HSTR 449 History of Vietnam**

**3 cr. Prerequisite: Consent of instructor. (every other Sp)** Explores Vietnam's 3,000-year-long history with a focus on its rich cultural evolution, resistance to waves of foreign domination, and emergence as a vibrant 21<sup>st</sup> century nation.

**HSTR 450 Women in European History since 1700**

**3 cr. Prerequisite: Consent of instructor. (Sp)** Explores the relationship between women and politics, society, economics, the family, and culture in Europe from 1700 to the present. Emphasizes diverse experiences of women across Europe, their relationship to the state and society and gendered assumptions related to femininity and its relationship to other categories of difference. Particular attention is paid to women and the Enlightenment, French Revolution, the development of the Nation State, WWI, WWII, the Holocaust, the Cold War, and the Student and Women's Movements.

**HSTR 462 Holocaust in Nazi Occupied Europe**  
**[formerly HIST 447 The Holocaust in Nazi Occupied Europe]**

**3 cr. Prerequisite: HSTR 102 or consent of instructor. (odd Sp)** Examines the Holocaust in Nazi occupied Europe from 1933 to 1945. Covers the origins, causes, motivations, and effects of the discrimination, internment, and genocidal actions of the Nazi regime. The Holocaust is put into its larger historical perspective prior to and after the actual event.

**HSTR 466 Islamic Civilization**  
**[formerly HIST 451 History of Islamic Civilization]**

**3 cr. Prerequisite: Consent of instructor.** Develops the social, political, cultural, and economic history of the Middle East from the rise of Muhammed and the Caliphate to the Umayyad and Abbasid Empires and the establishment of the Ottoman Empire. Emphasizes Islamic religious thought and philosophy and the flowering of Medieval Islam.

**HSTR 473 Gender, War and Film: Europe 1648-1945**

**[formerly HIST 448 War and Diplomacy in Europe, 1648-1945]**

**3 cr. Prerequisite: Consent of instructor.** Focuses on gender, culture, and social change related to warfare and the memory of war in film, beginning with the religious wars through the upheavals of the French Revolution and Napoleonic Wars to the First and Second World Wars.

**HSTR 487 Monsters in European History: Witches, Vampires and Zombies**

**3 cr. Prerequisite: Consent of instructor. (F)** Introduces students to some of the major themes and developments related to the historical construction and significance of monsters in European history from the sixteenth century to the present. The main focus will be on understanding the specific nature of a particular monster, the historical context in which it was created and its relation to larger social, political, and cultural questions.

**HSTR 491 Special Topics: Modern European History****[formerly HIST 462 Topics in Modern European History]**

**3 cr. Prerequisite: Consent of instructor.** Explores the political, social, cultural, and intellectual history of a particular European country or region in the modern era. The course focuses on turning points in a given country's (or region's) history as well as various issues related to identity, social life, and government. The course seeks to provide a specialized knowledge of an individual European country's (or region's) history in more depth than the general European survey. Topics under this title may include France since 1789, Germany since 1517, England since 1688, or Eastern Europe since 1918. This course shall be repeatable for up to 6 credits with instructor approval.

**HSTR 492 Independent Study****[formerly HIST 491 Independent Study]**

**V1-5 cr. Prerequisites: Consent of instructor and chairperson of the department.** Provides outstanding students an individual opportunity to explore material not covered by regular History courses. The student's proposal for independent study must be approved before registering and the student's GPA in previous History courses must be at least 3.00.

**HSTR 494 Seminar/Workshop****[formerly HIST 492 Seminar]**

**3 cr. Prerequisite: Consent of instructor.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of History.

**HSTR 494 Seminar/Workshop****[formerly HIST 493 Workshop]**

**V1-8 cr. Prerequisite: Consent of instructor.** Provides an opportunity for experimental study in an area of History.

**HSTR 498 Internship/Cooperative Education I, II, III****[formerly HIST 490 Internship: Public History]**

**V1-6 cr. Prerequisite: Consent of instructor.** Provides public history opportunities for students in local organizations which utilize public historians.

**HSTR 498 Internship/Cooperative Education I, II, III****[formerly HIST 496 Cooperative Education/Internship]**

**V1-9 cr. Prerequisite: Consent of instructor.** Provides university credit for a work experience in the area of History supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**HSTR 499 Senior Capstone: Historical Methodology****[formerly HIST 499 Historical Methodology]**

**3 cr. Prerequisite: 12 semester hours of history or consent of instructor. (F, Sp)** Analyzes how historians ask methodological and interpretive questions and how they answer those questioned intellectually and technically. Aids the student in developing an understanding of the historical profession and the tasks of the historian through research and writing exercises, the investigation and evaluation of primary and secondary materials, and study of various methodologies employed by historians.

## Health

### Health & Human Performance

**(406) 657–2370****HTH 101 Opportunities in the Health Professions**  
**[formerly HHP 201 Core Concepts in Health]**

**3 cr. (F, Sp)** Provides pre-service educators with an introduction to contemporary health issues and the importance of individual responsibility for personal health care. Reviews the health and safety issues of children and adolescents and provides an introduction to the role of the teacher as it applies to the eight component model of the comprehensive school health program.

**\* HTH 110 Personal Health and Wellness**  
**[formerly HHP 101 Health Sciences]**

**3 cr. (F, Sp)** Covers contemporary health issues and explores individual and community based solutions. Content areas to include: medical self-care, culture and health behavior, alcohol, tobacco and other drugs, mental and emotional health, consumer health, nutrition, physical fitness, environmental health, human sexuality, chronic degenerative and communicable diseases, aging, violence and personal safety, health care, and death and dying.

**HTH 201 Health Issues for Educators**

**3 cr. (F, Sp)** Provides students, including pre-service educators, with a foundation in the applied science of health and wellness. Establishes the basis for understanding and facilitating individual, group, and community health and wellness. Addresses health and wellness across the age span, including the role of teachers in the comprehensive school health program and citizens in community health and wellness activities.

**\* HTH 270 Global Health Issues****[formerly HHP 270 Global Health Issues]**

**3 cr. (F)** Explores the relationships between human behavior, economics, history, culture, politics, policy formation, and the environment, while investigating the impact of these elements on the quality of health within our global community. Class sessions will focus on the interdisciplinary nature of health issues that impact on daily human existence. The objective of seminar based class meetings will be to study these issues, contrasting their origins, manifestations, and possible resolutions in developed and less developed nations.

**HTH 391 Special Topics****[formerly HHP 320 Current Issues in Health]**

**3 cr. (F, Sp)** An investigation of issues facing the health educator in today's schools. Special focus will be given to the topics of nutrition education, physical fitness, and human sexuality. Students will develop lesson plans in these topical areas as they pertain to either elementary or secondary education levels.

**HTH 411 Alcohol, Tobacco and Other Drug Prevention****[formerly HHP 411 Alcohol, Tobacco and Other Drug Prevention]**

**3 cr. Prerequisite: Junior standing. (F, Sp, Su)** Provides information about: alcohol, tobacco, and other drugs; the potential for abuse and addiction; and factors associated with use. The primary focus is on the preventive aspects of drug abuse across the lifespan, and it centers on the approaches that are most effective. (Meets State Teacher Licensure requirement for a Drug and Alcohol Abuse Class).

**HTH 412 Drugs and Alcohol****[formerly HHP 412 Alcohol, Tobacco and Other Drug Awareness (ATOD)]**

**1 cr.** Provides information about problems related to contemporary drug use, misuse, and abuse. Due to the potential negative effects of alcohol, tobacco, and the broad category of "other drugs," drug prevention at the school and community level is critical for addressing problems that arise from ATOD use. The primary focus on this course is identifying which drugs are most commonly used and abused, particularly among youth and teens, and recommend effective drug prevention strategies.

**HTH 425 Health and Sexuality****[formerly HHP 425 Health and Sexuality]**

**3 cr.** Explores contemporary issues in human sexuality and the preparation of professionals who conduct sexuality education with diverse populations in a variety of settings. The course examines current knowledge of and attitudes toward human sexual behavior with emphasis on topics such as healthy sexuality throughout the lifecycle, sexual anatomy and physiology, gender roles, body image, interpersonal relationships, sexual orientations, birth control, sexual response, sexual dysfunction, sexual abuse, sexually transmitted infections, abortion, and pregnancy.

**HTH 435 Health and Wellness across the Lifespan**

**3 cr. (F)** Addresses the rapidly increasing need for specialized knowledge of health and wellness across the lifespan. Focuses on understanding issues unique to different age cohorts, e.g., childhood obesity and diseases of age, as well as issues that are equally applicable across the lifespan, e.g., exercise as medicine and diet. Introduces strategies for promoting health and wellness across the lifespan.

**Humanities****(406) 657–2348****HUMN 292 Seminar**

**3 cr.** Provides students an opportunity to study subjects in the Humanities which are not explored in regular courses.

**HUMN 492 Seminar**

**3 cr.** Provides advanced students an opportunity to study subjects in the Humanities which are not explored in regular courses.

**Heating, Ventilating, Air  
Conditioning, and Refrigeration  
Maintenance Technology  
City College****HVC 110 Introduction to HVAC****[formerly HVAC 110 Introduction to HVAC]****4 cr. (4 lec/wk)**

Exposes students to theories and concepts of the HVAC industry. Topics covered will include principles of thermodynamics, the study and nature of air, and an introduction to heating and cooling loads.

**HVC 111 Heating Fundamentals****[formerly HVAC 111 Heating Fundamentals]****2 cr. (1 lec/2 lab/wk) Prerequisite: HVC 110.**

Introduces the student to basic theories of heating and their applications to heating equipment. Operation, maintenance and troubleshooting procedures of gas, fuel oil and electric furnaces will be studied.

**HVC 125 Air Handling****[formerly HVAC 125 Air Handling]****3 cr. (2 lec/2 lab/wk) Prerequisite: HVC 110.**

Exposes students to load calculations, psychrometrics, principles of air flow, and duct design. Students will create diagrams providing adequate heating and cooling in accordance with local and national codes.

**HVC 130 HVAC Electrical****[formerly HVAC 141 HVACR Basic Electricity]****4 cr. (3 lec/2 lab/wk)**

Introduces the student to basic electricity concepts, electrical test instruments, electrical devices used on heating, air conditioning and refrigeration systems, and the different types of AC electrical motors. Students learn how to measure voltage, ohms, watts and amperage on series/parallel circuits.

**HVC 135 Air Conditioning****[formerly HVAC 135 Air Conditioning]****2 cr. (1 lec/2 lab/wk) Prerequisite: HVC 110.**

Exposes students to residential and commercial air conditioning applications, installation, troubleshooting, and design.

**HVC 175 HVAC Controls****[formerly HVAC 175 HVAC Controls]****4 cr. (3 lec/2 lab/wk) Prerequisite: TRID 180.**

Introduces students to concepts of control and automation in HVAC systems. Students will also learn to troubleshoot systems using diagrams and test equipment.

**HVC 182 Hydronics****[formerly HVAC 182 Hydronics]****2 cr. (1 lec/2 lab/wk) Prerequisite: HVC 111.**

Introduces the student to hot water heating principles and systems. Students will learn to install, maintain, and troubleshoot these systems.

**HVC 200 Refrigeration Technicians E.P.A.****Certification Review****[formerly HVAC 200 Refrigeration Technicians E.P.A. Certification Review]****1 cr. (1 lec/wk)**

Exposes the student to requirements and criteria needed for passing the Section 608 E.P.A. exam certification for refrigeration technicians.

**HVC 201 Advanced Refrigeration****[formerly HVAC 201 Advanced Refrigeration]****3 cr. (2 lec/2 lab/wk) Prerequisite: HVC 111.**

Exposes the student to the selection, installation, adjustment, maintenance and repair of refrigeration systems.

**HVC 203 Advanced Air Conditioning****[formerly HVAC 203 Advanced Air Conditioning]****2 cr. (1 lec/2 lab/wk) Prerequisite: HVC 135.**

Exposes students to the selection, installation, adjustment, maintenance, and repair of air conditioning systems. Students will recover, charge, and troubleshoot residential and light commercial systems.

**HVC 210 Heat Pumps****[formerly HVAC 210 Heat Pumps]****2 cr. (1 lec/2 lab/wk) Prerequisite: HVC 135.**

Exposes the student to the selection, installation, adjustment, maintenance, and repair of heat pumps.

**HVC 212 Sheet Metal Technology and Blueprint Reading****[formerly HVAC 212 Sheet Metal Technology and Blueprint Reading]****2 cr. (2 lec/wk)**

Introduces the student to basic sheet metal terms and fittings, how to use the sheet metal hand tools, equipment, and procedures for duct layout. They also will learn to read blueprints for residential and commercial buildings.

**HVC 235 Residential and Light Commercial Heating & Ventilation Systems****[formerly HVAC 231 Residential and Light Commercial Heating & Ventilation Systems]****3 cr. (2 lec/2 lab/wk) Prerequisite: HVC 111.**

Exposes the student to the selection, installation, adjustment, maintenance and repair of residential and small commercial heating and ventilating systems.

**HVC 243 Steam Systems****[formerly HVAC 243 Steam Systems]****3 cr. (2 lec/2 lab/wk) Prerequisite: HVC 182.**

Introduces students to design, installation, adjustment, maintenance, and repair of small commercial steam systems.

**HVC 255 Advanced Controls****[formerly HVAC 255 Advanced Controls]****3 cr. (2 lec/2 lab/wk) Prerequisite: HVC 175.**

Introduces students to commercial control systems such as digital direct, programmable logic, and pneumatic controls. Students will install, diagnose, and repair all types of pneumatic systems using test equipment, diagrams, and computer simulators.

**HVC 294 Seminar****[formerly HVAC 292 Seminar]****V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of heating, ventilation and air conditioning or major appliance repair.

**HVC 294 Workshop****[formerly HVAC 293 Workshop]****V1-3 cr.**

Provides an opportunity for experimental study in an area of heating, ventilation and air conditioning or major appliance repair.

**HVC 298 Cooperative Education/Internship****[formerly HVAC 296 Cooperative Education/Internship]****V1-9 cr. (45 hours/credit)**

Provides university credit for a sophomore work experience in the area of Heating, Ventilation, Air Conditioning and Refrigeration Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**HVC 299 Capstone****[formerly HVAC 275 Capstone]****1 cr. (1 lec/wk) Prerequisite: HVC 200.**

Introduces students to regulations, codes, and professionalism, while preparing them for the Industry Competency Exams (ICE). A passing grade on the ICE is required to pass this class.

## Information Technology Systems City College

**ITS 163 MS Windows 8 Configuration****3 cr. (2 lec/2 lab/wk) Prerequisite: CAPP 120 or instructor approval. (F)**

Provides students with the knowledge and skills required to set up and administer a computer running Microsoft Windows 8 operating system as a single workstation and also a member of a domain. The course provides the skills required to perform basic installation, configuration tasks, and day-to-day administration tasks in a Windows 8-based network. The course also provides instruction to students on troubleshooting basic installation, configuration, and resolving administration problems.

**ITS 166 Configuring MS Windows 10****3 cr. (2 lec/2 lab/wk) Prerequisite: CAPP 120. (F)**

Provides students with the knowledge and skills required to set up and administer a computer running Microsoft Windows 10 operating system as a single workstation and a member of a domain. The course provides the skills required to perform basic installation, configuration tasks, and day-to-day administration tasks in a Windows-based network. The course also teaches students how to troubleshoot basic installation, configuration, and administration problems.

**ITS 170 MS Windows Server 2012****3 cr. (2 lec/2 lab/wk) Prerequisite: ITS 163. (Sp)**

Provides students with the knowledge and skills required to set up and administer a computer running Microsoft Windows 2008 operating system in a single domain environment. The course provides the skills required to perform basic installation, configuration tasks, and day-to-day administration tasks in a Windows 2008-based network. The course also teaches students how to troubleshoot basic installation, configuration, and administration problems. The course content applies to the Windows 2012 Server network operating system and the Windows client operating system.

**ITS 171 Configuring MS Server 2016****3 cr. (2 lec/2lab/wk.) Prerequisite: ITS 166. (F)**

Provides students with the knowledge and skills required to set up and administer a computer running Microsoft Server 2016 operating system in a single domain environment. The course provides the skills required to perform basic installation, configuration tasks, and day-to-day administration tasks in a Microsoft-based network. The course also teaches students how to troubleshoot basic installation, configuration, and administration problems. The course content applies to the Windows 2016 Server network operating system and the Windows client operating system.

**ITS 182 Help Desk Support****[formerly CST 182 Help Desk Support]****3 cr. (2 lec/2 lab/wk)**

Provides an overview of topics relevant to working a help desk. Included are sections on people, processes, technology, and information, and how these components come together to instruct the student on how the Help Desk functions to support business operations.

**ITS 200 CCNA Exam Preparation****1 cr. (1 lec/wk) Prerequisite: NTS 205. (Sp)**

Prepares students to successfully pass the Cisco CCNA exam by reviewing current exam requirements and topics and building students' self-confidence as they prepare for the exam.

**ITS 217 Network Operating System – Server Admin/Apps****3 cr. (2 lec/2 lab/wk) Prerequisites: ITS 161 & ITS 162. (F)**

Provides students with the knowledge and skills to configure and troubleshoot a Windows Server 2008 network infrastructure. Students will learn to implement and configure secure network access and implement fault tolerant storage technologies. Students will gain an understanding of the networking technologies most commonly used with Windows Server 2008 and IP-enabled networks. Students will also learn how to secure servers and maintain update compliance.

**ITS 220 Fundamentals of Wireless LANs****[formerly CST 277 Fundamentals of Wireless LANs]****3 cr. (2 lec/2 lab/wk) Prerequisite: NTS 205 or consent of instructor.**

Teaches students to design, plan, implement, operate, and troubleshoot wireless LANs. The course covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands-on skills in the following areas: wireless LAN setup and troubleshooting, 802.11a & 802.11b/g wireless networking technologies, wireless hardware and solutions, radio technologies, WLAN applications and site surveys, resilient WLAN products, design, installation, configuration, and troubleshooting, WLAN security, vendor interoperability strategies, and emerging wireless technologies. This hands-on, lab-oriented course stresses documentation, design, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively in group environments.

**ITS 224 Introduction to Linux****3 cr. (2 lec/2 lab/wk) (F, Sp)**

Provides students with the knowledge and skills required to set up and administer a computer running a Linux operating system. The course provides the skills required to perform basic installation, configuration tasks, and day-to-day administration tasks in a Linux network. The course also teaches students how to troubleshoot basic installation problems and perform system maintenance.

**ITS 256 CCNA Security****3 cr. (2 lec/2 lab/wk) Prerequisite: NTS 105. (F)**

Provides students with the technical knowledge required of foundation-level security practitioners. Provides a foundation level of skill and knowledge in general security concepts, communication security, infrastructure security, basics of cryptography, and operational/organizational security.

**ITS 260 CCNP: Routing****[formerly CST 270 Advanced Routing Configuration]****4 cr. (2 lec/2 lab/wk) Prerequisite: NTS 205.**

Addresses those tasks that network managers and administrators need to perform when managing access and controlling overhead traffic in growing, routed networks once basic connectivity has been established. This course also discusses router capabilities used to control traffic over LANs (local area network) and WANs (wide area network), as well as connecting corporate networks to an Internet Service Provider (ISP).

**ITS 262 CCNP 2: Implementing Secure Converged WAN****[formerly CST 272 Remote Access Networks]****4 cr. (2 lec/4 lab/wk) Prerequisite: NTS 205.**

Teaches students how to build a remote access network to interconnect central sites to branch offices and home office/telecommuters. Once the network is built, the course further teaches students how to control access to the central site, as well as maximize bandwidth utilization over the remote links.

**ITS 264 CCNP 3: Switching****[formerly CST 274 Multi-Layer Switching]****4 cr. (2 lec/4 lab/wk) Prerequisite: NTS 205.**

Teaches network administrators how to build campus networks using multi-layer switching technologies over high speed Ethernet. This course addresses how routing and switching concepts and implementations along with various technologies work together.

**ITS 266 CCNP: Troubleshooting****[formerly CST 276 Network Troubleshooting]****4 cr. (2 lec/4 lab/wk) Prerequisites: ITS 260, ITS 262, ITS 264.**

Teaches students how to baseline and troubleshoot an environment using Cisco routers and switches for multi-protocol client hosts and servers connected with the following: Ethernet, Fast Ethernet, and Token Ring LANs using Serial, Frame Relay, and ISDN BRI WANs.

**ITS 274 Advanced Hardware/Software Troubleshooting and Support****3 cr. (1 lec/4 lab/wk) Prerequisites: ITS 162 & ITS 280. (Sp)**

Studies advanced software applications in order to solve in-depth business cases. Provides students with the skills necessary to troubleshoot computers, networks, and peripheral devices. Students complete software and hardware installation projects to increase competency and hands-on skills and then learn how to troubleshoot common problems associated with each stage of the project.

**ITS 280 Computer Repair and Maintenance [formerly CST 250 Microcomputer Hardware Maintenance]****3 cr. Prerequisite: CAPP 120 or Instructor Approval. Corequisite: CST 252.**

Provides students with the skills necessary to install and troubleshoot hardware devices. Topics include system setup, RAM, hard and floppy drives, data buses, power supplies, IO cards, and diagnostic tools.

**ITS 283 Health Information Networking****3 cr. (2 lec/2 lab/wk) Prerequisites: CAPP 120, NTS 104, and NTS 105. (Sp)**

Equips students with the knowledge and skills that can be applied toward entry-level specialist careers in healthcare networking. Health Information Networking is a blended curriculum with both online and classroom learning. Health Information Networking aims to develop an in-depth understanding of principles and practicalities needed for information technology professionals wishing to specialize in healthcare network implementations.

**ITS 284 Network Storage****3 cr. (2 lec/2 lab/wk) Prerequisite: ITS 217 or consent of instructor. (Sp)**

Provides students with the knowledge and skills required to set up and administer digital information in traditional media, network media storage devices, and virtual media storage devices.

**ITS 285 Help Desk Infrastructure****[formerly CST 285 Help Desk Infrastructure]****3 cr. (1 lec/4 lab/wk) Prerequisites: WRIT 121 and ITS 182.**

Strengthens student skills in diagnosing and solving user- and software-related problems with on-site projects or in short-term assignments. Students will also engage the topics of technical communication, professional development, and other work place skills. This is a capstone course for the AAS Degree in Desktop Support. A team approach is used for some projects.

**ITS 291 Special Topics****[formerly CST 200 Cisco CCNA Exam Prep] V1-4 cr.**

Prepares students in computer special topics of variable length.

**ITS 294 Seminar/Workshop****[formerly CMP 292 Seminar]****V1-3 cr. Prerequisite: CAPP 120.**

Investigates intensively topics pertaining to an area of data processing.



## Journalism Communication & Theatre (406) 657–2178

### **JRNL 270 Reporting**

**[formerly COMT 222 Media Writing]**

**3 cr. (F, Sp)** Introduces students to fundamentals of newsgathering in print and broadcast journalism. The course covers basic skills necessary for newsgathering such as reporting techniques, story composition, and interviewing methods.

## Kinesiology Health & Human Performance (406) 657–2370

### **KIN 105 Foundations of Exercise Science** **[formerly HHP 100 Foundations of Exercise Science]**

**3 cr. Corequisite: KIN 106. (F, Sp, Su)** Extends and applies understanding to the use of life science in promoting healthy lifestyles to students' lives. The exercise sciences of physiology, kinesiology, biomechanics, and motor learning are integrated through didactic and laboratory instruction that focuses students on the fundamental importance of exercise science in healthy living.

### **KIN 106 Foundations of Exercise Science Lab** **[formerly HHP 102 Foundations of Exercise Science Lab]**

**1 cr. Corequisite: KIN 105.** Provides laboratory experiences in exercise science to complement student learning in the classroom. By its nature, exercise science involves lab activities dependent upon physical activity.

### **KIN 202 Personal Fitness**

**[formerly HHP 174 Personal Fitness]**

**1 cr. (F, Sp)** Offers an individualized approach to fitness at any level. It is designed to teach principles of cardiovascular fitness, endurance, strength and flexibility, and back strengthening exercises through participation with a basic weight training program, use of stretch bands, handweights, and a run walk program.

### **KIN 205 Foundations in HHP**

**[formerly HHP 260 Foundations and Scientific Fundamentals in Health and Human Performance]**

**3 cr. (F)** Introduces fundamentals of scientific basics in human movement. Included areas of study are basic human bone and muscle anatomy, principles of biomechanical movement, and basic principles of exercise physiology. The relationship between Health/Physical Education and Education is introduced as well as historical background facts, discipline interrelationships, career opportunities, elementary principles of fitness and nutrition, and professional challenges.

### **KIN 320 Exercise Physiology**

**[formerly HHP 430 Exercise Physiology]**

**3 cr. (3 lec/wk) Prerequisite: KIN 105. Corequisite: KIN 321. (F, Sp)** Provides the physiological

fundamentals needed to understand skilled movement. The course focuses on the responses of the human body during exercise with emphasis on professional interventions in various education, health promotion, and human performance settings. Various body systems (i.e., cardiovascular, respiratory, metabolic, musculo-skeletal, endocrine) are studied to understand the adaptations associated with physical fitness, sport, and healthy lifestyle activities.

### **KIN 321 Exercise Physiology Lab**

**[formerly HHP 431 Exercise Physiology Lab]**

**1 cr. (1.5 lab/wk) Corequisite: KIN 320. (F, Sp)** Complements topics presented in exercise physiology lecture. Labs involve physical activity, investigation, and application of clinical assessment skills. Research teams investigate, collect, and analyze data, and present results in oral and written formats.

### **KIN 322 Kinesiology**

**3 cr. Corequisite: KIN 323. (F)** Provides an in-depth exploration into musculoskeletal anatomy and functional movement patterns as they apply to human performance.

### **KIN 323 Anatomical Kinesiology Lab**

**1 cr. Corequisite: KIN 322. (F)** Examines the anatomical structures and mechanical aspects of human motion. Laboratory exercises concentrate on the role of muscle and joint action during basic movements and the adaptations that can result from pathologic conditions. Students will be required to apply their knowledge of anatomy towards understanding individual joint function as well as the integrated function of several joints during complex activities such as normal human locomotion.

**KIN 325 Biomechanics**

**3 cr. Corequisite: KIN 328. (Sp)** Emphasizes the effects of structure, motion, and forces, and their effects on and within the human body using both qualitative and quantitative analyses. Additional emphasis will be placed on the development of critical thinking skills associated with biomechanics-related research and interpretation.

**KIN 327 Kinesiology and Biomechanics**

**[formerly HHP 463 Kinesiology and Biomechanics]**

**3 cr. Prerequisite: KIN 105. Corequisite: KIN 328.**

**(F, Sp)** Examines the anatomy and mechanics of human motion with the goal of improving efficiency in sport, dance, and exercise.

**KIN 328 Biomechanics Lab**

**[formerly HHP 464 Kinesiology and Biomechanics Lab]**

**1 cr. Corequisite: KIN 325. (F, Sp)** Examines the mechanical aspects of human motion. Laboratory exercises focus on the effects of structure, motion, and force related to exercise, sport, and physical activity.

**KIN 330 Motor Learning and Control**

**[formerly HHP 300 Motor Learning and Control]**

**3 cr. Prerequisite: KIN 105. Corequisite: KIN 331.**

**(F, Sp)** Focuses on the basic principles of motor control and learning, examining the mechanisms by which the nervous system plans, initiates, and executes movements (both involuntary and voluntary) as well as accomplished sensory-motor integration and the means for maximizing the learning and performance of movement skills including how to design practice conditions and how to optimize arousal, attention, motivation, feedback, and transfer so to optimize skilled motor performance.

**KIN 331 Motor Learning and Control Lab**

**[formerly HHP 301 Motor Learning and Control Lab]**

**1 cr. Corequisite: KIN 330. (F, Sp)** Includes laboratory exercises in motor control fundamentals of nervous system functions, sensory-motor integration, and methods for maximizing the learning and performance of movement skills.

**KIN 364 Research Methods in Health and Human Performance**

**[formerly HHP 364 Research Methods in Health and Human Performance]**

**3 cr. (F, Sp)** Provides students with experience and knowledge which will allow them to critically analyze and evaluate completed research in health and human performance. Examines methods of assessment, prescription, and evaluation in health and human performance activities.

**KIN 415 Advanced Exercise Testing and Prescription (crosslisted with HHP 545)**

**[formerly HHP 445 Exercise Testing and Prescription]**

**3 cr. Prerequisite: KIN 320. (F, Sp)** Explores basic techniques in the assessment of physical fitness, prescription of exercise for healthy and unhealthy adults, and promotion of physical activity within communities.

**KIN 462 Evidence Based Assessment and Treatment**

**3 cr. Prerequisite: Admission to Human Performance Program. (F, Sp)** Provides the foundation for evidence-based practice in exercise science by establishing scientific evidence as the basis for clinical decision making. Clinical practices are questioned and evaluated for alignment with evidence-based decision making. Commonly accepted hierarchies of evidence are used to evaluate the level of scientific support for both assessment and treatment techniques used in exercise science. Objective outcome measures that determine level of success in individual client scenarios in a wide array of exercise applications are used to provide evidence of intervention effects.

## Languages

### English, Philosophy & Modern

### Languages

**(406) 657–2348**

**LANG 101, 102 Elementary Foreign Language I, II**

**4, 4 cr. (F, Sp)** The courses provide credit for students who wish to satisfy one year of the foreign language requirement in a language other than French, German or Spanish.

**LANG 201, 202 Intermediate Foreign Language I, II**

**3, 3 cr.** The courses provide credit for students who wish to satisfy a second year of the foreign language requirement in a language other than French, German or Spanish.

**LANG 292 Seminar**

**V1-3 cr.** Provides freshmen and sophomores an opportunity to investigate intensively topics pertinent to the field of Languages and Literatures.

**LANG 293 Workshop**

**V1-8 cr.** Provides an opportunity for experimental study in Languages and Literatures.

**LANG 295 Study Abroad**

**3 cr. Prerequisites:** Successful completion of LANG 102 or FRCH 102 or GERM 102 or SPNS 102 with a grade of “C” or better, or consent of department chair. Provides students with faculty-led, “real life” opportunities to practice second language skills within an authentic cultural and linguistic framework. Combines on-site university classroom activities, native-guided excursions, and residence with a native family to assure maximum immersion in the target language and culture. Students are responsible for air travel, housing, on-site tuition, and entrance fees associated with the course.

**LANG 296 Cooperative Education/Internship**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Language supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**LANG 490 Internship**

**V1-3 cr. Prerequisites:** Completion of 60 credit hours or upper division standing in the Language, 3.0 overall GPA, consent of advisor and approval by the Department Chair. Provides an opportunity for students to acquire field experience and material not covered by regular Foreign Language classes in French, German or Spanish; can only be taken on a Pass/No Pass basis.

**LANG 491 Independent Study**

**V1-5 cr. Prerequisites:** consent of instructor and Foreign Languages and Literatures chairperson. Provides an opportunity for students of superior academic standing to explore material not covered by regular college courses.

**LANG 492 Seminar**

**V1-8 cr.** Provides an opportunity for study in an area of Languages and Literatures.

**LANG 493 Workshop**

**V1-8 cr.** Provides an opportunity for experimental study in an area of Languages and Literatures.

**LANG 495 Study Abroad**

**3 cr. Prerequisites:** Successful completion of LANG 202 or FRCH 202 or GERM 202 or SPNS 202 with a grade of “C” or better or consent of department chair. Provides students with faculty-led, “real life” opportunities to practice second language skills within an authentic cultural and linguistic framework. Combines on-site university classroom activities, native-guided excursions, and residence with a native family to assure maximum immersion in the target language and culture. Students are responsible for air travel, housing, on-site tuition, and entrance fees associated with the course.

**LANG 496 Cooperative Education/Internship**

**V1-9 cr.** Provides university credit for a work experience in the area of Language, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**LANG 499 International Studies Capstone Course**

**1 cr. Prerequisite:** Completion of International Studies Minor. Demonstrates the student’s synthesis of knowledge through the creation and implementation of a project (s) which focuses on international studies and which will be disseminated to the larger campus, and the writing of a reflective paper.

## Linguistics

### English, Philosophy & Modern

### Languages

(406) 657-2348

**LING 210 Introduction to Language and Linguistics [formerly ENGL 213 Introduction to Language]**

**3 cr. (F, Sp)** Surveys introductory linguistic topics and methods of analysis as applied to the structure of English and as preparation for the scientific analysis of other language phenomena.

**LING 294 Seminar/Workshop**

**V1-3 cr.** Provides freshmen and sophomores an opportunity to investigate intensively topics pertinent to the fields of composition, literature and language.

**LING 294 Seminar/Workshop**

**V1-3 cr.** Provides freshmen and sophomores an opportunity for experimental study in an area of English or the teaching of English.

**LING 301 History of the English Language**  
**[formerly ENGL 314 History of the English Language]**

**3 cr. Prerequisite:** LING 210. (odd Sp) Presents a linguistic analysis of the history of the English language, including Old English, Middle English, and Modern English dialects and recent semantic and vocabulary changes as illustrated by writings from various historical periods. Considers applications of such information in the classroom.

**LING 312 English Grammar**  
**[formerly ENGL 312 English Grammar]**

**3 cr. Prerequisite:** LING 210. (F) Provides a thorough review of traditional grammatical terms and principles, as well as an overview of modern theories of syntactic analysis, including structural and transformational-generative grammars, for the prospective teacher of English. (Course must be completed prior to student teaching.)

**LING 315 Sociolinguistics**  
**[formerly ENGL 315 Sociolinguistics]**

**3 cr. Prerequisite:** LING 210. (F) Surveys a variety of topics of interest to teachers and language arts students, including language variation, conversational interaction, the relationship between language and society, and language and power.

**LING 318 Introduction to Psycholinguistics**  
**(crosslisted with PSYX 482)**

**[formerly ENGL 318/PSYC 318 Psycholinguistics]**  
**3 cr. Prerequisite:** LING 210. (even Sp) Explores the relationship between the human brain and language, including brain anatomy, first and second language acquisition, abnormal language acquisition and functions, and mental language processes.

**LING 491 Special Topics**  
**[formerly ENGL 466 Studies in Language and Linguistics]**

**V1-3 cr. R-6. Prerequisite:** Upper division status. Provides advanced study in selected language/linguistics topics. Course content will vary, and the course may be repeated for credit.

**LING 492 Independent Study**

**V1-3 cr. Prerequisites:** consent of instructor and chairperson of the department. Provides outstanding students with an opportunity for individually guided research and study in English. A contract describing the study must be completed at the time of enrollment and filed in the English Department office. (Note: Not more than 6 credits of LING 492 may be allowed toward any program in English.)

**LING 494 Seminar/Workshop**

**V1-3 cr.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of English.

**LING 494 Seminar/Workshop**

**V1-3 cr.** Provides an opportunity for experimental study in an area of English and the teaching of English.

**LING 498 Cooperative Education/Internship**

**V1-9 cr.** Provides university credit for a work experience in the area of English, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Literature

### English, Philosophy & Modern Languages

**(406) 657-2348**

**\* LIT 110 Introduction to Literature**  
**[formerly ENGL 160 Reading and Responding to Literature]**

**3 cr. (F, Sp)** Presents students with the opportunity to experience and analyze short and long fiction; narrative, dramatic and lyric poetry; stage and cinematic drama, and selected audio/visual materials. Students will develop skills and attitudes enabling them to experience the written word and selected audio/visual media for insight and entertainment (Course not applicable to English major).

**LIT 201 Introduction to Literary Studies**

**3 cr. Prerequisite:** WRIT 101. (F, Sp) Focuses on reading and analyzing literary works to prepare students for literary studies at the college level. This course will introduce students to literary genres, literary terms, methods of literary criticism, and research skills focused on scholarly articles. Students will write analytical essays in response to various literary works.

**\* LIT 230 World Literature Survey**  
**[formerly ENGL 260 World Foundations of Literature]**

**3 cr. (F, Sp)** Surveys in translation representative works of world literature (e.g., Chinese, Indian, Russian, Latin American, European) in poetry, prose, and drama which provides a comparative basis for understanding different cultures.

**\* LIT 240 The Bible As Literature****[formerly ENGL/PHIL 240 The Bible As Literature]**

**3 cr. (Sp)** Examines the Bible as a work of literary art. Considers such topics as literary genre, plots, character development, thematic concerns, historical and cultural contexts, and style of writings that make up the Old Testament/Hebrew Bible and the New Testament.

**\* LIT 270 Film & Literature****[formerly ENGL 280 Fiction into Film]**

**3 cr. (Sp)** Focuses on modern and contemporary novels, plays or short stories which have been adapted to film. Emphasizes written and visual literacy.

**LIT 294 Seminar/Workshop**

**V1-3 cr.** Provides freshmen and sophomores an opportunity to investigate intensively topics pertinent to the fields of composition, literature and language.

**LIT 294 Seminar/Workshop**

**V1-3 cr.** Provides freshmen and sophomores an opportunity for experimental study in an area of English or the teaching of English.

**LIT 300 Literary Criticism****[formerly ENGL 325 Survey of Literary Criticism]**

**3 cr. Prerequisite: LIT 230. (Sp)** Surveys the leading literary critics and theorists from Plato and Aristotle to the Formalists of the mid- twentieth century.

**LIT 305 Literature by and about Native Americans (crosslisted with NASX 340)****[formerly ENGL/NAMS 303 Literature of the American Indian]**

**3 cr. Prerequisite: at least one lower division course in English or Native American Studies, or permission of the instructor.** Includes fictional and non-fictional oral, written, and visual literature pertaining to Native Americans and created by Indians and non-Indians including traditional literature such as legends, myths, teaching stories, humor, songs, orations, dramas, captivity accounts, sign language, winter counts, and hide paintings; contemporary literature such as poetry, songs, short stories, novels, humor, newspapers, theatricals, movies, television, and picture books; and translation, interpretation, and criticism, with insight drawn from Indian cultural traditions, the humanities, and the social sciences.

**LIT 307 Latino Literature (crosslisted with SPNS 314)****[formerly ENGL/SPAN 309 Latino Literature]**

**3 cr. (odd Sp)** Introduces Latino/a literature with focus on classic and contemporary writers of Hispanic origin living and writing in the U.S. Analyzes their historical, political, cultural, and literary discourses through fictional and some non-fictional works focusing on Latino/a society as a marginalized minority.

**LIT 312 Advanced American Literature I****[formerly ENGL 355 American Literature I]**

**3 cr. Prerequisite: LIT 230. (F)** Provides intensive study and discussion of selections from major American writers from the colonial period through the end of the Civil War.

**LIT 313 Advanced American Literature II****[formerly ENGL 356 American Literature II]**

**3 cr. Prerequisite: LIT 230. (Sp)** Provides intensive study and discussion of selections by major American writers from the post-Civil War period through the present.

**LIT 320 Advanced British Literature I****[formerly ENGL 361 British Literature I]**

**3 cr. Prerequisite: LIT 230. (taught in sequence with LIT 321 and 322)** Provides intensive study and discussion of selections by major British writers from the Anglo Saxon period to 1660. Pays special attention to Old and Middle English poetry and the lyric and dramatic verse of the sixteenth and seventeenth centuries.

**LIT 321 Advanced British Literature II****[formerly ENGL 362 British Literature II]**

**3 cr. Prerequisite: LIT 230. (taught in sequence with LIT 320 and 322)** Provides intensive study and discussion of selections from major British writers from the Restoration through the Romantic period.

**LIT 322 Advanced British Literature III****[formerly ENGL 363 British Literature III]**

**3 cr. Prerequisite: LIT 230. (taught in sequence with LIT 320 and 321)** Provides intensive study and discussion of selections from major British writers from the Victorian period to 1965.

**LIT 327 Shakespeare****[formerly ENGL 444 Shakespeare]**

**3 cr. Prerequisite:** LIT 320 or instructor's permission. **(F)** Examines the major dramatic genres of Shakespeare: history/tragedy, and comedy/romance. Studies Shakespeare's biography, historical context and knowledge of psychology, ethics, and philosophy as reflected in plays.

**LIT 335 Women & Literature****[formerly ENGL/A&SC 365 Images of Women in Literature and the Arts]**

**3 cr. (even F)** Studies examples of the written, oral, and visual arts depicting women as "voices" of the periods which produced them, and examines how those voices influenced, and continue to color, women's perceptions of their roles in society. Pays special attention to the literature written by such authors as Doris Lessing, Alice Adams, Anne Sexton, Alice Munro, Megan Terry, and Alice Walker.

**LIT 342 Montana Writers****[formerly ENGL 331 Montana Writers]**

**3 cr. (alternating Sp)** Examines literature produced by authors, including Dorothy Johnson, A.B. Guthrie, James Welch, and Ivan Doig, who were born in or live in Montana and set their literary productions in the state.

**LIT 370 Science Fiction****[formerly ENGL 270 Science Fiction]**

**3 cr. (even Sp)** Examines the major Humanistic, biological, environmental, psychosocial, and technological themes of science fiction as a significant genre of modern speculative fiction and traces the historical development of science fiction from the 19<sup>th</sup> century to the present.

**LIT 381 Young Adult Literature****[formerly ENGL 381 Adolescent Literature]**

**3 cr. (F)** Provides students with knowledge of books written specifically for young adults and with a background in the various kinds of material available for both in-class and out-of-class reading experiences for preteens and teenagers. Issues involved in assigning and recommending reading materials for Middle School, Junior and Senior High School students are covered, including units on censorship and methods of promoting books through classroom activities.

**LIT 432 Major Writers****[formerly ENGL 471 Major Writers]**

**3 cr.** Provides advanced study of the work of a selected author or authors.

**LIT 437 Studies in Genres**

**3 cr. (3 lec/wk) (Sp)** Provides intensive study of a single genre—such as the epic, the novel, drama, or poetry—or the idea of "genre" itself. Selection and approach will vary with each offering.

**LIT 460 Studies in British Literature****[formerly ENGL 460 Studies in British Literature]**

**V1-3 cr. R-6. Prerequisite:** upper division status.

Provides advanced study of major developments, periods, genres, or themes in British Literature. Course content will vary, and the course may be repeated for credit.

**LIT 461 Studies in American Literature****[formerly ENGL 461 Studies in American Literature]**

**V1-3 cr. R-6. Prerequisite:** upper division status.

Provides advanced study of major developments, periods, genres, or themes in American literature. Course content will vary, and the course may be repeated for credit.

**LIT 463 Studies in Contemporary Literature****[formerly ENGL 463 Studies in Contemporary Literature]**

**V1-3 cr. R-6. Prerequisite:** upper division status.

Provides advanced study of major developments, genres, or themes in American, British, and/or Western-European fiction, poetry, and drama (and film where relevant) since 1965. Appropriate connections among national literatures will be explored. Course content will vary, and the course may be repeated for credit.

**LIT 464 Studies in Medieval Literature****[formerly ENGL 464 Studies in Medieval Literature]**

**V1-3 cr. R-6. Prerequisite:** LIT 230 or instructor's permission. Provides advanced study of British and/or Western European medieval literature, with special emphasis on an influential major author, or authors, and on the major genres and themes of western medieval literature.

**LIT 492 Independent Study**

**V1-3 cr. Prerequisites:** consent of instructor and chairperson of the department. Provides outstanding students with an opportunity for individually guided research and study in English. A contract describing the study must be completed at the time of enrollment and filed in the English Department office. (Note: Not more than 6 credits of LIT 492 may be allowed toward any program in English.)

**LIT 494 Seminar/Workshop**

**V1-3 cr.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of English.

**LIT 494 Seminar/Workshop**

**V1-3 cr.** Provides an opportunity for experimental study in an area of English and the teaching of English.

**LIT 498 Cooperative Education/Internship**

**V1-9 cr.** Provides university credit for a work experience in the area of English, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**LIT 499 Thesis/Capstone: Portfolio**

**[formerly ENGL 425 Senior Portfolio]**

**3 cr. Prerequisites: WRIT 201 and senior status. (F, Sp)** Requires students to produce a substantial quantity and variety of nonfiction prose. Each student makes an oral presentation of his or her best chosen work with the advice of instructor. Course affords opportunity for conferences with instructor as well as discussions of related readings. Designed especially for senior English majors. Work produced for Senior Portfolio constitutes an outcomes assessment of the quality of the student's training in English.

## Library Science

### Library

**(406) 657-2262**

**\* LSCI 125 Research in the Information Age**

**[formerly LS 125 Research in the Information Age]**

**3 cr. (F, Sp, Su)** Introduces students to how information is organized and demonstrates how to find, evaluate, and use books, articles, web pages, and other materials in both electronic and print forms. The course also covers the steps of the research process including how to think critically about information, how to use information ethically, how to navigate ongoing changes in information sources, and how to cite sources.

## Developmental Education: Math City College

**M 065 Prealgebra**

**[formerly M 061 Basic Mathematics]**

**3 cr.** Covers pre-algebra concepts involving terminology, fractions, decimals, percent, ratio and proportion, measurement, geometry, and statistics. Credits do not apply toward graduation requirements nor fulfill General Education requirements. However, the credits do count towards enrollment status for financial aid.

**M 088 Mathematical Literacy**

**4 cr. (4 lec/wk) Prerequisite: M 065 or equivalent placement. (F, Sp)**

Develops mathematical literacy through peer collaboration, problem solving, critical thinking, writing, and communicating mathematics. Students represent and solve relevant, real-world problems using various forms of numbers, equations, and graphs. Topics include proportional reasoning, algebra, introductory statistical formulas, geometry, and measurement.

**M 090 Introductory Algebra**

**[formerly MATH 101 Introductory Algebra]**

**3 cr. (3 lec/wk) Prerequisite: M 065 or equivalent.**

Covers basic algebra concepts including terminology, operations on rational numbers, solving and graphing linear equations and inequalities in one and two variables, determining equations of lines, and polynomial and function operations. Credits do not apply toward graduation requirements and do not fulfill General Education requirements. However, the credits do count towards enrollment status for financial aid.

**M 095 Intermediate Algebra**

**[formerly MATH 105 Algebra for College Students]**

**4 cr. Prerequisite: M 090 or equivalent.** Reviews basic algebra concepts including terminology, operations on rational numbers, solving and graphing linear equations and inequalities in one and two variables, determining equations of lines, and polynomial operations. Covers function operations; operations on exponential and radical expressions; factoring; solving rational, absolute value, radical, and systems of equations; and solving and graphing quadratic equations. Credits do not apply toward graduation requirements and do not fulfill General Education requirements. However, the credits do count towards enrollment status for financial aid.

**M 098 Introductory & Intermediate Algebra**  
**5 cr. Prerequisites:** M 065 or equivalent COMPASS score. (F, Sp, Su) Covers basic algebra concepts including terminology; operations on rational numbers; solving and graphing linear equations and inequalities in one and two variables; determining equations of lines; polynomial and function operations; operations on exponential and radical expressions; factoring; solving rational, absolute value, radical, and systems of equations; solving and graphing quadratic equations. This is a modularized course based on mastery learning in which students will earn credit for each module (A, B, C, D, E) by examination.

## Mathematics

(406) 657-2228

**\* M 105 Contemporary Mathematics**  
[formerly MATH 141 Contemporary Mathematics]  
**3 cr. Prerequisite:** M 095 or three years of high school mathematics. (F, Sp) Introduces the student to areas of interest in applied and pure mathematics. Content may vary.

**M 108 Business Mathematics**  
[formerly MATH 104 Business Mathematics]  
**3cr. (3 lec/wk) Prerequisite:** Passing M 065 or appropriate placement test scores. (F, Sp)  
Examines the mathematics of business ownership and exposes the mathematical needs of business decisions. Techniques include marketing, payroll, cash flow, simple and compound interest, credit, promissory notes, insurance financial statements, ratio analysis, depreciation, annuities, and inventory valuation.

**M 110 Mathematical Computing**  
[formerly MATH 110 Mathematical Computing]  
**1 cr. (F, Sp)** Introduces the use of computer algebra systems to solve mathematical problems.

**M 111 Technical Mathematics**  
[formerly MATH 103 Essential Mathematics for the Trades]  
**3 cr. (3 lec/wk) Prerequisite:** M 065 or appropriate placement scores. (F, Sp, Su)  
Applies math to problems drawn from diverse occupational fields. In addition to a review of operations on rational numbers, the topics of measurement, percent, proportion and variation, applications of algebra to the extent of solving quadratic equations, and applications of plane and solid figure geometry are developed for use in a trade or industrial setting. Course may serve as a prerequisite to M 114, but does not satisfy the prerequisite of any other math courses. Credits apply to graduation but do not fulfill General Education requirements.

**\* M 114 Extended Technical Mathematics**  
[formerly MATH 122 College Mathematics for Technology]  
**3 cr. (3 lec/wk) Prerequisite:** M 111 or M 095 or appropriate placement score. (F, Sp, Su)  
Applies math to problems drawn from diverse occupational fields. Provides college level study of measurement, algebra, geometry, and trigonometry as needed to solve mathematical applications in a trade or technical work environment.

**M 120 Mathematics with Health Care Applications**  
**3 cr. (3 lec/wk) (F, Sp) Offered ONLY Online.**  
Provides students with a solid mathematical foundation necessary to succeed in a health care profession. This course will review algebra, systems of measurement, medication and syringe calculations, ratio and proportions, calculations for intravenous therapy, basic statistics, ionic solutions, and pH calculations.

**\* M 121 College Algebra**  
[formerly MATH 106 College Algebra]  
**3 cr. Prerequisite:** M 095 or appropriate placement score. (F, Sp, Su) Covers the concepts of functions, complex numbers, and solving basic system of equations. Investigates linear, quadratic, polynomial, exponential, and logarithmic functions.

**\* M 122 College Trigonometry**  
**3 cr. Prerequisite:** M 121 or appropriate placement scores. (F, Sp) Covers trigonometric functions and their inverses, polar coordinates, graphing, vectors, and trigonometric identities. Includes sequences and series.



**\* M 130 Mathematics for Elementary Teachers I**  
**[formerly MATH 201 Fundamentals of Mathematics I]**

**3 cr. Prerequisite: M 088 or equivalent. (F, Sp)**  
Stresses topics in counting and cardinality, operations in base ten, measurement and data, and geometry as defined by the Common Core State Standards for mathematics. Restricted to majors in elementary education and special education.

**M 131 Mathematics for Elementary Teachers II**  
**[formerly MATH 202 Fundamentals of Mathematics II]**

**3 cr. Prerequisite: M 130 or consent of instructor. (F, Sp)**  
Stresses topics in fractions, ratios, and proportional relationships; the number system; expressions and equations; statistics and probability; and functions as defined by the Common Core State Standards for mathematics.

**M 139 Graphing Calculator Workshop**  
**[formerly MATH 109 Using the HP-48G]**  
**1cr. (1 lec/wk)**

Introduces the use of the HP-48G (G, G+, or GX) calculator to solve mathematical problems. Included topics are Reverse Polish Notation, tick mark entry, equation editor, solver, plot, stack & memory management and more.

**\* M 143 Finite Mathematics**  
**[formerly MATH 121 Finite Mathematics]**

**4 cr. Prerequisite: M 095 or equivalent. (F, Sp)**  
Studies applications of systems of linear equations to problems of optimization, elementary functions, logic, and mathematics of finance. Introduces differentiation.

**\* M 161 Survey of Calculus**

**3 cr. (3 lec/wk) Prerequisite: M 121 or appropriate placement test score. (F, Su)**  
Covers basic calculus concepts including limits, differentiation, and integration with applications to business, science, and social science problems.

**\* M 171 Calculus I**  
**[formerly MATH 112 Calculus I]**

**4 cr. Prerequisite: M 122. (F, Sp)**  
Covers differentiation and presents applications to the approximation of functions, root finding, and 1-variable optimization. Introduces integration.

**M 172 Calculus II**  
**[formerly MATH 113 Calculus II]**

**4 cr. Prerequisite: M 171. (F, Sp)**  
Includes techniques and applications of integration, analytic geometry and the theory of sequences and series. This course is a continuation of M 171.

**M 242 Methods of Proof**

**3 cr. Prerequisite: M 172. (Sp)**  
Covers reasoning and communication in mathematics, including logic, generalization, existence, definition, proof, and the language of mathematics. Topics include functions, relations, set theory, recursion, algebra, number theory, and other areas of mathematics.

**M 273 Multivariable Calculus**  
**[formerly MATH 312 Multivariable Calculus]**

**4 cr. Prerequisite: M 172 and either M 110 or EGEN 105. (F)**  
Covers vector-valued functions, functions of two and three variables, partial differentiation, as well as multiple, line, and surface integrals; includes a variety of applications.

**M 274 Introduction to Differential Equations**  
**[formerly MATH 302 Intermediate Differential Equations]**

**4 cr. Prerequisite: M 172 and either M 110 or EGEN 105. (Sp)**  
Presents methods for the solution of first and higher-order differential equations including variation of parameters, undetermined coefficients, the Laplace transform, and power series expansions. Introduces phase plane methods.

**M 294 Seminar/Workshop**  
**[formerly MATH 292 Seminar]**

**V1-3 cr.**  
Provides students an opportunity to investigate intensively topics pertinent to the field of Mathematics.

**M 294 Seminar/Workshop**  
**[formerly MATH 293 Workshop]**

**V1-8 cr.**  
Provides an opportunity for experimental study in an area of Mathematics.

**M 298 Cooperative Education/Internship**  
**[formerly MATH 296 Cooperative Education/Internship]**

**V1-9 cr.**  
Provides university credit for a sophomore work experience in the area of Mathematics supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**M 302 Trends in Elementary Mathematics**  
[formerly MATH 320 Trends in Elementary Mathematics]

**3 cr. Prerequisites:** M 131 or consent of instructor.

Focuses on a consideration of applications of mathematics that are within the scope of the elementary (K-8) mathematics curriculum. Examples will be drawn from existing elementary mathematics curriculum projects and be adapted from projects at higher levels. The use of this content will serve to reflect the curriculum changes that have been called for by the Curriculum and Evaluation Standards (NCTM, 1989) and will show how math is responding to the expectation that the curriculum demonstrate greater relevance. Topics to be covered include geometry and technology, measurement, social science applications, business applications, and science applications (especially using probability). Technology will be incorporated as appropriate in all activities.

**M 305 Discrete Structures I**  
[formerly MATH/COMP 305 Discrete Structures I]

**4 cr. Prerequisite:** M 172 and CSCI 111A. (F)

Covers logic, recursion, induction and basic data models. Surveys combinatorics and the theory of algorithms with attention to design analysis and verification techniques.

**M 306 Discrete Structures II**  
[formerly MATH/COMP 306 Discrete Structures II]

**4 cr. Prerequisites:** M 305. (Sp) Discusses algorithm design in the context of graph theory. Introduces automata and formal languages. Covers logic, computability, artificial intelligence and robotics.

**M 329 Modern Geometry**  
[formerly MATH 311 Geometry]

**3 cr. Prerequisites:** M 242 and M 333. (Sp) Deals with the fundamentals of synthetic and modern geometry. Covers topics in non-Euclidean geometry as well as topics in Euclidean geometry, such as finite geometry, space geometry, constructions, and solid geometry.

**M 330 History of Mathematics**  
[formerly MATH 331 History of Mathematics]

**3 cr. Prerequisite:** junior standing or consent of instructor. (F) Emphasizes the historical development of mathematics during 5,000 years, from primitive counting through set theory. Particularly useful for those teaching mathematics

**M 333 Linear Algebra**  
[formerly MATH 301 Applied Linear Algebra]

**4 cr. Prerequisite:** M 172. (Sp) Covers linear systems and matrices, determinants, vector spaces, linear transformations, eigenvalues and eigenvectors, and orthogonality. Exact topics may vary year to year.

*MATH 341 Probability – See STAT 341*

**M 371 Numerical Computing**  
[formerly MATH/COMP 371 Numerical Computing]

**4 cr. Prerequisite:** M 333. (Sp) Presents floating-point arithmetic, approximate solution of equations and systems of equations, polynomial interpolation, numerical integration and differentiation, and the approximate solution of ordinary differential equations. Exact topics may vary from year to year.

**M 397 Education Methods: Peer Tutoring**  
[formerly MATH 390 Peer Tutoring]  
**1 cr. R-3 Prerequisites:** mathematics major or minor and approval of the director of the Math Lab. Provides practical experience imparting basic mathematical skills to the students in the Math Lab.

**M 431 Abstract Algebra I**  
[formerly MATH 421 Algebraic Structures]  
**3 cr. Prerequisite:** M 242 and M 333. (F) Covers groups, rings, fields and vector spaces. Exact topics may vary from year to year.

**M 471 Mathematical Analysis**  
[formerly MATH 412 Mathematical Analysis I]  
**3 cr. Prerequisite:** M 242 and M 273. Presents the basic theorems of one and multivariable analysis as a basis for higher analysis and its applications.

**M 472 Introduction to Complex Analysis**  
[formerly MATH 413 Mathematical Analysis II]  
**3 cr. Prerequisite:** M 273. Covers topics in multivariable calculus and/or complex variables.

**M 492 Independent Study**  
[formerly MATH 491 Independent Study]  
**V1-3 cr. Prerequisites:** consent of instructor and department chairperson. Provides outstanding students an individual opportunity to explore material not covered by regular mathematics courses.

**M 494 Seminar/Workshop**  
[formerly MATH 492 Seminar]  
**V1-3 cr. Prerequisite:** mathematics major or minor, or consent of instructor. Investigates intensively topics pertinent to the area of Mathematics.

**M 494 Seminar/Workshop****[formerly MATH 493 Workshop]****V1-3 cr.** Provides an opportunity for experimental study in an area of Mathematics.**M 498 Internship/Cooperative Education****[formerly MATH 496 Cooperative Education/Internship]****V1-9 cr.** Provides university credit for a work experience in the area of Mathematics, supervised by faculty. Learning agreement must be completed prior to registration (restricted).**M 499 Capstone****[formerly MATH 498 Capstone Seminar]****3 cr. Prerequisite: Senior Standing in Math. (F)** Requires students to analyze and create mathematical arguments that lead to written or oral reports. Synthesizes the ideas and techniques acquired in prior mathematics courses. Incorporates the department assessment exams.**Media Arts****City College****MART 208 Multimedia Technology****[formerly DSGN 208 Multimedia Technology]****3 cr. (2 lec/2 lab/wk) Prerequisite: CAPP 120, transfer equivalent or consent of instructor. (F, Sp)**

Provides the student with an opportunity to explore hardware and software aspects of multimedia. Students participate in a hands-on environment utilizing recordable CD media, digital cameras, scanners, image capture hardware, digital video recorders, and multimedia editing software. Relevance and application of multimedia presentations are also covered.

**\* MART 260 Computer Presentation and Animation [formerly DSGN 248 Computer Presentation and Animation]****3 cr. (2 lec/2 lab/wk) (F, Sp)**

Excites the student through immersion into the topic of 3D computer graphics and animation. Digital environments are explored using the 3D Studio Max software. Interdisciplinary projects are created utilizing digital object construction, lighting, camera, kinetic and artistic techniques. An overview of audio impact and integration is included.

**Management****Business Administration****(406) 657-2295****MGMT 472 Principles of Fire Management****3 cr. Prerequisite: Business core. Offered ONLY Online.**

Addresses issues routinely faced by fire department managers. Management of fire personnel, relationships between department and community as well as problems and issues faced, cross-department interactions, zero-based budgeting, and services offered by fire departments are examined.

**MGMT 473 Principles of Planning and Prevention****3 cr. Prerequisite: Business core. Offered ONLY Online.**

Investigates issues routinely faced by fire department managers. Master planning, maintaining department readiness and training, engineering elements in fire prevention, evaluation and enforcement of safety codes, terrorism issues, and working with schools and Fire Marshals will be examined.

**Information Systems****Business Administration****(406) 657-2295****MIS 365 Database Management****3 cr. Prerequisites: Admission to upper division standing, CSCI 100 or consent of department. (F)**

Introduces the theory and principles of modern database management systems, including the ideas of data and program independence, schemas, hierarchical and network structures, relational systems and data description and query languages. The student uses several data base systems available on mainframe and microcomputers on campus. Includes a major project assignment.

**MIS 463 Server Side Scripting****3 cr. Prerequisite: BMIS 310, MIS 365.** Provides students with advanced web programming skills needed to create websites with database interaction.

## Military Science Leadership

### Military Science Department

(406) 247–5733

#### **MSL 101 Leadership and Personal Development** [formerly MSG 101 Introduction to Military Leadership Skills]

**2 cr. Corequisite: MSL 106.** Establishes a framework for understanding officership, leadership, Army values and physical fitness, time management, communications theory and practice (written and oral), and interpersonal relationships. These initial lessons form the building blocks of progressive lessons in values, fitness, leadership, and officership. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Fall, Spring, and Summer sessions.

#### **MSL 102 Introduction to Tactical Leadership** [formerly MSG 102 Basic Leadership Skills & Concepts]

**2 cr. Corequisite: MSL 106.** Establishes a foundation of basic leadership fundamentals such as: problem solving, communications, military briefings, effective writing, goal setting, techniques for improving listening and speaking skills, in addition to an introduction to counseling. Provides students with a basic understanding of situational leadership as it applies to the military and how the basic concepts and practices relate to individuals and organizations. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Fall, Spring, and Summer sessions.

#### **MSL 106 Army Physical Fitness** [formerly MSG 106 Army Physical Conditioning and Training Laboratory]

**1 cr. R Corequisite: All MSG courses.** Develops confidence and discipline in mind and body through a regimented and challenging physical conditioning course. Designed to provide students a framework of fitness skills, planning, and testing for a lifetime of health. The course consists of three Physical Training (PT) sessions per week that include: running, swimming, upper body, core development, sports, and team building exercises. Offered Fall, Spring, and Summer sessions.

#### **MSL 201 Innovative Team Leadership** [formerly MSG 201 Leadership Development & Life Skills]

**3 cr. Corequisite: MSL 106.** Develops an understanding of how to build teams, influence, communicate, a process for effective decision making, teaches creative problem solving, and the fundamentals of planning. Students identify successful leadership characteristics through observation of others and self through experiential learning exercises. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Fall, Spring, and Summer sessions.

#### **MSL 202 Foundations of Tactical Leadership** [formerly MSG 202 Leadership Management & Team Building]

**3 cr. Corequisite: MSL 106.** Provides an advanced look at leadership principles and the application and practice of those principles. Examines building successful teams, various methods for influencing action, effective communication, and achieving goals. Additionally, stresses the importance of timing the decision, creativity in the problem solving process, and obtaining team buy-in through immediate feedback. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Fall, Spring, and Summer sessions.

#### **MSL 203 Ranger Challenge** [formerly MSG 203 Ranger Challenge Laboratory]

**1 cr. Prerequisite: Consent of instructor.**

**Corequisites: MSG 101, 201, 301, or 401.** Provides a forum to execute and evaluate the leadership skills and abilities developed in practical exercises, tactical scenarios, and peer mentorship. This course evaluates the tactical, technical, and communication skills and duties common to all branches of the Army. Develops leadership and the ability to function effectively in small unit operations. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Fall semester.

**MSL 204 Leader's Training Course**  
**[formerly MSG 298 Leadership Training Course – Internship]****V1-6 cr. Prerequisite: Consent of instructor.**

Provides a forum for the development of military leadership fundamentals. Leadership Training Course (LTC) is four weeks of intense classroom and field training held in the summer at Fort Knox, Kentucky. This course is an accelerated version of the two years of leadership development training Cadets receive in the Basic Course of ROTC (freshman & sophomore years on campus). By transforming themselves through this rigorous training, students will qualify for enrollment in the Army ROTC Advanced Course on campus, provided they have two years of college remaining (undergraduate or graduate).

**MSL 301 Adaptive Team Leadership**  
**[formerly MSG 301 Small Unit Tactics & Operations]****3 cr. Prerequisites: MSL 101, 102, 201, and 202 or**

**MSL 204. Corequisite: MSL 106.** Provides for the study, evaluation, and practice of the adaptive leadership model in order to acquire the same. The Leadership Development Program (LDP) is used to develop self-awareness, behavior modification, and critical thinking. Battle drills serve to assist in preparing the student/leader for Warrior Forge. Students conduct self-assessment of leadership style, develop personal fitness regimen, and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem-solving techniques. Students receive direct feedback on leadership abilities. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Fall semester. Restricted to contracted Military Science students.

**MSL 302 Applied Team Leadership**  
**[formerly MSG 302 Applied Leadership and Tactics Training]****3 cr. Prerequisite: MSL 301. Corequisite: MSL 106.**

Provides a forum in order to execute and evaluate the leadership skills and abilities developed in practical exercises, tactical scenarios, and mentorship. Evaluates the tactical, technical, and administrative skills and duties common to all branches of the Army. Develops leadership behaviors and the ability to function effectively in small unit operations. Examines the role communications, values, and ethics play in the leadership role. Topics include: ethical decision-making, considerations of others, spirituality in the military, and case studies of effective leaders. Explores the leader's role in planning, directing, and coordinating the efforts of individuals and small groups

in tactical missions. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Spring semester.

**MSL 305 Leadership Development & Assessment Course****[formerly MSG 398 Warrior Forge – Internship]****V1-6 cr. Prerequisite: Consent of instructor.**

Provides an environment in which to evaluate and enhance students' leadership abilities in a controlled and challenging environment. This serves as U.S. Army Cadet Command's flagship training and assessment exercise held at Fort Lewis, Washington each summer. Every Army ROTC Cadet hoping to pin-on the gold bar of an Army lieutenant must successfully complete Warrior Forge. After graduation, most attendees will go back to their colleges or universities to finish their degrees and then be commissioned as an Officer of the U.S. Army. Offered during Summer session.

**MSL 401 Adaptive Leadership**  
**[formerly MSG 401 The Army Officer: Roles & Responsibilities]****3 cr. Prerequisite: Consent of instructor.**

**Corequisite: MSL 106.** Develops proficiency in planning and executing complex operations, functioning as a member of a staff, and mentoring subordinates. Students explore training management, methods of effective team collaboration, and developmental counseling techniques, as well as the application of leadership principles and techniques involved in leading young men and women in today's Army. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Fall semester.

**MSL 402 Leadership in a Complex World**  
**[formerly MSG 402 Officership: Ethics & Justice in the Army]****3 cr. Prerequisite: Consent of instructor.**

**Corequisite: MSL 106.** Focuses on case study analysis of military law and practical exercises in establishing an ethical command climate. Future leaders must complete a semester-long Senior Leadership Project that requires them to plan, organize, collaborate, analyze, and demonstrate their leadership skills. The course includes understanding of the ethical components of the Uniform Code of Military Justice and civil rights legislation, study of the military justice system and Army law administrations, exploration of the dynamics of leading in complex situations, and preparation for transition from college student to commissioned Officer in the Army. This course

includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Spring semester.

**MSL 491 Leadership Special Topics**  
**[formerly MSG 491 Leadership Special Topics]**

**V1-6 cr.** Provides a course of study not required in any curriculum for which there is a particular one-time need. Serves the needs of the instructor and/or student(s) otherwise not covered in any other class or curriculum. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Spring, Summer, and Fall sessions.

**MSL 492 Military Science Independent Study**  
**[formerly MSG 492 Advanced Leadership Practicum]**

**V1-6 cr. Prerequisite: Consent of instructor.** Provides a study in military tactics, leadership, and organizational behavior. Students are closely supervised by military Officers in order to provide one-on-one developmental counseling and mentorship. Restricted to contracted Military Science students. This course includes a required field training component which includes physical fitness, orienteering, and other outdoor skills. Offered Fall, Spring, and Summer sessions.

## Music Education

### Music

**(406) 657-2350**

**MUSE 101 Fundamentals of Music for Elementary Teachers**

**[formerly MUSC 101 Fundamentals of Music for Elementary Teachers]**

**2 cr. (2 lab/wk) Prerequisite: Restricted to majors in Elementary Education and Special Education.**

Introduces basic concepts, skills and vocabularies in music appropriate for elementary teachers.

**MUSE 272 Techniques: Flute and Single Reed**  
**[formerly MUSC 250 Flute and Single Reed Pedagogy]**

**1 cr. (2 lab/wk) R-2. (odd Sp)** Prepares the prospective teacher with the knowledge of methods of instruction and problems of public school music in woodwind instruments; develops fundamental technical skills on flute, clarinet and saxophone. Includes laboratory experience for the student.

**MUSE 273 Techniques: Double Reed**  
**[formerly MUSC 251 Double Reed Pedagogy]**

**1 cr. (2 lab/wk) (odd Sp)** Prepares the prospective teacher with the knowledge of methods of instruction and problems of public school music in double reed instruments; develops fundamental technical skills on oboe and bassoon. Includes laboratory experience for the student.

**MUSE 274 Techniques: Upper Brass**  
**[formerly MUSC 252 High Brass Pedagogy]**

**1 cr. (2 lab/wk) (odd F)** Prepares the prospective teacher with the knowledge of methods of instruction and problems of public school music in high brass instruments; develops fundamental technical skills on trumpet and French horn. Includes laboratory experience for the student.

**MUSE 275 Techniques: Lower Brass**  
**[formerly MUSC 253 Low Brass Pedagogy]**

**1 cr. (2 lab/wk) (odd F)** Prepares the prospective teacher with the knowledge of methods of instruction and problems of public school music in low brass instruments; develops fundamental technical skills on trombone, bass trombone, euphonium, baritone and tuba. Includes laboratory experience for the student.

**MUSE 276 Techniques: Percussion**  
**[formerly MUSC 254 Percussion Pedagogy]**

**1 cr. (2 lab/wk) R-2. (even Sp)** Prepares the prospective teacher with the knowledge of methods of instruction and problems of public school music in the percussion area; develops fundamental technical skills in percussion instruments. Includes laboratory experience for the student.

**MUSE 278 Techniques: String Instrument**  
**[formerly MUSC 255 String Instrument Pedagogy]**

**1 cr. (2 lab/wk) R-2. (even Sp)** Prepares the prospective teacher with the knowledge of instruction and problems of public school music in the teaching of string instruments. Develops fundamental technical skills on string instruments. Includes laboratory experience for the student.

**MUSE 279 Techniques: Vocal**  
**[formerly MUSC 256 Vocal Pedagogy]**

**1 cr. (2 lab/wk) R-2. (even F)** Prepares the prospective teacher with the knowledge of instruction and problems of public school music in the vocal area. Develops fundamental technical skills in this area. Includes laboratory experience for the student.

**MUSE 330 Keyboard Pedagogy****[formerly MUSC 374 Piano Pedagogy I]**

**1 cr. (2 lab/wk) Prerequisite:** junior standing or consent of instructor. Preparation of advanced piano students for teaching of beginning pupils, privately and in groups. Includes a survey of materials and teaching methods appropriate for this level.

**MUSE 430 Keyboard Pedagogy II****[formerly MUSC 470 Piano Pedagogy II]**

**1 cr. (2 lab/wk) Prerequisite:** MUSE 330. Provides piano students with actual teaching situations for the practical application of principles studied in piano pedagogy. Includes supervised planning, presentation and evaluation of lessons.

**MUSE 431 Keyboard Pedagogy III****[formerly MUSC 471 Piano Pedagogy III]**

**1 cr. (2 lab/wk) Prerequisite:** MUSE 430. Continues actual teaching situations for the practical application of principles studied in piano pedagogy. Includes supervised planning, presentation and evaluation of lessons.

## Music

**(406) 657-2350**

**\* MUSI 101 Enjoyment of Music****[formerly MUSC 100 Music Appreciation]**

**3 cr. (F, Sp, Su)** Introduces methods of music understanding and perceptive listening. Examines the language and forms of music, plus the styles and genres of the Baroque, Classical, Romantic and Contemporary periods.

**MUSI 105 Music Theory I****[formerly MUSC 130 Music Theory I]**

**3 cr. Corequisites:** MUSI 135 and MUSI 140. (F)

The study and application of written harmony, keyboard harmony and analysis.

**MUSI 106 Music Theory II****[formerly MUSC 132 Music Theory II]**

**3 cr. Prerequisite:** MUSI 105. **Corequisites:** MUSI 136 and MUSI 141. (Sp) Continues the study and application of written harmony, keyboard harmony, and analysis.

**MUSI 108 Orchestra: MSUB****[formerly MUSC 161 Symphony Orchestra]**

**1 cr. (3 lab/wk) R-4.** Provides an opportunity for capable students to participate in the Billings Symphony. Registration by audition only.

**\* MUSI 114 Band: MSUB Symphonic****[formerly MUSC 160 Symphonic Band I]**

**1 cr. (3 lab/wk) R-4. (F, Sp)** Provides members an opportunity to perform wind band literature from all periods and styles.

**\* MUSI 131 Jazz Ensemble I: MSUB****[formerly MUSC 168 Jazz Ensemble I]**

**1 cr. (3 lab/wk) R. (F, Sp)** Provides members the opportunity to perform big band jazz literature from all periods and styles.

**MUSI 135 Keyboard Skills I****[formerly MUSC 125 Keyboard Harmony I]**

**1 cr. (3 lab/wk) Corequisite:** MUSI 105. (F)

Develops keyboard skills with an emphasis on theory, technique, sight reading, and piano repertoire for the non-keyboard music major.

**MUSI 136 Keyboard Skills II****[formerly MUSC 126 Keyboard Harmony II]**

**1 cr. (3 lab/wk) Corequisite:** MUSI 106. (Sp)

Continues the development of keyboard skills with an emphasis on theory, technique, sight reading, and piano repertoire for the non-keyboard music major.

**MUSI 140 Aural Perception I****[formerly MUSC 131 Aural Skills I]**

**1 cr. (2 lab/wk) (F)** Beginning ear training and sight singing.

**MUSI 141 Aural Perception II****[formerly MUSC 133 Aural Skills II]**

**1 cr. (2 lab/wk) Prerequisite:** MUSI 140. (Sp)

Continues the development of ear training and sight singing.

**\* MUSI 147 Choral Ensemble: University Chorus****[formerly MUSC 162 Concert Choir I]**

**1 cr. (3 lab/wk) R-4. (formerly A Capella Choir) (F, Sp)** Provides an opportunity for members to explore and express, through performance, choral music of all periods and styles of composition.

**MUSI 162A Chamber Ensembles: Singers****[formerly MUSC 165 Chamber Singers]**

**1 cr. (2 lab/wk) R. Corequisite:** MUSI 147. (F, Sp)

Members are selected through audition to study and present vocal chamber music selected from medieval to contemporary compositions.

**MUSI 162B Chamber Ensembles: Instrumental**  
[formerly MUSC 166 Small Ensemble-Instrumental]  
**1 cr. (2 lab/wk) R. (F, Sp)** Brass, Woodwind, String, Percussion, New Music. Offers experience in chamber music for various wind, string and percussion instrument combinations. Designed to improve individual performance skills as well as familiarizing students with outstanding music.

*Applied music courses (MUSI 195A-195P) are restricted to music majors.*

**MUSI 195A Applied Music I: Guitar**  
[formerly MUSC 104 Applied Guitar I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on guitar.

**MUSI 195B Applied Music I: Voice**  
[formerly MUSC 105 Applied Voice I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction in voice.

**MUSI 195C Applied Music I: Piano**  
[formerly MUSC 106 Applied Piano I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on piano.

**MUSI 195D Applied Music I: Flute**  
[formerly MUSC 107 Applied Flute I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on flute.

**MUSI 195E Applied Music I: Oboe**  
[formerly MUSC 108 Applied Oboe I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on oboe.

**MUSI 195F Applied Music I: Clarinet**  
[formerly MUSC 109 Applied Clarinet I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on clarinet.

**MUSI 195G Applied Music I: Saxophone**  
[formerly MUSC 110 Applied Saxophone I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on saxophone.

**MUSI 195H Applied Music I: Bassoon**  
[formerly MUSC 111 Applied Bassoon I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on bassoon.

**MUSI 195I Applied Music I: Horn**  
[formerly MUSC 112 Applied Horn I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on horn.

**MUSI 195J Applied Music I: Trumpet**  
[formerly MUSC 113 Applied Trumpet I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on trumpet.

**MUSI 195K Applied Music I: Trombone**  
[formerly MUSC 114 Applied Trombone I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on trombone.

**MUSI 195L Applied Music I: Euphonium**  
[MUSC 115 Applied Euphonium I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on euphonium.

**MUSI 195M Applied Music I: Tuba**  
[formerly MUSC 116 Applied Tuba I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on tuba.

**MUSI 195N Applied Music I: Violin/Viola**  
[formerly MUSC 117 Applied Violin or Viola I]  
**V1-4 cr. R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on violin or viola.

**MUSI 195O Applied Music I: Cello/Bass**  
[formerly MUSC 118 Applied Cello or Bass I]  
**V1-4 cr. R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on cello or bass.

**MUSI 195P Applied Music I: Percussion**  
[formerly MUSC 119 Applied Percussion I]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite: audition and/or permission of instructor. (F, Sp)** Provides the student with private instruction on percussion.



**MUSI 205 Music Theory III****[formerly MUSC 230 Music Theory III]****3 cr. Prerequisite:** MUSI 106. **Corequisite:** MUSI 240. **(F)** Continues the study and application of written harmony, keyboard harmony and analysis.**MUSI 206 Music Theory IV****[formerly MUSC 232 Music Theory IV]****3 cr. Prerequisite:** MUSI 205. **Corequisite:** MUSI 241. **(Sp)** Continues the study and application of written harmony, keyboard harmony and analysis.**\* MUSI 207 World Music****[formerly MUSC 150 Musics of the World]****3 cr. (F)** Introduces students to the uses and functions of music in various cultures. The style of music used and performance of music in selected cultures of Africa, Latin America, North America, Asia, the Middle East, as well as folk music of Europe will be explored.**MUSI 235 Keyboard Skills III****1 cr. (3 lab/wk) Corequisite:** MUSI 205. **(F)**

Develops advanced keyboard skills with an emphasis on score reading, repertoire, and accompanying.

**MUSI 236 Keyboard Skills IV****1 cr. (3 lab/wk) Corequisite:** MUSI 206. **(Sp)**

Continues the development of advanced keyboard skills with an emphasis on score reading, repertoire, and accompanying.

**MUSI 240 Aural Perception III****[formerly MUSC 231 Aural Skills III]****1 cr. (2 lab/wk) Prerequisite:** MUSI 141 or permission of instructor. **(F)** Continues the development of ear training and sight singing.**MUSI 241 Aural Perception IV****[formerly MUSC 233 Aural Skills IV]****1 cr. (2 lab/wk) Prerequisite:** MUSI 240. **(Sp)** Continues the development of ear training and sight singing.**MUSI 281 Diction I: English and Italian****2 cr. (F)** Uses the international phonetic alphabet to improve the singers' pronunciation in English and Italian vocal literature.**MUSI 282 Diction II: French and German****2 cr. (F)** Uses the international phonetic alphabet to improve the singers' pronunciation in French and German vocal literature**MUSI 294 Seminar/Workshop****[formerly MUSC 292 Seminar]****V1-3 cr. (F, Sp)** Provides students an opportunity to investigate intensively topics pertinent to the field of music.**MUSI 294 Seminar/Workshop****[formerly MUSC 293 Workshop]****V1-8 cr.** Provides an opportunity for experimental study in an area of music.**MUSI 298 Internship/Cooperative Education****[formerly MUSC 296 Cooperative Education/Internship]****V1-9 cr. (F, Sp)** Provides university credit for a sophomore work experience in the area of Music supervised by faculty. Learning agreement must be completed prior to registration (restricted).**MUSI 301 Music History I****[formerly MUSC 340 Music History: A Survey of Music and Its Development in Western Civilization to 1750]****3 cr. (even F)** Emphasis is given to an acquaintance with representative musical works and style, and to the understanding of musical concepts in the light of their historical background.**MUSI 302 Music History II****[formerly MUSC 341 Music History: A Survey of Music and Its Development in Western Civilization from 1750 to the Present]****3 cr. (odd Sp)** Emphasis is given to an acquaintance with representative works and an understanding of specific musical concepts in the light of their historical and general cultural content since 1750.**MUSI 312 Choir III: University Chorus****[formerly MUSC 362 Concert Choir II]****1 cr. (3 lab/wk) R-4. Prerequisite:** Consent of instructor. **(F, Sp)** Provides an opportunity for capable students to experience great music written for mixed voices and to develop their potential as members of choral groups.**MUSI 325 Jazz Chronicle****[formerly MUSC 343 History of Jazz]****3 cr.** Traces the history of America's only internationally recognized indigenous art form, jazz, from its roots in Africa to New Orleans and on to the contemporary sounds of today.

**MUSI 331 Jazz Ensemble II: MSUB**  
[formerly MUSC 368 Jazz Ensemble II]  
**1 cr. (3 lab/wk) R. Prerequisite:** Consent of instructor. (F, Sp) Provides members the opportunity to perform big band jazz literature from all periods and styles.

**MUSI 335 Instrumental Conducting**  
[formerly MUSC 351 Instrumental Conducting]  
**2 cr. Prerequisite:** MUSI 336. (Sp) Introduces the basic techniques of instrumental conducting. Continues emphasis placed on techniques previously covered in MUSI 336, including beat patterns, cues, releases, etc. Emphasis will also be on methodology including rehearsal techniques, ensemble organization, seating arrangements, score reading and band literature.

**MUSI 336 Choral Conducting**  
[formerly MUSC 350 Choral Conducting]  
**2 cr. Prerequisites:** MUSI 206 and MUSI 241. (even F) Introduces the basic techniques of choral conducting. Initial emphasis will be placed on the physical components of conducting (such as posture, beat patterns, preparations, cues, releases and expressive gestures) both with and without baton, as they relate directly to the musical score. Subsequent emphasis will be given to methodology, including rehearsal techniques, ensemble organization, tone/seating arrangements, score study, choral literature, and repertoire selection.

**MUSI 345 Music Improvisation**  
[formerly MUSC 345 Improvisation]  
**2 cr. Prerequisite:** Admission to upper division. (even F) Assists the student in developing the ability to extemporaneously create music using as a basis various styles of pre-existing melodic, rhythmic, harmonic, and stylistic materials.

**MUSI 362 Chamber Ensembles III: MSUB**  
[formerly MUSC 365 Chamber Singers]  
**1 cr. (2 lab/wk) R. Prerequisite:** 4 credits of MUSI 162A. **Corequisite:** MUSI 312. (F, Sp) A select group of singers chosen mainly for reading and singing ability through private audition, performing all styles of music from early Renaissance madrigals and motets to the Twentieth Century. Registration by audition only.

**MUSI 364 Symphonic Band**  
[formerly MUSC 360 Symphonic Band II]  
**1 cr. (3 lab/wk) R-4. Prerequisite:** Consent of instructor. (F, Sp) Provides members an opportunity to perform wind band literature for all periods and styles.

**MUSI 365 Symphony Orchestra**  
[formerly MUSC 361 Symphony Orchestra]  
**1 cr. (3 lab/wk) R-4. Prerequisite:** 4 credits of MUSI 108. Provides an opportunity for capable students to participate in the Billings Symphony. Registration by audition only.

**MUSI 368 Small Ensemble-Instrumental**  
[formerly MUSC 366 Small Ensemble-Instrumental]  
**1 cr. (2 lab/wk) R. Prerequisite:** 4 credits of MUSI 162B. (F, Sp) Brass, Woodwind, String, Percussion, New Music, Jazz. Offers experience in chamber music for various wind, string and percussion instrument combinations. Designed to improve individual performance skills as well as familiarizing students with outstanding music. Registration by audition only.

**MUSI 369 Intermediate Wind Ensemble**  
[formerly MUSC 369 Wind Ensemble]  
**1 cr. (2 lab/wk) R. (F, Sp) Corequisite:** MUSI 364. Provides members the opportunity to perform wind ensemble literature requiring from eight to 15 players. Registration by audition only. Instrumentation may vary.

*Applied music courses (MUSI 395A-395P) are restricted to music majors.*

**MUSI 395A Applied Music III: Guitar**  
[formerly MUSC 304 Applied Guitar II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on guitar.

**MUSI 395B Applied Music III: Voice**  
[formerly MUSC 305 Applied Voice II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction in voice.

**MUSI 395C Applied Music III: Piano**  
[formerly MUSC 306 Applied Piano II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on piano.

**MUSI 395D Applied Music III: Flute**  
[formerly MUSC 307 Applied Flute II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on flute.

**MUSI 395E Applied Music III: Oboe**  
[formerly MUSC 308 Applied Oboe II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on oboe.

**MUSI 395F Applied Music III: Clarinet**  
[formerly MUSC 309 Applied Clarinet II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on clarinet.

**MUSI 395G Applied Music III: Saxophone**  
[formerly MUSC 310 Applied Saxophone II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on saxophone.

**MUSI 395H Applied Music III: Bassoon**  
[formerly MUSC 311 Applied Bassoon II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on bassoon.

**MUSI 395I Applied Music III: Horn**  
[formerly MUSC 312 Applied Horn II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on horn.

**MUSI 395J Applied Music III: Trumpet**  
[formerly MUSC 313 Applied Trumpet II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on trumpet.

**MUSI 395K Applied Music III: Trombone**  
[formerly MUSC 314 Applied Trombone II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on trombone.

**MUSI 395L Applied Music III: Euphonium**  
[formerly MUSC 315 Applied Euphonium II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on euphonium.

**MUSI 395M Applied Music III: Tuba**  
[formerly MUSC 316 Applied Tuba II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on tuba.

**MUSI 395N Applied Music III: Violin/Viola**  
[formerly MUSC 317 Applied Violin or Viola II]  
**V1-4 cr. R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on violin or viola.

**MUSI 395O Applied Music III: Cello/Bass**  
[formerly MUSC 318 Applied Cello or Bass II]  
**V1-4 cr. R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on cello or bass.

**MUSI 395P Applied Music III: Percussion**  
[formerly MUSC 319 Applied Percussion II]  
**V1-4 cr. (V1-4 studio/wk) R-4. Prerequisite:** audition and/or permission of instructor and upper division status. (F, Sp) Provides the student with private instruction on percussion.

**MUSI 399 Junior Recital**  
[formerly MUSC 399 Junior Recital]  
**1 cr. Prerequisites:** Permission of instructor and successful admission to upper division status. (F, Sp)  
A pre-recital jury is required at least one month prior to the junior recital. Requires students to perform a full recital.

**MUSI 432 Keyboard Literature**  
[formerly MUSC 475 Keyboard Literature]  
**2 cr. Prerequisite:** MUSI 302. Surveys keyboard literature from the development of the Baroque era to the contemporary period.

**MUSI 438A Advanced Instrumental Studio Pedagogy and Literature: Guitar**  
**2 cr. (F)** Examines the solo, ensemble, and study literature for the guitar and explores the integration of this material with various pedagogical techniques.

**MUSI 438B Advanced Instrumental Studio Pedagogy and Literature: Flute and Single Reed**  
**2 cr. (F)** Examines the solo, ensemble, and study literature for the flute, clarinet, and saxophone and explores the integration of this material with various pedagogical techniques for each instrument.

**MUSI 438C Advanced Instrumental Studio  
Pedagogy and Literature: Double Reed**

**2 cr. (F)** Examines the solo, ensemble, and study literature for the oboe and bassoon and explores the integration of this material with various pedagogical techniques for each instrument.

**MUSI 438D Advanced Instrumental Studio  
Pedagogy and Literature: High Brass**

**2 cr. (F)** Examines the solo, ensemble, and study literature for the trumpet and horn and explores the integration of this material with various pedagogical techniques for each instrument.

**MUSI 438E Advanced Instrumental Studio  
Pedagogy and Literature: Low Brass**

**2 cr. (F)** Examines the solo, ensemble, and study literature for the trombone, euphonium, and tuba and explores the integration of this material with various pedagogical techniques for each instrument.

**MUSI 438F Advanced Instrumental Studio  
Pedagogy and Literature: Percussion**

**2 cr. (F)** Examines the solo, ensemble, and study literature for percussion instruments and explores the integration of this material with various pedagogical techniques for each instrument.

**MUSI 440 Orchestration**

**[formerly MUSC 460 Instrumentation and Arranging]**

**3 cr. Prerequisite: MUSI 206. (F)** Discussion of individual wind, string, percussion and keyboard instruments. Techniques of scoring for winds and voices. Analysis of orchestra.

**MUSI 442 Advanced Vocal Studio Pedagogy and Literature**

**2 cr. (F)** Examines the solo and study literature for voice and explores the integration of this material with various pedagogical techniques.

**MUSI 443 Music Form and Style**

**[formerly MUSC 440 Music Form and Style]**

**3 cr. Prerequisite: MUSI 206. (odd Sp)** Involves the study of form with particular attention to tonal structure and musical design in music of the common-practice era.

**MUSI 492 Independent Study**

**[formerly MUSC 491 Independent Study]**

**V1-5 cr. Prerequisites: consent of instructor and chairperson of department.** Provides outstanding students an individual opportunity to explore material not covered by regular music courses.

**MUSI 494 Seminar/Workshop**

**[formerly MUSC 492 Seminar]**

**V1-3 cr. (F, Sp)** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of music.

**MUSI 494 Seminar/Workshop**

**[formerly MUSC 493 Workshop]**

**V1-8 cr. (F, Sp)** Provides an opportunity for experimental study in an area of music.

**MUSI 498 Internship/Cooperative Education**

**[formerly MUSC 496 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a work experience in the area of Music, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**MUSI 499 Senior Recital**

**[formerly MUSC 499 Senior Recital]**

**1 cr. Prerequisites: Permission of instructor and successful completion of at least two semesters of upper division applied music. (F, Sp)** A pre-recital jury is required at least one month prior to the senior recital. Students enrolled in the Bachelor of Science in Education extended Major in music must present at least a half recital during their senior year.

## Music Technology

### Music

**(406) 657-2350**

**MUST 294 Seminar: Recording Technology**

**[formerly MUSC 292 Seminar]**

**2 cr. (F, Sp)** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of music.

**MUST 394 Seminar: Recording Technology**

**[formerly MUSC 492 Seminar]**

**2 cr.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of music.

## **Native American Studies**

### **Social Sciences and Cultural Studies**

**(406) 657-2311**

**\* NASX 105 Introduction to Native American Studies**

**[formerly NAMS 181 Introduction to Native American Studies]**

**3 cr.** Covers the scope and concepts of American Indian Studies. Provides a general overview of Indian culture, sociology, values, and history from both a national and regional perspective. Considers the interaction between Indian and non-Indian cultures.

**\* NASX 205 Native Americans in Contemporary Society**

**[formerly NAMS 211 Social Issues of the Native American]**

**3 cr.** Analytical and evaluative examination of the sociology of Native Americans. Emphasis on the issues raised by the interface of the Native American culture and values with the majority cultures of the United States, including problem areas such as alcoholism, alienation, education, health, crime, and intercultural relations.

**NASX 294 Seminar/Workshop**

**[formerly NAMS 292 Seminar]**

**V1-3 cr.** Provides freshmen and sophomores an opportunity to investigate intensively topics pertinent to the field of Native American Studies.

**NASX 294 Seminar/Workshop**

**[formerly NAMS 293 Workshop]**

**V1-3 cr.** Provides an opportunity for experimental study in an area of Native American Studies.

**NASX 298 Internship/Cooperative Education**

**[formerly NAMS 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Native American Studies supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**NASX 304 Native American Beliefs and Philosophy**  
**[formerly NAMS 413 Native American Philosophies and Religions]**

**3 cr. Prerequisite: at least one lower division course in Religion, Philosophy, or Native American Studies, or permission of instructor, or ENST 210.** Covers Native American philosophies and religions, including basic types and elements of traditional beliefs, ceremonies, holy objects, practitioners, visions, and world views; influence of Christianity through missionaries, federal Indian policy, nativistic movements, and syncretism; and contemporary perspectives such as the Native American Church, Sun Dance, God is Red theology, and revitalization. Special attention is paid to selected Indian tribes.

**NASX 332 Montana Indians: Cultures, Histories, Current Issues**

**[formerly NAMS 300 Montana Tribal Groups]**

**3 cr.** Provides a description and analysis of Montana tribes including tribal oral traditions, rock art, intercultural relations, culture change, the impact of Euro-American exploration, the fur trade, and early Westward expansion. Attention is given to the Indian wars, development of the reservation system, persistence and revival of Indian culture, civil rights, and urbanization.

**NASX 340 Native American Literature (crosslisted with LIT 305)**

**[formerly NAMS/ENGL 303 Literature of the American Indian]**

**3 cr. Prerequisite: at least one lower division course in English or Native American Studies, or permission of the instructor, or ENST 210.** Includes fictional and non-fictional oral, written, and visual literature pertaining to Native Americans and created by Indians and non-Indians including traditional literature such as legends, myths, teaching stories, humor, songs, orations, dramas, captivity accounts, sign language, winter counts, and hide paintings; contemporary literature such as poetry, songs, short stories, novels, humor, newspapers, theatricals, movies, television, and picture books; and translation, interpretation, and criticism, with insight drawn from Indian cultural traditions, the humanities, and the social sciences.

**NASX 350 Native Americans and the Environment**  
**[formerly NAMS 351 Native Americans and the Environment]**

**3 cr.** Examines traditional beliefs and attitudes of Native Americans with respect to the natural environment as expressed in speeches, stories, and prayer. Surveys traditional techniques and uses of land, plants, and animals. Contemporary environmental issues and actions confronting American Indians are also analyzed.

**NASX 379 Federal Indian Law**  
**[formerly NAMS/POLS 314 The Indian and the Law/PSCI 376 The Indian and the Law]**

**3 cr.** Covers the development of federal, state, and tribal statutes dealing with Native Americans; judicial decisions that have significant input on the legal status of Indian tribes and individuals; and federal agency policy which constitutes administrative law for tribes. Discusses the impact of Western European and United States jurisprudence on the history and culture of the Indian.

**NASX 406 History of American Indian Women**

**3 cr.** Provides a description and analysis of Indian women from oral histories, legends, and research literature. Attention is given to the roles and responsibilities of Indian women within tribal culture and in response to intercultural relations with other tribes and to Euro-American impact. The challenges and accomplishments of Indian women as leaders, homemakers, warriors, healers, and artists will be examined. Course materials will include discussion of the role of women in the evolution of bi-cultural living with particular concentration on the impact of the fur trade and education. Attention is paid to methods and findings derived from archeology, oral traditions, ethnographic studies, and historical sources.

**NASX 419 Federal Indian Policy (crosslisted with PSCI 419)**

**[formerly NAMS/POLS 495 Federal Indian Policy]**  
**3 cr. Prerequisites:** NASX 105 or NASX 205.

Explores the development of the United States' federal Indian policy from colonial times to the present. Follows the evolution of federal Indian policy as a result of tensions between assimilation and separation forces in general and of other legal, political, economic and social forces acting in the United States. Explores how contemporary American Indians fit into the American political system.

**NASX 439 American Indian Art (crosslisted with ARTH 439)**

**[formerly NAMS 439 Survey of American Indian Art]**

**3 cr.** Presents an overview and analysis of Native American art forms, techniques, and traditions. Background and interpretation of traditional and contemporary styles and symbols important to both tribal and individual expression. Includes discussion of tribal arts and crafts associations, markets and exhibitions, and federal laws.

**NASX 492 Independent Study**  
**[formerly NAMS 491 Independent Study]**

**V1-5 cr.** Provides an opportunity for students of superior academic standing to explore material not covered by the regular courses.

**NASX 494 Seminar/Workshop**  
**[formerly NAMS 492 Seminar]**

**V1-3 cr.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Native American Studies.

**NASX 494 Seminar/Workshop**  
**[formerly NAMS 493 Workshop]**

**V1-3 cr.** Provides an opportunity for experimental study in an area of Native American Studies.

**NASX 498 Internship/Cooperative Education**  
**[formerly NAMS 490 Native American Studies Internship]**

**V1-12 cr. Prerequisites:** consent of instructor and consent of chairperson of department. Provides outstanding students an individual opportunity to explore material not covered by regular Native American Studies courses. No more than 6 hours may be counted toward a Native American Studies minor.

**NASX 498 Internship/Cooperative Education**  
**[formerly NAMS 496 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a work experience in the area of Native American Studies supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Sustainable Energy

### City College

#### **NRGY 101 Introduction to Sustainable Energy** [formerly SET 110 Introduction to Sustainable Energy]

**3 cr. (3 lec/wk) (Sp)**

Provides an overview of sustainable energies including solar, wind, hydro, biomass, and geothermal. Students will learn the basic principles of each technology. Students will also investigate renewable resources and their associated technologies.

#### **NRGY 110 Fundamentals of Hydraulic/Pneumatic Systems**

[formerly SET 130 Fundamentals of Hydraulic/Pneumatic Systems]

**3 cr. (2 lec/2 lab/wk) Prerequisite: M 111.**

Introduces basic hydraulic concepts, formulas, and applications of hydraulic components used for directional, flow, and pressure control of circuits. Students will identify and explain safety rules, precautions, test procedures, common components, and operating principles for hydraulic and pneumatic systems commonly found in the energy industry.

#### **NRGY 120 Industrial Safety and Rigging** [formerly SET 150 Industrial Safety and Rigging]

**3 cr. (2 lec/2 lab/wk) (Sp)**

Provides an overview of safe industrial practices and basic rigging techniques. At completion of this course, students will have earned the OSHA 10 certification.

#### **NRGY 121 Climb Safety and Rigging**

**1 cr. (2 lab/wk) (F)**

Introduces students to the concept of rigging and basic skills needed for every rigging operation. The skills learned include determining the center of gravity, load balancing, operation of hoists, and use of slings to lift material. Hooks and eyebolts will also be discussed. Students will also learn climb safety and rescue techniques.

#### **NRGY 130 Fundamentals of Mechanical Systems** [formerly SET 120 Fundamentals of Mechanical Systems]

**3 cr. (3 lec/wk) (Sp)**

Explains energy industry mechanical systems at the component level. Topics covered include repairing a basic mechanical system, familiarity with basic tooling, and understanding gears and rotational relationships.

#### **NRGY 210 Wind Technician Safety**

[formerly SET 250 Wind Technician Safety]

**4 cr. (3 lec/2 lab/wk) Prerequisite: NRGY 120.**

Builds on safety topics covered in the Industrial Safety and Rigging course and focuses on safety requirements and techniques common in wind energy technician jobs.

#### **NRGY 220 Wind Turbine Equipment**

[formerly SET 252 Wind Turbine Equipment]

**3 cr. (2 lec/2 lab/wk) Prerequisite: NRGY 120.**

Introduces common wind turbine components and equipment. The mechanical systems that make up the subsystems of wind turbines will be covered in addition to structural characteristics and aerodynamic principles.

#### **NRGY 230 Wind Turbine Operations and Maintenance**

[formerly SET 254 Wind Turbine Operations and Maintenance]

**3 cr. (2 lec/2 lab/wk) Prerequisite: NRGY 120.**

Exposes students to real-world scenarios that may be encountered in the workplace. Practice of installation, operation, maintenance, troubleshooting, and repair of wind turbine electro-mechanical systems are included in this course.

#### **NRGY 235 Building Energy Efficiency**

**3 cr. (3 lec/wk) Prerequisite: NRGY 101. (F)**

Provides an overview of energy efficiency opportunities in residential buildings and prepares the student to take the National RESNET Home Energy Rater Exam. Provides familiarity with residential construction and basic energy terminology.

#### **NRGY 243 Fundamentals of Photovoltaic Design and Installation**

**3 cr. (2 lec/2 lab/wk) Prerequisite: NRGY 101 and ETEC 103. (F)**

Provides students with an introduction to the fundamental principles and technologies of solar energy systems. Emphasis on system design and installation, including site and resource assessment, load analysis, trouble shooting, and cost analysis. The material covered prepares students for a career in renewable energy or for installing a renewable energy system on their own homes. Solar hydronics will also be covered.

#### **NRGY 291 Special Topics**

**V1-3 cr. (1-3 lec/wk) (F)**

Provides experimental offerings in Sustainable Energy Technology.

**NRGY 298 Internship****3 cr. (V/wk) (F)**

Provides university credit for student work experience in the area of Sustainable Energy Technology. Learning agreement must be completed prior to registration (restricted).

**NRGY 299 Senior Capstone****3 cr. (3 lec/wk) Prerequisite: NRGY 101, ETEC 103, NRGY 243, and ELCT 241. (F)**

Provides hands-on experience in which the student, under supervision, applies the skills and knowledge presented thus far in the Sustainable Energy program. Students will participate in a sustainable energy technology design, build, and testing project of their choice. The instructor will coach students as they take a project from concept to a working product.

## Nursing

### City College

**NRSG 100 Introduction to Nursing****[formerly NURS 101 Introduction to Nursing]****1 cr. (1 lec/wk) (F, Sp, Su)**

Socializes student to the roles/functions/expectations of the nurse. This course provides an introduction to nursing history and current views of nursing as a discipline (including various types of nursing occupations and educational requirements). Scholastic expectations required to complete a program of study in nursing are introduced as well as professional expectations of the practicing nurse. The following core concepts related to nursing practice are presented: the caring nature of the nursing profession, the importance of critical thinking/clinical judgement, legal/ethical/cultural issues in nursing, the need to understand human motivation and behavior, and use of the nursing process.

**NRSG 130 Fundamentals of Nursing****[formerly NURS 230 Fundamentals of Nursing]****3 cr. (3 lec/wk) Prerequisite: Acceptance to PN program. Corequisite: NRSG 131. Offered ONLY Online. (F, Sp)**

Introduces learners to knowledge, basic clinical skills, and attitudes essential for the nursing role. The course approach presents concepts and behaviors of nursing roles within the context of the nursing process and multicultural, holistic healthcare. Emphasis is on theoretical and practical concepts of nursing skills required to meet the needs of patients in a variety of settings.

**NRSG 131 Fundamentals of Nursing Lab****[formerly NURS 231 Fundamentals of Nursing Lab]****3 cr. (6 lab/wk) Prerequisite: Acceptance to PN program. Corequisite: NRSG 130. (F, Sp)**

Performance of clinical skills is integrated into this lab using healthcare scenarios which focus on implementation of the nursing process, clinical decision making, and caring interventions in collaboration with the interdisciplinary team in a variety of healthcare settings.

**NRSG 135 Pharmacology for Practical Nurses****[formerly NURS 232 Pharmacology]****3 cr. (3 lec/wk) Corequisite: NRSG 136. Offered ONLY Online. (F, Sp)**

Introduces the student to the knowledge needed to provide safe nursing care to patients across the lifespan in the administration of medications. Content covered includes the basic principles of pharmacology such as pharmacokinetics, pharmacodynamics, medication interactions, potential adverse medication reactions, and pathophysiology of common disease processes. The emphasis is on patient-centered care utilizing the nursing process and incorporating evidence-based practice.

**NRSG 136 Pharmacology for Practical Nurses Lab****2 cr. (4 lab/wk) Corequisite: NRSG 135. (F, Sp)**

Integrates the knowledge of safe medication administration into a laboratory environment. This includes dosage calculation and safe administration of medications through a variety of appropriate routes, including intravenous therapy.

**NRSG 138 Gerontology for Nursing****[formerly NURS 234 Gerontology]****1 cr. (1 lec/wk) Prerequisite: Acceptance to PN program. Corequisites: NRSG 130, NRSG 131, NRSG 135, and NRSG 139. (F, Sp)**

Provides the student with introductory skills and knowledge needed in delivering nursing care to aging clients. Topics explored include current trends (including legal and ethical issues) in gerontological nursing, developmental stages and transitions associated with aging, expected age-related physiological changes and assessment findings, recognition and management of acute and chronic illnesses that commonly occur in the older adult population, promotion of health for the older adult client, and end-of-life issues and care.



**NRSG 139 Gerontology for Nursing Clinical**  
**[formerly NURS 235 Gerontology Clinical]**  
**1 cr. (3 clinical/wk) Prerequisite:** Acceptance to  
**PN program. Corequisites:** NRSG 130, NRSG 131,  
NRSG 135, and NRSG 138. (F, Sp)

Provides the student with introductory skills and knowledge needed in delivering nursing care to aging clients. Topics explored include current trends (including legal and ethical issues) in gerontological nursing, developmental stages and transitions associated with aging, expected age-related physiological changes and assessment findings, recognition and management of acute and chronic illnesses that commonly occur in the older adult population, promotion of health for the older adult client, and end-of-life issues and care.

**NRSG 140 Adult Health Nursing**  
**[formerly NURS 240 Core Concepts of Adult**  
**Nursing]**

**4 cr. (4 lec/wk) Corequisite:** NRSG 141. *Offered ONLY Online.* (F, Sp)

Builds upon the knowledge acquired in Fundamentals of Nursing. The focus is on safe, effective care environments, health promotion and maintenance, and psychosocial and physiological integrity of adults who are experiencing health interruptions in well-defined practice settings. Principles of pharmacology, cultural competency, gerontology, nutrition, end-of-life, and palliative care are integrated throughout the course.

**NRSG 141 Adult Health Nursing Clinical**  
**[formerly NURS 241 Core Concepts of Adult**  
**Nursing Clinical]**

**3 cr. (9 clinical/wk) Corequisite:** NRSG 140. (F, Sp)

Focuses on the implementation of the nursing process, professional behaviors, communication, clinical decision making, caring interventions, and collaboration in interdisciplinary practice to promote, maintain, and restore basic health in well-defined practice settings.

**NRSG 142 Nursing Care of Women and Children**  
**[formerly NURS 242 Core Concepts of**  
**Maternal/Child Nursing]**

**3 cr. (3 lec/wk) Corequisite:** NRSG 143. *Offered ONLY Online.* (F, Sp)

Introduces the student to the knowledge needed to provide safe nursing care for the female patient and family with regard to reproductive issues, including perinatal. Also included is the child patient and family regarding normal growth and development as well as common and chronic disease processes. Psychosocial aspects of care, legal and ethical issues, and cultural beliefs will be incorporated throughout. The emphasis

is on patient and family centered care utilizing evidence-based practice and effective interpersonal communication skills while functioning within an interdisciplinary team environment.

**NRSG 143 Nursing Care of Women and Children**  
**Clinical**

**[formerly NURS 243 Core Concepts of**  
**Maternal/Child Nursing Clinical]**

**1 cr. (3 clinical/wk) Corequisite:** NRSG 142. (F, Sp)

Integrates the knowledge of care for women, children, and families in a variety of clinical settings.

**NRSG 144 Core Concepts of Mental Health Nursing**  
**[formerly NURS 244 Core Concepts of Mental**  
**Health Nursing]**

**2 cr. (2 lec/wk) Prerequisite:** Acceptance into the  
**Practical Nursing program.** (F, Sp)

Examines the physiological, psychological, sociocultural, spiritual, and environmental factors associated with mental health/illness effecting individuals and families. Focus will be placed on basic concepts of psychiatric nursing, therapeutic modalities, as well as psychiatric disorders including psychopharmacological management.

**NRSG 148 Leadership Issues for Practical Nurses**  
**[formerly NURS 246 Leadership Issues]**

**2 cr. (2 lec/wk) Corequisite:** NRSG 149. *Offered ONLY Online.* (F, Sp)

Explores the legal and ethical principles of Practical Nursing leadership in providing safe, relationship-centered care. The concepts of accountability, fiscal responsibility in relation to patient outcomes, collaboration, effective communication, conflict management skills, critical thinking, delegation, principles of human caring, and prioritization are emphasized throughout the course. Application of concepts in the rural environment is included.

**NRSG 149 Leadership Issues for Practical Nurses**  
**Clinical**

**[formerly NURS 247 Leadership Issues Clinical]**

**1 cr. (3 clinical/wk) Corequisite:** NRSG 148. (F, Sp)

Integrates theory with implementation of basic leadership skills. Preceptor experiences are based on selected nursing needs in the local and rural communities with a focus on knowledge, skills, and attitudes of nursing leadership needed to provide high quality, holistic, safe nursing care.

**NRSG 152 Gerontology and Community Nursing**  
**2 cr. (2 lec/wk) Corequisite: NRSG 153. Offered ONLY Online. (F, Sp)**

Presents the knowledge, skills, and attitudes needed to provide high quality holistic nursing care for the geriatric client, as well as other vulnerable populations in the local and rural communities. The safe application of the nursing process in community based, patient-centered, interdisciplinary care environments is emphasized in order to promote patient well-being in regard to common acute and chronic health issues, including end-of-life and palliative care.

**NRSG 153 Gerontology and Community Nursing Clinical**

**2 cr. (6 clinical/wk) Corequisite: NRSG 152. (F, Sp)**

Integrates theory into the clinical setting. The emphasis is on promoting the highest level of health and wellness for common acute and chronic health issues for the geriatric and other vulnerable populations in local and rural communities.

**NRSG 214 Basic IV Therapy**

**[formerly NURS 214 Basic IV Therapy]**

**2 cr. (1 lec/2 lab/wk) Prerequisite: Student must be currently admitted to the Nursing program or presently an LPN or RN seeking IV certification. (F, Sp)**

Addresses administration of parenteral drugs and fluids by the intravenous route. Covers the nursing role and responsibility of intravenous therapy, the techniques of therapy, equipment selection, fluid and electrolyte balance, parenteral nutrition therapy, transfusion therapy, and special applications.

**NRSG 230 Nursing Pharmacology**

**3 cr. (3 lec/wk) Corequisite: NRSG 231. (F, Sp)**

Provides the student with an overview of pharmacology with an emphasis on the study of effects, interactions, and nursing considerations of pharmacologic agents on the client population across the lifespan. The course also explores the ethical, legal, cultural, and age implications of pharmacologic therapy across diverse populations and the lifespan.

**NRSG 231 Pharmacology for Nursing Lab**

**2 cr. (4 lec/wk) Corequisite: NRSG 230. (F, Sp)**

Focuses on the basic principles in providing safe medication administration, including intravenous therapy across diverse populations and the lifespan.

**NRSG 232 Foundations for Nursing**

**3 cr. (3 lec/wk) Corequisite: NRSG 233. (F, Sp)**

Provides opportunities to develop competencies necessary to meet the needs of individuals throughout

the lifespan in a safe, legal, and ethical manner, using the nursing process. Students learn concepts and skills necessary for maintaining standard precautions and physical and psychological safety, along with skills needed in therapeutic interventions. Students are introduced to the concepts of professional nursing, patient needs, safety, communication, teaching/learning, critical thinking, ethical-legal, rural nursing, cultural and ethnic diversity, and interdisciplinary patient-centered care.

**NRSG 233 Foundations of Nursing Lab**

**3 cr. (6 lab/wk) Corequisite: NRSG 232. (F, Sp)**

Focuses on psychomotor nursing skills needed to assist individuals in meeting basic human needs. Application of the nursing process and hands-on learning experiences for nursing skills, patient assessments, and basic therapeutic skills are practiced and demonstrated.

**NRSG 234 Adult Nursing I**

**3 cr. (3 lec/wk) Corequisite: NRSG 235. (F, Sp)**

Builds upon the knowledge and skills acquired in Foundations of Nursing and places them in the context of patient-centered care. Social, cultural, ethical, rural, and legal issues, as well as end-of-life and palliative care across diverse adult populations are introduced. Health promotion and prevention throughout the adult lifespan, with specific focus on the geriatric patient, are emphasized. Normal aging, health alterations associated with aging, and their implications are addressed.

**NRSG 235 Adult Nursing I Clinical**

**2 cr. (6 lab/wk) Corequisite: NRSG 234. (F, Sp)**

Introduces the student to nursing practice in care of the stable adult patient. This includes care of the adult in a variety of health care settings. Students utilize the nursing process to develop individualized plans of care to prevent illness, promote wellness, and maintain or restore health, based on patient needs and evidence based practice.

**NRSG 236 Health and Illness of Maternity Nursing**

**2 cr. (2 lec/wk) Corequisite: NRSG 237. (F, Sp)**

Applies holistic concepts to the professional nursing care of the childbearing family, including conception, prenatal, intrapartum, postpartum, and newborn care. Content addresses health and complex alterations; reproduction and menopause; nutrition; therapeutic communication; and ethical, legal, cultural, and evidence based practice.

**NRSG 237 Health and Illness of Maternal Nursing Clinical****1 cr. (3 lab/wk) Corequisite: NRSG 236. (F, Sp)**

Introduces the student to the role of the registered nurse in the care of the childbearing family. Students will utilize the nursing process to assess and develop individualized plans of care for mother and infant. Emphasis will be placed on patient education to promote healthy mother, infant, and childbearing family bonding.

**NRSG 244 Adult Nursing II****3 cr. (3 lec/wk) Corequisite: NRSG 245. (F, Sp)**

Builds upon previous knowledge of the nursing process and care of the patient experiencing acute and chronic disease alterations. Pathophysiologic processes are discussed as related to evidence-based nursing interventions. Students apply the nursing process, nutritional therapy, and pharmacological therapy utilizing interdisciplinary practice to promote, maintain, and restore health across the adult lifespan.

**NRSG 245 Adult Nursing II Clinical****2 cr. (4 lab/wk) Corequisite: NRSG 244. (F, Sp)**

Provides clinical experiences for the student to care for individuals and families experiencing acute health alterations and those associated with chronic disease processes. Students use the nursing process to systematically analyze information to plan and implement nursing interventions which are individualized and founded on evidence-based practice.

**NRSG 246 Health and Illness of Child and Family Nursing****2 cr. (2 lec/wk) Corequisite: NRSG 247. (F, Sp)**

Applies holistic concepts to the professional nursing care of children and their families in health, illness, end-of-life, and palliative care. Emphasis is placed on incorporating growth and development principles to facilitate positive health outcomes through health promotion, nutrition, and disease prevention.

**NRSG 247 Health and Illness of Child and Family Nursing Clinical****1 cr. (3 lab/wk) Corequisite: NRSG 246. (F, Sp)**

Utilizing the nursing process, students will provide nursing care to healthy and high-risk pediatric populations and their families experiencing disruptions in biological, psychological, social, cultural, and spiritual needs. Emphasis is also placed on health promotion, health maintenance, and therapeutic communication.

**NRSG 250 LPN to RN Transition****[formerly NURS 248 Transition to Registered Nursing]****3 cr. (2 lec/2 lab/wk) Prerequisite: LPN license and out of college 3 years or more. (F, Sp)**

Integrates the components of lifelong learning, adapting to change, critical thinking, nursing process, legal and ethical issues, math for meds, IV therapy, APA format, and skill review to “socialize” the student from the LPN/LVN to the Associate Degree RN.

**NRSG 252 Complex Care Maternal/Child Client [formerly NURS 252 Complex Care Needs of the Maternal/Child Client]****2 cr. (2 lec/wk) Prerequisite: Acceptance to ASN program. Corequisites: NRSG 253, NRSG 254, and NRSG 255. (F, Sp)**

Expands the knowledge base of the student to provide care to maternal/child clients experiencing acutely changing conditions in settings where outcome is less predictable. Topics include care of the client during childbirth, high-risk pregnancies, obstetrical emergencies, neonatal emergencies, and infants and children requiring complex collaborative care.

**NRSG 253 Complex Care Maternal/Child Client Clinical****[formerly NURS 253 Complex Care Needs of the Maternal/Child Client Clinical]****1 cr. (3 clinical/wk) Prerequisite: Acceptance to ASN program. Corequisites: NRSG 252, NRSG 254, and NRSG 255. (F, Sp)**

Expands the knowledge base of the student to provide care to maternal/child clients experiencing acutely changing conditions in settings where outcome is less predictable. Topics include care of the client during childbirth, high-risk pregnancies, obstetrical emergencies, neonatal emergencies, and infants and children requiring complex collaborative care.

**NRSG 254 Mental Health Concepts****[formerly NURS 254 Complex Care Needs-Mental Health Client]****3 cr. (3 lec/wk) Prerequisite: Acceptance to ASN program. Corequisite: NRSG 255. (F, Sp)**

Utilizing the basic nursing concepts of basic human needs, developmental theory, nursing process, therapeutic communication, and nursing interventions, the student will learn to promote and maintain health for clients and families experiencing mental health issues. The student will examine client responses to stressors across the life span. Tasks of biological-behavioral concepts in psychosocial nursing care, rural, and cultural impacts will be addressed.

**NRSG 255 Mental Health Concepts Clinical**  
**[formerly NURS 255 Complex Care Needs-Mental Health Client Clinical]**

**1 cr. (3 clinical/wk) Prerequisite:** Acceptance to ASN program. **Corequisite:** NRSG 254. (F, Sp)  
Applies the knowledge of psychiatric and mental health nursing. Students will have mental health focused clinical experiences in a variety of settings.

**NRSG 256 Pathophysiology**  
**[formerly NURS 250 Pathophysiology]**

**3 cr. (3 lec/wk) Prerequisite:** Acceptance into ASN program or consent of instructor. (F, Sp)  
Introduces the student to the basic principles and processes of pathophysiology, including cellular communication, genes and genetic disease, forms of cellular injury, fluid and electrolyte/acid base balance, immunity, stress coping and illness, and tumor biology. Pathophysiology of the most common alterations according to body systems will be discussed as well as the latest development in research and patient-centered nursing interventions.

**NRSG 259 Adult Nursing III**

**3 cr. (3 lec/wk) Corequisites:** NRSG 260 and NRSG 261. (F, Sp)  
Expands on the nursing role in care of patients with complex health alterations. Students utilize evidence-based, interdisciplinary interventions to meet patient and family needs.

**NRSG 260 Adult Nursing III Lab**

**1 cr. (2 lab/wk) Corequisites:** NRSG 259 and NRSG 261. (F, Sp)  
Utilizing previous knowledge, students are introduced to basic electrocardiogram interpretation, advanced concepts of perfusion, ventilation, and complex pharmacologic regimens.

**NRSG 261 Adult Nursing III Clinical**

**2 cr. (6 lab/wk) Corequisites:** NRSG 259 and NRSG 260. (F, Sp)  
Focuses on application of the nursing process and utilization of information to provide comprehensive nursing care to the acutely ill patient experiencing complex health alterations in a variety of settings. Emphasis is placed on prioritization of care and collaboration with other members of the interdisciplinary team to ensure optimal client care.

**NRSG 262 Complex Care Adult Client**  
**[formerly NURS 260 Complex Care Needs of the Adult Client]**

**2 cr. (2 lec/wk) Prerequisite:** Completion of 5<sup>th</sup> semester ASN coursework. **Corequisites:** NRSG 263, NRSG 266, and NRSG 267. (F, Sp)  
Expands previously learned concepts to prepare the student to provide nursing care to adult clients experiencing acutely changing conditions in settings where outcome is less predictable. Emphasis is placed on the nurse's response to emergent/life-threatening/rapidly changing conditions. Topics covered include collaborative therapeutic modalities related to acute/complex neurological, cardiac, respiratory, hematological, endocrinologic events, and shock, sepsis/SIRS, complex burns, etc.

**NRSG 263 Complex Care Adult Client Clinical**  
**[formerly NURS 261 Complex Care Needs of the Adult Client Clinical]**

**2 cr. (6 clinical/wk) Prerequisite:** Completion of 5<sup>th</sup> semester ASN coursework. **Corequisites:** NRSG 262, NRSG 266, and NRSG 267. (F, Sp)  
Expands previously learned concepts to prepare the student to provide nursing care to adult clients experiencing acutely changing conditions in settings where outcome is less predictable. Emphasis is placed on the nurse's response to emergent/life-threatening/rapidly changing conditions. Topics covered include collaborative therapeutic modalities related to acute/complex neurological, cardiac, respiratory, hematological, endocrinologic events, and shock, sepsis/SIRS, complex burns, etc.

**NRSG 265 Advanced Clinical Skills Lab**  
**[formerly NURS 262 Advanced Clinical Skills]**  
**1 cr. (2 lab/wk) Corequisites:** NRSG 262 and NRSG 266. (F, Sp)

Applies concepts from previous nursing courses to carry out complex nursing interventions. Topics covered include central venous therapy, parenteral nutrition, hemodynamic monitoring, advanced airway/ventilatory support, intracranial pressure monitoring, IV medication administration, high risk IV infusions, blood/blood product administration, conscious sedation, advanced wound care, etc.

**NRSG 266 Managing Client Care for the RN****[formerly NURS 264 Managing Client Care]****2 cr. (2 lec/wk) Corequisite: NRSG 267. (F, Sp)**

Examines concepts of leadership and management, emphasizing prioritization, delegation, and supervision of nursing care for patients across the lifespan. Topics also include communication techniques, legal and ethical issues, care of the culturally diverse patient, and utilizing change theory. Healthcare policy, finance, and regulatory environment issues are explored and applied to planning, collaborating, and coordinating care across the continuum.

**NRSG 267 Managing Client Care for the RN Clinical****[formerly NURS 265 Managing Client Care Clinical]****2 cr. (6 clinical/wk) Corequisite: NRSG 266. (F, Sp)**

Focuses on principles of nursing leadership and management in a variety of settings. Students apply knowledge to provide culturally competent, holistic interventions within the professional nursing role for individuals, communities, and families across the lifespan in this precepted clinical.

**NRSG 291 Special Topics****[formerly NURS 292 Seminar-Special Projects]****1-3 cr.**

Provides an opportunity for experimental study in an area of Nursing or Allied Health professions.

**NRSG 294 Seminar/Workshop****[formerly NURS 293 Workshop]****1-3 cr.**

Provides an opportunity for experimental study in an area of Nursing or Allied Health professions.

## Nursing

### Health Care Services (CAHP)

**NRSG 301 Nursing in the Community****5 cr. (5 lec/wk) Prerequisite: ASN coursework completed. Corequisite: NRSG 302. Offered ONLY Online. (Sp)**

Provides the student with an opportunity to apply the nursing process to the care of communities. The course explores concepts in population-focused interdisciplinary care, levels of prevention, and levels of practice (individual/family, systems, and communities). Health status indicators for the local community and the Healthy People 2020 national healthcare agenda are researched. Basic concepts of environmental health, emergency preparedness, economics, and epidemiology are discussed. Students explore community coalitions and work groups that interface with vulnerable, at-risk populations in the community.

**NRSG 302 Nursing in the Community – Clinical****1 cr. (15 clinical/wk) Prerequisite: ASN coursework completed. Corequisite: NRSG 301. Offered ONLY Online. (Sp)**

Provides a clinical experience in community health preceptor-based learning, a home visit program, and health promotion at community sites.

**NRSG 320 Nursing Informatics****3 cr. (3 lec/wk) Prerequisite: ASN coursework completed. Offered ONLY Online. (F)**

Introduces health informatics by focusing on applications relevant to the nursing profession. Emphasis will be placed on the integration of nursing science with computer technology and information science to support patient care and provide leadership within healthcare systems.

**NRSG 322 Health Promotion and Education****3 cr. (3 lec/wk) Prerequisite: ASN coursework completed. Offered ONLY Online. (F)**

Prepares the student to expand practice from illness to include wellness and health promotion, focusing on disease prevention and education. Course content will include theories of learning, assessment of learning needs, and developing and evaluating patient teaching strategies. Focus will be on wellness and health promotion interventions and education across the lifespan for all patient populations.

**NRSG 325 Health Assessment****3 cr. (3 lec/wk) Prerequisite: ASN coursework completed. Offered ONLY Online. (F)**

Prepares the learner to develop a nursing database and builds on the education and skills gained during previous course work. Learners will enhance their assessment techniques through learning experiences that focus on physical, developmental, emotional, psychosocial, cultural, spiritual, and functional assessment of patient wellbeing. The course emphasizes analysis, synthesis, and documentation of assessment data as a foundation for providing holistic clinical reasoning and nursing care.

**NRSG 326 Complex Healthcare Needs****3 cr. (3 lec/wk) Prerequisite: ASN coursework completed. Offered ONLY Online. (Sp)**

Examines client centered nursing care of individuals with multiple comorbidity health and illness needs. Applies clinical reasoning and evidence-based practice concepts from pathophysiological nursing. The impact of multiple comorbidity illness and injury of individuals and their families is examined.

**NRSG 344 Family Nursing****3 cr. (3 lec/wk) Prerequisite: ASN coursework completed. Offered ONLY Online. (Su)**

Applies the theories and models of family coping and adaptation by integrating the concepts into professional nursing care of the family unit. Apply these principles while caring for families, identify the strengths and weaknesses of the family unit, and predict how the family will cope in times of illness and wellness. The impact of genetic nursing on the family will be examined.

**NRSG 361 Global Nursing****3 cr. (3 lec/wk) Prerequisite: ASN coursework completed. Offered ONLY Online. (Su)**

Examines the foundations of healthcare policy, the financial structure of healthcare systems, and the regulatory environments that impact nursing practice and client care. This course will also analyze current and emerging global health priorities, including emerging infectious diseases, poverty, health inequity, health systems reforms, and major global initiatives for disease prevention and health promotion.

**NRSG 424 Nursing Research and Evidence-Based Practice****3 cr. (3 lec/wk) Prerequisite: ASN coursework completed. Offered ONLY Online. (Sp)**

Examines the research process and the translation of research into clinical practice. Students explore and evaluate current nursing evidence-based knowledge. Emphasis is placed on gaining competency in accessing and critically reading, evaluating, and applying research findings to clinical judgement and nursing practice utilizing evidence-based models.

**NRSG 463 Leadership and Management for the RN****5 cr. (5 lec/wk) Prerequisite: ASN coursework completed. Corequisite: NRSG 464. Offered ONLY Online. (Su)**

Examines the theory, research, and practical application of nursing leadership and the managing role of the leader within a variety of nursing practice settings. Concepts such as the leader and manager roles, healthcare organizations, care delivery strategies, managing resources, interpersonal and personal skills, and career management that were introduced at the ASN level are examined in depth in this course. Managerial concepts and leadership skills needed to promote high quality nursing care delivery and organizational effectiveness are examined. Emphasis is placed on applying leadership and management concepts to a complex healthcare system in various clinical settings.

**NRSG 464 Leadership and Management for the RN – Clinical****1 cr. (15 clinical/wk) Prerequisite: ASN coursework completed. Corequisite: NRSG 463. Offered ONLY Online. (Su)**

Enables the student to further develop leadership abilities, communication, critical thinking skills, and decision-making in the role of nurse leader and manager in a variety of settings.

## Networking Technology Systems City College

**NTS 104 CCNA 1: Intro to Networks**  
[formerly CST 170 Introduction to Internetworking and Cabling]

**4 cr. (2 lec/4 lab/wk) Prerequisite:** CAPP 120 or Instructor Approval.

Provides students in the first of four semester courses with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment or further education and training in the computer networking field. Covers the following networking topics and skills: OSI model and industry standards, network topologies, IP addressing including subnet masks, networking components, basic network design, beginning router configurations, and routed and routing protocols.

**NTS 105 CCNA 2: Routing & Switching Essentials**  
[formerly CST 172 Introduction to IP Routing]

**4 cr. (2 lec/4 lab/wk) Prerequisite:** NTS 104.

Teaches students the skills they will need to design, build, and maintain small to medium size networks. The focus of this course is basic configuration of routers into small networks.

**NTS 204 CCNA 3: Scaling Networks**  
[formerly CST 174 Advanced Routing and Ethernet Switching]

**4 cr. (2 lec/4 lab/wk) Prerequisite:** NTS 105.

Teaches students the skills they will need to design, build, and maintain small to medium size networks. The focus of this course is the integration of routers and switches into small networks.

**NTS 205 CCNA 4: Connecting Networks**  
[formerly CST 176 Wide Area Networking]

**4 cr. (2 lec/2 lab/wk) Prerequisite:** NTS 204.

Teaches students the skills they need to design, build, and maintain small to medium size networks. The focus of this course is configuring routers and small networks into WANs (wide area networks).

## Nutrition

**Biological & Physical Sciences, (406)**  
**657–2341**

**Health & Human Performance, (406)**  
**657–2370**

**NUTR 121 Clinical Human Nutrition**  
[formerly BIOL 104 Nutrition for Health Careers]

**2 cr. (F, Sp, Su)** Introduces the importance of a nutritious diet in the maintenance and promotion of health. Emphasizes clinical aspects of human nutrition and appropriate uses of diet therapy in the clinical setting. Designed for students in health care pathways. Restricted to ASN/PN majors at MSUB City College.

**NUTR 221 Basic Human Nutrition**  
[formerly BIOL 221 Human Nutrition]

**3 cr. Prerequisites:** CHMY 121 and one General Education course chosen from the Life Sciences category (BIOB 121 or BIOB 123 are preferable). **Recommended:** CHMY 123. (F, Sp) Includes the principles of adequate diets in human nutrition, which involves carbohydrates, lipids, proteins, vitamins, minerals, absorption, digestion, metabolism, and energy utilization as they relate to health and food consumption at different stages of the life cycle. This is primarily a course for health science majors.

**NUTR 411 Nutrition for Sports and Exercise**  
[formerly HHP 432 Nutrition in Health and Human Performance]

**3 cr. Prerequisite:** KIN 105/106, NUTR 221. (F, Sp) Emphasizes nutrition as it applies to fitness, training, and athletic performance. Topics include macro- and micronutrient requirements and dietary recommendations, energy metabolism, anthropometry, body weight issues, increased nutrient needs during training and competition, and nutritional ergogenics. Application of concepts is reinforced in a nutritional assessment of a volunteer student athlete and educational video project.

## Pharmacy City College

### **PHAR 100 Introduction to Pharmacy Practice for Technicians**

**3 cr. (3 lec/wk) Prerequisite:** Admission to Pharm Tech program. (F)

Examines general aspects of the profession, including types of pharmacy practice, pharmacy law, and regulations. Students will learn the various job duties as well as educational requirements, registration, and licensing of pharmacists and pharmacy technicians.

### **PHAR 101 Pharmacy Calculations**

**3 cr. (3 lec/wk) Prerequisite:** Admission to Pharm Tech program. (F)

Prepares students for calculations used in pharmacy practice. This course reviews various systems of weights and measures (metric, apothecary, household), conversions between these systems, ratio/proportions, dosage determinations, percentage preparations, reducing and enlarging formulas, dilution, concentration, alligation, flow rates, international time, temperature measurements, compounding formulas, and business math.

### **PHAR 102 Pharmacology for Technicians**

**6 cr. (6 lec/wk) Prerequisite:** Admission to Pharm Tech program. (F)

Introduces students to the general principles of pharmacology. Drugs are discussed in the context of drug classes, mechanisms of action, disease types, and body systems. The goal is to provide the student with sufficient background information so that the student will be able to play a key role in avoiding dispensing errors. Although emphasis will be given to the approximately 200 most commonly prescribed drugs, many more drugs will be discussed during the semester.

### **PHAR 104 Pharmacy Dispensing Lab**

**3 cr. (6 lab/wk) Prerequisite:** Admission to Pharm Tech program. (F)

Provides hands-on training in medication dispensing, non-sterile compounding, and sterile product preparation, without impact or potential for impact on patients. It also continues to build upon the knowledge attained in previous courses, allowing the student to use that knowledge in a practical manner. The course explores the day-to-day operations of both retail and hospital pharmacy. Students will continue to build communication skills through various means. While each skill may be taught in isolation, by the end of the

lab component, students will perform each skill in a sequential manner the way the skill is performed in a pharmacy.

### **PHAR 120 Medication Safety**

**3 cr. (3 lec/wk) Prerequisites:** PHAR 100, PHAR 101, PHAR 102, PHAR 104 and second semester standing. (Sp)

Examines why medication errors occur, what is being done about errors, and what can be done in the future. Includes medication safety, quality assurance, and quality improvement topics.

### **PHAR 121 Preparation for the PTCB Exam**

**1 cr. (1 lec/wk) Prerequisites:** PHAR 100, PHAR 101, PHAR 102, PHAR 104 and second semester standing. (Sp)

Assists students in preparing for the Pharmacy Technician Certification Board's national exam (PTCE). Students must successfully complete a national certification test to become a registered pharmacy technician in the State of Montana. The PTCE is the most recognized national certification exam in the U.S. and students must take this exam as one of the criteria for completing City College's Pharmacy Technician training program. Students will learn strategies for test taking and review topics covered on the test as outlined by the PTCB.

### **PHAR 198 Internship: Pharmacy**

**8 cr. (24 lab/wk) Prerequisites:** PHAR 100, PHAR 101, PHAR 102, PHAR 104 and second semester standing. (Sp)

Provides students the opportunity to participate in training and experience in a variety of hospital and community pharmacy settings under supervision of a pharmacist. Students' experiential activities are performed in at least two different types of contemporary pharmacy settings, one of which must be a dispensing pharmacy (e.g., hospital, community, etc.). This experience will emphasize practical experience in outpatient dispensing, inpatient dispensing, unit-dose systems, IV admixture systems, bulk and sterile compounding, purchasing and inventory control, and effective communication. It is the final preparation for entering the workforce as a pharmacy technician.



## Philosophy

### English, Philosophy & Modern Languages

(406) 657-2348

**\* PHL 110 Introduction to Ethics: Problems of Good and Evil**  
[formerly PHIL 115 Ethics]

**3 cr. (F, Sp)** Explores canonical moral theories and contemporary moral problems. Students are invited to examine a variety of moral viewpoints, including the strengths and weaknesses of each, and to critically examine their own moral commitments. Coursework explores controversial issues such as abortion, animal rights, sexism, poverty, euthanasia, environment, and capital punishment.

**\* PHL 111 Philosophies of Life**  
[formerly PHIL 117 Philosophies of Life]

**3 cr. (F, Sp)** Explores how philosophy shapes our lives. This course serves as an introduction to core philosophical themes and thinkers from a variety of perspectives. Things to be pondered might include the meaning of life, justice, skepticism, and our place in the world.

**PHL 234 Introduction to Logic: Applied Logic**  
[formerly PHIL 221 Critical Thinking]

**3 cr.** Distinguishes between different forms of arguments and exposes a variety of common fallacies. Students will learn to analyze the components of arguments, distinguish different forms of argumentation, assess claims, and think critically about such common cultural expressions as advertisements, political rhetoric, and news reports.

**\* PHL 254 People and Politics**

**3 cr. (3 lec/wk) (F)** Examines a number of the main figures, texts, and ideas in the history of western political thought, with an emphasis on the development of democracy. Analyzes the significance of issues like rights, freedoms, equality, justice, the legitimacy of the state, and the sovereign.

**PHL 265 Studies in the History of Philosophy**  
[formerly PHIL 300 Studies in the History of Philosophy]

**3 cr. Prerequisite: one course in philosophy. (every second Sp)** Explores the philosophical developments during several of the following eras (to be announced each time the course is offered): Ancient, Medieval and Renaissance, Modern, 19<sup>th</sup> Century, and 20<sup>th</sup> Century. Course is an introduction and survey of the major philosophical figures and movements that mark each time period.

**\* PHL 271 Indian Philosophies and Religions**  
[formerly PHIL 233 Philosophies and Religions of India]

**3 cr. (F)** Explores, through a comparative lens, the philosophies and religions of India, including such topics as Hinduism, Buddhism, mythology, art, ethics, and religious exemplars, as well as contemporary issues such as gender relations, attitudes toward nature, and the place of nonhuman animals. Interactive and rooted in critical thinking, this course invites students to compare their own worldview with philosophical and spiritual worldviews of India.

**\* PHL 272 Chinese Philosophies and Religions**  
[formerly PHIL 234 Philosophies and Religions of China, Tibet, and Japan]

**3 cr. (Sp)** Explores the philosophies and religions of China, including such topics as Daoism, Confucianism, mythology, art, ethics, and religious exemplars, as well as contemporary issues such as gender relations, attitudes toward nature, and the place of nonhuman animals. Interactive and rooted in critical thinking, this course invites students to compare their own worldview with philosophical and spiritual worldviews of China.

**PHL 294 Seminar/Workshop**  
[formerly PHIL 292 Seminar]

**V1-3 cr.** Provides an opportunity to intensively investigate specific topics pertinent to fields of Philosophy and/or Religious Studies, such as Islam, Philosophy of Science, Sacred Texts and the Natural World, Buddhism, Philosophies of Love, Feminist Philosophy, Existentialism, Phenomenology, and Ideas that Rocked the 20<sup>th</sup> Century.

**PHL 320 Philosophy and Business Ethics**  
[formerly PHIL 314 Business Ethics]

**3 cr. (every second F)** Explores complex moral dilemmas facing individuals in business and the ethical problems of business in society. Explores theories and case studies to analyze the way that justice, human rights, and the social good are critical to business.

**PHL 324 Nature, Culture, Ethics**

**3 cr. (3 lec/wk) (Sp)** Examines how humans understand and relate to the natural world. Critical and comparative in nature, students explore such topics as contemporary environmental issues, important movements and organizations, tactics, theories, and the contributions of key individuals, with an eye to examining the environmental impact of our lifestyles.

**PHL 326 Death, Dying and Medical Ethics**  
[formerly PHIL 301 Death, Dying and Medical Ethics]

**3 cr. Prerequisite: consent of instructor. (every second Sp)** Explores issues involving medicine, technology, and the law, and the host of ethical concerns that accompany them, such as justice, personhood, death, experimentation, medical practice, and the value of life. These will be examined from as many sides as possible, weighing the reasons people have for believing them.

**PHL 364 Great Figures and Ideas**  
[formerly PHIL 360 Great Figures in Philosophy and Religion]

**3 cr. (alternating F)** Examines the lives and works of foundational thinkers and what they have contributed to the philosophical tradition. Possibilities include Gandhi, Kant, The Enlightenment, Pre-Socratics, and Sartre.

**PHL 375 Women, Philosophy and Religion**  
[formerly PHIL 365 Women, Philosophy, and Religions]

**3 cr. Prerequisite: A course in religious studies or consent of instructor. (alternating F)** Explores topics such as violence, gender constructs, the media, sexism, power structures, ecofeminism, and controversial contemporary issues in philosophy and religion. Rooted in critical analysis and class discussion, coursework encourages students to examine sexism and equality in our culture and in their own lives.

**PHL 492 Independent Study**  
[formerly PHIL 491 Independent Study]

**V1-5 cr.** Provides students an opportunity to research subjects in Philosophy and Religious Studies which are not explored in regular courses.

**PHL 494 Seminar/Workshop**  
[formerly PHIL 492 Seminar]

**V1-3 cr.** Provides an opportunity to intensively investigate specific topics pertinent to fields of Philosophy and/or Religious Studies, such as Islam, Philosophy of Science, Sacred Texts and the Natural World, Buddhism, Philosophies of Love, Feminist Philosophy, Existentialism, Phenomenology, and Ideas that Rocked the 20<sup>th</sup> Century.

**Photography****Art****(406) 657-2324****\* PHOT 154 Exploring Digital Photography**

**3 cr. (6 stu/wk) (Sp, Su)** Introduces technical and aesthetic ways of creating digital photographic images. Emphasis is on the production of photographic images, from acquiring them with digital cameras to using computer software for manipulating digital images. Instructor and peer critique of student work is an integral part of the course.

**Physics****Biological & Physical Sciences****(406) 657-2341****\* PHSX 103 Our Physical World****[formerly PHYS 101 Earth, Air, Fire & Water]**

**3 cr. Prerequisite: M 095. Corequisite: PHSX 104. (F, Sp, Su)** Concentrates on fundamental ideas of physics: energy, forces, and conservation laws. Helps students understand basic principles which underlie and explain all diverse phenomena and structures of the physical world. Emphasizes conceptual rather than mathematical treatment; however, basic algebra skills are required.

**\* PHSX 104 Our Physical World Laboratory****[formerly PHYS 102 Earth, Air, Fire & Water Lab]**

**1 cr. Corequisite: PHSX 103. (F, Su)** Examines and analyzes the immediate physical environment in terms of fundamental principles through data collection, analysis, and the formation of scientifically valid conclusions. Develops an appreciation for the simplicity of basic physical laws and the broad range of phenomena which can be explained by them.

**\* PHSX 105 Fundamentals of Physical Science**

[formerly PSSC 101 The Physical World Around Us]

**3 cr. Prerequisite:** M 095. **Corequisite:** PHSX 106.

**(Sp)** Introduces students to the fundamental ideas of Chemistry, Physics and Earth Science and their roles in our understanding of the world, and explores the impact of each on our society. Emphasizes conceptual rather than mathematical treatment; however, basic algebra skills are required. Lab required.

**\* PHSX 106 Fundamentals of Physical Science Lab**  
[formerly PSSC 102 The Physical World Around Us Lab]

**1 cr. (Sp)** Enhances the lecture material of PHSX 105 through the usage of experiential activities.

**\* PHSX 205 College Physics I**

[formerly PHYS 110 College Physics I]

**3 cr. Prerequisite:** M 122. **Corequisite:** PHSX 206.

**(F)** Presents an algebra-based treatment of introductory physics covering vector analysis, Newton's Laws of Motion, conservation laws, bulk properties of matter, fluid mechanics, and wave motion. This is the first semester of a two-semester sequence. Students may receive credit for only one introductory sequence: PHSX 205-207 or PHSX 220-232.

**\* PHSX 206 College Physics I Laboratory**

[formerly PHYS 111 College Physics I Lab]

**1 cr. Prerequisite:** M 122. **Corequisite:** PHSX 205.

**(F)** Laboratory to complement the lecture in PHSX 205.

**PHSX 207 College Physics II**

[formerly PHYS 120 College Physics II]

**3 cr. Prerequisite:** PHSX 205 and PHSX 206. **(Sp)**

Presents continuation of PHSX 205 with a discussion of thermodynamics, electricity and magnetism, electric circuits, and the behavior and properties of light (with an emphasis on optical applications). This is the second semester of a two-semester sequence. Students may receive credit for only one introductory sequence: PHSX 205-207 or PHSX 220-232. Lab required.

**PHSX 208 College Physics II Laboratory**

[formerly PHYS 121 College Physics II Lab]

**1 cr. Prerequisites:** PHSX 205 and PHSX 206. **(Sp)**

Complements the lecture in PHSX 207 with emphasis on electricity, magnetism, and thermodynamics.

**PHSX 220 Physics I**

[formerly PHYS 210 University Physics I]

**3 cr. Prerequisite:** Or concurrent enrollment in M

**171. Corequisite:** PHSX 221. **(F)** Presents calculus-based treatment of introductory physics covering vector analysis, Newton's Laws of Motion, conservation laws, bulk properties of matter, fluid dynamics, and wave motion. This is the first semester of a two-semester sequence. Students may receive credit for only one introductory sequence: PHSX 205-207 or PHSX 220-232.

**PHSX 221 Physics I Laboratory**

[formerly PHYS 211 University Physics I Lab]

**1 cr. Corequisite:** PHSX 220. **(F)** Laboratory to complement the lecture in PHSX 220.

**PHSX 232 Physics II and Thermo**

[formerly PHYS 220 University Physics II]

**3 cr. Prerequisite:** M 171, PHSX 220, PHSX 221.

**Corequisite:** PHSX 233. **(Sp)** Presents a continuation of the calculus-based treatment of physics with a discussion of thermodynamics, electricity and magnetism, electric circuits, and the behavior and properties of light. Students may receive credit for only one introductory sequence: PHSX 205-207 or PHSX 220-232.

**PHSX 233 Physics II and Thermo Laboratory**

[formerly PHYS 221 University Physics II Lab]

**1 cr. Corequisite:** PHSX 232. **(Sp)** Laboratory to complement the lecture in PHSX 232.

**PHSX 343 Modern Physics**

[formerly PHYS 230 Modern Physics]

**3 cr. Prerequisite:** PHSX 232. **(even F)** Presents the fundamentals of relativity and quantum mechanics with an emphasis on developing the mathematical tools necessary for coordinate transformations, second order partial differential equations, matrices, eigenvalues, and eigenvectors.

**PHSX 344 Modern Physics Lab**

[formerly PHYS 231 Modern Physics Lab]

**1 cr. Prerequisite:** PHSX 232. **Corequisite:** PHSX 343. **(even F)** Presents laboratory exercises to complement the lecture in PHSX 343.

**PHSX 391 Special Topics**

[formerly PHYS 350 Advanced Topics I]

**3 cr. Prerequisite:** PHSX 343. Designed to serve the needs of students who are interested in continued study in physics beyond the introductory level. The course will be devoted to an in-depth study of one of the following topics: electricity and magnetism, classical mechanics, or quantum mechanics.

**PHSX 490 Undergraduate Research**

**V1-6 cr. Prerequisite: Junior standing or consent of instructor.** Provides students the opportunity to conduct a research project under the supervision of a faculty member, including library and experimental research as appropriate, analysis of the results, and the submission of a formal research report upon completion of the project.

**PHSX 491 Special Topics**

**[formerly PHYS 450 Advanced Topics II]**

**3 cr. Prerequisite: PHSX 391 in the area to be continued.** Continues a topic covered in PHSX 391. The follow-up for electricity and magnetism will be electromagnetic wave theory; for classical mechanics will be fluid dynamics; for quantum mechanics will be further analysis of more complicated atomic systems and a study of Dirac's matrix representation of the Schrodinger equation.

**PHSX 492 Independent Study**

**[formerly PHYS 491 Independent Study]**

**V1-4 cr. Prerequisites: consent of instructor and department chairperson.** Designed to provide the student with the opportunity to study any special aspect of physics which is not offered directly as a course.

**PHSX 494 Seminar/Workshop**

**[formerly PHYS 492 Seminar]**

**V1-3 cr. Prerequisites: major or minor in one of the natural sciences and consent of instructor.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Physics.

**PHSX 494 Seminar/Workshop**

**[formerly PHYS 493 Workshop]**

**V1-4 cr. Prerequisite: consent of instructor.** Provides an opportunity for experimental study in an area of Physics.

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**PHYS 240 Electronics Instrumentation**

**4 cr. (Lec. 3; Lab 1).** Presents the basics of circuit design and analysis to develop an understanding of the behavior of electric circuits. The remainder of the course will be devoted to the use of integrated circuit chips in the construction of filters, amplifiers and logic circuits. Lab required.

**Process Plant****City College****PPT 101 Fundamentals of Processing Technology Lecture**

**4 cr. (4 lec/wk)**

Introduces the student to the fundamentals of process/refinery technology. Areas covered are the mechanics of fluids, hydrocarbons, gases, heat, and chemistry. The student realizes how each plays a significant role in the refining distillation process.

**PPT 102 Fundamentals of Process Technology Laboratory**

**1 cr. (2 lab/wk) Corequisite: PPT 101.**

Provides students exposure to major concepts of industry through hands-on laboratory investigations and application of principles learned in PPT 101.

**PPT 120 Environmental Awareness**

**2 cr. (2 lec/wk)**

Provides the student with the history behind certain environmental policies, the creation of OSHA, and key environmental issues. Provides learning in treatment processes, waste water units, vapor recovery systems, cleanup, and an overview of the specialty equipment necessary for an ecologically sound process plant.

**PPT 130 Process Diagrams for Process Technology**

**2 cr. (1 lec/2 lab/wk)**

Provides the student with an introduction in the use of process flow and instrument drawings. Upon completion of this course, students will be familiar with using P&ID (Process and Instrument Drawings) drawings in the course of their work as process technicians. In addition, students will obtain the skills necessary to produce process flow diagrams.

**PPT 135 Instrument and Control Systems Lecture**

**4 cr. (4 lec/wk) Prerequisites: PPT 101 & 130, TRID 185.**

Familiarizes the student with the vocabulary surrounding the instrument and control field as well as examining the function of each instrument. The topics of process measurements, analytical instrumentation, process controls, and instrument systems are also covered in this course.

**PPT 136 Instrument and Control Systems Laboratory**

**1 cr. (2 lab/wk) Corequisite: PPT 135.**

Provides students exposure to major concepts of industry through hands-on laboratory investigations and application of principles learned in PPT 135.

**PPT 140 Brewing Process Technology****2 cr. (1 lec/2 lab/wk) (Sp)**

Introduces the student to actual brewing processes, taking an in-depth look at each process, unit variables, equipment design and function, process control methodologies, and unit specific operating and safety considerations. Various types of equipment are discussed, including heaters, coolers, pumps, filters, fermentation reactors, distillation columns, reboilers, and condensers. The course is designed to provide classroom time balanced with hands-on review of the various processes.

**PPT 151 Process Plant Safety I****2 cr. (2 lec/wk)**

Examines the regulatory safety programs instituted by OSHA and other regulatory agencies which are specific to the processing industry. Covers a variety of topics such as hazards safety, personal protective equipment, emergency response and safe work practices.

**PPT 161 Process Plant Safety II****2 cr. (1 lec/2 lab/wk) Prerequisite: PPT 151.**

Provides the student with detailed instruction in the field of safety and health within the Process industry. In this course, the student will complete an in-depth study in the use of gas detection equipment, the use of the permitting system including lock out/tag out, the use of OSHA logs, the use of advanced safety equipment, and study the importance of industrial hygiene in an industrial setting.

**PPT 175 Process Plant Sciences Lecture****4 cr. (4 lec/wk) Prerequisite: PPT 101.**

Provides the fundamentals necessary for an in-depth look at the distillation process. Examines the concepts of heat and thermodynamics, as well as the chemical bonds, organic chemistry, the periodic table and hydrocarbon concepts. Gives students the necessary tools for a better understanding of the process taking place in the refining and power industries.

**PPT 176 Process Plant Sciences Laboratory****1 cr. (2 lab/wk) Corequisite: PPT 175.**

Provides students exposure to major concepts of industry through hands-on laboratory investigations and application of principles learned in PPT 175.

**PPT 207 Boilers, Accessories and Basic Operations****3 cr. (2 lec/2 lab/wk)**

Offers an introduction to boiler equipment, controls, and systems. Instruction includes the function and operation of all major components and control devices, common troubleshooting problems, and common maintenance concerns.

**PPT 208 Equipment and Operations Laboratory****2 cr. (4 lab/wk) Corequisite: PPT 210.**

Provides students exposure to major concepts of industry through hands-on laboratory investigations and application of principles learned in PPT 210.

**PPT 210 Equipment and Operations Lecture****4 cr. (4 lec/wk) Prerequisite: PPT 175.**

Covers the equipment necessary for the operation of a process/refining plant. A few topics of discussion include pumps, compressors, valves, heat exchangers, distillation towers, cooling towers, as well as auxiliary systems. Some of the operations principles reviewed are pneumatics, boilers, hydraulic functions, furnace processes, reactor systems, and distillation. Reading process flows and instrument diagrams is also included.

**PPT 211 Advanced Operations Lecture****2 cr. (2 lec/wk) Prerequisite: PPT 210.**

Introduces the student to actual refining processes, taking an in-depth look at each process, as well as the unit variables, equipment, critical control areas, product and unit specific safety considerations. Various types of processes are discussed, including Fluid Catalytic Cracking, Alkylation, Catalytic Reforming, De-sulfurization, Crude/Vacuum Systems, Amine, Coking, and Hydro treating. The course is also designed to provide classroom time balanced with field review of the various processes.

**PPT 212 Advanced Operations Laboratory****1 cr. (2 lab/wk) Corequisite: PPT 211.**

Provides students exposure to major concepts of industry through hands-on laboratory investigations and application of principles learned in PPT 211.

**PPT 220 Quality Control Practices****2 cr. (2 lec/wk) Prerequisites: PPT 210, BGEN 105.**

Provides the student with an overview of the field of quality within the Process industry. Within this course, students will be introduced to many industry-related quality concepts including operating consistency, continuous improvement, plant economics, team skills, and statistical process control (SPC).

**PPT 225 Plant Investigation and Troubleshooting  
2 cr. (1 lec/2 lab/wk) Prerequisite: PPT 210.**

Provides the student with an overview of the various troubleshooting models used by process technicians. Process troubleshooting involves different types of troubleshooting techniques, procedures, and methods used to solve process problems. Topics include application of data collection and analysis, cause-effect relationships, and reasoning. The student is exposed to many different trouble situations similar to those encountered in the process plant experience. The student is taught a systematic way to solve problems, using measured process variables and personal knowledge of how they affect each other (cause and effect).

**PPT 292 Seminar  
V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of process plant technology.

**PPT 293 Workshop  
V1-3 cr.**

Provides an opportunity for experimental study in an area of process plant technology.

**PPT 296 Cooperative Education /Internship  
V1-9 cr. (45 hours/credit)**

Provides university credit for a sophomore experience in the area of Process Plant Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Political Science

### Social Sciences and Cultural Studies (406) 657-2311

**\* PSCI 210 Introduction to American Government  
[formerly POLS 212 United States Government]**

**3 cr.** Covers the American Political System relative to central government and institutions. Attention is given to concepts, organizations and functions with emphasis on the political, governmental and democratic processes and problems, including the role of individual and group relationships. Provides a perspective and background for further study in Political Science.

**\* PSCI 220 Introduction to Comparative  
Government****[formerly POLS 200 Introduction to Comparative  
Government]**

**3 cr.** Introduces the ideas behind the democratic and non-democratic forms of political life in the modern world; investigates the changing nature of the role of government through systematic and comparative study of political structures, functions, behavior and changes; and provides a background for the pursuance of more specialized study in the various fields of Political Science.

**\* PSCI 230 Introduction to International Relations  
[formerly POLS 221 International Relations]**

**3 cr.** Considers the nature of relations among nations, various dimensions of international politics and the nature of political challenges occasioned by the changing milieu in which international affairs are conducted.

**PSCI 240 Introduction to Public Administration  
[formerly POLS 213 Introduction to Public  
Administration]**

**3 cr.** Studies the basic principles and theory of administrative structures, organizations, leadership, fiscal management, personnel, and policy-making in the modern state.

**PSCI 260 Introduction to State and Local  
Government****[formerly POLS 215 American State and Local  
Government]**

**3 cr.** Considers the functions, organization and problems of American state governments and the local subdivisions—counties and municipalities—and examines state-federal and state-local relations. This class is a prerequisite for those students interested in applying for a Montana legislative internship.

**PSCI 294 Seminar/Workshop  
[formerly POLS 292 Seminar]**

**V1-3 cr.** Provides freshmen and sophomores an opportunity to investigate intensively topics pertinent to the field of Political Science.

**PSCI 294 Seminar/Workshop  
[formerly POLS 293 Workshop]**

**V1-6 cr.** Provides freshmen and sophomores an opportunity for experimental study in an area of Political Science.

**PSCI 298 Internship/Cooperative Education**  
**[formerly POLS 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Political Science, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**PSCI 335 American Foreign Policy**  
**[formerly POLS 322 United States Foreign Policy]**

**3 cr. Prerequisites:** PSCI 220 and PSCI 210, or consent of instructor. Traces the development of United States foreign policy and foreign policy institutions with emphasis on the post-World War II period. Modern foreign policy is analyzed in the context of theoretical and institutional implications. Will also deal with U.S. foreign policy towards specific areas of the world.

**PSCI 341 Political Parties & Elections**  
**[formerly POLS 214 Political Parties and Elections]**

**3 cr.** Examines the structure and function of political parties, interest groups, and the mass media in the electoral process. Special emphasis on electoral rules and citizen participation from a comparative democratic perspective.

**PSCI 342 Media, Public Opinion, Polling**  
**[formerly POLS 350 Public Opinion and Polling]**

**3 cr.** Provides historical background material on public opinion and polling, as well as address major contemporary issues faced by those who measure public opinion. The students enrolled in this course will develop a survey questionnaire and employ MSU Billings' CATI (Computer Assisted Telephone Interviewing) Laboratory to conduct a random sample statewide telephone survey and write a paper based upon the polling's results.

**PSCI 346 American Presidency**  
**[formerly POLS 217 The Presidency]**

**3 cr.** Examines the evolution and development of the office of the President, its major responsibilities in domestic and foreign affairs, with emphasis on particular power problems that confront the President.

**PSCI 347 United States Congress**  
**[formerly POLS 347 Legislative Process]**

**3 cr. Prerequisite:** PSCI 210. Examines the roles, structures, and procedures of the United States Congress and the Montana Legislature. During legislative election years, special emphasis will be devoted to how members are elected to legislative office.

**PSCI 365 Public Policy Issues and Analysis**  
**[formerly POLS 321 Public Policy]**

**3 cr. Prerequisite:** PSCI 210. Examines a variety of public policy issues including economic, social welfare, health care, environmental, and criminal justice policy. Emphasis is placed on substantive policies and policy analysis.

**PSCI 370 Courts and Judicial Politics**  
**[formerly POLS 310 Judicial Process, CRIM 370 Courts and Judicial Politics]**

**3 cr. Prerequisite:** PSCI 210. Examines the Federal and Montana judicial systems, focusing on the institutions, procedures, and personnel. Presents an introduction to civil and criminal procedures and the legal profession.

**PSCI 419 Federal Indian Policy (crosslisted with NASX 419)**

**[formerly POLS/NAMS 495 Federal Indian Policy]**

**3 cr. Prerequisites:** NASX 105 or NASX 205.

Explores the development of the United States' federal Indian policy from colonial times to the present. Follows the evolution of federal Indian policy as a result of tensions between assimilation and separation forces in general and of other legal, political, economic and social forces acting in the United States. Explores how contemporary American Indians fit into the American political system.

**PSCI 424 Democratization**

**3 cr. (3 lec/wk) (Sp)** Analyzes the political determinants of democratic transitions and democratic consolidation. Global and regional trends are examined systematically through data analysis.

**PSCI 425 International Conflict**

**3 cr. (3 lec/wk) (Sp)** Analyzes the political determinants of international war and conflict.

**PSCI 426 Comparative Political Economy**

**3 cr. (3 lec/wk) (F)** Assesses the relationship between politics and economics within countries. Topics covered include the relationship between democracy and development, globalization, and the welfare state. Global and regional trends are examined systematically through data analysis.

**PSCI 427 Research Methods**

**3 cr. (3 lec/wk) (Sp)** Develops knowledge of research design, qualitative and quantitative methods, and data analysis skills. Students will prepare and submit a research design that meets social scientific standards.

**PSCI 458 Urban and Regional Planning**

**3 cr. (3 lec/wk)** Reviews and analyzes the historical development of urban and regional planning in the United States, as well as prominent theories of urban planning practice. Emphasizes the connection between the theoretical and historical material and current planning practice.

**PSCI 459 Public Budgeting & Finance (crosslisted with POLS 557)**

**[formerly POLS 457/557 Public Budgeting & Finance]**

**3 cr. Prerequisite: Graduate standing.** Focuses on budgeting in the public sector as a tool for financial management and the implementation of fiscal and programmatic policy, with emphasis on the political context. Graduate students will be expected to read substantially more in the public administration literature, to produce more in-depth research in their term papers, and to make at least one, possibly two, classroom presentations.

**PSCI 464 Local Government Administration (crosslisted with POLS 562)**

**[formerly POLS 462/562 Local Government Administration]**

**3 cr. Prerequisite: Graduate standing.** Focuses on contemporary issues affecting small towns and counties. Discussed topics include public works departments, economic growth, human resource development, and parks and recreation.

**PSCI 469 Ethics and Public Policy (crosslisted with POLS 560)**

**[formerly POLS 460/560 Ethics and Public Policy]**

**3 cr. Prerequisite: Graduate standing.** Explores ethics and selected issues in public service and policy making through theoretical and case study approaches. Emphasis on the relation of continuing issues and problem areas to individual careers in policy making and administrative decision making. Graduate students will be expected to read substantially more in the public administration literature, to produce more in-depth research in their term papers, and to make at least one, possibly two, classroom presentations.

**PSCI 472 Constitutional Law: Civil Liberties (crosslisted with HSTA 480)**

**[formerly POLS/HIST 423 Constitutional Law: Civil Liberties]**

**3 cr. Prerequisite: HSTA 101 or PSCI 210.**

Examines major Supreme Court decisions in the field of individual rights. Provides an overview of civil liberties decisions with emphasis on the recent past, or may consider specific constitutional issues (i.e., church and state, freedom of speech and press, the death penalty) over the course of American history.

**PSCI 473 Constitutional Law: Powers and Structures (crosslisted with HSTA 481)**

**[formerly POLS/HIST 427 Constitutional Law: Powers and Structures]**

**3 cr. Prerequisite: HSTA 101 or PSCI 210.**

Introduces the evolution and structure of the United States constitutional system, focusing on the federal relationship, the separation of powers, and the judicial review, relying primarily upon the case method of analysis.

**PSCI 491 Special Topics (crosslisted with POLS 580)**

**[formerly POLS 480/580 Special Topics]**

**3 cr. Prerequisite: Consent of instructor.** Provides Masters of Public Administration students an opportunity for them to investigate contemporary topics related to the field. Staffing needs will largely involve local practitioners in government and not-for-profit organizations. The course will be offered on an irregular basis.

**PSCI 492 Independent Study**

**[formerly POLS 491 Independent Study]**

**V1-5 cr. Prerequisites: consent of instructor and chairperson of department.** Provides outstanding students an individual opportunity to explore material not covered by regular Political Science courses.

**PSCI 494 Seminar/Workshop**

**[formerly POLS 492 Seminar]**

**V1-3 cr.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Political Science.

**PSCI 494 Seminar/Workshop**

**[formerly POLS 493 Workshop]**

**V1-6 cr.** Provides an opportunity for experimental study in the area of Political Science.



**PSCI 498 Internship/Cooperative Education**  
[formerly POLS 490 Political Science Internship]  
**V1-12 cr. Prerequisites:** PSCI 260, or consent of instructor and consent of chairperson of department. Provides outstanding students an individual opportunity to explore material not covered by regular Political Science courses. Students will be working directly for elected or appointed officials and/or various types of political groups. No more than 6 hours may be counted toward a Political Science minor.

**PSCI 498 Internship/Cooperative Education**  
[formerly POLS 496 Cooperative Education/Internship]  
**V1-9 cr.** Provides university credit for a work experience in the area of Political Science supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Psychology

(406) 657-2242

**\* PSYX 100 Introduction to Psychology**  
[formerly PSYC 101 General Psychology]  
**3 cr. (F, Sp, Su)** Presents an overview of the psychological functioning of the individual, including such topics as the biological bases of behavior, learning, cognition, motivation, developmental and social processes, psychological disorders and their treatment.

**PSYX 222 Psychological Statistics**  
[formerly PSYC 205 Research Analysis in Psychology]  
**3 cr. Prerequisites:** PSYX 100 and STAT 141. (F, Sp) Introduces the principles of psychological research and their applications to the analysis and statistical interpretation of experimental data.

**PSYX 223 Research Design and Analysis I**  
[formerly PSYC 206 Research Design in Psychology]  
**3 cr. Prerequisite:** PSYX 100. (F, Sp) Provides an opportunity for the student to learn about design, control, and measurement techniques through actual construction and implementation of a research plan. Includes laboratory exercises related to topics discussed. Lab required.

**PSYX 224 Research Design and Analysis I Lab**  
**1 cr. (F, Sp)**

**PSYX 230 Developmental Psychology: Development Over the Lifespan**  
**3 cr. Prerequisite:** PSYX 100. (F, Sp, Su) Provides a comprehensive overview of human development across the life-course. Contemporary theory and research are presented from a multi-disciplinary perspective that emphasizes the integration of biological, psychological, socio-cultural, and developmental influences over time. The course will cover common developments and challenges encountered at various life stages as well as the emergence of individual differences that account for our unique characteristics.

**\* PSYX 231 Human Relations**  
[formerly PSYC 271 Human Relations]  
**3 cr. (Su)** Considers the psychological nature of interpersonal relationships, including nonverbal communication, defensiveness, anger, empathy, feedback, listening, and conflict; uses role-playing to practice improving relationships.

**PSYX 294 Seminar/Workshop**  
[formerly PSYC 292 Seminar]  
**3 cr.** Provides students an opportunity to investigate intensively special topics in Psychology.

**PSYX 294 Seminar/Workshop**  
[formerly PSYC 293 Workshop]  
**V1-8 cr.** Provides an opportunity for experimental study in an area of Psychology.

**PSYX 298 Cooperative Education/Internship**  
[formerly PSYC 296 Cooperative Education/Internship]  
**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Psychology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**PSYX 320 Research Methods III**  
[formerly PSYC 428 Statistics for Psychology]  
**3 cr. Prerequisite:** PSYX 222. (Sp) Enables the student to conduct more advanced statistical analyses of the results of psychological research, through the use of both descriptive statistics, including measures of central tendency, dispersion, skewness, kurtosis, and correlation, and inferential statistics, including parametric statistics, such as the analysis of variance and nonparametric statistics. Lab required.

**PSYX 321 Research Methods III Lab**  
**1 cr. (Sp)**

**PSYX 330 Child Psychology****[formerly PSYC 380 Developmental Psychology]**

**3 cr. Prerequisite:** PSYX 100. (F, Sp, Su) Provides a comprehensive overview of child development prior to puberty. Contemporary theory and research will be presented from multiple perspectives that emphasize the integration of biological, cognitive, social, emotional, and cultural influences over time.

**PSYX 332 Adult Psychology****[formerly PSYC 382 Adult Psychology]**

**3 cr. Prerequisite:** PSYX 100. (Sp, Su) Considers development through adulthood. Traces the individual's emotional, cognitive, social and physical adjustment.

**PSYX 333 Psychology of Aging****[formerly PSYC 383 The Psychology of Aging]**

**3 cr. Prerequisite:** PSYX 100. (Sp) Considers the various aspects of the aging process as they relate to the psychological functioning of people in later life. Theories, data, and applications are considered as they relate to the wellbeing of older people.

**PSYX 335 Psychology of Gender****[formerly PSYC/A&SC 309 Psychology of Gender Differences]**

**3 cr. Prerequisite:** PSYX 100. (F) Explores the factors that influence the development of differences in cognitive and social/emotional functioning between males and females and the effects of those differences on psychological functioning.

**PSYX 340 Abnormal Psychology****[formerly PSYC 470 Abnormal Psychology]**

**3 cr. Prerequisite:** PSYX 100. (F, Su) Covers the various categories of mental disorders, as classified in the Diagnostic and Statistical Manual of Mental Disorders. For each disorder, information about features, causes, and treatments is examined.

**PSYX 350 Physiological Psychology****[formerly PSYC 338 Physiological Psychology]**

**3 cr. Prerequisite:** PSYX 100. (F) Presents the physiological basis of human and animal behavior. Primarily concerned with the structure and function of the central nervous system as it relates to the behavior of organisms. Laboratory will concentrate on the neuroanatomy of the brain and demonstrations of techniques used in the discipline. Lab required.

**PSYX 351 Physiological Psychology Lab 1 cr.****Prerequisite:** PSYX 100. (F)**PSYX 352 Comparative Psychology****[formerly PSYC 336 Comparative Psychology]**

**3 cr. Prerequisite:** PSYX 100. Explores the diversity of behavior among different species. Examines research dealing with early experience, courtship, reproduction, conflict, aggression, communication and specialized adaptations which permit the survival of a species in its environment. Includes laboratory exercises related to topics discussed in class, including the collection, analysis, and presentation of observational data in various animal species. Explores many settings such as field, laboratory, and zoological. Lab required.

**PSYX 353 Comparative Psychology Lab 1 cr.****PSYX 354 Sensation & Perception****[formerly PSYC 316 Sensation and Perception]**

**3 cr. Prerequisites:** PSYX 100, PSYX 222 and PSYX 223. Covers the psychological and physiological aspects of sensory and perceptual experience in humans. Explores the historical and scientific backgrounds of sensation and perception. Laboratory exercises demonstrate psychophysics, measures of perceptual phenomena and sensory physiology. Lab required.

**PSYX 355 Sensation & Perception Lab 1 cr.****PSYX 358 Drugs and Behavior****3 cr. (3 lec/wk) Prerequisite:** PSYX 100.

**Corequisite:** PSYX 359. (Sp) Explores the physiological and psychological effects of licit and illicit drugs, including drug-related topics in biology, neuroscience, history, and law. Shows how drug taking behavior helps us comprehend human behavior in a biological environment

**PSYX 359 Drugs and Behavior Lab****1 cr. (1.5 lab/wk) Prerequisite:** PSYX 100.

**Corequisite:** PSYX 358. (Sp) Explores the effects of drugs on the brain and human behavior using statistical modeling and drug use surveys on national populations. Students will learn research techniques useful in the field of pharmacology and psychology. The lab supports topics covering the Drugs and Behavior course.

**PSYX 360 Social Psychology (crosslisted with SOCI 382)****[formerly PSYC/SOCL 471 Social Psychology]****3 cr. Prerequisite: PSYX 100 or consent of instructor. (Sp)** Studies how the thought, feeling, and behavior of individuals are influenced by the actual, implied, or imagined presence of others. Emphasis is given to the symbolic interactionist perspective and the relationship between culture and cognitive processes.**PSYX 370 Psychology of Learning****[formerly PSYC 314 Learning and Motivation]****3 cr. Prerequisite: PSYX 100. (even Sp)** Explores the facts and principles of learning, motivation and memory. Covers the historical and theoretical background of learning, motivation and memory. Laboratory exercises demonstrate learning, motivation and memory processes. Lab required.**PSYX 371 Psychology of Learning Lab 1 cr. (even Sp)****PSYX 378 Introduction to Clinical Psychology****[formerly PSYC 476 Introduction to Clinical Psychology]****3 cr. Prerequisite: PSYX 100. (odd Sp)** Surveys the major approaches to psychotherapy, with emphasis on theoretical foundations. Also addresses the issues of treatment efficacy, common factors, eclecticism, and current controversies.**PSYX 380 Memory & Cognition****[formerly PSYC 317 Cognitive Processes]****3 cr. Prerequisites: PSYX 100, PSYX 222 and PSYX 223. (F)** Considers such topics as language and thought, attention, visual information processing, and short term and long term memory. Laboratory replicates and extends classical experiences in the field. Lab required.**PSYX 381 Memory & Cognition Lab 1 cr. (F)****PSYX 382 Forensic Psychology****[formerly PSYC 350 Forensic Psychology]****3 cr. Prerequisite: PSYX 100 or consent of instructor. (Sp)** Applies psychology to the legal system. Topics include jury selection and decision-making, memory as evidence, eyewitness testimony, psychological assessment and the insanity defense, and psychological profiling of criminal behavior.**PSYX 385 Psychology of Personality****[formerly PSYC 460 Theories of Personality]****3 cr. Prerequisite: PSYX 100 or consent of instructor. (F)** Surveys the major theories of personality, with secondary attention to the lives of the theorists who formulated them.**PSYX 395 Field Work****[formerly PSYC 396 Field Work]****3 cr. R-6. Prerequisites: Junior standing with 2.50 GPA and consent of instructor. (F, Sp)** Provides the student an opportunity to apply academic study to actual work experiences. Offers added meaning to theories and principles learned in class as provided by concrete application on supervised and selected work assignments. Includes weekly case conference with instructor.**PSYX 400 History & Systems in Psychology****[formerly PSYC 401 History and Systems of Psychology]****3 cr. Prerequisite: PSYX 100. (Sp, Su)** Covers the historical development of psychology and studies the development and the content of the major systems and ideas.**PSYX 410 Cognitive Learning Theories****[formerly PSYC 410 Cognitive Learning Theories]****3 cr. Prerequisites: PSYX 100.** Studies the thought processes that underlie learning. Focuses on unseen mental events (such as thinking and memory) that occur during the learning process. Animals and humans use such processes to develop expectancies concerning behavior and its relationship to external events.**PSYX 461 Industrial & Organizational Psychology****[formerly PSYC 445 Industrial/Organizational Psychology]****3 cr. Prerequisite: PSYX 100 or consent of instructor. (Sp)** Introduces students to the field of Industrial/Organizational Psychology. Surveys research and practice of psychological principles to a work setting.**PSYX 470 Psychological Testing****[formerly PSYC 450 Psychological Testing]****3 cr. Prerequisites: PSYX 100 and PSYX 222, or equivalent. (odd Sp)** Examines the conceptual foundations of psychological testing and surveys representative tests and measurement instruments.

**PSYX 480 Cognitive Development****[formerly PSYC 480 Cognitive Development]****3 cr. Prerequisites: PSYX 100 and PSYX 330.**

Examines the development of cognition, including logical thinking, language, memory, and concept formation from infancy through adolescence. Emphasis is placed on a critical examination of Piaget's theory of cognitive development. Lab required.

**PSYX 482 Introduction to Psycholinguistics****(crosslisted with LING 318)****[formerly PSYC/ENGL 318 Psycholinguistics]**

**3 cr. Prerequisite: LING 210.** Explores the relationship between the human brain and language, including brain anatomy, first and second language acquisition, abnormal language acquisition and functions, and mental language processes.

**PSYX 492 Independent Study****[formerly PSYC 491 Independent Study]**

**V1-4 cr. Prerequisites: enrollment in a major or minor program in Psychology and consent of the department chairperson.** Provides outstanding students an individual opportunity to investigate material not covered by regular Psychology courses.

**PSYX 494 Seminar/Workshop****[formerly PSYC 485 Senior Seminar]**

**3 cr. Prerequisites: PSYX 400 and senior status in Psychology.** Provides a terminal integration of the undergraduate course of study through an in-depth examination of seminal topics in Psychology.

**PSYX 494 Seminar/Workshop****[formerly PSYC 492 Seminar]**

**V1-3 cr.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Psychology.

**PSYX 494 Seminar/Workshop****[formerly PSYC 493 Workshop]**

**V1-8 cr.** Provides an opportunity for study in an area of Psychology.

**PSYX 495 Practicum****[formerly PSYC 490 Practicum]**

**V1-3 cr. R-6. Prerequisites: Psychology major, Junior or Senior standing and consent of department chairperson. (F, Sp)** Provides opportunity of direct use of psychological knowledge in an academic setting. A student may be enrolled in only one practicum during a given semester. If repeated, the second practicum must relate to services in a different course or serve a different function within the same course.

**PSYX 498 Internship/Cooperative Education****[formerly PSYC 496 Cooperative Education/Internship]**

**V1-6 cr.** Provides university credits for a work experience in the area of Psychology supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**PSYX 499 Senior Thesis****[formerly PSYC 499 Senior Thesis]**

**3 cr. Prerequisites: PSYX 222, PSYX 223, PSYX 224, and Senior level standing in Psychology.**

**Offered ONLY Online. (F, Sp)** Guides students through the process of carrying out a thesis project, including conducting a literature review, designing a study, collecting data, statistical analysis, writing a report, and making an oral presentation.

## Power Plant

### City College

**PWRP 201 Power Plant Equipment and Operations****3 cr. (2 lec/2 lab/wk)**

Provides the student with an introduction to the major systems and components that make up a modern power plant. Students learn how electric power is produced and distributed; how boilers, turbines, and condensers operate; and what the general responsibilities of plant operators are during all phases of plant operation. Specific attention is given to the flow of water and steam through the steam cycle, how combustion occurs, types of boilers and turbines, operation of steam cycle support systems, bearings and lubrication, turbine control, pollution control, and plant safety. This course covers the various types of equipment used in the production of electricity, including pumps, valves, air compressors, coal pulverizers, fans, cooling towers, condensers, and heat exchangers.

**PWRP 203 Energy Sources and Conversion****3 cr. (2 lec/2 lab/wk)**

Allows students to study the various forms of energy and the processes used to convert chemical and potential energy into thermal, mechanical, and in some instances, electrical energy. Energy sources that will be studied include fossil fuels (coal, oil, and natural gas), hydro, wind, fuel cells, solar, derived fuel, geothermal, and nuclear. Combustion and reaction will be discussed in detail for those energy sources that require combustion to convert from one energy form to another.

**PWRP 210 Turbines, Accessories and Basic Operations****3 cr. (2 lec/2 lab/wk) Prerequisites:** PPT 135, PPT 175

Allows students to study all the elements that make up gas and steam turbines, a combined cycle unit, and associated auxiliary systems. This course also covers the safe and efficient operation of gas turbines and heat recovery steam generators and their different applications as used in combine cycle and cogeneration configurations. Students will learn how thermal energy is converted to mechanical energy as the steam passes through a typical industry steam turbine. Steam turbine start-up and shut-down procedures will also be studied.

**PWRP 214 Power Generation****4 cr. (3 lec/2 lab/wk) Prerequisite:** PPT 175.

Introduces the basic elements of generator design, protection, and operation. Students are introduced to the theoretical aspects of reactive power in power systems by analyzing the inductive and capacitive components of the system, with an emphasis on megavar loading as it is affected by the excitation system. The generator's auxiliary systems, including hydrogen cooling systems, stator cooling systems, seal oil systems, and generator degassing procedures, are also introduced and the function and types of exciters commonly found in power plants are examined.

**PWRP 216 Electrical System Components and Protections****3 cr. (2 lec/2 lab/wk) Prerequisite:** PPT 175.

Introduces typical devices used to protect personnel and prevent damage to plant equipment. Also covered are generator, bus, and line differential protection, as well as high- and low-pressure protection. The material presented includes trip and alarm logic for chemical protection, turbine protection, boiler protection, and generator protection. Devices covered include fuses over current relays and over- and under-voltage relays. The course covers practices for electrical protection of plant equipment and personnel.

**PWRP 218 Advanced Plant Operations and Troubleshooting****4 cr. (2 lec/4 lab/wk) Prerequisite:** PWRP 201.

Allows students to gain the knowledge necessary to comprehend overall power plant operations and respond to abnormal operating conditions. Students will also participate in root cause analysis exercises while troubleshooting different operating scenarios.

**PWRP 296 Cooperative Education/Internship 2 cr. (45 hours/credit)**

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

## Developmental Education: Reading City College

**RD 101 Reading Improvement for College Students****3 cr. (F, Sp)** Provides instruction and practice in applying active reading strategies, improving comprehension in content areas, demonstrating critical thinking skills in responding to individual content area reading assignments, and increasing vocabulary to improve academic success. RD 101 prepares students for the demands of college-level reading. Course earns academic credit but does not count toward General Education, a degree, or certification.**RD 102 Reading and Study Skills****2 cr.** Emphasizes the skills needed for effective studying. Designed to help college students with note taking skills, preparing for class discussions, efficient textbook reading and use of reference materials.

## Outdoor Recreation

### Health & Human Performance

**(406) 657-2370**

*Due to the course content and environmental requirements, a significant number of REC classes will be held off of the MSU Billings main campus. Courses may meet on weekends and/or during semester breaks. Some courses require a special fee. Fees cover a number of things that include but are not limited to: transportation, food, gear, lift tickets, and certifications.*

**REC 119 Nordic Skiing I****[formerly HHP 131 Cross Country Skiing]****1 cr.** Presents skills needed in cross country skiing including equipment, base preparation, waxing, and classical and skating techniques. Depending on time constraints and student interest, basic winter risk management will also be included.

**REC 120 Fundamentals of Backcountry Travel**  
**[formerly HHP 184 Hiking/Backpacking]**

**2 cr.** Develops understanding and demonstration of backcountry and expedition trip planning to include: goals and objectives, participant considerations, budget resources, appropriate selection and packing of equipment, clothing, itinerary and time control planning, access requirements, nutritional needs, and risk management and emergency planning.

**REC 122 Alpine Skiing I**  
**[formerly HHP 132 Skiing, Beginning Downhill]**

**1 cr.** Covers the basics of downhill skiing for students without prior experience.

**REC 123 Telemark Skiing I**  
**[formerly HHP 138 Telemark Skiing]**

**2 cr.** Learn, understand, and demonstrate telemark skiing techniques and proper equipment needs for the sport of telemark skiing.

**REC 125 Snowboarding I**  
**[formerly HHP 134 Beginning Snowboarding]**

**1 cr.** Covers the basics of snowboarding equipment, safety, mechanics and techniques.

**REC 130 Fly Fishing I**

**1 cr.** Builds the necessary skills and self-confidence to learn the sport of fly fishing. This course is an entry-level fly fishing class designed to develop all the skills and understanding necessary to catch wild fish on a fly rod. Class sessions will cover the mechanics of casting, proper equipment, the basic cast, variations of the basic cast, knots, entomology as it relates to fly selection, and conservation and safety of the sport.

**REC 140 Mountain Biking**  
**[formerly HHP 187 Mountain Biking]**

**1 cr.** Teaches students how to choose the correct size bicycle, develop students' mountain biking skills, develop awareness of risk management in mountain biking, develop students' ability to negotiate mountain bike terrain with proper technique, and develop students' ability to maintain and fix common problems that they may encounter on a mountain bike ride.

**REC 150 Low Element Challenges**  
**[formerly HHP 191 Low Element Challenges]**

**2 cr.** Learn a variety of low element challenges and demonstrate creative planning, teamwork, cooperation, and trust development, and understand the many varied values of low element challenges.

**REC 155 Rappelling/Belaying**  
**[formerly HHP 190 Rappelling/Belaying]**

**2 cr.** Develops students' understanding and demonstration of rappelling and belaying methods, correct anchoring, equipment, proper climbing knots, and rescue techniques.

**REC 160 Shooting Sports I**

**1 cr.** Focuses on understanding and demonstrating proficient skills, knowledge, and attitude towards the manipulation and proper use of firearms. Emphasis is placed on safety, firearms history, actions, loading, unloading, and ammunition identification.

**REC 178 Canoeing I**  
**[formerly HHP 193 Canoeing]**

**1 cr.** Learn, understand, and apply canoeing terminology, principles, and equipment. Included will be canoe design affects, paddle selection, carrying the canoe efficiently and safely, and tandem canoeing.

**REC 181 Basic Navigation/Orienteering**  
**[formerly HHP 181 Basic Navigation/Orienteering]**

**1 cr.** Provides an introduction and application of the history, equipment, and techniques of land navigation and orienteering. Included will be sections on map reading, compass use, GPS use, map and compass techniques, orienteering principles, and orienteering course design.

**REC 182 Advanced Navigation**  
**[formerly HHP 182 Advanced Navigation]**

**2 cr. Prerequisite: REC 181 or Instructor approval.** Introduces newest technology for navigating in wilderness and emergency settings and navigation techniques ranging from environmental to global positioning systems. Included will be practical application of learned skills in an outdoor/wilderness setting.

**REC 185 Winter Survival Skills**  
**[formerly HHP 185 Winter Survival Skills]**

**2 cr.** Presents skills and application of necessary techniques needed for safe winter travel as well as involving winter risk management, nutrition, survival skills, ice rescues, snow shelters, avalanche awareness, and protection methods.

**REC 187 Basic Survival in the Outdoors**  
**[formerly HHP 189 Basic Survival in the Outdoors]**

**2 cr.** Understand and demonstrate basic wilderness survival recommendations including methods of staying warm and building shelters, signaling, natural indicators of direction, fire building, and accessing water.

**REC 200 Foundations of Outdoor Adventure Leadership****[formerly HHP 200 Foundations of Outdoor Adventure Leadership]**

**3 cr.** Introduces foundational information of Outdoor and Adventure Leadership/Education. Included are history, background, and current local, state, and national issues of outdoor and adventure education. Introduces the relationship to a variety of career areas such as educational teachers, outdoor recreational instructors, challenge course coordinators, corporate teambuilding managers, community activity centers, and the like. Fundamental competencies for effective outdoor adventure leadership are presented, discussed, and practiced.

**REC 210 Environment/Leave No Trace****[formerly HHP 183 Environment/Leave No Trace]**

**2 cr. (1 lec/wk & 2 day field trip) Prerequisite: REC 120 or instructor approval.** Develops participants' awareness and application of Leave No Trace principles and an appreciation of the ethical reasons behind the principles. Explores current environmental and wilderness issues.

**REC 220 Alpine Skiing II****[formerly HHP 133 Skiing, Intermediate Downhill]**

**2 cr. Prerequisite: REC 122 or Instructor approval.** Goes beyond REC 122 to cover additional techniques and skills of downhill skiing for students with successful prior instruction and experience.

**REC 225 Snowboarding II****2 cr. Prerequisite: REC 125 or Instructor approval.**

Builds upon the skills developed in REC 125 Snowboarding I. Students will learn additional snowboarding techniques, develop an understanding of teaching and learning styles, be provided the opportunity to both teach and evaluate a group lesson, and gain experience in writing lesson plans.

**REC 230 Fly Fishing II****2 cr. Prerequisite: REC 130 or Instructor approval.**

Builds upon the skills and knowledge gained in REC 130 Fly Fishing I. Emphasis will be placed on reading water, bug identification, guiding techniques, risk management, and group awareness.

**REC 233 Skiing/Snowboarding Instructor Development****2 cr. Prerequisites: REC 220 or REC 225 and Instructor approval.**

Develops techniques and skills needed to become an instructor in either Alpine skiing or snowboarding. Emphasis placed on teaching techniques and learning styles. PSIA certification may be offered.

**REC 255 Rock Climbing I**

**1 cr.** Introduces students to the basic concepts associated with spotting and belaying techniques and bouldering and top rope climbing techniques in both an indoor and outdoor setting.

**REC 257 Rock Climbing II****2 cr. Prerequisite: REC 255 or Instructor approval.**

Builds on skills gained in REC 255 by introducing leading climbing and multi-pitch climbing equipment and techniques. Emphasis will be given to placement of protection and anchors, ground and hanging belays, rope management, and site management.

**REC 260 Shooting Sports II**

**2 cr. Prerequisite: REC 160.** Seeks to build on the skills, experience, and knowledge gained in REC 160 Shooting Sports I. Emphasis is placed on the ability to manage, facilitate, and execute the demands of firearm safety, accuracy, and manipulation.

**REC 275 Kayaking I****[formerly HHP 195 Kayaking]**

**1 cr.** Learn, understand, and execute kayaking skills such as getting into a kayak, forward and backward paddling strokes, stopping techniques, forward and reverse sweep stroke, and draw stroke. Included are safety and rescue methods recommended in kayaking.

**REC 276 Kayaking II****2 cr. Prerequisite: REC 275 or Instructor approval.**

Seeks to build on the skills, experience, and knowledge gained in REC 275 Kayaking I. Emphasis will be placed on strokes, lateral movement, maneuvers, safety, rescue, group management, river reading, and paddling in appropriate whitewater.

**REC 277 Rafting I****[formerly HHP 198 Rafting]**

**1 cr.** Learn to identify rafting equipment, awareness of preplanning considerations, proper raft carrying techniques, execution of proper rowing and oar strokes, foundational execution of rescue maneuvers, and a thorough understanding of safety considerations.

**REC 278 Rafting II**

**2 cr. Prerequisite:** REC 277 or Instructor approval. Seeks to build on the skills, experience, and knowledge gained in REC 277 Rafting I. An emphasis will be placed on equipment, proper preparation for a river trip, paddling strokes, control of a raft, river dynamics, maneuvering in whitewater, reading the river, proper commands to safely descend and control a raft in rapids, river safety and rescue, and care for and minor repair of a raft.

**REC 280 Challenge Course Fundamentals  
[formerly HHP 280 Challenge Course Fundamentals]**

**2 cr.** Introduces history and current practices in American challenge courses. Current practices in design, facilitation, and evaluation of curricula in Outdoor Adventure Leadership settings, including low and high ropes and challenge course programs, are presented. Students will also be introduced to current offerings in challenge course technology and the opportunity to practice basic challenge course facilitation methods.

**REC 285 Scuba Diving I**

**2 cr.** Teaches understanding and application of scuba diving techniques, equipment, and knowledge of diving hazards and precautions. The skills include, but are not limited to: remove mask and clear, remove and recover regulator, remove and recover Scuba equipment, demonstrate cramp removal, assist other divers, underwater navigation, hand and arm signals, signs and symptoms of decompression sickness, plan and conduct open water dives, dive computer, wetsuit utilization.

**REC 287 Archery I  
[formerly HHP 103 Archery, Beginning, Intermediate]**

**1 cr.** Designed for the beginner archer with a focus on recognizing, understanding, and following the safety guidelines employed in the handling and use of archery equipment. Emphasis will be placed on target archery, range safety, shooting stance and techniques, terminology, scoring, and conducting a shooting line.

**REC 288 Archery II**

**2 cr. Prerequisite:** REC 287 or Instructor approval. Seeks to build on the skills, experience, and knowledge gained in REC 287 Archery I. Emphasis will be placed on safety, skills accuracy, instructing archery, group management, and environmental issues.

**REC 306 Outdoor Living Skills**

**3 cr. Prerequisite:** REC 120 or Instructor approval. Explores the fundamental skills necessary to successfully and safely exist in the backcountry setting. Topics include proper dress, nutrition, backcountry navigation, personal hygiene, and shelter systems employing leave no trace (LNT) and low impact techniques. Students are committed to seven days (two days in the classroom and five days in the field).

**REC 308 Winter Outdoor Living Skills**

**2 cr. Prerequisite:** REC 120 or Instructor approval. Explores the fundamental skills necessary to successfully and safely exist in a winter backcountry setting. Topics include proper dress, nutrition, backcountry navigation, personal hygiene, and shelter systems employing leave no trace (LNT) and low impact techniques. (Students are committed to a four-day overnight trip in the field.)

**REC 309 People and the Environment**

**3 cr. Prerequisite:** REC 120 or Instructor approval. Gain an understanding that the natural world is a critical component to the appropriate enjoyment and appreciation of the outdoors. Students will learn about the environment around them, including natural and cultural history, and how to share that knowledge with others from clients to students of all ages. Students will examine the evolving relationship between humans and nature, as well as the philosophical and theoretical foundations and practice of environmental education. The course will include a wilderness camping trip and skills session.

**REC 310 Adventure Leadership**

**[formerly HHP 310 Adventure Leadership]**

**3 cr. Prerequisite:** REC 200 or Instructor approval. Acquaints students with the history, philosophy, depth, and scope of Adventure Leadership. Methods discussed will be applied to group development, minimizing risk in the field, teambuilding, decision making, problem solving, and teaching. Students will explore and enhance their own leadership, philosophy and style through participation in group projects, lecture, and activities while taking this class.

**REC 356 Search and Rescue**

**3 cr. Prerequisite:** REC 181 and Instructor approval. Instructs individuals in the methods of searching for lost persons. Topics include search and rescue (SAR) hierarchy, personal preparedness, rescue, search, and preventative search and rescue. Course is hands-on oriented and includes one overnight experience. FUNSAR certification offered.



**REC 357 Ropes Rescue**

**3 cr. Prerequisite:** REC 155 or REC 257 and **Instructor approval.** Develops skills and techniques needed to safely perform a rope rescue. Emphasis is placed on rescue philosophy, liability, mitigation, safety, managing a rope rescue, equipment, knots, anchors, mechanical advantage, low-angle and high-angle ropes systems, raising and lowering systems, rappelling, belaying, ascending, and pick-offs.

**REC 358 Swift Water Rescue**

**3 cr. Prerequisite:** Instructor approval. Explores skills and methods of rescuing persons in swift water conditions. Students study the dynamics of moving water, natural and man-made hazards, swimming the rapids to assist in a rescue, how to deal with strainers, use of a throw rope, rope rescue techniques, and the use of a rescue vest. Special topics are added as appropriate by the instructor. SWR certification offered.

**REC 359 Backcountry Avalanche Forecasting and Rescue**

**4 cr. Prerequisite:** REC 308 or Instructor approval. Develops skills and techniques needed to safely plan, recognize avalanche hazards, make safe travel decisions, and apply effective companion rescue techniques (including multiple and deep burials) in avalanche terrain. Develops an understanding of snowpack development, metamorphosis, factors that contribute to spatial variability, and avalanche release and triggering mechanisms. Introduces snow stability analysis, backcountry forecasting, and standard observation guidelines and recording formats.

**REC 381 Leadership and Group Dynamics [formerly HHP 381 Adventure Counseling and Leadership]**

**3 cr.** Explores leadership principles and group dynamics applied to adventure settings. Emphasis will be given to risk management and group process, the development of decision-making, ethical issues, communication, and motivational, organizational, and evaluation skills.

**REC 389 Mountaineering**

**3 cr. Prerequisite:** REC 257 or REC 155 or **Instructor approval.** Builds on skills gained in REC 257 by introducing alpine ice, mixed route climbing, glacial travel (including roped travel, ice axe, and crampon techniques), and crevasse rescue equipment and techniques. Emphasis will be given to the ecological, environmental, physiological, and technical requirements needed for responsible travel in the alpine environment. (Students are committed to a six-day mountaineering trip.)

**REC 411 Adventure Guiding and Instructing**

**3 cr. Prerequisite:** REC 200, REC 310 or **Instructor approval.** Provides students an opportunity to explore teaching methods appropriate for a wide spectrum of adventure guiding and instructing. Examines learning styles, lesson planning, delivery options, risk management, evaluation, and assessment.

**REC 466 Ethical/Legal Aspects in Outdoor Adventure Leadership**

**[formerly HHP 466 Ethical/Legal Aspects in Outdoor Adventure Leadership]**

**2 cr.** Presents the ethical and legal principles and practices recommended and required in outdoor adventure leadership careers. Particular emphasis is on the ethical and legal guidelines that follow national program accreditation standards.

**REC 470 Adventure Program Planning and Development**

**3 cr. Prerequisites:** REC 200, REC 310 or **Instructor approval.** Examines principles related to planning, scheduling, and implementation of recreational activities and events. Students will be introduced to the procedures involved in development of programs, staffing, budgeting, and managing risks for adventure programs for diverse populations.

**REC 480 Challenge Course Skills and Facilitation [formerly HHP 480 Advanced Challenge Skills and Facilitation]**

**3 cr. Prerequisites:** REC 150 and REC 280 or **Instructor approval.** Presents understanding and proficiency in applying current and advanced outdoor adventure leadership facilitation and debriefing skills. Course coverage will include developing various risk management plans, review and awareness of new safety policies and recommendations, understanding program construction basics, and applying evaluation methods in all levels of adventure challenge settings. Included will be planning and development of facilitation objectives and methods for diverse populations.

**REC 494 Seminar/Workshop**

**V1-4 cr. Prerequisite: Instructor approval.** Provides an opportunity for students to investigate intensively specific/independent areas of OAL or allows for a trial of a proposed course to determine acceptability and demand before requesting a regular course number.

**REC 498 Internship**

**V1-6 cr. Prerequisite: Instructor approval.** Provides OAL majors with practical experience in an OAL profession or a program under the supervision and by prior approval of OAL program faculty. A learning agreement must be completed with the student's advisor prior to registration. In-field contact time is 45 hours per semester credit.

## Rehabilitation and Related Services

### Rehabilitation & Human Services (406) 896–5830

**\* REHA 201 Introduction to Diversity in Counseling**

**3 cr.** Introduces counseling and the importance of multicultural knowledge, skills, awareness, and attitudes toward the clients they serve. The course focuses on counselor perspectives for understanding and interacting with diverse groups, and will examine theoretical and research literature concerning cultural characteristics and differences related to disability, gender, race/ethnicity, sexual orientation, religion, geography, advanced aging, and social class. Students will be provided the opportunity to explore scholarly as well as practical resources for interacting with diverse individuals and families.

**REHA 216 Introduction to Rehabilitation and Related Services**

**3 cr.** Provides overall knowledge of psychological and social factors affecting adjustment to disability. This course also focuses on introducing students to the field of rehabilitation and the broader human service profession. It covers history, legislation, skills/competencies, attitudes, service delivery, and career information. Students will be provided the opportunity to explore the rehabilitation profession and the broader human service field. It will include the required qualifications and skills for various professions.

**REHA 292 Independent Study**

**[formerly REHA 291 Independent Study]**

**V1-3 cr.** Provides an experience for students of superior academic standing to explore material not covered by regular college courses.

**REHA 294 Seminar/Workshop**

**[formerly REHA 292 Seminar]**

**V1-3 cr.** Provides students an opportunity to intensively investigate topics pertinent to the field of Rehabilitation.

**REHA 298 Internship**

**[formerly REHA 290 Internship]**

**V1-6 cr. Prerequisite: An application for field experience is required with prior approval from the field placement supervisor.** Provides freshmen and sophomores with a supervised field experience in an appropriate setting specifically related to the students' major/minor area. In-field contact time is 45 hours per semester credit.

**REHA 298 Cooperative Education/Internship**

**[formerly REHA 296 Cooperative Education/Internship]**

**3 cr. Prerequisite: Permission of Instructor.**

Provides university credit for a sophomore level field experience in the area of Rehabilitation and Related Services supervised by faculty. Learning agreement must be completed prior to registration.

**REHA 301 Principles of Counseling and Group Theory**

**3 cr. Prerequisite: upper division standing.**

Develops an understanding of group process, provides an introduction to conducting interviews and skills in the helping process, and emphasizes group membership skills for rehabilitation clients.

**REHA 303 Assistive Technology Applications Across the Lifespan**

**3 cr. Prerequisite: REHA 201.** Examines applications of Assistive Technology (AT) to maintain or increase levels of functioning and independence for individuals across the life span. The spectrum of low to high technology options in several life domain areas for children and adults with disabilities, those with chronic illness, and the aging population will be explored. Assessment, public policy, universal design, and multicultural considerations are also addressed.

**REHA 406 Assessment in Human Service and Addiction Programs**

**3 cr.** Teaches skills for assessment and diagnosis of addictions. Also, applies empirical principles to appraisal of client characteristics, needs, and potential. Provides practice with assessment data recording, interpretation, and application to an overall view of a case.

**REHA 418 Counseling for Loss and Bereavement**

**3 cr. Prerequisite: consent of instructor.** Examines the process of adjustment to losses of many different kinds that frequently occur in the lives of consumers serviced by counselors and human service agencies. Course will discuss counseling techniques and strategies to facilitate successful adjustment to loss.

**REHA 425 Psychiatric Rehabilitation and Co-Occurring Disorders**

**3 cr. Prerequisite: upper division standing.** Provides an orientation to the field of psychiatric rehabilitation. The course will include historical antecedents, philosophical and traditional connections with the field of rehabilitation and addictions counseling, assessment, planning, and service delivery methods for those intending to work in rehabilitation focused programs serving persons with psychiatric and addiction disabilities. Diagnostic methods for assessing co-occurring psychiatric and addictive disorders utilizing the DSM IV will be explored.

**REHA 453 Case Management and Community Resources**

**3 cr. Prerequisite: upper division standing.** Covers methods for effectively managing a case and caseload. Areas covered include writing a case history, treatment planning, and writing case notes. Aids counselors serving consumers, determining appropriate community resources, and making a proper referral.

**REHA 458 Community Advocacy for Persons with Disabilities**

**1 cr. R-3.** Provides students with experience in providing advocacy for individuals with disabilities.

**REHA 492 Independent Study**

**[formerly REHA 491 Independent Study]**

**V1-3 cr.** Provides an experience for students of superior academic standing to explore material not covered by regular college courses.

**REHA 494 Seminar/Workshop**

**[formerly REHA 492 Seminar]**

**V1-3 cr.** Investigates special topics pertinent to the area of Health and Human Services.

**REHA 494 Seminar/Workshop**

**[formerly REHA 493 Workshop]**

**V1-3 cr.** Provides an opportunity for experimental study in an area of Health and Human Services.

**REHA 498 Internship**

**[formerly REHA 490 Internship: Rehabilitation Agency]**

**6 cr. Prerequisite: upper division standing.** Provides a supervised field experience within a Rehabilitation or allied agency setting. An application is required with prior approval needed for registration. In-field contact time is 45 hours per semester credit.

**REHA 498 Internship**

**[formerly REHA 490 Internship: Community Agency]**

**6 cr. Prerequisite: upper division standing.** Provides a supervised field experience within a community agency which provides people services. An application is required with prior approval needed for registration. Infield contact time is 45 hours per semester credit.

**REHA 498 Cooperative Education/Internship**

**[formerly REHA 496 Cooperative Education/Internship]**

**3 cr. Prerequisite: Permission of Instructor.**

Provides university credit for a junior or senior level field experience in the area of Rehabilitation and Related Services supervised by faculty. Learning agreement must be completed prior to registration.

**REHA 499 Capstone: Addiction Treatment Planning and Documentation**

**2 cr. Offered ONLY Online.** Reviews assessment of individuals with a variety of types of addiction and creating client treatment plans. Course content will also include becoming knowledgeable of the DSM and the ASAM and including them in the assessment and treatment of co-occurring disorders.

## Religious Studies

### English, Philosophy & Modern Languages

(406) 657-2348

**\* RLST 170 The Religious Quest**

**[formerly PHIL 105 The Religious Quest]**

**3 cr. (F, Sp)** Explores humanity's rich accumulation of thought, art, and writings from religious traditions around the world. Rooted in critical thinking, coursework compares and contrasts Daoist, Hindu, Muslim, Buddhist, Confucian, Jewish, Pagan, Jain, Sikh, and Christian traditions, with an eye to exploring and re-envisioning our own spiritual journey.

**RLST 245 Christianity**

**[formerly PHIL 250 Christianity]**

**3 cr.** Examines the Christian tradition in a comparative and critical manner via such topics as the life of Jesus, historic development, scripture (including interpretations and translations), ethics, theology, church divisions, saints and exemplars around the world, heretics, ritual, art and music, and contemporary movements.

**RLST 303 Greek and Roman Mythology**

**[formerly PHIL 303 Classical Mythology]**

**3 cr. (F)** Examines Greek and Roman mythology principally through the major Greek and Roman authors, typically Homer, Apollonius, Sophocles, Euripides, Vergil, and Ovid. The myths are analyzed from a variety of perspectives, such as philosophical, religious, historical, social, anthropological, and literary. The course considers the influence of the myths on the fine arts, especially later literature.

**RLST 304 Mythology Around the World**

**[formerly PHIL 304 Global Mythology]**

**3 cr. (Sp)** Invites students to ponder myths that shape our own lives and compare ancient myths with contemporary answers to age-old questions. From Asia and the Americas to Europe and Oceania, this course considers recurring themes in mythology, such as sex and gender equality, good and evil, nature and our relations with nonhuman animals, the gods and creation, and death and salvation. Interactive and rooted in critical thinking, students will examine myths in light of subjects such as philosophy, religion, history, psychology, anthropology, cultural similarity, and cultural difference.

## Integrated Sciences

### Biological & Physical Sciences (406) 657-2341

**\* SCIN 101 Integrated Sciences I**

**3 cr. Prerequisite: M 095. Corequisite: SCIN 102.**

**(F)** Introduces the concepts and methodology of science by integrating biology, chemistry, physics and geology to investigate specific relevant topics. In particular, the themes of organization, energy, transformation, and diversity are explored in relation to each scientific discipline. Emphasizes conceptual rather than mathematical treatment; however, basic algebra skills are required. Lab required.

**\* SCIN 102 Integrated Sciences Lab**

**1 cr. Corequisite: SCIN 101. (F)** Enhances the lecture material of SCIN 101 through experimental activities.

**\* SCIN 103 Integrated Sciences II**

**3 cr. Prerequisite: SCIN 101. Corequisite: SCIN 104.**

**Offered ONLY Online. (Sp)** Continues to apply the concepts and methodology biology, chemistry, geology, and physics to additional topics. Further details of the application of organization, energy, transformation, and diversity are explored.

**\* SCIN 104 Integrated Science Lab II**

**1 cr. Prerequisite: SCIN 102. Corequisite: SCIN 103.**

**(Sp)** Enhances lecture material of SCIN 103 through experimental activities.

**SCIN 201 Special Topics in Science**

**1 cr. Prerequisites: SCIN 103** Provides an advanced study of special topics in science. Restricted to non-science majors in the University Honors Program.

**SCIN 490 Internship**

**V1-3 cr. Prerequisites: Elementary Education major or Special Education major; completion of PHSX 105, BIOB 101 or equivalents with grade B or higher and consent of instructor.** Provides opportunity of direct use of teaching skills in science areas under a supervised setting in college laboratories and lectures.

**SCIN 491 Independent Study**

**V1-4 cr. Prerequisites: Completion of PHSX 105, BIOB 101 or equivalents, consent of instructor and consent of department chairperson.** Designed to provide the student with the opportunity to study any aspect of integrated sciences which is not offered directly as a course.

**SCIN 492 Seminar**

**V1-3 cr. Prerequisite:** Completion of PHSX 105 or equivalent with a grade B or higher. Provides students in elementary education and/or special education an opportunity to investigate science topics pertinent to the teaching of science at the elementary school level.

**SCIN 493 Workshop**

**V1-4 cr. Prerequisites:** Completion of PHSX 105, BIOB 101, or equivalents, and consent of instructor. Provides opportunity for experimental and/or library research study in integrated areas of the sciences.

## Sign Language

### Rehabilitation & Human Services

(406) 896–5830

**SIGN 101 Introduction to American Sign Language**

**3 cr. (F)** Provides students with the ability to sign as well as understand a deaf person with basic questions, statements, and commands in American Sign Language (ASL). Upon successful course completion, the student can have simple conversations with a client and be able to assist them with filling out forms. This does not replace the need for an interpreter, but would allow the counselor or receptionist to have a conversation with the client in order to make an appointment or to fill out the initial paperwork.

**SIGN 201 Intermediate American Sign Language**

**3 cr. Prerequisite:** SIGN 101. (Sp) Provides students with additional skills in American Sign Language vocabulary and grammar, building on a foundation learned in SIGN 101. Skills learned in SIGN 201 can be used to complete an initial interview with a deaf client. Students will also learn more about deaf culture and will meet the Billings deaf community in order to practice what is learned in the course.

## Sociology

### Social Sciences and Cultural Studies

(406) 657–2311

**\* SOCI 101 Introduction to Sociology**

**[formerly SOCL 101 Introduction to Sociology]**

**3 cr.** Introduces concepts and principles of sociology. Surveys the discipline's basic ideas and orientation.

**\* SOCI 201 Social Problems**

**[formerly SOCL 221 Social Problems]**

**3 cr.** Provides key sociological concepts and theoretical perspectives in the study of social problems. Examines certain selected major U.S. social problems from the perspective of cultural values and social structure. Different possible solutions to the problems will also be explored.

**SOCI 221 Criminal Justice System**

**[formerly CRIM 221 Criminal Justice System, CRIM/SOCL 225 Introduction to Crime and Justice]**

**3 cr.** Familiarizes students with the phenomena of crime and the formal mechanisms of crime control. Uniform Crime Report and National Crime Survey will be used as the primary crime database for examination. Special attention will be paid to study police, their organization and function, as the first-line agent of crime control.

**SOCI 294 Seminar/Workshop**

**[formerly SOCL 292 Seminar]**

**V1-3 cr.** Provides freshmen and sophomores an opportunity to investigate intensively topics pertinent to the field of Sociology.

**SOCI 294 Seminar/Workshop**

**[formerly SOCL 293 Workshop]**

**V1-6 cr.** Provides freshmen and sophomores an opportunity for experimental study in an area of Sociology.

**SOCI 298 Cooperative Education/Internship**

**[formerly SOCL 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of Sociology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**SOCI 311 Criminology**

**[formerly CRIM 311 Criminology, CRIM/SOCL 324 Criminology]**

**3 cr. Prerequisites:** SOCI 101 or SOCI 201 and SOCI 221. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Explores the legal aspects of crime by examining the sociological aspects of making of law. Major contemporary theories in crime as well as criminal behavior systems will be discussed.

**SOCI 318 Sociological Research Methods**

[formerly SOCL 305 Principles and Methods of Social Science Inquiry]

**3 cr. Prerequisites:** SOCI 101 or SOCI 201, STAT 141 or STAT 216, and Junior or Senior status.

**Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Using a philosophy of science approach, this course introduces the basic elements of methodologies used in the social sciences. Qualitative as well as quantitative methodologies are emphasized.

**SOCI 319 Statistics for Sociologists**

**3 cr. Prerequisites:** SOCI 318 and STAT 216.

**Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Introduces students to the statistical analysis of social science data, primarily through the use of the computer program SPSS. Students will build on their understanding of sociological research methods and data collection techniques to conduct their own original research project in which they collect data, construct a dataset, use statistical software to analyze their data, and interpret their research findings.

**SOCI 327 Sociology of Deviance**

[formerly CRIM 327 Sociology of Deviance, CRIM/SOCL 325 Sociology of Deviance]

**3 cr. Prerequisite:** SOCI 101 or SOCI 201.

**Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines deviant behavior in contemporary society. Explores why certain people and types of behaviors come to be defined as deviant. Introduces students to theoretical explanations of deviance.

**SOCI 330 Juvenile Delinquency**

[formerly SOCL 326 Juvenile Delinquency]

**3 cr. Prerequisites:** SOCI 101 or SOCI 201 and SOCI 221. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken.

Considers the structure and function of the juvenile court system in its relation to the societal definition of delinquent behavior and the young people designated as delinquents. Covers the relationship among delinquency and family, school, peer group and social class. Societal reactions to delinquency in terms of mechanisms of social control are also studied.

**SOCI 332 Sociology of the Family**

[formerly SOCL 332 Sociology of the Family]

**3 cr. Prerequisite:** SOCI 351 or consent of instructor. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines the basic structures and functions and the family, male-female differences, love and sexuality, types of marital relationships and the family and child raising in different cultures. With the work of John Bradshaw the course also examines family systems theory, dysfunctional family paradigm and the relationships between the family of origin and compulsive behavior.

**SOCI 344 Sociology of Race and Ethnicity**

[formerly SOCL 344 Minority Groups in America]

**3 cr. Prerequisite:** SOCI 101 or consent of instructor. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken.

The first part of the course is devoted to an examination of prejudice and discrimination as characteristics of human societies. The second part of the course examines a number of socially recognized and in some cases, culturally distinct minority groups in the United States with particular attention given to their histories, problems and the degrees to which each, where it applies, has assimilated with the dominant American society.

**SOCI 351 Dating & Mate Selection**

[formerly SOCL 333 Dating and Mate Selection]

**3 cr. Prerequisite:** SOCI 101 or SOCI 201.

**Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines the social and historical contexts of dating and mate selection, the role of intimacy, and considers marriage as a process involving both unity and conflict.

**SOCI 352 Diseases & Society**

[formerly SOCL 352 Diseases and Societies]

**3 cr. Prerequisite:** SOCI 101 or SOCI 201.

**Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines the interactions between diseases and societies, historically and contemporarily. The course provides a framework for understanding the role diseases have had in shaping society and explores the history of humans' relationship with diseases and anticipates what the future may be, given current disease outbreaks.

**SOCI 355 Social Demography and Population Studies**

[formerly SOCL 342 Social Demography and Population Studies]

**3 cr. Prerequisite:** SOCI 101 or SOCI 201 or ENST 210 or consent of instructor. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Provides an introduction to the field of demography. Emphasis is placed on understanding components of population change, and theories and methods of demography.

**SOCI 356 Sociology of Violence**

**3 cr. (3 lec/wk) Prerequisite:** SOCI 101 or SOCI 201. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. (Sp) Examines contemporary forms of violence from a sociological perspective. Considers the historical and social context of forms of violence ranging from bullying and harassment to police brutality and terrorism. Explores individual and group responses to violence as well as the impact of media and other social institutions on these resources.

**SOCI 362 Sociology of Law Enforcement**

**3 cr. (3 lec/wk) Prerequisite:** SOCI 101 or SOCI 201. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. (Sp) Provides an in-depth examination of law enforcement from a sociological perspective. Students will learn about the role of law enforcement officers in contemporary society and will become familiar with policing as a mechanism for formal social control.

**SOCI 380 Sociology of Health and Medicine**  
[formerly SOCL 380 Sociology of Health, Healing and Illness]

**3 cr. Prerequisite:** SOCI 101 or SOCI 201 or SOCI 318 or ENST 210 or consent of instructor. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Considers the application of sociology to the field of health and medicine. Topics include: the relationship between sociology and health/health care; the development of scientific medicine; the influence of the social environment on health and illness; health care practitioners and their relationship with parents and each other; and the health care delivery system.

**SOCI 382 Social Psychology and Social Structure**  
(crosslisted with PSYX 360)

[formerly SOCL/PSYC 471 Social Psychology]

**3 cr. Prerequisite:** SOCI 101 or SOCI 201 or PSYX 100 or consent of instructor. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Studies how thoughts, feelings, and behavior of individuals are influenced by the actual, implied, or imagined presence of others. Emphasis is given to the symbolic interactionist perspective and the relationship between culture and cognitive processes.

**SOCI 415 Sociology of Hunting and Poaching**

**3 cr. (3 lec/wk) Prerequisite:** SOCI 101 or SOCI 201. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. (Sp) Provides an in-depth sociological examination of hunting and poaching in modern society. Examines the role of hunting and conservation in the United States and explores contemporary hunting issues. Students will learn criminological theories used to explain the illegal taking of wildlife resources.

**SOCI 423 Sociology of Corrections**

[formerly CRIM 423 Sociology of Corrections]

**3 cr. Prerequisite:** SOCI 101 or SOCI 201. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines philosophies of punishment and provides an introduction to institutional and community corrections. Topics include prisons, jails, and probation.

**SOCI 425 Victims and Society**

[formerly CRIM 425 Crime Prevention and Victimology]

**3 cr. Prerequisite:** SOCI 101 or SOCI 201 or SOCI 311 or SOCI 330. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Applies theoretical understandings gained in Criminology and Juvenile Delinquency to construct and evaluate programs in crime prevention. The primary objective is to familiarize students with major prevention strategies, both criminalization (becoming a criminal) and victimization (becoming a victim), as well as certain operational mechanisms.

**SOCI 431 Sociology of Gender Roles**

[formerly SOCL 431 Sociology of Gender Roles]

**3 cr. (It is desirable if students enroll in SOCI 431 after taking SOCI 351 and before enrolling in SOCI 432.) Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Covers the fundamental importance of gender roles as a structural component of social interaction, social structure, and social organization in the face of shifting role responsibilities.

**SOCI 432 Human Sexual Behavior****[formerly SOCL 432 Human Sexual Behavior]**

**3 cr. Prerequisite:** SOCI 101 or SOCI 201 or consent of instructor. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Explores human sexual behavior on a continuum ranging from normal to deviant. The structure of the course permits opportunity for both subjective and objective analyses of a variety of ways in which human sexuality is expressed.

**SOCI 435 Law and Society****[formerly SOCL 465 Sociology of Law]**

**3 cr. Prerequisite:** SOCI 101 or SOCI 201 or PSCI 220 or instructor consent. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines the relationship between the approaches by informal (cultural) and formal (legal) social institutions in attempting to define, organize, and ultimately to legitimately control human behavior in multicultural, historical, institutional, and constitutional contexts. The dichotomy of social justice and inequality is of special concern, along with examining the social impact (or lack thereof) of different socially and/or legally-based institutional attempts at social change implementation.

**SOCI 448 Sport and Society****[formerly SOCL 470 Sport and Society]**

**3 cr. Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Employs sociology as a means to understand and analyze social issues related to sports. Addresses both the positive and negative features of sport in society today, examines the current popularity of sports, the benefits they provide, and the problems they may pose. Discusses how participation in sports can teach cultural values, encourage socially appropriate behavior, and foster community spirit and looks at how particular social problems such as economic inequality, sexism, and racism are handled with sport.

**SOCI 455 Classical Sociological Theory****[formerly SOCL 481 History of Sociological Thought]**

**3 cr. Prerequisite:** SOCI 101 or SOCI 201 or consent of instructor. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Introduces the major sociological theories associated with the founding of the discipline. Focuses on theory as a set of tools to guide research. The explanations provided by theorists are compared and their contributions to the study of selected social phenomena are discussed.

**SOCI 461 Urban Society and Human Ecology****[formerly SOCL 461 Urban Sociology and Human Ecology]**

**3 cr. Prerequisite:** SOCI 101 or SOCI 201 or ENST 210. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Introduces basic concepts of human ecology and focuses on basic patterns of social life in urban areas and their effect on the society and culture which can be expressed by the individual. The urban area is presented in its communal, ecological and morphological aspects including planning for the future.

**SOCI 470 Environmental Sociology****[formerly SOCL 442 Environmental Sociology]**

**3 cr. Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Takes a holistic and systemic approach, applying sociological perspectives to environmental issues. Emphasis on ecological, social-cultural, political-economic, and demographic interactions with the environment.

**SOCI 482 Contemporary Sociological Theory****[formerly SOCL 482 Contemporary Sociological Theory and Theory Construction]**

**3 cr. Prerequisites:** SOCI 455 or consent of instructor. **Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Examines the concepts and theories of recent and contemporary sociologists from 1940 to the present and the current emphasis for sociologists to bring together theory and empirical research at a level where there can be immediate, practical and needed results from their work.

**SOCI 492 Independent Study****[formerly SOCL 491 Independent Study]**

**V1-5 cr. Prerequisites:** consent of instructor and chairperson of department. Provides outstanding students an individual opportunity to explore material not covered by regular Sociology courses.

**SOCI 494 Seminar/Workshop****[formerly SOCL 492 Seminar]**

**V1-3 cr. Prerequisite:** SOCI 101 or SOCI 201.

**Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Sociology.

**SOCI 494 Seminar/Workshop****[formerly SOCL 493 Workshop]**

**V1-6 cr. Prerequisite:** SOCI 101 or SOCI 201.

**Corequisite:** WRIT 201 or WRIT 221 if not previously taken. Provides an opportunity for experimental study in an area of Sociology.



**SOCI 498 Internship/Cooperative Education**  
**[formerly SOCL 490 Internship]****V3-12 cr. Prerequisite: consent of instructor.**

Provides junior and senior Sociology majors with an opportunity to gain practical experience in sociological fieldwork. Three credits are required in the Sociology BA or BS and six credits may be taken in the Extended Sociology BA/BS major.

**SOCI 498 Internship/Cooperative Education**  
**[formerly SOCL 496 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a work experience in the area of Sociology supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**SOCI 499 Senior Thesis/Capstone**  
**[formerly SOCL 499 Capstone Seminar]**

**3 cr. Prerequisite: Senior status. Restricted-Consent of Selected Instructor.** Analyzes how sociologists ask and answer methodological and theoretical questions. Guides the student in developing an understanding of the sociological profession and the tasks of the sociologist through the development of a research project including a literature review, designing a study, collecting data, writing a report, and making a presentation.

## Spanish

### English, Philosophy & Modern

### Languages

(406) 657-2348

**SPNS 101, 102 Elementary Spanish I, II**  
**[formerly SPAN 101, 102 Elementary Spanish I, II]**

**4, 4 cr. (F, Sp)** A sequence course; student must pass SPNS 101 before enrolling in SPNS 102. Introduces modern Spanish; an audio-lingual approach which teaches the grammar necessary for simple spoken and written Spanish.

**\* SPNS 150 The Hispanic Tradition**  
**[formerly SPAN 150 The Hispanic Tradition]**

**3 cr. (F)** Presents aspects of Hispanic traditions and culture across the time and geography as they have shaped current Hispanic societies. Taught in English.

**SPNS 201, 202 Intermediate Spanish I, II**  
**[formerly SPAN 201, 202 Intermediate Spanish I, II]**  
**3, 3 cr. Prerequisite: SPNS 102 or equivalent. (F, Sp)**

A sequence course; student must pass SPNS 201 before enrolling in SPNS 202. Provides a systematic review and expanded study of Spanish grammar and increased development of oral, reading, and writing skills.

**SPNS 292 Independent Study****SPNS 293 Study Tours/Study Abroad****SPNS 304 Spanish for Business**  
**[formerly SPAN 304 Spanish for Business]**  
**3 cr. Prerequisite: SPNS 321 or equivalent.**

Introduces essential business terminology and practices in Spanish, including idioms and special language affecting business investments, labor relations, and corporate economic viability. Special attention is given to U.S.-Latin American sphere.

**SPNS 305 Spanish Phonetics**  
**[formerly SPAN 360 Spanish Phonetics]**  
**3 cr. Prerequisites: SPNS 202 or junior standing. (alternating Sp)**

Introduces students to the unique sound system and fundamentals of Spanish pronunciation, with attention to syllabication intonation, articulation, and individual difficulties; provides students with opportunities to produce, recognize, and transcribe a wide variety of Spanish language sounds.

**SPNS 311, 312 Hispanic Culture and Civilization I, II**

**[formerly SPAN 311, 312 Hispanic Culture and Civilization I, II]**  
**3, 3 cr. Prerequisite: SPNS 202 or equivalent. (F, Sp)**  
Studies the culture and civilization of Spain (SPNS 311) and Latin America (SPNS 312). Readings and discussion on Hispanic history, politics, and culture. Conducted in Spanish.

**SPNS 314 Latino Literature (crosslisted with LIT 307)**

**[formerly SPAN/ENGL 309 Latino Literature]**  
**3 cr. (odd Sp)** Introduces Latino/a literature with focus on classic and contemporary writers of Hispanic origin living and writing in the U.S. Analyzes their historical, political, cultural, and literary discourses through fictional and some non-fictional works focusing on Latino/a society as a marginalized minority.

**SPNS 321, 322 Advanced Spanish Conversation I, II**  
[formerly SPAN 301, 302 Advanced Spanish Conversation I, II]

**3, 3 cr. Prerequisite:** SPNS 202 or equivalent. (F, Sp)  
Provides extensive oral practice to develop greater fluency and proficiency in spoken Spanish. Conducted in Spanish.

**SPNS 405, 406 Spanish Composition & Grammar I, II**

[formerly SPAN 405, 406 Spanish Composition and Grammar Review I, II]

**3, 3 cr. Prerequisite:** SPNS 202 or equivalent. (F, Sp)  
Considers various points of Spanish grammar with the goal of developing an awareness of style necessary for teaching or advanced studies.

**SPNS 455 Topics in Spanish American Literature**  
[formerly SPAN 410 Topics in Spanish American Literature]

**3 cr. Prerequisites:** SPNS 312 or consent of instructor. (even Sp) Studies aspects of Spanish American literature by genre, theme, or period. Focus varies. May be repeated for up to 6 credits. Conducted in Spanish.

**SPNS 456 Topics in Spanish Literature**  
[formerly SPAN 414 Topics in Spanish Literature]

**3 cr. Prerequisites:** SPNS 311 or consent of instructor. (alternating Sp) Studies aspects of Spanish literature by genre, theme, or period. Focus varies. May be repeated for up to 6 credits. Conducted in Spanish.

**SPNS 493 Study Tours/Study Abroad****SPNS 492 Independent Study**  
[formerly SPAN 491 Independent Study]

**V1-5 cr. Prerequisites:** consent of instructor and department chairperson. Offers an opportunity for students of outstanding ability to explore material not covered by regular courses in languages.

**SPNS 494 Seminar/Workshop**  
[formerly SPAN 492 Seminar]

**V1-3 cr. Prerequisites:** consent of instructor and department chairperson. Provides advanced students an opportunity to investigate intensively topics pertinent to the field of Spanish Languages and Literatures.

**SPNS 494 Seminar/Workshop**  
[formerly SPAN 493 Workshop]

**3 cr. Prerequisite:** consent of instructor. Provides an opportunity for experimental study in an area of Spanish Language and Literatures.

**SPNS 498 Internship/Cooperative Education**  
[formerly SPAN 490 Internship]

**V1-3 cr. Prerequisites:** Completion of 60 credit hours or upper division standing in Spanish, 3.0 overall GPA, consent of advisor, and approval of Department Chair. Provides an opportunity for students to acquire field experience and material not covered in regular classes in Spanish; can only be taken on a Pass/No Pass basis.

**SPNS 498 Internship/Cooperative Education**  
[formerly SPAN 496 Cooperative Education]

**V1-8 cr.** Provides university credit for a paid work experience in the area of Spanish supervised by faculty and requiring written assignments.

**SPNS 499 Senior Thesis/Capstone**  
[formerly SPAN 499 Senior Paper]

**1 cr. Prerequisite:** Senior standing in Spanish. Major research paper to be defended in Spanish.

## Statistics

### Mathematics

(406) 657–2228

**\* STAT 141 Introduction to Statistical Concepts**  
[formerly STAT 141 Introduction to Statistics]

**3 cr. Prerequisite:** M 088 or equivalent. (F, Sp, Su)  
Introduces the basic ideas of modern statistics including descriptive statistics, probability, and statistical inference.

**\* STAT 216 Introduction to Statistics**  
[formerly STAT 241 Statistical Methods]

**4 cr. Prerequisite:** M 088 or equivalent. (F, Sp, Su)  
Covers descriptive techniques, probability distributions, and statistical inference of one and two sample tests and associated confidence intervals for means and proportions and linear regression. Introduces statistical analysis using technology.

**STAT 217 Intermediate Statistical Concepts**  
[formerly STAT 242 Statistical Methods II]

**4 cr. Prerequisite:** STAT 216. Covers one and two sample tests and associated confidence intervals for means and proportions; one-way analysis of variance; F-tests; multiple comparisons; correlation; contingency tables; and distribution-free methods. Emphasizes statistical analysis using the computer.

**STAT 294 Seminar/Workshop****[formerly STAT 292 Seminar]**

**V1-3 cr.** Provides students an opportunity to investigate intensively topics pertinent to the field of Statistics.

**STAT 294 Seminar/Workshop****[formerly STAT 293 Workshop]**

**V1-8 cr.** Provides an opportunity for experimental study in an area of statistics.

**STAT 341 Introduction to Probability & Statistics****[formerly STAT/MATH 341 Probability]**

**4 cr. Prerequisite: M 273. (F)** Covers discrete and continuous random variables, moment generating functions, statistical inference, and methods of estimation. Topics may vary from year to year.

**STAT 492 Independent Study****[formerly STAT 491 Independent Study]**

**V1-3 cr. Prerequisites: consent of instructor and department chairperson.** Provides outstanding students an individual opportunity to explore material not covered by regular statistics courses.

**STAT 494 Seminar/Workshop****[formerly STAT 492 Seminar]**

**V1-3 cr. Prerequisite: mathematics major or minor, or consent of instructor.** Investigates intensively topics pertinent to the area of Statistics.

**STAT 494 Seminar/Workshop****[formerly STAT 493 Workshop]**

**V1-3 cr.** Provides an opportunity for experimental study in an area of Statistics.

## Technical Administrative Skills City College

**TASK 115 Keyboard Applications/Ten Key****[formerly CTBU 115 Keyboard Applications/Ten Key]**

**3 cr. (1 lec/4 lab/wk) (F, Sp)**

Applies keyboarding skills to the formatting of various kinds of business correspondence. The ten-key component develops the skill to operate the computer numeric ten-key pad by the touch method. Students will continue building speed and improving accuracy on both keyboards.

**▽ TASK 145 Records Management****[formerly CTBU 131 Records and Information Management]**

**3 cr. (3 lec/wk) Prerequisite: CAPP 120. (F, Sp)**

Applies concepts of file storage and retrieval and ARMA basic rules for the four most commonly used filing systems: alphabetic, numeric, subject, and geographic. Emphasis is also placed on electronic file management. The student will learn the basics of database management through design, control, organization, and accuracy.

**TASK 202 Machine Transcription****[formerly CTBU 113 Transcription]**

**3 cr. (1 lec/4 lab/wk) Prerequisites: TASK 115, CAPP 154. (F, Sp)**

Develops the ability to produce business correspondence using dictation/transcription equipment.

**TASK 230 Office Career Success****[formerly CTBU 133 Office Applications]**

**3 cr. (3 lec/wk) (F, Sp)**

Presents practical strategies to enhance job search and career management skills through the study of contemporary workplace issues including current business practices, globalization, communications, and human relations. Career-building assignments including skills and interest assessment assist students in achieving immediate and future goals.

**TASK 292 Independent Study**

**V1-8 cr.**

**TASK 294 Seminar/Workshop****[formerly CTBU 292 Seminar]**

**V1-3 cr.**

Provides students with the opportunity to intensely study a wide variety of topics pertinent to the field of Business and Information.

**TASK 294 Seminar/Workshop****[formerly CTBU 293 Workshop]**

**V1-3 cr.**

Provides students with the opportunity for experiential study in the varied areas of Business and Information.

**TASK 298 Internship/Cooperative Education****[formerly CTBU 296 Cooperative Education/Internship]**

**V1-9 cr. (45 hours/credit)**

Provides university credit for a sophomore work experience in the area of Business and Information Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Theatre

### Communication & Theatre

(406) 657-2178

**\* THTR 101 Introduction to Theatre**  
[formerly COMT 150 Introduction to Theatre and Performance]

**3 cr.** Introduces the student to various aspects of theatre and performance with the goal of enhancing the student's enjoyment of drama and performance art. Provides the student with an understanding and an appreciation of the art of theatre.

**THTR 102 Introduction to Theatre Design**  
[formerly COMT 256 Visual Elements of Performance Studies]

**3 cr.** Focuses on analysis, design, and construction of the visual/physical aspects of performance. This class explores creating a physical environment for performance. Based on traditional theatrical tools (set/lighting design and construction, costumes, makeup), students will also be encouraged to work with video production techniques leading to documentary design options. Non-traditional tools such as found objects, expanded definitions of performance space, and experimental design processes will also be explored.

**\* THTR 120 Introduction to Acting I**  
[formerly COMT 250 Introduction to Acting]

**3 cr.** Uses theatre games and scripted material to introduce the student to basic concepts of the art of acting. Helps the student to develop an appreciation for the art of acting both from the point of view of the audience and the performer.

**THTR 205 Theatre Workshop II**  
[formerly COMT 293 Workshop]

**V1-5 cr. Prerequisite: consent of instructor.** Provides an opportunity for experimental study in an area of Communication and Theatre.

**THTR 302 Theatre Design and Technology**  
[formerly COMT 356 Theatre Design and Technology]

**3 cr. Prerequisite: THTR 102.** Refines communication through the media of lighting, sound, and scenic design. This course allows the student to learn the steps through which to execute a stage design. Students will explore different design strategies and apply theoretical models to theatrical and/or media productions.

**THTR 305 Theatre Workshop III**  
[formerly COMT 493 Workshop]

**V1-5 cr. Prerequisite: consent of instructor.** Provides an opportunity for experimental study in areas Communication and Theatre.

**THTR 375 Directing I**  
[formerly COMT 358 Directing]

**3 cr. Prerequisite: COMX 200, THTR 120 or consent of department chair.** Provides a guided study in interpreting and directing the play with work in developing a written concept and staging a portion of material based on that concept. It is also intended to help each student with individual rehearsal problems.

## Trade and Industry

### City College

**TRID 140 Automobile Sheet Metal and Structural MIG Welding**

**2 cr. (1 lec/2 lab/wk) (F)**

Demonstrates the basic methods and techniques used in GMAW (Gas Metal Arc Welding) also referred to as MIG (Metal Inert Gas) welding. The MIG welding concentration is focused on gauges of metal used in the production of modern automobiles.

**TRID 150 Environmental and Shop Practices**

**2 cr. (1 lec/2 lab/wk) (F, Sp)**

Informs students on safety, hazardous materials and toxic waste. Students are given a working knowledge of tool use, measuring devices, fasteners, use of shop manuals, and hazardous waste precautions and handling procedures.

**TRID 151 Welding**

**2 cr. (1 lec/2 lab/wk) (F, Sp)**

A theory and practical course designed to give students experience in oxyacetylene welding, cutting, and arc welding processes used in the trade and industrial field applications. Various types of welders and electrodes are used for practice on weld coupons.

**TRID 152 Vehicle Heating, Ventilation and Air Conditioning**

**3 cr. (1 lec/4 lab/wk) (F, Sp)**

The auto air portion of this course is designed to help students gain an understanding and working knowledge of air conditioning systems and controls currently used in automobiles and trucks. Theory, diagnosis and service procedures, and environmental concerns are presented to give students the necessary skills to repair vehicle air conditioning systems.

**TRID 160 Hazardous Materials Technician General Training****3 cr. (2 lec/2 lab/wk) (Sp)**

Provides hazardous materials training needed to meet all requirements of the first responder at the awareness, operations, and technician level of emergency hazardous materials response. Technicians shall meet the training requirements in accordance with requirements of OSHA and NFPA (National Fire Protection Association).

**TRID 170 Engine Theory****4 cr. (4 lec/wk) Prerequisites: Eligible to enter WRIT 104 and a minimum RD 101 Compass score of 72 or appropriate transfer work. (F)**

Theory-driven introductory course that will give the student a basic understanding of compression and spark ignition engines. This course will study engine components, terminology of engine design, and will provide a basic understanding of engine design and operation. This is not an engine overhaul course.

**TRID 180 Electrical Systems****4 cr. (2 lec/4 lab/wk) Prerequisite: M065 or appropriate placement score. (F, Sp)**

Covers introductory material in Automotive Electrical Systems. This course is designed to give the student a strong background in the theory of operation, diagnosis, and repair of electrical and electronic systems. Theory of AC/DC electricity, Ohm's Law, magnetism, wiring, and measuring devices are discussed. Units covered include the theory of testing and/or repair of automotive and heavy-duty batteries, starters, alternators, and regulators.

**TRID 181 Transportation Electrical Systems Lecture****2 cr. (2 lec/wk) Corequisite: TRID 182. (F, Sp)**

Covers introductory theory of electrical systems found in the transportation and heavy equipment industry. This course is designed to give the student a strong background in the theory of operation of electrical and electronic systems. Theory of AC/DC electricity, Ohm's Law, magnetism, wiring, and measuring devices are discussed. Units covered include the theory of testing and/or repair of automotive and heavy-duty batteries, starters, alternators, and regulators.

**TRID 182 Transportation Electrical Systems Lab****2 cr. (4 lab/wk) Corequisite: TRID 181. (F, Sp)**

Covers introductory testing and repair of electrical systems found in the transportation and heavy equipment industry. This course is designed to give the student a strong background in the diagnosis and repair of electrical and electronic systems. Application of AC/DC electricity, Ohm's Law, magnetism, wiring, and measuring devices are applied. Units covered include the testing and/or repair of automotive and heavy-duty batteries, starters, alternators, and regulators.

**TRID 185 Introduction to Industrial Power Systems Lecture****2 cr. (2 lec/wk)**

Covers the fundamental principles of direct current and alternating current circuits and their use in an industrial setting. Also includes transformers and electrical distribution systems.

**TRID 186 Introduction to Industrial Power Systems Laboratory****1 cr. (2 lab/wk) Corequisite: TRID 185.**

Provides students exposure to major concepts of industry through hands-on laboratory investigations and application of principles learned in TRI 185.

**TRID 190 Introduction to Residential Wiring****3 cr. (2 lec/2 lab/wk)**

Introduces wiring methods and materials used in single- and two-family dwellings. It covers basic installation and replacement techniques for residential electrical components.

**TRID 290 Internship****Credit varies.**

Integrates coursework with program-related work experience in business, industry, and/or government. Students do not receive pay. This must be coordinated through the department chairperson.

**TRID 292 Seminar****V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of trade and industry.

**TRID 293 Workshop****V1-3 cr.**

Provides an opportunity for experimental study in an area of trade and industry.

## Women's & Gender Studies

### Social Sciences and Cultural Studies

(406) 657-2311

**\* WGSS 274 Women, Culture and Society**  
[formerly SOCL/A&SC 250 Women, Culture and Society]

**3 cr.** Examines the diversity of women's experience in society as citizens, creators, and thinkers. The course includes cross-cultural and historical study, but concentrates on the status and roles of women (and men) in contemporary American society.

#### **WGSS 294 Seminar in Women's Studies**

**3 cr.** Provides beginning or advanced students an opportunity to investigate intensively topics pertinent to the field of Women's Studies.

#### **WGSS 492 Independent Study**

**V1-6 cr. Prerequisite: Consent of instructor and chairperson of department.** Provides outstanding students an individual opportunity to explore material not covered by regular Women's Studies courses.

#### **WGSS 494 Seminar in Women's Studies**

**3 cr.** Provides beginning or advanced students an opportunity to investigate intensively topics pertinent to the field of Women's Studies.

#### **WGSS 498 Internship/Cooperative Education**

**V1-6 cr.** Provides university credit for a work experience in the area of Women's Studies, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

#### **WGSS 499 Capstone Seminar in Women's Studies**

**3 cr. Prerequisite: WGSS 274.** Emphasizes analysis of women's studies theories and research methods and applications of feminist thought to social institutions that are of concern to women.

## Welding

### City College

#### **WLDG 117 Blueprint Reading and Welding Symbols**

[formerly METL 112 Blueprint Reading and Welding Symbols]

**3 cr. (3 lec/wk) Prerequisite: RD 101 and WRIT 104 or compass score equivalent. (F)**

Introduces the student to structural steel, piping, and mechanical blueprint reading. Hand sketching of orthographic and isometric drawings are taught along with weld symbols and solid modeling for blueprint design.

#### **WLDG 124 Welding Theory, Technology and Safety** [formerly METL 111 Welding Technology, Theory and Safety]

**3 cr. (3 lec/wk) Prerequisite: RD 101 and WRIT 104 or compass score equivalent. (F)**

Examines and presents welding and shop safety, oxy-fuel safety, base metal preparation, weld quality, SMAW equipment and set-up, electrode selection, and joint design and fit-up. Other topics introduced are air carbon arc cutting, plasma cutting, and beginning pipe welding.

#### **WLDG 125 Cutting and Shielded Metal Arc Welding Lab**

[formerly METL 113 Cutting and Shielded Metal Arc Welding Lab]

**5 cr. (10 lab/wk) Corequisite: WLDG 124. (F)**

Includes manual and semi-automated oxy-acetylene cutting processes and safety. Shielded Metal Arc Welding with 6010 electrode prepares students for the American Welding Society D1.1 and American Society of Mechanical Engineers Section IX structural certification. In addition, air carbon cutting process, plasma arc cutting process, and equipment set-up are presented. Welding shop safety and quality are emphasized.

#### **WLDG 126 Shielded Metal Arc Welding Lab** [formerly METL 114 Shielded Metal Arc Welding Lab]

**4 cr. (8 lab/wk) Corequisite: WLDG 124. (F)**

Continues WLDG 125 which leads the student toward American Welding Society D1.1 and American Society of Mechanical Engineers Section IX structural certification for 6010 and 7018 electrodes in all positions. Equipment set-up, operation, weld quality, and safety are emphasized.

**WLDG 152 Layout Pattern Making**  
**[formerly METL 151 Layout and Pattern Making Fundamentals]**

**3 cr. (3 lec/wk) Prerequisites:** WLDG 117, M 111 or consent of instructor. **Corequisites:** WLDG 153 and WLDG 154. (Sp)

Provides layout and fitting skills applicable to an industrial welding and fabrication shop. Tasks include reading prints, estimating, and ordering materials. Employs simple layout, parallel line development, radial line development, triangulation for pattern development and applied math concepts.

**WLDG 153 Metal Fabrication Basics**  
**[formerly METL 152 Metal Fabrication Basics]**

**3 cr. (2 lec/2 lab/wk) Prerequisites:** WLDG 124, WLDG 117, WLDG 125, WLDG 126, M 111, or instructor consent. **Corequisite:** WLDG 154. (Sp)

Introduces metal fabrication procedures and safe operation of fabrication equipment. Instruction covers operation of shears, press-brakes, ironworkers, punches, drill presses, CNC plasma tables, and CAD software. Common terminology, fabrication theory, material use, and equipment safety are taught.

**WLDG 154 Metal Fabrication Basics Lab**  
**[formerly METL 153 Metal Fabrication Lab]**

**3 cr. (6 lab/wk) Prerequisites:** WLDG 124, WLDG 117, WLDG 125, WLDG 126, or consent of instructor. **Corequisites:** WLDG 152, WLDG 153. (Sp)

Uses techniques learned in WLDG 152 and WLDG 153 to perform layout, cutting and fabrication, fitting, and weld-out procedures applicable to fabricating a finished product or project. Includes the proper use of fabrication equipment and shop practices. Safety, accuracy, quality, and commitment to excellence are emphasized. Semester projects are assigned.

**WLDG 156 Semi-Automatic Welding**  
**[formerly METL 154 Semi-Automatic Welding]**

**2 cr. (2 lec/wk) Prerequisites:** WLDG 124, WLDG 117, WLDG 125, WLDG 126, or consent of instructor. (Sp)

Prepares and teaches students basic knowledge of Gas Metal Arc Welding (GMAW), Flux Core Arc Welding (FCAW), shielded and non-shielded, and GMAW-Pulsed. Equipment needs, set-up, joint design, filler metals, shielding gasses, welding techniques, and safety will be taught.

**WLDG 157 Semi-Automatic and SMAW Lab**  
**[formerly METL 155 Semi-Automatic and SMAW Lab]**

**5 cr. (10 lab/wk) Prerequisites:** WLDG 124, WLDG 125, WLDG 126, or consent of instructor. **Corequisite:** WLDG 156. (Sp)

Introduces semi-automatic wire feed processes. This course leads to AWS and ASME certification of plate (all positions) with the SMAW, GMAW, GMAW-P, and FCAW-G and FCAW processes. Safe practices and weld quality are emphasized.

**WLDG 205 Applied Metallurgy**  
**[formerly METL 214 Advanced Weld Technology and Theory II]**

**2 cr. (2 lec/wk) Prerequisite:** Completion of first year of program or consent of instructor. (F)

Introduces the student to weldability of metals, welding metallurgy, welding automation and robotics, and related cutting and welding processes.

**WLDG 212 Pipe Welding and Layout**  
**[formerly METL 211 Pipe Welding and Layout]**

**3 cr. (1 lec/4 lab/wk) Prerequisite:** Completion of first year of program or consent of instructor. (F)

Provides the second year welding student with an introduction to pipe layout, fitting, and welding. Instructs students in piping information, basic pipe layout practices, use of pipe layout tools, and basic pipe welding techniques for 1G rolled position, 2G, 5G, and 6G fixed position using 6010 and 7018 electrodes. Safety, quality, and proper welding techniques according to ASME SEC IX and API 1104 standards are stressed.

**WLDG 213 Pipe Welding I Lab**  
**[formerly METL 212 Pipe Welding Lab I]**

**5 cr. (5 lec/10 lab/wk) Prerequisite:** Completion of first year of program or consent of instructor. **Corequisite:** WLDG 212. (F)

Provides students with the practical application of pipe welding and fitup. Students will practice pipe layout, fitting, and welding techniques in the 1G rolled position the 2G, 5G, and 6G fixed position using 6010 and 7018 welding electrodes and semi-automatic wire processes. Quality and safety will be emphasized.

**WLDG 215 Gas Tungsten Arc Welding**  
**[formerly METL 213 Gas Tungsten Arc Welding]**

**5 cr. (2 lec/6 lab/wk) Prerequisite:** Completion of first year of program or consent of instructor. (F)

Provides an intense course in all aspects of manual gas tungsten arc welding (GTAW). Course covers welding techniques and applications, equipment setup, and procedures for ferrous and non-ferrous metals. Quality and safety will be stressed.

**WLDG 250 Metals Production****2 cr. (4 lab/wk) Prerequisite: WLDG 215. (Sp)**

Complete a project from conceptualization to final product that includes creating blueprints, developing bill of materials, and generating cost estimates. The students fabricate the project to print dimensions and tolerances. Students use CAD and other software, math skills, various welding positions, fabrication, and assembly techniques for product completion.

**WLDG 251 Specialty Welding Processes****[formerly METL 251 Specialty Welding Processes]****5 cr. (2 lec/6 lab/wk) Prerequisite: Completion of first year of program, WLDG 213, WLDG 215, and WLDG 205 or instructor's consent. (Sp)**

Provides welding students with the practices and difficulties welding high carbon and low alloy steels, cast iron, stainless steel, and aluminum with SMAW, GTAW, GMAW, and FCAW. Welding safety will be a component of this course.

**WLDG 255 CNC Burn Table Programming and Operation****[formerly METL 252 CNC Processes for Metal Fabrication]****5 cr. (2 lec/6 lab/wk) Prerequisites: WLDG 124, WLDG 117, WLDG 152, WLDG 153, and WLDG 154 or consent of instructor. (Sp)**

Introduces the student to CNC processes used in metal fabrication. Students will learn how to understand and use machine post processors and controllers. Covers programming of metal shears, metal brakes, and plasma cutting tables as well as programming basic operations on CNC lathes and mills. Master Cam CNC programming software and Solid Works solid modeling software will be taught and used.

**WLDG 280 Weld Testing Certification****[formerly METL 253 Weld Testing and Certification]****2 cr. (2 lec/wk) Prerequisite: Completion of first year of program or consent of instructor. (Sp)**

Prepares the student for weld testing and certification. Covers destructive and non-destructive testing for weld inspection. Students learn the weld certification process and welding codes governing welding.

**WLDG 281 Weld Testing Certification Lab  
[formerly METL 254 Weld Testing and Certification Lab]****3 cr. (6 lab/wk) Prerequisite: Completion of first year of program or consent of instructor. (Sp)**

Provides students with the opportunity to prepare and practice for plate and pipe tests according to AWS D1.1, API 1104, and ASME Section IX codes and standards.

**WLDG 294 Seminar/Workshop****[formerly METL 292 Seminar]****V1-3 cr.**

Provides students an opportunity to investigate intensively topics pertinent to the field of metal fabrication.

**WLDG 294 Seminar/Workshop****[formerly METL 293 Workshop]****V1-3 cr.**

Provides an opportunity for experimental study in an area of metal fabrication.

**WLDG 298 Internship/Cooperative Education****[formerly METL 296 Cooperative Education/Internship]****V1-9 cr. (45 hours/credit)**

Provides university credit for a sophomore work experience in the area of Welding and Metal Fabrication Technology, supervised by faculty. Learning agreement must be completed prior to registration (restricted).

## Developmental Education: Writing City College

**WRIT 095 Developmental Writing****[formerly ENGL 100 English Essentials]**

**3 cr.** Reviews basic grammar with emphasis on sentence structure and mechanics. Also presents basic writing considerations, especially paragraph organization and development of the multi-paragraph essay. Placement by student's request or by results of Writing Placement Test, SAT, or ACT and by faculty recommendation. Credits do not apply toward graduation requirements and do not fulfill General Education requirements. Credits not applicable to English major or minor. However, the credits do count towards enrollment status for financial aid.



## Writing

### English, Philosophy & Modern Languages

(406) 657-2348

**\* WRIT 101 College Writing I**  
[formerly ENGL 150 College Composition]  
**3 cr. Prerequisite:** Satisfactory passing score on Placement Examination or grade of “C” or better in WRIT 095. (F, Sp) Provides instruction in writing competencies expected of college students. Pays special attention to writing as a problem-solving process, patterns of organization in personal and informative writing, and logical thinking and style in argumentative/persuasive writing. (Course not applicable to English major or minor.)

**WRIT 104 Workplace Communications**  
[formerly ENGL 102 English Essentials for Technical Writers]

**3 cr. (3 lec/wk) (F, Sp, Su)**

Designed to teach students the fundamentals of the English language, including grammar, spelling, punctuation, and word usage, with emphasis on applying these skills in written communication for the work world.

**\* WRIT 121 Introduction to Technical Writing**  
[formerly ENGL 145 Technical Communication]  
**3 cr. (3 lec/wk) Prerequisite:** WRIT 095, WRIT 104, or qualifying score on placement exam and CAPP 120. (Sp)

Introduces the student to the creation and evaluation of several kinds of written and oral technical communication.

**\* WRIT 122 Introduction to Business Writing**  
[formerly ENGL 140 Business Writing]  
**3 cr. (3 lec/wk) Prerequisite:** Satisfactory completion of WRIT 095, WRIT 104, or qualifying score on the placement exam. (F, Sp, Su)  
Provides instruction in the preparation of business memos, letters, reports, oral presentations, and computer assisted writing in business contexts.

**WRIT 180 Editing for Business Writing**  
[formerly ENGL 180 Editing for Business Writing]  
**1 cr. (1 lec/wk) Prerequisite:** Satisfactory completion of one of the following: WRIT 122, WRIT 121, WRIT 101, an approved college English course, or qualifying score on the placement exam. (Sp)

Develops three basic editing skills necessary to achieve an on-the-job level of proficiency. This includes review and instruction on grammar, usage, and style as they apply to the modern office environment.

**\* WRIT 201 College Writing II**  
[formerly ENGL 226 Research Writing]  
**3 cr. Prerequisite:** WRIT 101. (F, Sp) Provides opportunities for students to develop writing and thinking skills that are both relevant and adaptable to many writing situations and assignments. Includes basic research writing and information gathering skills appropriate to a variety of academic disciplines. Students will be instructed in the use of both the M.L.A. and the A.P.A. systems of documentation.

**\* WRIT 220 Business & Professional Writing**  
[formerly ENGL 201 Business Communication]  
**3 cr. Prerequisite:** WRIT 101 or WRIT 122. (F, Sp)  
Provides the study and practice of advanced writing for business and administrative settings. The student learns to write various kinds of messages (informational, bad news, persuasive, critical, sales/solicitation) and uses various formats (memos, letters, reports). Students work collaboratively on group writing assignments.

**\* WRIT 221 Intermediate Technical Writing**  
[formerly ENGL 210 Technical Writing]  
**3 cr. Prerequisite:** WRIT 101 or WRIT 121. (even Sp) Emphasizes advanced strategies and techniques appropriate to descriptive and analytical writing in sciences and technical disciplines.

**WRIT 294 Seminar/Workshop**  
**V1-3 cr.** Provides freshmen and sophomores an opportunity to investigate intensively topics pertinent to the fields of composition, literature and language.

**WRIT 294 Seminar/Workshop**  
**V1-3 cr.** Provides freshmen and sophomores an opportunity for experimental study in an area of English or the teaching of English.

**WRIT 298 Cooperative Education/Internship**  
**[formerly ENGL 296 Cooperative Education/Internship]**

**V1-9 cr.** Provides university credit for a sophomore work experience in the area of English supervised by faculty. Learning agreement must be completed prior to registration (restricted).

**WRIT 321 Advanced Technical Writing**

**3 cr. (3 lec/wk) Prerequisite: WRIT 101 or WRIT 121 or WRIT 122. (F)** Focuses on effective technical communication, including theory and practice of audience analysis, purpose and scope, organization, and development. Emphasizes drafting, revising, and editing for specialized audiences.

**WRIT 396 Peer Tutoring**

**[formerly ENGL 390 Peer Tutoring]**

**1 cr. R-6. Prerequisites: English major or minor and approval of the instructor. (F, Sp)** Provides practical experience imparting basic language skills to fellow students in the Writing Lab.

**WRIT 398A Internship**

**[formerly ENGL 394 Internship]**

**1cr. R-6. Prerequisites: English major, Upper-division status and approval of department chair. (F, Sp)** Places the upper-division English student in a section of WRIT 101 College Writing I, as a teaching assistant with a faculty member as mentor. The student will assist the faculty member in teaching the class and have primary responsibility for designing, implementing, and evaluating at least one writing assignment. The class provides direct teaching experience for students pursuing teacher licensure in English.

**WRIT 492 Independent Study**

**V1-3 cr. Prerequisites: consent of instructor and chairperson of the department.** Provides outstanding students with an opportunity for individually guided research and study in English. A contract describing the study must be completed at the time of enrollment and filed in the English Department office. (Note: Not more than 6 credits of WRIT 492 may be allowed toward any program in English.)

**WRIT 494 Seminar/Workshop**

**V1-3 cr.** Provides advanced students an opportunity to investigate intensively topics pertinent to the field of English.

**WRIT 494 Seminar/Workshop**

**V1-3 cr.** Provides an opportunity for experimental study in an area of English and the teaching of English.

**WRIT 498 Cooperative Education/Internship**  
**[formerly ENGL 490 Internship]**

**V1-3 cr. Prerequisites: upper division status and approval of department chairperson.** Provides an opportunity for students to acquire field experience and material not covered by regular English courses.

# Glossary of Terms and Definitions

The following is a collection of explanations and interpretations of terms commonly used throughout this General Bulletin and at Montana State University Billings.

**589** – Designated course number for professional development credit bearing courses offered by Extended Campus. These credits do not count toward any degree at MSU Billings.

**Academic Probation** - Denotes that a student's academic performance is below standard as defined by the institution; the student is warned of possible suspension.

**Academic Record** - The unabridged and complete historical record of a student's academic coursework.

**Academic Senate** - The highest ranking faculty governing committee on campus. The Senate makes recommendations on course offerings, program content, and other academic matters and governs a variety of faculty matters. Although members are elected by faculty members, students may also serve on Senate committees.

**Academic Year** - That period of time from the opening of Fall Semester to the closing of the next Spring Semester is the "academic year." Summer Session is specifically excluded.

**Accredited Institution** - A college or university accredited by, or a candidate for accreditation from, one of the recognized regional accrediting commissions. Montana State University Billings is accredited by the Northwest Commission on Colleges and Universities.

**Activity Courses** - Courses centered around participation rather than classroom and laboratory achievement. Examples include physical education activities, band and chorus activities and drama activities. Credit earned in such courses may be limited when used for meeting graduation requirements in some programs.

**Admission** - The process of accepting a candidate for enrollment into college.

**Advising** - A service provided by a faculty member or designated person (advisor). An advisor guides students through academic questions, problems, and/or coursework to plan and complete a degree program.

**Advisor** - A faculty member or designated person who guides students through academic questions, problems, and/or coursework to plan and complete a degree program.

**Allied Health Professions (College of)** - This area involves coursework which will prepares students to work in health, human services, rehabilitation, and related areas.

**Arts and Sciences (College of)** - Subjects used traditionally to teach students to think, to evaluate ideas, and to communicate with precision. Subjects in the College of Arts and Sciences include: Art; Biological and Physical Sciences (biology, chemistry, earth sciences and physics); Communication and Theatre; English, Philosophy and Modern Languages; History; Mathematics; Music; Psychology; and Social Sciences and Cultural Studies (sociology, political science, Native American studies, environmental studies, and women's studies).

**Associate Degree** - A degree which generally requires two years to complete. MSU Billings offers Associate of Arts and Associate of Science degrees as well as the Associate of Applied Science degree.

**Auditor** - One who enrolls in a class for informational instruction only. No academic credit is granted for auditing a class.

**Bachelor's Degree** - A first-level degree granted upon completion of a course of study in a given field and based on at least four years of college work, or the equivalent thereof.

**Business (College of)** - This area includes subjects which apply to the business world including Accounting, Finance, Management, and Marketing.

**Candidate for a Degree** - A status students assume when they have completed all requirements for a degree and apply for graduation. To apply for graduation a student fills out an application for graduation at the Admissions and Records Office, pays a fee, and returns the application to the Admissions and Records Office.

**Class Schedule** - The list of courses and sections offered in a given semester, including days, hours, places of meeting and names of instructors.

**College** - One of five major divisions of academic areas at MSU Billings. They are the College of Allied Health Professions, the College of Arts and Sciences, the College of Business, the College of Education, and City College. Each college is headed by a dean who reports to the Provost and Academic Vice Chancellor.

**Common Body of Knowledge (CBK)** - Courses required of students in all options and majors in the College of Business.

**Core Courses** - Courses required by the University, the college, or the department by all students in a degree program regardless of the option or concentration in which they may choose to major.

**Corequisite** - A course required to be taken at the same time as another course.

**Course** - A unit of academic work in a particular subject, normally one semester long, for which credit toward graduation is usually given.

**Course Load** - The number of semester credit hours associated with the academic work in which a student is enrolled in any given term.

**Credit Hours** - Normally one semester credit hour represents 60 minutes of classroom instruction each week for one semester. (Credit in a laboratory or studio class may require a longer period of time). A three credit class will meet for three 60-minute or two 90-minute sessions each week for the entire semester.

**Degree** - An academic title MSU Billings is authorized to confer as official recognition to those who complete an academic program. An example is a Bachelor of Science Degree.

**Degree Program** - A prescribed course of study which leads to a degree.

**Double Counting** - The process by which some courses may be used to meet both General Education requirements and requirements for a major or minor. However, the credits may not be counted twice. If, for instance, one course is used to meet requirements in General Education and the major, the credits may only be counted in one of those areas.

**Education (College of)** - This area involves coursework which will enable students to teach in elementary or secondary schools in most areas offered in arts and sciences and in health, physical education and related subjects, and in special education.

**Electives** - Courses which are not a required part of a degree program are electives. Some departments may insist that their majors choose between certain electives (referred to as Restricted Electives).

**Extended Major** - As a substitution for the standard major-minor requirement a student may, with permission of the department chairperson concerned, complete an extended major with a minimum of 40 semester credits.

**Extension Class** - A special class offered through MSU Billings Extended Campus. A special fee is required and the course may be offered for regular college credit or it may be a non-credit course.

**Faculty Advisor** - A faculty member who helps a student plan and complete a degree program.

**Full-time Student** - An undergraduate student registered for 12 or more semester credits, or any graduate student registered for nine or more semester credits is considered a full-time student.

**General Education Requirements** - A body of knowledge which, in the view of the University and its faculty, every graduate of MSU Billings must have in addition to the specializations of the major and minor. Each student is required to take 31 semester credits of General Education courses.

**Good Academic Standing** - Status which denotes that a student is eligible to continue at or return to an institution.

**Grade Point Average (GPA)** - The grade average a student earns for each semester. It is calculated by multiplying the number of credits given for a course times the value of the grade received for the course (A=4, B=3, C=2, D=1, F=0), adding the value calculated for each class and dividing by the total number of credits. Thus, if a student has an “A” in a 4 credit course; a “B” in a 3 credit course; a “C” in a 2 credit course, and a “D” in a 2 credit course the GPA calculation would be as follows:

A = 4 times 4 credits = 16 grade points

B = 3 times 3 credits = 9 grade points

C = 2 times 2 credits = 4 grade points

D = 1 times 2 credits = 2 grade points

Total = 31 grade points divided by 11 total credits = 2.82 GPA.

**Grade Report** - A report of the student's grades earned at the end of each semester.

**Graduate Student** - Student who has earned a baccalaureate degree and is pursuing post baccalaureate studies including a master's degree.

**Graduate Courses** - Courses generally reserved for graduate students and numbered at the 500 level and above.

**Graduation Check** - The determination of whether a student has met the specified minimum educational requirements necessary for the granting of a degree.

**Headcount** - The number of students enrolled in an educational institution, program, course, etc., without regard to the number of credit hours being taken by individual students.

**Hours** - Sometimes referred to as semester credit hours unless specifically stated otherwise.

**Human Services** - A broad field of human endeavor in which individuals act as agents to assist individuals, families, and communities to better cope with crisis, change, and stress; to prevent or alleviate stress; and to function effectively in all areas of life and living.

**Laboratory** - A course involving supervised experimentation or practice related to an academic area. It generally requires hands-on use of equipment and materials.

**Lower Division Courses** - Classes usually numbered 100 to 299. Ordinarily freshman and sophomores take courses numbered from 100 to 299.

**Major** - The area in which a student concentrates. An academic major is required for graduation. Majors require a minimum of 30 semester credits.

**Minor** - A program of courses in addition to the major in which students must complete. A minor requires at least 20 semester credits of instruction in specified courses.

**Moratorium** - The academic program remains in the catalog, but the University has temporarily suspended admission to the program.

**MSU Billings Extended Campus** - This area includes noncredit and credit workshops, interactive TV courses, and internet courses as well as other professional development offerings on and off campus.

**Multicultural Study** - A general term for courses which involve students in the study of a culture other than the typical American culture.

**Option** - A program by which students narrow their area of specialty within the overall umbrella of a particular major program.

**Part-time Student** - A student enrolled with 11 or fewer credits.

**Pass/No Pass Grading** - Pass/No Pass is a way of taking classes without fear of failure. Students who do “A,” “B,” or “C” work in the class are given a “P;” students who do “D” or “F” work receive a “NP.” It is intended to encourage students to explore courses outside of their major and minor programs. There is no effect on Grade Point Average; however, credit is earned toward graduation. Students must indicate the P/NP Option at the time they register for classes.

**Pre-registration** - The process by which students select courses for a succeeding term in advance of the official opening date of the semester.

**Prerequisite** - A course to be completed successfully or a condition to be met before a student may enroll in a specific course.

**Probation** - Academic probation is the result of unsatisfactory scholarship. It is not a penalty but a warning and an opportunity to improve.

**Quantitative Methods** - A group of basic mathematics and statistics courses required for business majors. It provides a foundation for the more complicated mathematical manipulations required in the Common Body of Knowledge and other business courses.

**Quarter** - An enrollment period of about ten weeks.

**Quarter Credit Hours** - Units of credit awarded for successful completion of academic work. Students' progress toward fulfilling curricular and degree requirements is measured in terms of quarter credit hours at some other institutions. A quarter credit is equal to .66 of a semester credit. Example: A three-credit quarter course is equal to a two-semester credit course.

**Registration** - The process by which students officially enroll in classes and pay fees. Students must be formally admitted to MSU Billings before they may register.

**Restricted Electives** - Courses where students choose between several particular classes to meet requirements of the University, college or department.

**Section** - A division of a course, as between one or more instructors, but having the same course title and the same subject matter.

**Semester** - An enrollment period of about sixteen to eighteen weeks.

**Semester Credit** - A semester credit is 1 and 1/2 times more than a quarter credit (example: a two credit semester course is equal to a three credit quarter course).

**Summer Session** - An enrollment period that begins after the Spring Semester ends.

**Suspension** - Academic suspension is an involuntary separation of the student from the University for unsatisfactory scholarship. (See Minimal Academic Progress for details).

**Teacher Licensure** - A document issued by Montana's Office of Public Instruction authorizing the person holding it to teach at certain levels or in certain subjects, or serve in a professional teaching service position in the public schools of the state. (For additional information contact the Licensure Officer in the College of Education).

**Teacher Endorsement** - An official notation appended to the Teacher Licensure which defines the areas in which the holder of the licensure is qualified to teach or to serve in a professional teaching service position in the public schools of Montana.

**Transcript** - An Official Transcript is an unabridged and certified copy of a student's permanent academic record. A small fee is charged for each copy. (An uncertified working copy of the student's academic record is available at no charge).

**Undergraduate Student** - A student who has not yet earned a bachelor's degree or who has earned a bachelor's degree, but is a candidate for an additional bachelor's degree, or is pursuing additional undergraduate coursework.

**Upper Division Courses** - Courses numbered from 300 to 499. Ordinarily juniors and seniors take courses numbered from 300 to 499. Students must earn 36 semester credits of upper division courses to complete graduation requirements.

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B.S., Colorado School of Mines 1985; M.S., Colorado School of Mines 1988 (2016)

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B.S., Minnesota State University-Moorehead, 1999; M.Ed., University of North Dakota, 2006; Ph.D., University of North Dakota, 2011 (2011)

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B.A., Shandong University, 1995; M.S., Colorado State University, 2001; D.B.A., Louisiana Tech University, 2007 (2008)

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B.S., University of Colombo, 2002; M.S., Southern Illinois University Carbondale, 2006; Ph.D., Southern Illinois University Carbondale, 2012 (2011)

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Associate, Ohio Valley College, 1985; B.S.N., Harding  
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(2016)

**WOOD, Lisa** *Nursing Instructor*  
(2016)

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B.S., Baylor University, 1969; M.U.P., Texas A&M  
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B.S., Illinois State University, 1980; M.Ed., University  
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## Emeritus Professors

Acton, Dr. Gary A. *Professor, English, Philosophy and Modern Languages* (1966-2014)

Amundson, Mr. Gary *Adjunct Instructor, Business Administration* (1998-2016)

Baack, Ms. Susan *Instructor, General Education-English* (1995-2008)

Behm, Dr. Gary *Professor, Music* (1979-2008)

Bieber-Moses, Dr. Jeanette *Professor, Information Resource Management* (1961-1986)

Boden, Dr. Anneke-Jan *Professor, Communication Arts* (1964-1996)

Card, Dr. Kenneth *Professor, Special Education* (1964-1981)

Cast, Mr. Brian *Professor, Art* (1987-2013)

Christensen, Dr. Linda *Professor, Special Education* (1982-2008)

Coffman, Dr. Victoria Marie Tait *Professor, Communication Arts* (1967-2004)

Dunlop, Dr. Lowell A. *Professor, Elementary and Secondary Education, Dean of Students* (1965-1989)

Fargo, Dr. Mumatz A. *Professor, History* (1969-2000)

Farsio, Dr. Farzad *Professor, Finance and Economics* (1987-2007)

Floyd, Dr. Joseph W. *Professor, Native American Studies, Political Science, and Sociology & Director, CATI Lab* (1978-2007)

Friguglietti, Dr. James *Professor, History* (1976-2000)

Gabel, Dr. Kathe *Professor, Health and Human Performance* (2009-2017)

Grant, Dr. Roland L. *Associate Professor, Earth Science* (1967-1996)

Groseth, Dr. Rolf S. *Chancellor* (2010-2014)

Gruber, Dr. Richard *Professor, Education* (1962-1992)

Gulick, Dr. Walter B. *Professor, Philosophy, Humanities, and Religious Studies* (1974-2002)

Healey, Dr. James *Professor, English* (1975-1999)

Hecimovic, Dr. Anton *Professor, Educational Theory and Practice* (1990-2016)

Heidenreich, Dr. C. Adrian *Professor, Native American Studies* (1977-2006)

Heikes, Mr. Kenneth W. *Administrator Emeritus* (1967-1992)

Hinthorne, Dr. Thomas *Professor, Management* (1993-2008)

Holman, Ms. Patricia *Adjunct Assistant Professor, Business Administration* (1993-2011)

Howard, Mr. C. Randy *Professor, Accounting* (1973-1996)

Howell, Dr. Joseph O. *Professor, Mathematics* (1980-2008)

Jensen, Dr. Theodore W. *Professor, Modern Languages and Literatures* (1974-2006)

Jussila, Mr. Neil R. *Professor, Art* (1969-2012)

Karnos, Dr. David D. *Professor, Philosophy* (1977-2006)

Khaleel, Dr. Tasneem *Professor, Biology* (1976-2017)

Kittock, Mr. Charles E. *Administrator Emeritus* (1964-1994)

Kochner, Mr. Curtis *Vice Chancellor of Student Affairs Emeritus* (1984-2006)

LaCounte, Dr. Marlene *Professor, Education* (1982-2003)

Lin, Dr. Ruey-Lin *Professor, Sociology* (1974-2002)

Lord, Dr. Russell *Professor, Health and Human Performance* (1985-2016)

McKinley, Dr. William S. *Professor, Mathematics and Management* (1969-1987)

McNally, Dr. Mary *Professor, Management* (1987-2016)

Metheny, Dr. Dixie *Professor, Educational Theory and Practice & Mathematics* (1990-2012)

Moses, Dr. Norton H. *Professor, History* (1969-2005).

Mossman, Dr. Beal *Professor, Psychology* (1967-1996)

Pollock, Mr. John W. *Professor, Art* (1974-2010)

Rietz, Dr. Sandra *Professor, Educational Theory and Practice* (1974-2015)

Robinson, Dr. G. A. St. John *Professor, Spanish* (1982-2017)

Sanders, Dr. Jeffrey *Professor, Native American Studies* (1996-2016)

Schoenthal, Dr. Norman *Professor, Biological Sciences* (1966-1994)

Schulz, Dr. Dennis D. *Professor, Habilitative Services* (1967- 1987)

Selsor, Marcia L. *Professor, Art* (1975-2000)

Sexton, Dr. Ronald P. *Chancellor; Professor, Educational Theory and Practice* (1966-71, 1975-2010)

Shaw, Mr. John “Jay” H. *Associate Professor, Health and Human Performance* (1967-2014)

Sheridan, Ms. Joanne *Professor, Accounting* (1978-79, 1981-2002)

Smith, Dr. Kenyard E. *Professor, Music* (1987-1994)

Spicer, Dr. Janeth *Professor, Information Systems* (1972-2002)

Stannard, Dr. William *Professor, Mathematics* (1966-1984)

Urbaniak, Dr. Timothy *Instructor, Computer Technology and Drafting and Design* (1987-2016)

Utroske, Mr. Walter F. *Associate Professor, English* (1966-2006)

Waltner, Dr. Richard H. *Professor, Sociology* (1981-1993)

Wiatr, Dr. Stanley *Professor, Biology* (1979-2017)

Willetts, Dr. Flora *Associate Professor, English* (1965-1990)

Wilson, Dr. Craig *Professor, Sociology, Political Science, Native American Studies and Environmental Studies* (1980-2013)

Zwick, Dr. Thomas T. *Professor, Geology* (1971-2007)



# Directory of The Montana University System

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Robert Nystuen, 2022 .....	Kalispell
Martha Sheehy, 2021 .....	Billings
Paul Tuss, 2020, <i>Chair</i> .....	Havre
Levi Birky, 2017, <i>Student Regent</i> .....	Bozeman
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Christine Shearer, <i>Ph.D.</i> .....	Dean, College of Arts and Sciences
Barbara Wheeling, <i>Ph.D.</i> .....	Dean, College of Business
Mary Susan Fishbaugh, <i>Ph.D.</i> .....	Dean, College of Education
Clifford Coppersmith, <i>Ph.D.</i> .....	Dean, City College

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Extended Campus, <i>Director</i> .....	Kevin Nemeth, <i>M.S.</i>
Facilities Services, <i>Director</i> .....	Jason McGimpsey, <i>M.A.</i>
Financial Aid and Scholarships, <i>Director</i> .....	Emily Williamson, <i>B.A.</i>
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Graduate Studies, <i>Interim Director</i> .....	Diane Duin, <i>Ph.D.</i>
Human Resources/EEO/AA, <i>Director</i> .....	Janet Simon, <i>M.S.</i>
Intercollegiate Athletics, <i>Director</i> .....	Krista Montague, <i>B.S.B.A.</i>
Jackets & Company, <i>Manager</i> .....	Chad Scheier, <i>M.B.A.</i>
KEMC/Yellowstone Public Radio, <i>Interim General Manager</i> .....	Mary Hernandez
Library, <i>Director</i> .....	Darlene Hert, <i>M.L.S.</i>
Montana Center for Inclusive Education, <i>Director</i> .....	Marsha Sampson, <i>M.S.</i>
Student Life & Housing, <i>Interim Director</i> .....	Jeff Rosenberry, <i>M.S.</i>
Interim Dean of Students .....	Kathy Kotecki, <i>M.Ed.</i>
Security, <i>Police Chief</i> .....	Scott Forshee
University Honors Program, <i>Director</i> .....	David Craig, <i>Ph.D.</i>
University Relations & Communications, <i>Interim Director</i> .....	Sarah Brockel, <i>M.P.A.</i>
Catalog Editor .....	Rita Rabe Meduna, <i>B.A.</i>

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