

# Catalog 2016-2017

Every effort has been made to ensure that this catalog is accurate and current. Information in the catalog is correct according to information available to Rocky Mountain College administration at the time of publication. Rocky Mountain College reserves the right to withdraw courses at any time, change the fees, change the rules and calendar, regulate admission and graduation requirements, and change any other regulations affecting the student body. Changes shall become effective whenever the proper authorities so determine and shall apply not only to prospective students, but also to those who at the time are matriculated in the College.

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# 2016-2017 Academic Calendar

# Fall Semester 2016

Validation must be completed (confirm attendance and make payment arrangements or a \$50 fine will be charged).	August 1, 5:00 p.m.
Late validation (if not validated, a \$150 fine will be charged)	August 19
Classes begin	August 22
Last day to add a course	August 26
Last day to drop a course with no record on transcript	August 26
Labor Day – no classes	September 5
Midterm grades due in the Office of Student Records	October 10, noon
Midterm Break	October 13-16
Advising begins for spring registration	October 24
Last day to drop a course with a grade of "W"	October 28
Online registration opens for Spring 2017	October 31
Veterans Day – no classes	November 11
Thanksgiving Break	November 23-27
Last day of classes	December 2
Final examinations	December 5-9
Final grades due in the Office of Student Records	December 13, 5:00 p.m.

# **Spring Semester 2017**

Validation must be completed (confirm attendance and make payment arrangements or a \$50 fine will be charged).	December 9, 5:00 p.m.
<u> </u>	7
Late validation (if not validated, a \$150 fine will be charged)	January 6
Classes begin	January 9
Last day to add a course	January 13
Last day to drop a course with no record on transcript	January 13
Martin Luther King Day – no classes	January 16
Midterm grades due in the Office of Student Records	March 3, noon
Midterm Break	March 4-12
Advising begins for summer and fall registration	March 20
Last day to drop a course with a grade of "W"	March 24
Applications for graduation in December 2017 and May 2018 are due in the Office	April 1
of Student Records	
Online registration for Summer 2017 and Fall 2017 opens	April 3-7
Easter Break	April 14-17
Last day of classes	April 28
Final examinations	May 1-5
Baccalaureate	May 5
Commencement	May 6
Final grades due in the Office of Student Records	May 9, 5:00 p.m.

# **Summer Session 2017**

Session 1	<b>May 15 - June 5</b>
Classes begin. Validation must be complete (confirm attendance and make payment arrangements. After this time, late penalties will be in effect (courses deleted and a late fee charged).	May 15
Last day to add a course. Last day to drop a course with no record on transcript.	May 15
Last day to drop a course during Session 1 with a "W" on transcript	May 26
Memorial Day – no classes	May 29
Last day of classes	June 5
Final grades due in the Office of Student Records	June 12, noon
Session 2	June 6 - July 10
Classes begin. Validation must be complete (confirm attendance and make payment arrangements). After this time, late penalties will be in effect (courses deleted and a late fee charged).	June 6
Last day to add a course. Last day to drop a course with no record on transcript.	June 8
Last day to drop a course during Session 2 with a "W" on transcript	June 20
Last day of classes	July 10
Final grades due in the Office of Student Records	July 17, noon
Combined Session	May 15 - July 10
Classes begin. Validation must be complete (confirm attendance and make payment arrangements). After this time, late penalties will be in effect (courses deleted and a late fee charged).	May 15
Last day to add a course. Last day to drop a course with no record on transcript.	May 17
Memorial Day – no classes	May 29
Last day to drop a course during Combined Session with a "W" on transcript	June 25
Last day of classes	July 10
Final grades due in the Office of Student Records	July 17, noon

# Master of Physician Assistant Studies Academic Calendar Summer Term 2016

Student validation	July 5
Orientation/Classes begin	July 5
Last day of classes	August 12
Summer Break	August 13-22

# Fall Semester 2016

Classes begin	August 22
Labor Day – no classes	September 5
Fall Break	October 13-14
Veterans Day – no classes	November 11
Thanksgiving Break	November 24-25
Last day of classes	December 2

# **Spring Semester 2017**

Classes begin	January 2
Martin Luther King, Jr. Day – no classes	January 16
Spring Break	March 6-10
Easter Break	April 14-17
Last day of classes	April 28

# **Summer Semester 2017**

Classes begin	May 1
Summer Break (AAPA conference)	May 15-19
Memorial Day – no classes	May 29
Independence Day – no classes	July 4
Last day of classes	August 9

# 2016-2017 Master of Educational Leadership Academic Calendar Fall Semester 2016

Classes begin	August 1
Initial seminar at Rocky Mountain College	August 1-5
Applications for May 2017 graduation due	September 1
Last day of classes for Fall Semester	December 20
Final grades due for Fall Semester	January 5

# **Spring Semester 2017**

Classes begin	January 3
Baccalaureate	May 5
Commencement	May 6
Capstone seminar at Rocky Mountain College	June 5-9
Final grades due	June 17

# **General Information**

# **History of Rocky Mountain College**

Rocky Mountain College is the oldest college in Montana. Its history demonstrates a commitment to excellence and an openness to all points of view. Adversity has led to strength through the joining of a liberal arts tradition and the heritage of practical training for specific careers. The early influence of three distinct religious denominations has resulted in a learning community distinguished by thoughtful inquiry, ethical decision-making, and active citizenship. All faith traditions are welcome at Rocky Mountain College, and the spirituality, convictions, and questions of all are respected.

In 1877, a small group of Methodists met in Bozeman to establish a school in a principal area of the Territory. The committee included former Governor Benjamin J. Potts and minister-missionary Brother William Van Orsdel. The committee encountered roadblocks along the path to success, so a contingent from Deer Lodge, Montana, decided to establish the Montana Collegiate Institute in 1878 with three faculty, about two dozen students, and tuition of only \$15 to \$25.

Four years later, the Presbyterian Church assumed control and chartered the College of Montana with three brick buildings and an initial student population numbering 160. Meanwhile, in 1889, the Methodist Episcopal Church opened Montana University, later changed to Montana Wesleyan University, located in Helena. The assets, organizations, and traditions of these Presbyterian and Methodist institutions merged in 1923 under the aegis of Intermountain Union College in Helena. In 1904, two decades prior to the founding of Intermountain Union College, two brothers from Maine, Lewis T. and Ernest T. Eaton, leased the abandoned campus at the College of Montana and renamed it the Montana College and School of Manual Arts. In 1908, the brothers moved to Billings and established the Billings Polytechnic Institute, using the same blend of practicality, cultural arts, and civic and religious training of youth in its curriculum. Earthquakes seriously damaged the Intermountain Union College buildings in 1935, and after a brief move to Great Falls, Intermountain Union College accepted an invitation to relocate on the campus of Billings Polytechnic Institute, which had merged with the Billings Business College in 1927. As affiliates, the institutions developed integrated programs and then merged into a single college in 1939, later renamed Rocky Mountain College in 1947 by student vote.

The College maintains this proud blend of traditions as part of its heritage. One enduring tradition, the Candlelight Dinner, heralds the anniversary of the day Billings Polytechnic Institute moved from downtown Billings to its present location. The event was so named because on moving day in 1910, there was not yet electricity in the buildings, and a supper of cold sliced meat, cold boiled potatoes, cold baked beans, and doughnuts was served by candlelight. Since then, that first meal has been honored each year with a Candlelight Dinner. The tradition is observed nationwide and in foreign countries as Rocky Mountain College alumni from far and wide convene for their Candlelight Dinners approximating the atmosphere, if not the menu, from that first supper.

Another more recent, but equally popular tradition is the Yule Log Dinner. This Christmas ceremony involves the College community in a celebration of the beauty, spirituality, and sentiment of the season.

Since the merger of Intermountain Union College and Billings Polytechnic Institute in 1947, Rocky Mountain College has had the following presidents as leaders:

William D. Copeland – 1947-1951 Herbert W. Hines – 1951-1958 Philip M. Widenhouse – 1958-1966 Lawrence F. Small – 1966-1975 Bruce T. Alton –1975-1986 James J. Ritterskamp, Jr. – 1986-1987 Arthur H. DeRosier, Jr. – 1987-2002 Thomas R. Oates – 2002-2005 Michael R. Mace – 2005-2012 Robert J. Wilmouth – 2013-Present

#### Mission

Rocky Mountain College educates future leaders through liberal arts and professional programs that cultivate critical thinking, creative expression, ethical decision-making, informed citizenship, and professional excellence.

# **Core Themes**

#### **Academic Excellence**

Rocky Mountain College creates a culture of learning by providing distinctive academic programs designed and executed by outstanding faculty. The College is committed to the liberal arts and sciences as the basis for all academic development and as the foundation of the student experience. This commitment directs the College's core curriculum requirements and the expectations of students engaged in the various disciplines. Graduates possess knowledge and the abilities that promote professional excellence and lifelong learning through the combination of programs in the traditional liberal arts and sciences with professions-oriented disciplines.

#### **Transformational Learning**

Rocky Mountain College embraces its role as a transformational agent in the lives of students and elevates them educationally, economically, socially, and culturally. The College promotes the development of the whole person to maximize students' human and leadership potential. The College, more than the sum of its curricula and programming, affords students opportunities to engage in a wide range of curricular, co-curricular, and extracurricular opportunities enhancing the student experience.

# **Shared Responsibility and Stewardship**

Rocky Mountain College strives to be the embodiment of its mission. By serving as a capable steward of resources and by employing a participative and effective governance model, the College demonstrates application of the concepts expressed in its mission. Specifically, the College strives to engage in informed and ethical decision-making through the application of best practices as a means to promote organizational development and excellence. In short, the College endeavors to manifest the ideals of critical thinking, ethical decision-making, informed citizenship (from an organizational perspective), and professional (organizational) excellence. In doing so, the College models abilities, dispositions, and behaviors expected of students.

## Accreditation

Rocky Mountain College is accredited by the Northwest Commission on Colleges and Universities (8060 165th Avenue NE, Suite 100, Redmond, Washington 98052-3981) and by the Office of Public Instruction for the State of Montana for the preparation of elementary and secondary teachers. The physician assistant program is accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA), and the aviation program is accredited by the Aviation Accreditation Board International (AABI).

# **Church Relations**

Rocky Mountain College is historically related to the United Church of Christ, the United Methodist Church, and the Presbyterian Church (USA) – denominations traditionally committed to the pursuit of knowledge, religious tolerance and free inquiry, and to such values as service, community

# **General Information**

and character. These denominational relationships have helped to inform the mission and core themes of the College and are apparent in the College's mission to educate future leaders through liberal arts and professional programs that cultivate critical thinking, creative expression, ethical decision-making, informed citizenship, and professional excellence. Additionally, the College promotes the development of the whole person and provides opportunities to enhance student's intellectual, emotional, physical, and spiritual growth both on campus and through connections in the local and global community.

Today, our denominational relationships are most directly reflected through the Chaplain and Office of Spiritual Life. The mission of the Chaplain, to provide for the spiritual growth and wellbeing of the members of the RMC community, includes offering presence and programs that address students as whole persons, serving as a resource for the larger campus community, and maintaining denominational relationships. Primary objective include creating a safe and welcoming environment for exploring faith, providing opportunities for putting faith and social justice into action, and supporting faith that is integrated with intellectual pursuits. Programming also includes spiritual care and support for all members of the campus community, collaborative projects with other RMC offices, as well as opportunities for worship and spiritual inquiry, growth and practice.

We celebrate our church-related heritage. The early influence of three distinct religious denominations has resulted in a learning community distinguished by thoughtful inquiry, ethical decision-making, and active citizenship. All faith traditions are welcome at Rocky Mountain College, and the spirituality, convictions, and questions of all are respected.

#### The Campus

The campus of Rocky Mountain College occupies approximately 60 parklike acres in a residential section of Billings. Deciduous and evergreen trees, shrubs, and perennials make the campus particularly welcoming.

**Alden Hall, 1937:** This attractive stone and stucco building, the gift of the Alden Trust and founded by the late George Alden of Worcester, Mass., served as a residence hall for men until 1973. Currently, it houses faculty offices and the Institute for Peace Studies.

Anderson Hall, 1970; 1998: A more traditional residential college experience, Anderson Hall is co-educational by floor and maintains a community-driven environment, housing up to 84 students with shared restroom facilities, laundry rooms, and kitchenette on each floor. Rooms are designed for two students with approximately 151 square feet and include a built-in dresser/wardrobe, desk, chair, extra-long twin bed, and Internet connections for each student. Triple, single, and small single rooms have limited availability. Yoder Lounge, a comfortable space for study, computer use, and relaxation connects Anderson to Widenhouse Hall. Anderson Hall is named for Lula Anderson, a member of the first graduating class of Billings Polytechnic Institute.

**Aviation Hall, 1989; 2012:** This stucco building, located on the corner of Rimrock Road and Augusta Lane, houses the aviation program.

Bair Family Center for the Sciences, 1981: Named for the family of Montana pioneer and rancher, Charles M. Bair, Rocky Mountain College's major science facility houses the science and mathematics disciplines and is complete with classrooms, laboratories, seminar rooms, and faculty offices. It also houses the Nuclear Magnetic Resonance (NMR) Spectrometer. The facility was made possible by a major gift from Alberta M. Bair, daughter of Charles M. Bair, together with gifts from other donors to the Second Century Fund.

Bair Family Student Center, 1961; 1997: Located in the center of campus, north of the RMC Green, this structure houses the dining room, bookstore, game room, Fraley Lounge, campus mail services, and the offices of ASRMC, career services, and the dean for student life. The building has been extensively expanded and remodeled.

**Billings Studio Theatre, 1971:** This building affords an excellent facility for dramatic productions, as well as a commodious lecture hall that seats 250. It was built in cooperation with the Billings Studio Theatre community drama group.

**Eaton Hall, 1909:** Originally known as Science Hall, this building, the gift of a group of pioneer businessmen in Billings, houses administrative offices. The hall is named for the founders of Billings Polytechnic Institute, Lewis T. and Ernest T. Eaton.

Educational Resource Center, 1958; 1999: This building houses the Paul M. Adams Memorial Library; computer equipped writing, data, and business classrooms; and a distance learning center. The library, the largest part of the Educational Resource Center, contains a collection of over 85,000 books and periodicals accessible via the library's computer catalog. The Educational Resource Center also houses the Alice Giddings King Memorial Archives, the College's Heritage Archives, and collections belonging to the United Methodist Church and the United Church of Christ.

Flight Training Operations, 2007: Aircraft with modern navigation and avionics systems provide basic training resources for students. The location at Billings Logan International Airport provides close access to flight training and Class C airport operations.

Fortin Education Center, 1969: Fortin Education Center houses several academic programs, a gymnasium, auxiliary exercise areas, a swimming pool, a health suite, a large lecture hall, classrooms, laboratories, and offices for faculty and administrators. It is named for Philip Fortin, a Billings businessman and philanthropist.

**Intermountain Equestrian Center:** Located nine miles from campus, Rocky Mountain College contracts facilities that include two large heated indoor arenas, two extensive outdoor arenas, round pens, numerous trails for leisure riding, and top-notch stabling for 75 horses.

Jorgenson Hall, 1964; 1998: Available to students with junior or senior standing, Jorgenson Hall offers double occupancy, apartment-style rooms with private entrances. Each double occupancy unit is 728 square feet and is offered unfurnished, but comes equipped with a full kitchen and bathroom. Amenities include a full-sized refrigerator/freezer, stove/oven, double sink, heating, and air conditioning. Local phone, Internet, and laundry facilities are also available. Students who are 21 years-of-age or older will receive priority housing consideration in Jorgenson Hall.

**Losekamp Hall, 1917:** This sandstone buildings, in a modified Collegiate Gothic style, was a gift of the late John D. Losekamp, a pioneer merchant of Billings. It houses the music and theatre arts programs and the Ruth and Vernon F. Taylor Auditorium, which is used for drama productions, recitals, and other special events. Losekamp Hall houses studios, practice rooms, and classrooms.

Morledge-Kimball Hall, 1914; 2009: This stone and stucco building, part of which formerly served as a residence hall for women, was named for the principal donors, the Morledge Family of Billings, Montana, and the late Mrs. Flora Kimball of Portsmouth, N.H. This lovely facility houses 22 faculty offices and seven classrooms.

**Prescott Hall, 1916; 2001:** This stone building was erected through the generosity of the late Amos L. Prescott of New York City. Before 1961, it served as the College's dining hall. Extensive renovation and expansion were completed in Fall 2001. It currently houses administrative offices and serves as a gathering place for the campus community.

Rimview Hall, 2004: Designed for a more independent living situation, Rimview Hall provides suite-style living with four separate bedrooms; a micro-kitchen complete with a full refrigerator, sink, and microwave; and two bathrooms in each suite. Each unit is approximately 600 square feet and opens up to an inner courtyard and is fully furnished with a desk, chair, wardrobe, dresser, extra-long twin bed, and Internet connections in each bedroom, as well as a couch and chairs in the common areas. Rimview Hall is a popular choice for students who are of at least sophomore standing. Community laundry is available on the ground floor in the lounge. Students can do homework or watch TV in this space as they wait for their laundry to be finished.

**Technology Hall, 1922:** This sandstone structure contains offices, classrooms, an art gallery, art studios, laboratories for the computer science program, and the College's maintenance department.

**Tyler Hall, 1930:** This beautiful sandstone building designed in the Collegiate Gothic style is architecturally one of the finest on campus. This gift of Mrs. G.W. Mehaffey of Brookline, Mass., served as a men's residence hall until 1971. It now houses faculty offices and facilities for the teacher education program.

Widenhouse Hall, 1961; 1998: Dedicated in 1973 to the memory of Philip M. Widenhouse, third president of Rocky Mountain College, Widenhouse Hall houses the majority of first-year students with a capacity of 201 students who enjoy an active and social atmosphere. Floors are co-ed by room, with men and women sharing the same floor and oftentimes being neighbors. Rooms are furnished with a wardrobe/closet, dresser, desk, chair, extra-long twin bed, and Internet connections for each student. Each room is also equipped with a medium-sized refrigerator, microwave, and bathroom with laundry facilities available on each floor.

### **Admission for Undergraduate Studies**

The College invites applications for admission from students who demonstrate academic ability and who are seriously interested in the total development of character, intellect, leadership, and skills. Admission is based upon a careful review of the credentials presented by an applicant. Selection is made without regard to race, color, gender, age, religion, national or ethnic origin, physical or mental disability, sexual orientation, or familial status.

All applications for admission are reviewed on an individual, rolling basis. Criteria for admission to Rocky Mountain College are listed below. Exceptions are clearly identified for each group of applicants. Once an applicant's file is complete, the Admission Review Committee will make a decision on the student's application for admission. It is in the student's best interest to apply early for admission.

Students seeking admission must submit:

- 1. Completed Rocky Mountain College application for admission;
- Official transcripts (high school, GED, and any from post-secondary institutions);
- 3. Results of ACT and/or SAT tests for traditional freshman students;
- 4. Non-refundable application fee of \$35 (international students, \$40) (this fee is waived for online applications); and
- 5. An essay and two letters of recommendation may be required.

Traditional freshman applicants are encouraged to follow a college-preparatory curriculum.

The following may also be considered in reviewing applications for admission:

- Community service and work experience;
- Extracurricular activities;
- Special circumstances (e.g., health or personal);
- Recommendation information; and
- A personal essay.

# Freshman Student Admission Criteria

- High school diploma and a cumulative GPA of 2.50 or higher and an ACT/SAT score of 21/1000 (math and reading) or higher.
- The Admission Review Committee, composed of staff and faculty, will consider students with a cumulative GPA below 2.50 or a GED and an ACT/SAT score below 21/1000 (math and reading) for admission.
- A student who does not meet the normal requirements for admission must submit a personal essay and two letters of recommendation to the Office of Admissions for review by the Admission Review Committee, who will make a decision on that application. Appropriate references include teachers, professors, counselors, employers, clergy, etc.
- High school students may be considered for admission with grades reported through their junior year in high school. Final official transcripts noting certification of graduation and class rank must also be submitted before a student enrolls. Those students earning a GED must submit an official record of their scores directly from the granting agency to the College.

## **Nontraditional Freshman Student**

Nontraditional students are those students who are at least 25 years old and have not attended a post-secondary institution.

#### **Admission Criteria**

- Students with a high school diploma and a cumulative GPA of 2.50
  or higher meet the requirements for regular admission. ACT/SAT
  scores are not required for an admissions decision, but are helpful
  for placement into the appropriate college-level English and mathematics courses.
- Students with a GED or a cumulative high school GPA of less than 2.50 are considered for admission by the Admission Review Committee as outlined above. ACT/SAT scores are not required for an admissions decision, but are recommended.
- Students are required to submit an essay and two letters of recommendation from references.

## **Transfer Student**

Transfer students must have official transcripts from all colleges, vocational schools, and other post-secondary schools previously attended sent directly from their previous institution to Rocky Mountain College. Transfer students must complete all College degree requirements to graduate.

#### **Admission Criteria**

- Students who have completed, at an accredited institution, a
  minimum of 27 semester hours that count toward Rocky Mountain College's core curriculum and/or a Rocky Mountain College
  established major and who have a minimum of a 2.00 GPA meet the
  requirements for regular admission.
- Students who have attempted 27 or more semester hours, but have
  less than 27 semester hours that count toward Rocky Mountain College's core curriculum requirements and/or a Rocky Mountain College established major will be reviewed by the Admission Review
  Committee and may be required to submit additional materials.
- Students who have attempted less than 27 semester credits are reviewed according to the same criteria for admission as new freshmen (see "Freshman Student Admission Criteria").
- Any student, regardless of the number of credits transferring, who
  has been dismissed, placed on probation, or documented as not in
  good standing with any prior institution will be reviewed by the
  Admission Review Committee and may be required to submit additional materials.

**Note:** Although the College reserves the right to refuse incoming transfer credits, credits from equivalent accredited colleges normally will be accepted, subject to these conditions:

- No junior- or senior-level credit is allowed for courses from twoyear colleges.
- No "F" grades are accepted.
- No preparatory/developmental classes below the 100-level are accepted.

Failure to reveal records of previous college attendance is grounds for dismissal. The Office of Student Records makes final determination concerning acceptance of credit.

# **Requirements for International Admission**

International applicants are required to submit original or certified copies of their official secondary school transcripts in their native language, accompanied by a certified English translation. Those applying as transfer students must submit original or certified transcripts from each post-secondary institution attended. Additional admission materials for first-year applicants include official SAT or ACT results.

International applicants meeting the following criteria will be offered regular admission: A cumulative secondary school GPA of 2.50 or higher and

a critical reading and math section total on the SAT of 860 or an enhanced version composite score of 18 on the ACT.

Those applicants who completed secondary school three or more years prior to applying to Rocky Mountain College who are unable to submit SAT or ACT scores and whose native language is not English will be required to submit official results of English-language testing, such as TOEFL or IELTS. The following English-language test result minimums will be considered: TOEFL score of 525 (paper-based), 197 (computer-based), or 72 (Internet-based) or an IELTS result of 5.5/6.

For admission to a graduate program, the following English-language test score minimums are required: TOEFL score of 570 (paper-based), 230 (computer-based), or 88 (Internet-based) or an IELTS result of 6.5. Depending on the program, official GRE or GMAT results are required.

The Admission Review Committee will consider undergraduate applicants with a cumulative GPA below 2.50 and/or SAT or ACT scores below 860 or 18, respectively. These applicants will be required to submit a letter from a secondary school official, attesting that the student was in the upper 50 percent of his or her graduating class.

Accepted students are required to present confirmation of financial support. Submitted documentation will demonstrate the student, a benefactor, or a third-party sponsor has sufficient funds to support the student's educational expenses the first year. Such expenses may include tuition, fees, room, board, books, and other living expenses. Confirmation of financial support typically consists of a bank statement and an affidavit of support. The Office of International Programs should be consulted prior to submitting documentation.

# **International Admission Checklist**

- Official or certified copies of transcripts from all secondary and post-secondary institutions attended;
- Official or certified SAT or ACT results; and
- English-language test scores (waived if submitting SAT or ACT).

Upon acceptance to Rocky Mountain College, international students will be forwarded an admission packet consisting of the following:

- 1. Official acceptance letter;
- 2. Certificate of Eligibility: I-20 or DS-2019 (to obtain a visa);
- 3. Pre-arrival information packet;
- 4. Housing information and application;
- 5. Insurance guide and form; and
- 6. Student health form.

Items 4, 5, and 6 should be submitted to the Office of International Programs after receipt of the acceptance packet.

For more information, contact the Office of International Programs at international@rocky.edu or 406.657.1107.

## **International Transfer Student**

If transferring from a college or university within the United States, an Intent to Transfer form must be completed and submitted. This form is provided by the Office of International Programs upon acceptance. Refer to the transfer student section for additional requirements. If transferring from a college or university outside of the United States, an evaluation of non-U.S. post-secondary credentials will be required.

#### **Admission Criteria**

• Students who have completed 27 or more transferable semester

credit hours from an accredited college or university and who have a cumulative college GPA of 2.00 or higher and evidence of academic language proficiency meet the requirements for regular admission

 Students transferring from colleges or university in another country may have to pay an additional fee to have their credentials evaluated by an independent agency.

#### **International Exchange Student**

These students are not seeking a degree from the College, but are enrolled as visiting students for one or two semesters with the goal of exploring the region, American culture, and taking courses of interest to them.

#### **Admission Criteria**

- The usual requirements for admission are waived for vising international exchange students. Instead, articulation agreements between partner institutions or organizations will establish mutual requirements.
- Students are screened by committees at the partner institutions
  or meet criteria set by the consortia through which exchanges are
  facilitated. Typically, students must be "C+" or better students and
  must have English language proficiencies near that of the College's
  requirement. Standardized test scores are not required. Students
  receive letter grades unless otherwise specified in the exchange
  agreements.

#### **Readmission Guidelines**

Students who previously attended Rocky Mountain College but were either not enrolled during the previous semester or officially withdrew the previous semester must apply for readmission. Applications for readmission may be downloaded from the Rocky Mountain College website or requested from the Office of Student Records. Students must submit the application along with all transcripts from institutions attended since their last enrollment at Rocky Mountain College.

### Admission Criteria

Students who left Rocky Mountain College in good academic standing will be approved for readmission if they meet the following criteria:

- Have a minimum of a 2.00 GPA on a 4.00 scale from any institution attended since their last enrollment at Rocky Mountain College.
- Are in good standing at that/those institution(s); and
- Have not been convicted of a criminal offense.

The Admission Review Committee will consider any student for readmission who does not meet these criteria, including students with a Rocky Mountain College cumulative GPA below a 2.00. In addition to the readmission application, students are required to submit an essay for review by the Admission Review Committee. The essay should address the following:

- An explanation of past performance;
- Strategies the student will employ to improve his or her academic standing; and
- Changes in the student's personal life that will contribute to academic success.

#### **Veterans Admission**

Veterans of the armed services are encouraged to apply for admission and should follow the guidelines for "Freshman Student Admission" or "Transfer Student Admission." The College will give appropriate credit for college-level courses taken while in the armed services. Credit evaluation is based on American Council of Education guidelines and is awarded after successful completion of one semester (see the "Academics" section

of the catalog). Veterans and children of deceased veterans who are eligible for veteran's administration (VA) funding must secure a certificate of eligibility through a regional VA office. The Financial Aid Office serves as the campus VA representative.

#### **Early Admission**

Students who wish to complete their senior year in high school concurrently with their freshman year in college may apply for early admission. Students who apply for early admission are required to submit material outlined in the "Freshman Student Admission" section in this catalog. In addition, the following items are required:

- 1. A letter of approval from parent or legal guardian;
- A letter from the student's high school principal recommending early admission; and
- A letter from the student's high school counselor or teacher indicating the level of student's academic ability, emotional maturity, and social development.

A student accepted under the early admission policy is not required to show evidence of having earned a high school diploma. Upon request, the College will attempt to arrange a freshman-year curriculum for the student with coursework that parallels the high school classes for which credit is needed. Through this procedure, the student may earn a high school diploma while attending college. The student's principal and/or local school board must approve such an arrangement.

### "Explore College During High School"

High school juniors or seniors who wish to take college courses while still in high school need to complete the high school application for admission and submit a letter of recommendation from a high school counselor or principal. There is not application fee for this program. Students may enroll for up to six semester hours each semester while they are juniors and seniors, including summer sessions between their junior and senior years. Students wishing to continue their education at Rocky Mountain College after high school must follow the guidelines outlined in the "Freshman Student Admission" section.

### **Audit Student**

Individuals may attend classes without receiving credit by auditing the course. There are no admission requirements; however, students are required to pay an audit fee in addition to any materials fees. Audit class availability is dependent on space and permission of the instructor. Contact the Office of Student Records for more information.

# **Students with Disabilities**

#### **Admission Process**

There is no separate admission process for students with disabilities. Students apply through the regular admission process and must meet the College's admission criteria. For services, refer to "Disability Services" and "Services for Academic Success (SAS)" in the "Support Services" section.

## **Process of Confirmation**

The College will make a decision on a student's application for admission after required credentials have been presented. Admission decisions are made on a rolling basis throughout the year, and students may be admitted any semester. After a decision has been made regarding a student's application for admission, the student will be notified immediately.

Upon acceptance to Rocky Mountain College, students will be sent a letter of acceptance and the Family Education Right to Privacy Act (FERPA).

Students are asked to submit a \$250 tuition deposit. The deposit will be held in a subsidiary account and refunded upon graduation subject to any outstanding amount a student owes Rocky Mountain College. The deposit will guarantee enrollment in the student's chosen major. Upon receipt of deposit, students will be sent the following forms:

- 1. Housing and meal plan application;
- 2. Roommate preference form;
- 3. FERPA form:
- 4. News and information form:
- 5. Student health services form; and
- 6. Services for Academic Success (SAS) application form.

The College reserves the right to deny admission to any applicant whose academic history or personal qualifications are judged to be unsuitable for college work and living at Rocky Mountain College.

# **Admission for Graduate Students**

# **Master of Accountancy Program**

Anthony R. Piltz, Professor

## **Traditional Graduate Admission**

Applicants for the program who possess undergraduate degrees will be considered for admission based on the following:

- Possession of an earned bachelor's degree from a regionally accredited institution. The candidate's major field of study must be a field other than accounting.
- Cumulative undergraduate GPA of 3.00 or above.
- Completion of the following six prerequisite courses (the cumulative GPA for the courses must be 3.00 or above):
  - 1. ACC 210: Foundations of Accounting (or equivalent)
  - 2. ACC 351: Financial Reporting I (or equivalent)
  - 3. ACC 352: Financial Reporting II (or equivalent)
  - 4. BSA 311: Principles of Finance
  - 5. ECO 205: Principles of Economics (or equivalent)
  - 6. MAT 210: Probability and Statistics (or equivalent)

#### 3:2 Program Admission

Current RMC undergraduate students and undergraduate transfers to RMC are subject to a two-tiered admission process. Students are first admitted to the accounting program for the fourth year of study then, contingent upon sufficient academic progress, to the master of accountancy program for the fifth year of study. The specific admission requirements are:

- For the accounting program, candidates must have completed 90 semester hours of college-level credit with a cumulative GPA of 2.75 or above. The 90 earned credits must include: ACC 210, ECO 205, MAT 210, ACC 351, ACC 352, and BSA 311. The cumulative GPA for these eight courses must be 3.00 or above.
- Upon completing 124 college-level credits, candidates are eligible for formal admission to the master of accountancy program. To be admitted, candidates must:
  - Be currently enrolled in the accounting program and be in good academic standing.

#### **Course Sequence**

Courses are taught on a four semester rotating cycle. Therefore, the program will take a minimum of four semesters to complete. Current RMC students will generally begin the program in their first semester of the senior program (see "3:2 Program Admission" above). The program is

designed to avoid any sequencing problems, so a student may begin the program in any individual semester. The only prerequisite for any of the master's level courses is ACC 352: Financial Reporting II.

No transfer credit or advanced placement is allowed to replace any portion of the Accountancy program.

## **Master of Educational Leadership Program**

Stevie Schmitz, Director Jo Swain, Associate Professor Christine Unquera, Program Assistant

# The following materials are required to be considered for the educational leadership program (certification only):

- Application for admission;
- Current résumé to include educational degrees/professional experiences, as well as relevant awards, publications, presentations, or other achievements:
- Official transcript from the regionally accredited institution that granted the applicant's most recent degree;
- Three professional reference forms (Rocky Mountain College reference forms must be used) completed by:
  - 1. The applicant's principal;
  - 2. A teacher the principal chooses; and
  - A teacher of the applicant's choice. If the applicant is not currently teaching, a supervisor must be chosen who can describe the applicant's work.
- A photocopy of the applicant's valid (current) teaching certificate. If this certificate has expired, the applicant will be required to submit a renewed certificate before applying for the principal certificate.

Interested individuals should complete the following if they are interested in a master's-level program in educational leadership. The following materials are required to be considered for admission into the master of educational leadership program:

- Online application;
- Current résumé with a defined goal statement. The goal statement is 4-7 pages, double-spaced, which explains:
  - 1. The applicant's philosophy of education;
  - Qualities or characteristics of exemplary leaders;
  - How the applicant demonstrates or embodies these qualities or characteristics in his or her professional experience;
  - Why the applicant is applying to the RMC Educational Leader ship Program and wishes to become an educational leader in the 21<sup>st</sup> century.
  - What pledge of support from the applicant's school district has been secured and how the applicant will arrange release from time for the internship required in the RMC program.
- Official transcript from the regionally accredited institution that granted the applicant's most recent degree;
- Three professional reference forms (Rocky Mountain College reference forms must be used) completed by:
  - 1. The applicant's principal;
  - 2. A teacher of the applicant's choice; and
  - A teacher of the applicant's choice. If the applicant is not currently teaching, a supervisor must be chosen who can describe the applicant's work.

Submit a photocopy of a valid (current) teaching certificate. If the applicant's certificate has expired, he or she will be required to submit a renewed certificate before applying for the principal certificate.

The program for either certification or completion of a master's degree will also require successful interview prior to admission.

### Master of Physician Assistant Studies Program (MPAS)

Heather Heggem, PA-C, Program Director

Admission to the physician assistant program is highly competitive and multi-faceted. Application through the Center Application Service of Physician Assistants (CASPA) system is required. Applicants are selected based on their academic preparation, health care experience, maturity, interpersonal skills, and knowledge of the physician assistant profession and its role in health care delivery.

Preference is given to applicants who graduate from high schools in rural areas and who are residents of Montana, Wyoming, Colorado, North Dakota, South Dakota, Idaho, or Utah.

### Applicants need the following to be considered:

- Bachelor's degree from a regionally accredited institution required upon matriculation to MPAS.
- 2. Science GPA of 2.70. No science courses with a "C-" or below.
- 3. Cumulative GPA of 3.00.
- A one year sequence of general/organic/biochemistry (such as found in a nursing program) OR two semesters of organic chemistry OR one semester of organic chemistry and one semester of biochemistry.
- 5. Biology coursework to include 15 credits of:
  - a. Two semesters of anatomy and physiology with laboratory (from a biology, physiology, or zoology department or an allied health program) -8 credits
  - b. One semester of microbiology with laboratory 4 credits
  - c. One semester of genetics 3 credits
- Biology and chemistry prerequisites may not be taken online or through correspondence format.
- 7. Medical terminology (online course acceptable) 1-2 credits.
- 8. Minimum combined score (verbal + quantitative) of 291 on the graduate record examination (GRE).
- 9. Test of English as a Foreign Language (TOEFL) is required of all applicants when English is not the first language.
- 10. Mathematics to include a pre-calculus course (function, trigonometry, exponents, and logarithmic functions) and a statistics/probability course (defined as pre-mathematical functions and statistics and probability) 6 credits.
- 11. One semester of psychology (developmental or abnormal highly recommended) 3 credits.
- One semester social science other than psychology (examples: sociology, geography, economics, political science, anthropology)
   3 credits.
- 13. One semester English composition 3 credits.
- 14. 1,500 hours of direct, hands-on patient care experience\* before you submit your CASPA application.

We highly encourage one year of undergraduate physics or additional quantitative courses and/or laboratory experiences. We also highly recommend additional writing classes.

To apply, students must visit the CASPA website (the computerized application service) at https://portal.caspaonline.org/. Each year, the application process begins April 15th and ends October 1st for the class that matriculates the following year. The RMC MPAS program interviews

students on a rolling basis.

## \*Direct Hands-on Patient Care Experience

The higher the quality of patient care experience, the more competitive the applicant will be judged. However, all applicants with direct hands-on experience are encouraged to apply. (Examples: CNA, MA, AT, ERT, RN, LPN, paramedic, phlebotomist)

Graduates of Rocky Mountain College who have met all the requirements for admission, and have earned a bachelor's degree with a minimum of 60 credits earned at RMC, will be granted an automatic interview. Please note, this interview does not guarantee acceptance into the program. Students will compete with all the interviewing students for matriculation status.

No transfer credit or advanced placement is allowed to replace any portion of the MPAS program.

Applications are only valid for the admission cycle during which they are submitted. Individuals who wish to reapply during the following admission cycle are required to submit a new application.

All applicants who are accepted for admission to the Rocky Mountain College Master of Physician Assistant Studies Program are required to submit official transcripts (not copies issued to the student) for all institutions of higher education previously attended (including non-U.S. schools). This set of transcripts is in addition to those submitted to CASPA.

Dr. Stephen Germic, Academic Vice President

# **General Academic Information**

#### **Degrees**

Rocky Mountain College offers two baccalaureate degrees – the bachelor of arts degree and the bachelor of science degree. Other degrees include the associate of arts degree, the master of accounting, the master of physician assistant studies, and the master of educational leadership.

#### The Semester Plan

College credit is offered on a semester basis. Courses offered in the summer session meet more frequently and for a longer period of time at each meeting. Enrollment is always for a semester or a summer session except in the case of a special workshop.

#### **Course Hours**

In general, a course for one semester hour of credit meets for a 50-minute period once a week for the semester. For each class session, the student is expected to spend at least two hours in preparation. In studio, laboratory, or activity courses, at least two hours of attendance are required weekly for one semester hour of credit. In the case of seminars or independent study courses, less class attendance may be required and a proportionately larger amount of time spent in preparation.

#### **Course Load**

A normal load is considered to be 15 to 16 semester hours. Students in good academic standing may register for up to a total of 19 semester hours with the approval of their primary academic advisor. The advisor and the academic vice president must approve all other overload registrations. For each semester hour over 19, a student is charged an overload fee.

**Note:** A student must average 15.5 semester hours for eight semesters to complete the required minimum of 124 semester hours.

# Registration

Students are expected to register on the days specified in the academic calendar. Registration is not complete until financial arrangements are made with the Business Office. Students may add courses to their schedule during the first week of the semester. They are allowed one week to remove a course with no record on the transcript.

#### **Classification of Students**

Students are classified at the beginning of each semester in each academic year according to the following definitions of class standing:

- Freshman A student who has earned fewer than 27 semester hours.
- Sophomore A student who has earned 27 to 59 semester hours.
- Junior A student who has earned 60 to 89 semester hours.
- Senior A student who has earned 90 or more semester hours.

#### **Registration Status**

- Regular: Admission requirements fulfilled and systematically pursuing a definite course of study toward a degree.
- Conditional: Does not meet requirements for regular admission.
   Must establish regular (non-probationary) standing by the end of the first semester in residence.
- Special: A students who is not a candidate for a degree at Rocky Mountain College.
- Auditor: A student who attends class regularly, but does not receive credit or grade. A regular student may audit a course without charge, providing his or her course load remains within the 12- to 19-credit range.

#### **Academic Advisors**

Academic advisors are assigned to students based on their area of major interest upon entrance to Rocky Mountain College. Students are encouraged to meet with their advisors frequently to review graduation requirements, plan class schedules, and talk about their future. Students may change academic advisors at any time during the year by filing a request for change of academic advisor form, which is available in the Office of Student Records. For more information about academic advising, contact the director of academic advising at advising@rocky.edu.

#### **Levels of Courses**

It is recommended that students take courses at the level of their class standing (freshman 100-level, sophomore 200-level, junior 300-level, senior 400-level) provided that specific prerequisites have been met. Taking a course two levels or more above the level of class standing is not permitted, except with the approval of the instructor. All courses are further classified as either lower-division, upper-division, or graduate-level. Lower-division courses are those numbered 100 to 299; upper-division courses are those numbered 300 to 499; and graduate-level courses are numbered 500 to 699. A minimum of 40 semester hours must be completed in upper-division courses, at least 12 of which must be in the student's major. If a student chooses a minor, six upper-division credits must be completed in the minor.

#### **Cancellation of Courses**

The College reserves the right to cancel any course at any time. Courses are sometimes cancelled if enrollment is low: when enrollment is not at least 6 for fall or spring semester, or at least 4 for summer session courses.

#### **Regular Courses**

All regular course offerings are listed in this catalog. Courses cross-listed at a lower-division and upper-division level may be taken only once for credit unless otherwise noted.

The course schedule is available on CampusPortal and in the Office of Student Records. Courses for which there is small demand are typically offered alternate years or on demand. A course designated as "on demand" will be offered when there is sufficient number of students requesting the course, usually five or more, and if suitable arrangements can be made. Students should plan their schedules carefully with their advisors to take required courses when they are offered. The course schedule is subject to change.

## **Online Courses**

Regular courses may also be offered as online courses during any term. They are designated on the course schedule with the section listed as ONL. Students follow the same procedure to register for an online course as they do for regular course, although they incur an additional fee per credit. In order to begin an online course, students must sign into Moodle, the course management system. In order to login, they must have an enrollment key, which is provided by the professor. Professors will contact students on their official roster during the first days of class through the RMC email system with instructions on how to begin using Moodle and with course requirements. If a student does not receive an email from his/her professor, then the student must contact the professor to request information on the course. Online course grades are reported through Campus-Portal along with all other regular course grades.

#### **Special Courses**

Guidelines: Special courses use the following workload standards for a credit – 45 hours of student time for each semester hour, or completion of certain prescribed amounts of work or readings, determined at the beginning of the course.

The faculty member in charge is responsible for evaluating the student through oral or written tests, through the presentation of a paper or completed project, or by any other sound means of evaluation.

All special courses are to be taken seriously as academic courses based on advanced planning. They are to be completed by the end of the semester or term when they are started, just as regular classes. Incomplete grades will be given only under unusual circumstances and with the instructor's consent. See "grades" under "academic policies" in the "academics" section of this catalog.

**Note:** Under special circumstances a student may take a regular course by arrangement with a member of the faculty if the student is legitimately unable to attend the regular class sessions and has the instructor's approval. In this case, the student should enroll in the course under tis regular number, not under directed reading or any other special course number. The guidelines for special courses, however, must be followed when regular courses are taken by arrangement.

# Special Topics 180, 280, 380, 480, 580, 680

Faculty members may arrange, with the approval of the curriculum committee and the academic vice president, to offer under a special topics number courses not regularly listed in the catalog.

#### Field Practicum 291, 391

All programs may offer a field practicum for 1 to 3 semester hours, with the possibility of being repeated up to a total of 12 semester hours. There must be a faculty evaluation of the student's performance, with a statement of the evaluation to be kept with the student's records. Practicum courses are graded on a pass/no pass basis.

# Internship 450

An internship offers a learning experience in a workplace setting for juniors and seniors in any major. To be eligible for an internship, a students must have a cumulative GPA of at least 2.00 and major GPA of at least 2.25. For majors that require an internship, only the required credits can be completed for a letter grade; any additional credits may be completed on a pass/fail basis. Some majors only offer internship credits on a pass/fail basis. For majors that do not require an internship, only the first three credits may be completed for a letter grade; any others may be completed on a pass/fail basis. Only 12 credits of internship can be counted toward the completion of a degree. Internships should be related to the student's major or minor area of study and are arranged among a faculty member, the student, and an employer with assistance from the career services office. A completed internship learning contract is required prior to registration. Contracts and more information about internship requirements are available from the career services office.

## Seminar 490, 590, 690

Many academic programs offer a seminar as a capstone course carrying two to three semester hours of upper-division credit. Admission is restricted to juniors and seniors or master's program students.

# Independent Study 299, 499

Independent Study 299 is offered to freshmen or sophomores only by initiation of a faculty member and approval of the academic vice president. Its purpose is to allow work outside of the regularly offered course schedule in exceptional circumstances.

The purpose of Independent Study 499 is to allow a superior student to devise and pursue independent study in an area agreed upon in consultation with a faculty member who will supervise the study, subject to approval of the academic vice president. In order to qualify for such study, a

student must 1) major or minor in the program, 2) be a junior or a senior or a master's program student, and 3) carry a GPA of at least 3.00. Each independent study is 1 to 3 semester hours.

#### **Nontraditional Credit**

Recognizing that valuable learning often takes place outside the classroom, the College offers the opportunity to obtain academic credit for nontraditional learning experiences within certain guidelines. Nontraditional credits are not accepted in transfer from another institution and may apply to no more than 31 semester hours for a baccalaureate degree or 15 semester hours for an associate's degree.

Nontraditional credit is posted on the transcript after successful completion of one semester of full-time enrollment. Students may apply for nontraditional credit up to the end of their second term of attendance at Rocky Mountain College for work completed prior to enrolling at the College. Applications after the second term of attendance will not be accepted; nontraditional credit will not be granted for work done while enrolled at RMC.

Nontraditional credits granted are indicated on student transcripts with a grade of "P." There is a \$40 per credit transcripting fee. In all cases of nontraditional credit, it is the responsibility of the student to provide sufficient evidence to clearly show that he or she has earned the credit. For further information concerning the application process for nontraditional credit, including guidelines for the specific materials that need to be submitted for each type of nontraditional credit, and associated fees, contact the Office of Student Records. Details about the types of nontraditional credit that can be earned at Rocky Mountain College follow.

## Challenge of a Course

Students may challenge courses not previously taken. Approval of the faculty in the discipline and the academic vice president must be obtained, and written notification of successful challenge must be filed with the Office of Student Records. A challenge of a course involves a process whereby faculty members can effectively evaluate the student's knowledge and skills in the content areas. Examples of methods faculty may use to evaluate a challenge include exams, having the student write a paper or give a presentation, and/or having the student demonstrate skills in relevant activities.

# **CLEP and DANTES**

Rocky Mountain College recognizes, for college credit, successful completion of one or more of the general examination or subject examinations of the College Level Examination Program (CLEP). Credit may also be earned through the Defense Activity for Traditional Educational Support (DANTES) program. Any CLEP or DANTES examinations for credit must be completed by the end of the second semester of enrollment at Rocky Mountain College. More information is available in the Office of Student Records.

# Credit for Military Experience and Training (non-ROTC coursework)

Credit is evaluated based on the American Council on Education (ACE) recommendations for credit for military experience. Students should submit their information to ACE for evaluation. Once the ACE evaluation is returned, it should be brought to the Office of Student Records who will then evaluate the ACE recommendations and make determinations about which credits will transfer to Rocky Mountain College and how those credits will count toward graduation requirements.

# **Credit for Advanced Learning in High School**

College credit is awarded for advanced work in high school through the

advanced placement (AP) test of the College Entrance Examination Board and International Baccalaureate diplomas.

#### **Advanced Placement Program**

In order for credit to be granted by Rocky Mountain College, the institution must have a copy of the student's score sheet sent directly from the College Board Advanced Placement Program. Use 4660 as the Rocky Mountain College code.

Rocky Mountain College uses the American Council on Education (ACE) guidelines for determining the minimum score requirements for college credit on each AP exam.

#### **International Baccalaureate Program**

Rocky Mountain College recognizes the standards set by the International Baccalaureate Program for awarding college credit. Contact the Office of Student Records for more information on how IB credits transfer to RMC.

#### **Credit for Prior Learning**

This category of nontraditional credit is only appropriate under restricted and unusual circumstances; it applies to situations where students can document college-level learning in disciplines for which there is no corresponding course to challenge at Rocky Mountain College or any appropriate external examination, such as CLEP or DANTES.

The Academic Standards Committee is responsible for making final decisions about the granting of credit for prior learning; those decisions are typically made after consultation with appropriate faculty from within the College when available, or from other colleges if necessary. To earn academic credit, students are required to provide sufficient evidence to demonstrate that their learning outside of the classroom is equivalent to the content of an academic course. Evidence is presented in the form of a portfolio and typically includes performance tests, essay examinations, and samples of student work. Interviews with faculty or outside experts may also be appropriate.

There is a fee of \$200 for the development and evaluation of the portfolio. Credits granted are subject to a \$40 per credit transcripting fee. Students wishing to pursue this option should consult with the Office of Student Records to begin the process.

# Waivers and Substitutions of Program Requirements

In exceptional circumstances specific program requirements may be waived or substituted. If the requested waiver or substitution pertains to requirements of a student's major or minor area of study, an exception to the stated requirements may be granted at the discretion of the faculty in the relevant discipline, subject to the approval of the academic vice president. Waivers or substitutions related to core curriculum requirements are, like other exceptions to stated academic policy beyond those already noted, the purview of the Academic Standards Committee (see "Academic Standards Committee and Student Appeals" on page 20).

A waiver or substitution may be granted, for example, if a student unexpectedly does not have the opportunity to meet a program requirement because of an unavoidable conflict or because of a course cancellation. Substitutions are preferred over waivers so that the student will have an opportunity to learn most or all of the material by taking another course or combination of courses. When waivers or substitutions are approved, the student must still meet the minimum credit requirement for the major or minor – the student may need to take additional elective courses in the discipline. Students are not awarded credit for waivers. Waivers and substitutions are not appropriate in cases in which a student believes he or she has already learned the material necessary for the requirement. In such cases,

the student should challenge the course (see "Challenge of a Course").

# International Learning Experiences Study, Intern, Work, or Volunteer Abroad

The Office of International Programs helps students choose an international experience that best enhances their educational and career goals. Students may choose from semester- or year-long exchange programs, short-term faculty-led programs, and courses in which students study on campus for the majority of the semester and travel abroad to culminate the experience. With good planning, an international experience will not delay graduation. The Office of International Programs also assists students to find internships, work, or volunteer opportunities abroad.

### **RMC International Exchange Programs**

- Queen's University of Belfast Northern Ireland
- University of Ulster Northern Ireland
- Shikoku Gakuin University Japan
- Obirin University Japan
- Häme Polytechnic University Finland
- University of Gävle Sweden
- Writtle College England
- Regents American College London, England
- Yangtze University China
- Guangxi University China
- Guangxi Normal University China

#### **Academic Policies**

# **Family Educational Rights and Privacy Act**

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. 1232g; 34 CFR Part 99) protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

# Notification of Rights Under FERPA for Postsecondary Institutions

The Family Educational Rights and Privacy Act affords students certain rights with respect to their education records. These rights include:

The right to inspect and review the student's education records within 45 days of the day the College receives a request for access.

A student should submit to the registrar, dean, head of academic department, or other appropriate official, a written request that identifies the record(s) the student wishes to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA.

A student who wishes to ask the College to amend a record should write the College official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed.

If the College decides not to amend the record as requested, the College will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment.

Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

 The right to provide written consent before the College discloses personally identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure without consent.

The College discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement personnel and health staff); a person or company with whom the College has contracted as its agent to provide a service instead of using College employees or officials (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee or assisting another school in performing a task.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College.

The right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Family Policy Compliance Office U.S. Department of Education 400 Maryland Avenue, SW Washington, DC 20202-5901

Rocky Mountain College asks that each student fill out a FERPA form indicating a waiver of his or her right so that staff and faculty can speak to parents or other individuals that the student identifies on the form. A student also has the right to indicate that he or she does not waive these FERPA rights and thus does not give permission for staff and faculty to share academic information. FERPA waiver forms are available in the Office of Student Records.

#### Attendance

Students are expected to be in class regularly and promptly. They are responsible for all assignments, including, but not limited to, written papers, quizzes, class tests, midterm tests, and/or final examinations, even when ill or representing Rocky Mountain College officially in extracurricular activities, such as sporting events.

The academic vice president may, by written notice, place students on an "excused absence only" basis in some or all classes. If, after this notice is given, students are absent from class without adequate reason, the academic vice president may drop the student from a course or courses. In the event students are dismissed under the terms of this paragraph, a grade of "F" will be recorded in each course from which the student was dropped. Excused absence-only status is originated by the faculty or Student Alert Committee through a written warning issued to the student and copied to the Academic Vice President.

#### Examinations

Final examinations are given at the close of each semester. No change in the stated schedule may be made except by the academic vice president. Faculty members shall report the final grade for each student missing a final examination as "F" unless the academic vice president has excused the absence.

#### **Requesting a Change in the Final Examination Schedule**

Students may request exceptions to the published final exam schedule in cases where adherence to the published schedule would cause undue academic hardship. For example, a student may request the rescheduling of a final exam when the published schedule would require the student to take more than two final examinations on a single day. Since the final examination schedule is published well in advance, exceptions relating to personal/travel reasons will not be granted.

Requests for exceptions to the published schedule are initiated through the Office of the Academic Vice President/Provost, and an official request form may be obtained therefrom. Requests will be granted only upon the approval of the academic vice president and the course instructor. Completed forms indicating instructor approval must be returned to the Office of the Academic Vice President/Provost prior to the earlier of the scheduled examination time or the requested alternate examination time.

## Addition of a Course or Change of Section

Necessary registration changes, such as a change in a course or section, may be made by adding or dropping during the first week at the beginning of the fall or spring semesters. Students may not earn credit in any course for which they have failed to register.

#### Withdrawal from a Course

A student may withdraw from a course with a grade of "W" up to and including the last day to drop a class as published in the academic calendar. An exception to this date occurs for classes that only meet for part of the semester. For these classes, the student may withdraw from the course with a grade of "W" up to and including the day of the 50 percent point in the course. After that day, a student who withdraws from a course shall receive a grade of "F" in that course. (Students who officially withdraw from the College are not subject to this regulation.) It is required that both the student's advisor and the instructor concerned initial the withdraw form obtained from the Office of Student Records. Failure to withdraw in the official manner will result in a grade of "F." No withdrawal is official until the proper form has been filed in the Office of Student Records.

#### Withdrawal from College

Students who elect to withdraw from all of their classes after the term has started are required to complete the process of an official academic withdrawal from Rocky Mountain College. This process must be completed after the student has validated and up to the last day of scheduled classes. The academic withdrawal form can be found online at www.rocky.edu > Academics > Academic Forms and Policies > Academic Withdrawal Form.

All undergraduate students are allowed one opportunity during their enrollment at Rocky Mountain College to withdraw from all classes with "W" grades after the established deadline for an official academic withdrawal but prior to the last day of regular classes. Any student who withdraws in such a manner will be placed on academic probation the returning semester (fall/spring) and must comply with all necessary requirements.

Undergraduate students contemplating withdrawing from the College must meet with the Vice President for Student Life or the Director of Leadership, Engagement, and Achievement Program (LEAP) to discuss the academic and financial implications associated with withdrawing from the College. Failure to withdraw officially, as outlined above, will result in a grade of "F" for each course.

Graduate students contemplating withdrawing from the College must meet with the director of the relevant graduate program to complete the official academic withdrawal procedure. All final grades received prior to the withdraw date will be marked as earned on the transcript; all other grades will be marked with a "W" grade. The official withdrawal date will be the date the student submits the academic withdrawal form to the Vice President for Student Life, Director of LEAP, or graduate program director. A late date may be used if the College obtains evidence that the student who is withdrawing has attended any academically related activity such as a lecture, lab, exam, or tutorial after the withdrawal form has been submitted.

If a student leaves without official notification, the College will attempt to determine a last day of attendance. Although not required to take attendance, many faculty members do take attendance, thus allowing the College to document an academically related activity. If a last day of attendance cannot be identified and the College can verify the student attended at least one class during the semester, the halfway point of the semester will be used as the withdrawal date. Rocky Mountain College does not have a leave of absence policy.

## **Grade Points and Grade Point Average**

In order to determine students' scholastic averages, grade points are awarded for each hour of credit as follows: "A" – 4 points; "B" – 3 points; "C" – 2 points; "D" – 1 point; "F" – 0 points. Grades of "I," "P," and "W" are not used in calculation of the grade point average (GPA). A plus (+) or minus (-) does not change the value of the grade for calculation of the GPA.

GPA is determined by dividing the number of earned grade points by the number of attempted credit hours. The GPA is used in determining academic probation and suspension, eligibility for intercollegiate athletics, scholastic honors, and granting of degrees.

GPA is understood to mean cumulative GPA unless indicated for one semester. Grade point average for all uses in the College shall be based on all courses accepted at Rocky Mountain College. When a student repeats a course, the most recent grade will count toward GPA calculation. The previous grade will remain on the transcript, but will not be calculated in the GPA.

## **Course Grades**

Grades in courses are recorded as follows: "A" – outstanding; "B" – above average; "C" – average; "D" – below average; "F" – unsatisfactory; "P" – pass; "NP" – no pass; "I" – incomplete; "X" – no grade received from the instructor; and "W" – withdrawn. All grades except "I" and "X" become a matter of permanent record.

The "I" grade is given only under unusual circumstances and with the instructor's consent. Also, the student must have completed a minimum of 50% of the coursework. The instructor must file a completed Request for Incomplete Grade form in the Office of Student Records before the assignment of a grade as "I." An "I" must be made up within one year. After one year, it will be permanently recorded as an "F."

Grades not received from faculty by 10 days after the grade due date will be recorded as "F." Grades submitted to the Office of Student Records are final and may not be changed except upon request of the instructor. No grade change can be made more than one year after the end of the semester in which the course was taken.

If a student believes that their grade is incorrect, the student should first discuss the matter with the instructor. The student has the right to appeal

their case to the Academic Standards Committee in care of the registrar if talking to the faculty member does not resolve the issue.

\*Grade changes made after the due date of each semester final grades will have no effect on a student's satisfactory academic progress.

### Pass/No Pass Grading Option

The following courses are graded on a pass/no pass basis only: COM 247/447, IDS 220, music recital courses (MUS 020, MUS 030, MUS 040), varsity sports (HHP 100), physical education activity courses (PAC), THR 291, and all practicum courses. All other courses will be graded on the regular basis ("A," "B," "C," "D," "F"), unless noted. The academic vice president must approve any exceptions. A grade of pass/no pass is not used in computing GPA.

## Report of Grades

Mid-semester grade reports are progress reports and thus provide students with excellent opportunities to consult with instructors and advisors about problems they may be having. Mid-semester grade reports are available through CampusPortal after midterm break. These grades are not recorded on transcripts. Only final grades are recorded on transcripts in the Office of Student Records. Final grades are available on CampusPortal approximately one week after the end of the term. See the academic calendar for grade due dates.

#### Dean's List

Students who carry a full load (12 or more semester hours) of work completed with grade points and who earn a GPA of 3.60 or higher for the semester are placed on the Dean's List. Those with a GPA of 4.00 for the semester are recognized with high honors.

# **Graduation with Honors**

Honors at graduation are designated for associate of arts, bachelor of arts, and bachelor of science degrees as follows: summa cum laude, GPA 3.80 or above; magna cum laude, GPA 3.60-3.79; cum laude, GPA 3.40-3.59. An honors designation is not calculated for those earning a master's degree.

The GPA for graduation with honors is computed on the basis of all courses attempted, both at Rocky Mountain College and at any other college. The GPA for all work taken at Rocky Mountain College must be above the level for the honor awarded.

Honors listed in the graduation program are calculated through the December prior to graduation ceremonies. Honors at the point of graduation will be noted on both the diploma and on the student's transcript.

# **Application for Graduation**

All students intending to graduate in May during the current academic year must file an application for graduation by April 1 of the previous year. There is a \$100 graduation application fee, which includes the diploma, diploma cover, and commencement cap and gown. Applications received after April 1 and on or before February 1 will incur an additional late graduation application fee of \$25. After February 1, any student filing an application will not be allowed to participate in the graduation ceremony. All students intending to graduate in December must file an application for graduation by February 1 of the previous academic year (\$100 fee). Applications received after February 1 will incur a late graduation fee of \$25. Graduation ceremonies for the academic year are in May.

Students will be permitted to participate in graduation ceremonies under the following conditions:

- Applications must be received by the respective deadlines. See above for timeline.
  - Applications must be completed by the student and signed by the advisor.
  - Advising sheets for each major, minor, and core curriculum requirements must be completed and attached.
- All coursework must be scheduled for completion by the end of the last term of enrollment. Student applying for spring graduation may complete a maximum of six credits in the summer session if a plan and enrollment documentation is submitted to the Office of Students Records by March 1. For Aeronautical Science majors, required flight labs may not be part of the six credits.
- Student accounts must be in good standing by April 1.

#### **Transcripts**

Transcripts are available online through National Student Clearinghouse. Transcripts are \$7 and there is \$2.25 online processing fee. More information can be found online at www.rocky.edu > Academics > Student Records > Transcripts. Transcripts will not be issued for students who are not in good standing with the College.

# **Diplomas**

Official diplomas are awarded upon completion of all degree requirements at Rocky Mountain College. Individuals who wish to order replacement copies of previously awarded diplomas may do so by submitting a written, signed request to the Office of Student Records. A replacement fee of \$35 is required along with the request. Replacement diplomas will reflect the date on which the degree was awarded, however, it will include the signatures of current officers of the College.

## **Academic Standards Committee and Student Appeals**

The Academic Standards Committee is the body of original jurisdiction for student requests to be granted exceptions to the standard academic policies of the College. The Academic Standards Committee has jurisdiction over all such matters unless specifically noted otherwise in this document (see "Waivers and Substitutions of Program Requirements," "Academic Standing," and "Academic Integrity"). Common examples of student requests appropriate to the Academic Standards Committee involve exceptions to the core curriculum requirements and other requirements for graduation, exceptions to the College's drop/add policy, and exceptions to the College's policy related to participation in graduation ceremonies.

Requests for exceptions must be submitted in writing to the Office of Student Records. Requests should be accompanied by a letter of support from the student's academic advisor or an appropriate faculty member. Students should take steps to ensure that their requests reference specific policies to which they are seeking exceptions and specific desired results.

Decisions of the Academic Standards Committee may be appealed to the academic vice president, who will determine if all relevant policies have been followed, not address the merit of the appeal. Any appeal must be submitted, in writing, within 10 days of receipt of the Academic Standards Committee's decision.

In some cases, requests made of the Academic Standards Committee may be referred to an appropriate faculty member and/or academic division chair for informal resolution. In such cases, students should provide documentation of the results of said attempts should they desire to reinstate their request with the Committee.

# **Satisfactory Academic Progress**

## **Academic Standing: Probation and Suspension**

Students at Rocky Mountain College are expected to make progress toward attaining their degree. The criteria for good academic standings are as follows:

If:	Then:
Term GPA 0.00	Academic suspension for the following term (S)
Term GPA < 2.00 and/or cumulative GPA < 2.00	Academic probation for next term (P)
Term GPA < 1.00 and cumulative GPA < 2.00	Academic suspension for next term (S)
Probation term: Term GPA > 2.00 and cumulative GPA < 2.00	Academic probation for the following term (P)
Probation term: Term GPA < 2.00 and cumulative GPA < 2.00	Academic suspension for the following term.(S)
Readmitted by appeal, following pending suspension	Academic probation for the following term (P)
Upon second suspension or pending suspension status	Dismissal (D)

**Note:** For purposes of probation and suspension, summer sessions do not constitute "terms."

A student may appeal an academic suspension by indicating in writing the reasons why he or she did not make satisfactory academic progress, submitting a letter of support from a faculty member or academic advisor and submitting a plan for improvement. The appeal must be made by the deadline provided in the notification of suspension and directed to the Office of Student Records. The Office of Student Records will forward appeals to the Academic Progress Committee for review. If the appeal is granted, the student's standing will become probationary.

Students on probation must adhere to certain guidelines. These include enrolling for no more than 13 credits, meeting weekly with his or her academic advisor, and seeking assistance from other resources.

Students on probation are not eligible for participation in the following activities: intercollegiate athletics; intramural athletics; speech and debate; flight team; equestrian team; theatre productions; band, choir, and music ensembles; student government; study abroad; and College-sponsored trips.

Although a probation cannot be appealed, students can appeal ineligibility for activities. Students must make a written appeal to the Academic Progress Committee outlining the reasons activity eligibility should be restored. The appeal must be accompanied by letters of support from the academic advisor, the activity sponsor or coach, and a faculty member other than the academic advisor or activity sponsor/coach. If a student is placed on probation due to cumulative GPA, activity eligibility can be restored by sufficient progress during summer and/or inter-terms that raises the cumulative GPA above 2.00. Summer grades and earned credits do not otherwise affect probation.

Suspended students may be readmitted after one semester's absence. Readmission requires submission of an application for readmission to the Office of Student Records and consideration by the Academic Progress Committee. If readmission is approved, the probationary status shall be

continued until good academic standing is restored.

If a student is suspended a second time, the student is dismissed with no further opportunity to enroll at Rocky Mountain College.

Students may lose eligibility for financial aid while on probation or suspension. Check with the Financial Aid Office for more information.

Probation, suspension, and dismissal are permanently recorded on the student's transcript.

## **Eligibility Policy**

Students on probation are not eligible for participation in the following activities: intercollegiate athletics; intramural athletics; speech and debate; flight team; equestrian team; theatre productions; band, choir, and music ensembles; student government; study away; and College-sponsored trips. Although probation cannot be appealed, students can appeal ineligibility for activities.

If a student is placed on probation due to cumulative GPA, activity eligibility can be restored by sufficient progress during summer and/ or inter-terms that raise the cumulative GPA at or above 2.00. Summer grades and earned credits do not otherwise affect probation.

# **Academic Integrity**

Academic integrity at Rocky Mountain College is based on a respect for individual achievement that lies at the heart of academic culture. Every faculty member and student belongs to a community of learners where academic integrity is a fundamental commitment. This statement broadly describes principles of student academic conduct support by all academic programs. It is the responsibility of every member of the academic community to be familiar with these policies.

# **Basic Standards of Academic Integrity**

A student's registration at Rocky Mountain College implies agreement with and requires adherence to the College's standards of academic integrity. These standards cannot be listed exhaustively; however, the following examples represent some types of behavior that violate the basic standards of academic integrity and that are, therefore, unacceptable:

- Cheating: Using unauthorized notes, study aids, or information on an examination; altering a graded work after it has been returned, then submitting the work for re-grading; allowing another person to do one's work and submitting work under one's own name; submitting identical or similar papers for credit in more than one course without prior permission from the course instructors.
- 2. Plagiarism: Submitting material that in part or whole is not entirely one's own work without attributing those same portions to their correct source; not properly attributing words or ideas to a source even if not quoting directly; quoting from another author's writing without citing that author's work, including material taken from the Internet, books, and/or papers; citing, with quotation marks, portions of another author's work, but using more of that work without proper attribution; taking a paper, in whole or part, from a site on the Internet or a "library" of already-written papers; copying work from another student.
- 3. Fabrication: Falsifying or inventing any information, data, or citation; presenting data that was not gathered in accordance with standard guidelines defining the appropriate methods for collecting or generating data and failing to include an accurate account of the method by which that data was gathered or collected.
- Obtaining an unfair advantage: (a) Stealing, reproducing, circulating, or otherwise gaining access to examination materials prior to

the time authorized by the instructor; (b) stealing, destroying, defacing, or concealing library materials with the purpose of depriving others of their use; (c) unauthorized collaboration on an academic assignment; (d) retaining, possessing, using, or circulating previously given examination materials, where those materials clearly indicate that they are to be returned to the instructor at the conclusion of the examination; (e) intentionally obstructing or interfering with another student's academic work; or (f) otherwise undertaking activity with the purpose of creating or obtaining an unfair academic advantage over other students.

- 5. Aiding and abetting academic dishonesty: (a) Providing material, information, or other assistance to another person with knowledge that such aid could be used in any of the violations listed above; or (b) providing false information in connection with any inquiry regarding academic integrity.
- 6. Falsification of records and official documents: Altering documents affecting academic records; forging signatures of authorization or falsifying information on an official academic document, grade report, letter of permission, petition, drop/add form, ID card, or any other official College document.
- 7. Unauthorized access to computerized academic or administrative records or systems: Viewing or altering computer records; modifying computer programs or systems; releasing or dispensing information gained via unauthorized access; or interfering with the use or availability of computer systems or information.

# **Due Process and Student Rights**

Enforcement of the standards of academic integrity lies with the faculty and the academic division. In all cases involving academic dishonesty, the student charged or suspected shall, at a minimum, be accorded the following rights:

- 1. Be apprised of the charge(s) against him or her;
- Be provided with an opportunity to present information on his or her behalf;
- 3. Be given the right to appeal any decision of an individual faculty member or the Academic Progress Committee to the academic vice president and judicial council. Appeals to the academic vice president must be submitted in writing within 48 hours of the student being formally sanctioned.

Appeals utilizing the Rocky Mountain College judicial process should follow the procedures outlined in the student handbook.

#### Sanctions

All proven cases of academic dishonesty will be penalized as appropriate under the circumstances. Individual faculty members may take the following actions:

- Issue a private reprimand;
- Issue a formal letter of reprimand;
- Reduce the student's grade or fail him or her in the course.

All incidents of academic dishonesty will be reported to the registrar who reserves the right to forward the matter to the Academic Progress Committee for further action. The Committee may take the following actions:

- Define a period of probation, with or without the attachment of conditions:
- 2. Withdraw College scholarship funding;
- Define a period of suspension, with or without the attachment of conditions;
- 4. Expel the student from the College;

- 5. Make a notation on the official record;
- 6. Revoke an awarded degree; or
- 7. Act on any appropriate combination of 1-6 above.

#### Faculty and Administrative Responsibilities

In order to implement these principles of academic integrity, it is necessary for the administration and faculty to take certain steps that will discourage academic dishonesty and protect academic integrity:

- Rocky Mountain College will regularly communicate to the College community its academic standards and expectations through its publications. Further, the College will encourage and promote open dialogue and discussion about issues affecting academic integrity.
- 2. Instructors should inform students of the academic requirements of each course. Such information may include (a) notice of the scope of permitted collaboration; (b) notice of the conventions of citation and attribution within the discipline of the course; and (c) notice of the materials that may be used during examinations and on other assignments.

#### **Student Records**

Erik Willborg, Registrar

Official academic records of students are kept only in the Office of Student Records. The information is of three types: personal information supplied by the applicant; educational records, including records from previous institutions, including high school and/or colleges attended; and scholastic records as supplied by the student's college teachers.

Information pertaining to the student's scholastic records is kept in permanent records available only to the academic vice president, registrar, the assistant registrar, and other with the student's written consent; and in an academic profile, which includes grades, semester and cumulative averages, and progress toward the completion of degree requirements. Particularly helpful at the time of registration, the latter records are available to the student and those serving as the student's academic advisors.

Other items (for example, copies of letters sent to students regarding academic and/or social disciplinary action) are placed in the student's personal file. This information is periodically destroyed after the student has left the College and when the files are sorted for storage.

Students have the right to request the privilege of looking at their files. However, the College reserves the right to delay access to a student's personal file for a period of up to 45 days in accordance with the provisions of the Buckley/Pell Amendment. Transcripts of records will be sent only upon the individual student's written request except where grades determine eligibility for a scholarship, which the student has accepted or for which the student has applied.

Final grades will be available on CampusPortal approximately one week after the end of each term.

Rocky Mountain College has the responsibility and the authority to establish standards for scholarship, student conduct, and campus life. The polices that govern these standards recognize the College as part of the larger community bound by federal, state, and local legislation; as a unique academic enterprise, the College embraces regulations that are intended to create, preserve, and foster the freedom to learn.

## **Student Email Policy**

Electronic mail or "email" is considered an official method for communication at RMC because it delivers information in a convenient, timely,

cost effective, and environmentally aware manner.

An RMC-assigned student email account shall be the College's official means of communication with all students on the RMC campus. The official email account will be provided in the rocky.edu domain. Students can expect to receive official information regarding deadlines, policy/procedure changes, changes in degree requirements, special events, course schedule changes, regulatory changes, emergency notices, as well as other useful information from the registrar, Office of Financial Aid, the vice president of academic affairs, dean of students, and the Business Office. Students are responsible for all information sent to them via the RMC-assigned email account. If a student chooses to forward their RMC email account, he or she is responsible for all information, including attachments, sent to any other email account.

#### **Reason for Policy**

Rocky Mountain College provides students with an email account upon the student's matriculation to the institution. This account is free of charge and currently is active as long as the student remains enrolled at the College, and RMC graduates can retain their RMC email address indefinitely. Increasingly, email is becoming the primary mode of communication between students and RMC.

Some students do not use their RMC-assigned email account. Other students forward their RMC email account to an alternative account (e.g., a Yahoo account). When students do not use their RMC-assigned email account, or they forward email from that account to another account, vital information is often not conveyed as the email is unopened or the associated attachments are not forwarded.

## **Expectations of Students**

Students are expected to check their official RMC email on a frequent and consistent basis. The College recommends checking email daily.

#### **Faculty Expectations and Education Uses of Email**

Faculty members should check their email on a regular basis in order to stay current with College-related communications. Faculty will determine how electronic forms of communication will be used in their classes and should require the use of rocky.edu student addresses as per compliance with RMC's email policy.

# Forwarding Email

While students may forward their RMC email to another email account, having email lost because of forwarding does not absolve the student from the responsibilities associated with communication sent to his or her official email address. The College is not responsible for the handling of RMC email by outside vendors or unofficial servers.

Jessica Francischetti, Director of Financial Assistance

# **Types of Financial Assistance**

There are three types of financial assistance available to students attending Rocky Mountain College:

- Grants and scholarships
- 2. Loans
- 3. Work opportunities

Students who intend to apply for financial assistance must be accepted for admission to Rocky Mountain College (see the "Admissions" section of the catalog).

### **Institutional Grants and Scholarships**

Rocky Mountain College provides institutional grants and scholarships from the College's financial resources based on financial need and/or merit. A student is not required to apply for federal student assistance in order to be eligible for Rocky Mountain College financial assistance, however, doing so will ensure you are considered for all financial assistance from RMC, as well as all federal aid. Rocky Mountain College students obtaining their first baccalaureate degree who are in good academic standing and enrolled full-time (12 credit hours or more) are eligible for institutionally funded financial assistance for up to the number of semesters it would take to normally receive the degree they are seeking. If a student is in a fouryear program, institutional aid will be granted for four years. Students enrolled in a master's degree program are not eligible for institutionally funded grant assistance. The maximum institutional merit scholarship amount for which a student is eligible is awarded to the incoming student and is renewable to the student within institutional packaging policy requirements. These scholarships are determined by using a calculated index based on an ACT/SAT score and high school GPA for incoming freshmen. Transfer students are awarded merit scholarships based on prior academic performance at their former school(s). Students are eligible for only one institutionally funded merit scholarship each year. To ensure institutional grants and merit scholarships are renewed appropriately, all returning Rocky Mountain College students (i.e., sophomores and older) must complete the RMC Grant & Scholarship Renewal Form by March 1 every year. This form can be found at www.rocky.edu > Financial Aid > Financial Aid Forms. Institutional scholarships are not awarded for the summer term.

#### **Merit Scholarships**

For students entering RMC in the 2016-2017 academic year, these scholarships include, but are not limited to:

Trustee scholarship: \$15,000 Freshmen \$12,000 Transfer
 Presidential scholarship \$13,000 Freshmen \$11,000 Transfer
 Dean's scholarship \$11,000 Freshmen \$8,000 Transfer
 RMC Grant \$5,000 Transfer

### **Athletic Grants**

Rocky Mountain College athletic grants are available for football, men's/women's basketball, men's/women's alpine skiing, men's/women's cross country, men's women's golf, men's/women's soccer, volleyball, and cheerleading. Awards are made by the Office of Financial Assistance in consultation with each sport's coach. Amounts and annual renewal of athletic grants are determined by the coach.

#### **RMC Bear Grant**

Students who complete a Free Application for Federal Student Aid (FAFSA) and demonstrate financial need after merit and athletic award amounts are determined may be eligible for this grant. Amounts vary according to need.

#### Other Grant and Scholarship Opportunities

Rocky Mountain College funds students through the generosity of many donors. Students who are enrolled full-time and have submitted FAFSA results will be put into the eligibility pool for endowed and annually funded scholarships. In most instances, paper applications are not required. Scholarships not administered by Rocky Mountain College provide many students with aid to attend college. In most cases, the student must apply directly to the donor group. These grants must be reported to the Office of Financial Assistance. Many Rocky Mountain College students have received help from such organizations as the Veterans Administration, ROTC, vocational rehabilitation, Indian Health Service, fraternal organizations, service clubs, and local and national churches.

#### **Federal Financial Assistance**

To be eligible for financial assistance, students must be enrolled as a degree-seeking student. Students seeking financial assistance must complete a Free Application for Federal Student Aid (FAFSA) and request that the information be sent to Rocky Mountain College, Title IV school code 002534. With this application form, the student's financial need, eligibility for the federal student financial aid programs, and many Rocky Mountain College scholarships/grants are determined. The FAFSA is available online at www.fafsa.ed.gov, or a paper FAFSA can be requested at the College's financial aid office. For maximum speed and accuracy of processing, the preferred method for completing the FAFSA is online. The College will receive the results electronically when a student lists Rocky Mountain College as a college choice. Students who wish to be considered for federal financial assistance will need to complete the FAFSA each academic year by March 1 to ensure they receive the maximum aid for which they qualify.

#### The types of federal aid students may receive are as follows:

**Federal Pell Grant:** Based on the demonstrated financial need of the student as determined by the federal government when a student submits the FAFSA. Pell Grants are awarded to undergraduate students with high financial need who have not previously earned a bachelor's degree.

**Federal Supplemental Educational Opportunity Grant (FSEOG):** Based on the demonstrated financial need of the student as determined by the federal government when a student submits the FAFSA and is awarded by the Financial Aid Office as long as funds are available. Priority for this grant is given to Federal Pell Grant eligible students.

**Federal Teacher Education Assistance for College and Higher Education:** This federal program provides funds to students who are completing coursework that is required to begin a career in teaching and who agrees to teach full-time for at least four years:

- · As a highly qualified teacher;
- At a school servicing low-income students; and
- In a high-need field.

The four years of teaching must be completed within eight years after a student completes or otherwise ceases to be enrolled in the program for which he/she received a TEACH grant. If a student fails to complete the four year teaching requirement, the TEACH grant funds will be converted to a Federal Direct Unsubsidized Stafford Loan. The maximum award

is \$4,000 per year. Students must complete a FAFSA, although do not have to show financial need. To be eligible, a student must score above the 75th percentile on a college admission test or maintain a cumulative GPA of 3.25 or higher. Students must be formally accepted into the RMC teacher education program. Students must complete a TEACH grant initial and subsequent counseling and sign an Agreement to Serve each year a TEACH grant is requested. Students must complete TEACH grant exit counseling when they complete or cease to be enrolled in the program for which they received the grant.

Federal Direct Student Loans: This loan program provides low interest loans to students in order to pay for their educational expenses. Students must be enrolled at least half-time. The Direct Loan program offers both need-based (subsidized) and non-need (unsubsidized) loans. Subsidized Direct Loans do not accrue interest while the student is in school. The federal government pays interest on the loan, or subsidizes it, until the student goes into repayment. Unsubsidized Direct Loans begin to accrue interest from the time the loan is disbursed. If a student allows the interest to accumulate, it will be capitalized (added to the principal amount of the loan) and will increase the debt. Dependent students whose parents have been denied a parent loan may be eligible to borrow additional unsubsidized Stafford loan amounts. The financial aid office determines eligibility for either of the above loans by the student's financial need, grade level, and dependency status. The type of loan for which the student is eligible will be included with the financial aid award letter. Federal regulations require all students borrowing a Direct Loan for the first time to participate in a loan counseling session and complete a Master Promissory Note (MPN) before receiving the first disbursement of their loan. Students do not need to fill out an MPN every year. Once an MPN is completed in the first year, it is good for 10 years. The interest rate for subsidized and unsubsidized direct loans is fixed at 3.76% for undergraduate students. The interest rate for unsubsidized direct loans for graduate students is 5.31%. There is a loan fee of 1.068% that will be deducted from each loan disbursement. Repayment begins six months after the student graduates, withdraws, or drops below half-time enrollment.

**Direct Parent Loan (PLUS):** This loan is also part of the Direct Loan program. As the name states, the parent is the borrower. This loan is not based on need and all parents of dependent students are eligible to apply. The parent must be credit-worthy or have a credit-worthy endorser. The maximum amount available is determined by subtracting the student's total financial assistance from the cost of attendance. The parent borrower must complete a Master Promissory Note and a Parent PLUS Loan Request Authorization Form. The Parent PLUS Master Promissory Note only needs to be completed once. It, like the MPN for students, is good for 10 years. The PLUS Loan Request Authorization Form must be completed annually. There is a 4.272% loan fee that will be deducted from each loan disbursement. The interest rate is fixed at 6.31%. Repayment begins 60 days after the loan is fully disbursed.

The Grad PLUS: This loan is available to graduate students. The student must be credit-worthy or have a credit-worthy endorser. The maximum amount available is determined by subtracting the total financial assistance from the cost of attendance. Graduate students borrowing a Grad PLUS Loan for the first time must complete an online loan counseling session and a Master Promissory Note before receiving the first disbursement of their loan. Students do not need to fill out an MPN every year. Once an MPN is completed the first year, it is good for 10 years. There is a 4.272% loan fee that will be deducted from each loan disbursement. The interest rate is fixed at 6.31%, and repayment begins 60 days after the loan is fully dispersed.

Federal Perkins Loan: This loan is awarded to the student by Rocky

Mountain College. Perkins loans are awarded to students who have a high unmet need after all grant aid is awarded. Loan funds are limited so the federal Perkins loan is awarded to students on a first-come, first-served basis. Students must be enrolled at least half-time (6 credit hours). Primary consideration is given to full-time students. A student accepting a federal Perkins loan must sign a Master Promissory Note and complete a loan counseling session before the loan can be disbursed. This MPN is good for 10 years. Repayment of the loan and accumulation of the 5% interest does not begin until nine months after the student graduates, drops below half-time, or withdraws from college.

Work Opportunities: Work opportunities are available to qualified students in the form of work study. Work study will be awarded to eligible students as part of their financial aid package. Work study is the last source of funding to be added to a student's award package after their maximum federal and institutional grants and scholarships and loans have been determined. Priority for work study awards is given to students who have demonstrated the greatest financial need, according to the current year awarding model, as determined by a completed FAFSA. These students will be awarded Federal College Work Study. The maximum amount of work packaged will be up to the equivalent of 10 hours per week at the current minimum wage, depending on the student's need.

We recognize that there are some student positions that require a special skill set, such as class tutors, academic lab assistants, life guards, etc., that cannot be filled with a student who does not possess the required knowledge or skills. RMC institutional work study may be awarded to specific students needed to fill these positions upon request of their supervisor and do not necessarily need to show financial need.

Funding for federal and institutional work study is limited and is awarded on a first-come, first-served basis. If a student who has not been awarded work study requests it to be added to his/her award, every effort will be made to accommodate that request. If work study cannot be added to his/her award at the time of the request, the student may be placed on a waiting list. If funds become available, students on the waiting list will be considered for an award based on their eligibility.

Work study positions are available in various areas on campus or with off-campus community service jobs, such as reading and math tutors. Although every effort is made to provide students with work study jobs, the College cannot guarantee a student will be able to earn the amount of money initially awarded. Job availability, funding issues, and class schedules can prevent a student from participating in work study. Off-campus employment is available throughout the Billings area. The Career Services Office receive inquiries for all off-campus job opportunities.

#### Verification

Approximately 30% of all FAFSA applicants are selected by the Department of Education for a process called verification. In this process, the school is required to compare information from the FAFSA with signed copies of the Verification Worksheet, the student's (and parents') federal tax documents, W-2s, or other financial documents. If there are differences between the FAFSA information and the financial documents provided, Rocky Mountain College will make the corrections electronically. Verification must be completed no later than 14 days prior to the end of the first semester of enrollment. Verification must be completed before any federal grants or loans will be disbursed. Failure to complete verification will result in the cancellation of all federal and institutional need-based aid.

#### Re-evaluation

In some cases, the Office of Financial Aid can re-evaluate aid eligibility

based on special circumstances. Special circumstances include the death of a parent or spouse, loss of employment, divorce, and unusual debt or expenses. Students wishing to have their financial aid evaluated based on special circumstances need to complete the Appeal for Special Financial Consideration Form, which is available at www.rocky.edu > Financial Aid > Financial Aid Forms.

### **Determining Aid Eligibility**

Several components are used to determine a student's aid eligibility. In the spring of each year, a cost of attendance is determined for the following academic year. The cost of attendance for a full-time resident student for 2016-2017 is as follows:

•	Tuition and fixed fees:	\$26,666
•	Room and board allowance:	\$8,134
•	Books and supplies:	\$1,300
•	Personal expenses:	\$3,200
•	Loan fees:	\$70
•	Total cost of attendance:	\$39,370

If a student has applied for federal financial assistance, the Expected Family Contribution (EFC) on the student's FAFSA is subtracted from the cost of attendance to determine a student's financial need per federal eligibility guidelines. To help meet a student's financial need, aid is awarded by first determining a student's maximum eligibility for federal and institutional grants and scholarships, then loans, then work. For students who live off campus, the total amount of combined federal and/or institutional gift assistance will not exceed tuition. Financial aid packages are calculated using information available at the time of packaging and may be revised due to changes in enrollment and/or financial status changes. Most aid is disbursed evenly between fall and spring semesters. Students seeking financial assistance for summer terms should contact the financial aid office. Grants, scholarships, and loan funds are disbursed by applying them to the student's RMC student account. Work study is paid to the student monthly as earned. Adjustments may be made to the cost of attendance to allow for the one-time purchase of a computer, dependent care expenses, study abroad expenses, additional costs for students with disabilities, or loan fees at the request of the student.

When a new student's financial assistance eligibility has been determined, a financial assistance award notice will be mailed to the student. Returning students' award notices will be made available online in CampusPortal. Instructions about accepting the award online will be mailed to students when the award is complete. All consumer information regarding the award is also available online.

## **Satisfactory Academic Progress**

Federal regulations and Rocky Mountain College policy require students to maintain satisfactory academic progress (SAP) toward a degree. All federal and institutional scholarship, grant, loan, and work study programs are covered by this policy. Students currently enrolled and re-admits are subject to SAP measurement. New students, including transfer students, while subject to SAP, are not measured for satisfactory progress until grades have been posted for the first term of attendance at RMC. The following standards represent the minimum performance requirements to receive financial assistance and do not necessarily coincide with academic program requirements.

There are three dimensions to the satisfactory academic progress standards: maintaining the minimum required cumulative grade point average (GPA), successfully completing a degree at the required pace, and completing within an established time frame.

#### Minimum Cumulative GPA

Students must maintain a cumulative GPA of at least 2.00. Students must meet this qualitative standard in addition to the quantitative standards below.

#### Pace

Students must complete at least 67 percent of all credits attempted. Pace is measured by dividing the cumulative number of earned credit hours by the cumulative number of credit hours the student has attempted at the end of each academic period. Attempted credits are determined based on a student's credit load at the end of the drop/add period for each term.

#### **Maximum Time Frame**

Federal regulations state undergraduate students must complete their degree objective within 150 percent of the published length of the educational program. For example, a student enrolled in a bachelor's degree program requiring 124 semester credits in order to graduate could attempt up to 186 credits before federal student financial aid would be terminated.

RMC also expects students to complete their degree within a reasonable time frame. Institutional assistance is available to full-time students up to the number of semesters it would take to normally receive the degree they are seeking. If a student is in a four-year program, institutional aid will be granted for four years. Students can appeal this institutional aid policy if they have planned carefully and successfully completed 15 to 16 credits per semester, but still need an additional semester or two to complete their degree.

The following are considered when evaluating a student's satisfactory academic progress:

- Grades of A, B, C, and D are considered attempted and successfully completed. Grades of I, IP, W, F, and NP are considered to be courses attempted but not successfully completed. I, IP, NP, and W grades do not affect the cumulative GPA, but they do reduce the completion ratio (pace) and are considered in hours attempted toward the maximum time frame. An "I" grade must be made up within one year. If a student successfully completes the coursework within one year, the actual grade will be registered, the student will receive credit for the course and the new grade will be factored into the SAP components. IF it is not made up within one year it will be permanently recorded as an F. F grades negatively impact all SAP measurements.
- Audit classes are not considered in SAP measurement.
- Remedial courses count toward enrollment status in the term in which they are registered, but do not count toward total credits attempted and completed. Grades earned in remedial classes are included in the student's cumulative GPA calculation.
- Transfer credits that are accepted by RMC are included in the calculations for cumulative GPA and both attempted and earned hours.
- RMC does not monitor changes of majors. All grades earned, credits attempted, and credits completed are included in the SAP determination even if the student has changed majors.
- Students seeking to earn additional degrees will be placed into the grade level progression based on the number of credits accepted toward the additional degree and financial aid eligibility will be based on the grade level determined in this way.
- All periods of a student's enrollment count when assessing progress, even periods in which the student did not receive Title IV or institutional funds.
- Students may receive Title IV funding for repeating a class they
  previously failed for an unlimited number of times. IF a student

repeats a failed class and successfully completes it, the student will receive credit for the course, and the new grade will be factored into the SAP components. Students may receive Title IV funding for one repeat of a previously passed course. If a student repeats a previously passed course, the newest grade will be registered and will be factored into the SAP components.

## **Monitoring Progress**

Financial aid satisfactory academic progress at RMC is measured at the end of each semester and summer term. The overall cumulative grade point average (GPA), pace, and maximum time frame assessment will be based on the student's entire academic record.

#### Failure to Maintain Satisfactory Academic Progress

Students will be notified in writing if they have failed to meet the above standards.

Financial Aid Warning: A student is usually put in a warning status the first time he or she fails to meet the above standards. A student on financial aid warning may continue to receive financial aid, with the exception of work study, for one payment period. A student does not need to take any action at this point unless he/she wishes to participate in the work study program while in the warning status. Work study termination may be appealed in writing to the director of financial aid. The appeal should include a personal statement that clearly details the circumstances that hindered the student's academic performance, how the circumstances have been resolved or managed to permit the student to meet the standards, a plan of action to meet the conditions of the warning, and why working will not jeopardize that plan. Relevant documentation should accompany the appeal letter. At the end of the warning period, a student's satisfactory progress will be evaluated again. If it is determined that the student is meeting the minimum progress standards, the student will be considered to be in good standing and may continue to receive financial aid.

Financial Aid Termination: If the student fails to meet the minium satisfactory academic standards after the warning period, aid will be terminated for the subsequent payment period. Financial aid will be terminated for students with less than a 2.00 cumulative GPA after four semesters of attendance. The Academic Standards Committee may place a student on academic suspension if their term GPA is less than a 1.00. If a student is suspended for this reason, their aid will be terminated as well. If a student repeatedly withdraws from classes, financial assistance is terminated immediately when it is determined to be mathematically impossible for the student to be able to complete their degree objective within 150 percent of the published length of the program. Aid is also terminated for students who are dismissed from RMC.

Regaining Financial Aid Eligibility: Students whose financial aid has been terminated may regain eligibility for financial assistance by reestablishing the required GPA and/or completion ratios using their own resources. If a student regains satisfactory progress, they may receive financial assistance for the payment period in which they regain eligibility, but not for any payment period in which the student did not meet the standards. It is the responsibility of the student to notify financial aid personnel when he or she has re-established satisfactory academic progress.

# Right to Appeal

Financial assistance terminations, like academic suspensions, may be appealed. Generally, appeals will be granted for extraordinary circumstances beyond the student's ability to control, such as those described below. Appeals must be in writing and submitted to the director of financial assistance by November 15 for the fall semester, March 31 for the spring

semester, and May 10 for the summer term. The Academic Appeals Committee must grant academic reinstatement to students on academic suspension before the Financial Aid Office will consider an appeal for financial aid eligibility reinstatement.

The appeal should include a personal statement that clearly details the circumstances hindered the student's academic performance, how the circumstances have been resolved or managed to permit the student to meet the standards, and relevant documentation should accompany the appeal form. Acceptable reasons to appeal include, but are not limited to: illness or injury of the student, illness or death of an immediate relative of the student, divorce or separation of the student, etc. Relevant documentation may include a physician's letter, hospital records, death certificate, obituary, or court documents.

A student whose aid is terminated due to maximum time frame or credit limit must clearly detail what circumstances prevented their graduation within the applicable time frame or credit limit, what coursework is needed to complete the degree with their appeal, and how long it will take to complete the degree. Acceptable reasons to appeal maximum time frame include, but are not limited to: change of major, transfer credits that did not apply toward your degree/program, etc.

The appeal will be reviewed by the financial aid director and staff. All decisions of the SAP appeals committee are final. A written decision regarding the appeal will be sent to the student in a timely manner. If the appeal is approved and it is determined that the student should be able to make satisfactory progress during the subsequent payment period and meet the SAP standards by the end of the subsequent payment period, the student will be placed on financial aid probation and will be eligible to receive financial assistance, with the exception of work study, for one payment period. At the end of the probationary period, a student's satisfactory progress will be evaluated again to determine continuing eligibility. If the appeal is approved and it is determined that the student will not achieve the minimum SAP requirements within one payment period, they will be placed on financial aid probation and required to complete an Academic Recovery Plan (ARP) outlining how, if followed, the student will achieve the minimum academic standards, as well as a time frame in which the student expects to be back in compliance with the standards. Students approved on an ARP will complete and sign the plan with the Director of LEAP. The plan will be monitored at the end of each term. If a student is not academically progressing as planned, financial aid will be terminated. The student's responsibilities during a probationary period include successfully completing the appropriate number of credits and earning a cumulative GPA of at least 2.00 by the end of the probationary term.

# **Return of Title IV Funds**

The College is required to calculate the amount of Federal Title IV funds to be returned for a student who has withdrawn from all classes. The assumption of this policy is that a student earns aid based on the period of time he/she remains enrolled. Title IV funds are awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws, the student may no longer be eligible for the full amount of financial assistance that the student was originally scheduled to receive. This policy does not apply to students who have dropped some classes but remain enrolled in other classes. When a student reduces his or her course load from 12 credits to 9 credits, the reduction represents a change in enrollment status, not a withdrawal. If a student reduces his or her enrollment status, financial aid may need to be recalculated but no return calculation is required.

RMC does not have a formal written academic or financial aid leave of

absence policy. Students withdrawing from college completely are required to complete the process of an official academic withdrawal from Rocky Mountain College. The official withdrawal form can be found online at www.rocky.edu > Academics > Academic Forms and Policies > Academic Withdrawal Form. It is the student's responsibility to contact all departments indicated on the withdrawal form to complete the withdrawal process. The student must contact the Student Accounts Office for information regarding the proration of charges and financial assistance and for the handling of the balance of their account as a result of the withdrawal calculation. Accounts with a balance due Rocky Mountain College are subject to the Student Account Policies.

The date the official withdrawal form is submitted by the student determines the percentage of the term completed. This percentage is used to calculate the proration of tuition, fees, room, board, and financial assistance as governed by the Return of Title IV Funds policy set forth by the Department of Education. If the withdrawal takes place after the first five days of the semester and before 60% of the term is completed, the percentage is determined by dividing the calendar days completed in the period by the calendar days in the period (excluding scheduled breaks of five days or more).

- Withdrawal before drop/add date (first five days of semester) 100% refund
- Withdrawal after drop/add date (after first five days of semester and before 60% of term completed) – prorated refund based on percentage of term completed (number of days completed divided by number of days in semester)
- Withdrawal after 60 % of term completed no refund

Title IV funding is prorated based on the percentage of the term completed as outlined above. The amount of disbursed Title IV and institutional aid that exceeds the amount of aid earned under the required formula is considered to be unearned. Unearned Federal Title IV funds must be returned. If the amount disbursed to the student is less than the amount the student earned, and for which the student is otherwise eligible, he or she is eligible to receive a post-withdrawal disbursement of the earned aid that was not received.

The responsibility to repay unearned aid is shared by the institution and the student in proportion to the aid each is calculated to possess. If it is determined Title IV funds must be returned by the College, the financial aid office returns the funds in the following order: Unsubsidized Direct Stafford Loan, Subsidized Direct Stafford Loan, Perkins Loan, Direct PLUS (graduate student), Direct PLUS (parent), Pell Grant, FSEOG, TEACH Grant, and other Title IV funding. The College will return its share of unearned federal Title IV funds no later than 45 days after it determines that the student withdrew. The student must repay his/her share either by (1) paying loans in accordance with the terms and conditions of the promissory note or (2) repaying grants directly to the Department of Education or under a payment arrangement through the College (not required by the College).

If the student withdraws without official notification, the College will determine the last date of attendance. The school must determine the withdrawal date no later than 30 days after the end of the earlier of (1) the payment period or the period of enrollment (as applicable), (2) the academic year, or (3) the student's education program. This date is generally the student's last date of attendance at a documented academically related activity. Academically related activities include, but are not limited to, a lecture, a lab, an exam, and/or attending a study group. Residing in institutionally owned facilities or eating at institutionally provided food services are not considered to be academically related activities. If a last day of attendance cannot be determined and the College can verify the student attended at least one class during the term, the 50% point of the semester will be used as the withdrawal date.

# Student Tuition and Fee Refund and Withdrawal Policy Refunds After the 'Add/Drop' Deadline

No financial adjustment is made for credit load reduction after the last day to add or drop a course with no record on transcript, unless approved by the Academic Standards Committee or Tuition and Fees Committee. Students requesting an adjustment to charges must submit a written appeal to the appropriate committee, along with written support from a faculty member or advisor before the appeal will be considered. If a student reduces his or her credit load to less than full-time prior to the last day to add or drop a course with no record on transcript, the tuition charges will be recalculated and financial assistance will be revised to reflect the updated credit load.

### Withdrawal from College

This policy governs the refund of institutional charges and the return of institutional scholarships and grant funds disbursed for a student who completely withdraws from a term. It does not apply to students who have dropped some classes, but remain enrolled in other classes.

Students withdrawing from college completely are required to complete the process of an official academic withdrawal from Rocky Mountain College. The official withdrawal form can be found online at www.rocky.edu > Academics > Academic Forms and Policies > Academic Withdrawal Form. It is the student's responsibility to contact all departments indicated on the withdrawal form to complete the withdrawal process. The student must contact the Student Accounts Office for information regarding the proration of charges and financial assistance and for the handling of the balance of their account as a result of the withdrawal calculation. Accounts with a balance due Rocky Mountain College are subject to the Student Account Policies outlined herein.

The date the official withdrawal form is submitted by the student determines the percentage of the term completed. This percentage is used to calculate the proration of tuition, fees, room, board, and institutional scholarships and grants. The withdrawal calculation for the return of institutional funds is the same as the return of Title IV funds calculation. If the withdrawal takes place after the first five days of the semester and before 60% of the term is completed, the percentage is determined by dividing the calendar days completed in the period by the calendar days in the period (excluding scheduled breaks of five days or more).

- Withdrawal before drop/add date (first five days of semester) 100% refund
- Withdrawal after drop/add date (after first five days of semester and before 60% of term completed) – prorated refund based on percentage of term completed (number of days completed divided by number of days in semester)
- Withdrawal after 60% of term completed no refund

If the student withdraws without official notification, the College will determine the last date of attendance. This date is generally the student's last date of attendance at a documented academically related activity. Academically related activities include, but are not limited to, a lecture, a lab, an exam, and/or attending a study group. Residing in institutionally owned facilities or eating at institutionally provided food services are not considered to be academically related activities. If a last day of attendance cannot be determined and the College can verify the student attended at least one class during the term, the 50% point of the semester will be used as the withdrawal date.

# Refund of Room (if a student leaves the residence hall for reasons other than withdrawal)

The student will be released from their residence hall contract only if he

or she meets the criteria for release stated in the Off-Campus Housing Exemption Request Form or Contract Cancellation Request Form. The director of residence life will make the final decision regarding contract releases.

A \$250 cancellation fee and prorated room and board charges may be assessed as of the date of final checkout if completed before the 10<sup>th</sup> day of classes. If final checkout is completed after the 10<sup>th</sup> day of classes, the \$250 cancellation fee and full room and board charges will be assessed. Refunds will not be processed until the final checkout is complete, cleaning and/or damage fees are assessed, furnishings/keys accounted form, and outstanding debt to RMC has been resolved. Any remaining deposit balance will be refunded to the student the semester following the date of termination.

A student whose Off-Campus Housing Exemption Request Form or Contract Cancellation Request Form is denied must pay the full amount of the room and board charges for the full contract period and will not be checked out until the expiration of the contracted term.

This contract may be terminated by the Office of Residence Life at any time for violation of the terms and conditions of this contract. IF the contract is terminated, RMC may assess a \$250 contract cancellation fee, retain all payments made under the contract, and may seek any other remedy in law or equity. If this contract is terminated, the student agrees to vacate the residence hall within 24 hours, unless written permission has been obtained from the director of residence life. The student agrees to pay all reasonable costs, attorney's fees, and expenses made or incurred by RMC in enforcing this contract.

## Refund of Meal Plans (for reasons other than withdrawal)

Students are allowed to reduce their meal plans until the  $5^{th}$  day of class each semester and the lower charge will be assessed.

The Board of Trustees of Rocky Mountain College reserves the right to change the fee schedule without prior notice. Current 2015-2016 academic year tuition and fee information can be obtained from the Business Office.

# 2016-2017 Academic Year Schedule

Tuition per semester (12-19 credits)	\$13,068
Academic lab fee (full- and part-time) per semester	\$70
Campus technology fee (full- and part-time) per semester	\$90
ASRMC student government fee ( >5 credits per semester)	\$90
ASRMC publication fee ( >5 credits per semester)	\$15
Tuition, part-time (per credit)	\$1,089
Overload tuition (per credit over 19 credit)	\$1,089
Tuition, summer session (per credit)	\$375
Teacher recertification program (summer; per credit)	\$200
High school student tuition (per credit)	\$148
Audit fee (per course)	\$125
Online course fee (per credit)	\$50
Independent study fee (per credit)	\$196
Tuition exchange/remission fee (per course)	\$30
Study abroad fee (outgoing – includes ISEP)	\$150
Application fee (non-refundable; waived for online applications)	\$35
Admissions enrollment deposit	\$250
Installment payment plan application fee (per semester)	\$35
Late installment payment fee	\$25
Late validation fee	\$50
Re-registration fee	\$150
Graduation application fee	\$100
Late graduation application fee	\$25
Transcript fee (official paper – each)	\$9
Transcript fee (official FedEx – one per address)	\$34
ID card replacement	\$10
Parking permit replacement	\$10
Key replacement	\$50
MMR injections (each)	\$10
Returned check fee (per check)	\$25
Stop payment/check replacement fee	\$25
Wire transfer fee – incoming	\$10
Wire transfer fee –outgoing	varies
Education student transcript review and licensure audit	\$75
Credit for prior learning portfolio evaluation/development fee	\$200
Nontraditional credit fee (per credit)	\$40
CLEP/DANTES fee (per credit)	\$40
DANTES test fee (per test)	\$75
CLEP test fee (per test)	\$100
ACT test fee (per test)	\$35

Housing Fees (per semester)		AVS 354: UAS Lab – Intermediate AVS 371: Certified Flight Instructor (Part 141)	\$300 \$6,800
Anderson Hall		AVS 372: CFI Instrument (Part 141)	\$3,300
Triple	\$994	AVS 373: Multi-Engine Instructor (Part 141)	\$7,200
Double	\$1,303	AVS 376: Multi-Engine Rating Lab	\$7,300
Small Single	\$1,303	AVS 404: Crew Resource Management	\$600
Single	\$1,863	AVS 405: Air Transportation Management	\$50
Widenhouse Hall		Aviation lab fees are an estimate of the costs for an average st	tudent.
Quad	\$1,466	Actual costs may be higher or lower, depending on the actual	
Triple	\$1,655	hours flown in a lab. Each flight syllabus has been approved by	
Double	\$1,911	under Part 141 except for AVS 371, 372, 373, and 376. Flight	
Single	\$2,164	mated fees cover all aircraft fees, flight and ground instruction	
		training, flight publications, FAA knowledge exams, and end-	
Rimview Hall		evaluation fees. Books for ground schools, headsets, and iPad	
Private room (4-room suite)	\$2,314	must be purchased separately. In the event of a significant inc	
Forfeiture (residence hall contract penalty)	\$250	price of fuel, a fuel surcharge could be added to the cost of ea	ich hour of
		flight to reflect current prices.	
Jorgenson Hall Y-Unit (single)	\$2.460	Cost per Flight Hour	
Z-Unit (single) Z-Unit (double occupancy)	\$3,469 \$2,486	Piper Archer III	\$145
Z-Offit (double occupancy)	\$2,400	Cessna 172	\$145
Individual apartment unit (6-month lease required)	varies	Beechcraft Bonanza	\$195
Apartment unit deposit	\$450	Beechcraft Baron	\$330
Monthly rent late fee	\$25	Frasca flight training device	\$60
Worlding Tent rate ree	Ψ25	Redbird flight training device	\$60
Meal Plans (per semester)		Flight/ground instruction	\$43
50-meal plan	\$529	Simulator no-show fee (per occurrence)	\$30-\$100
100-meal plan	\$959	Aircraft no-show fee (per occurrence)	\$50-\$350
10-meal plan	\$1,905		
Carte Blanch meal plan	\$2,156	ETA administration fee (per course)	\$50-\$100
•		End-of-course fee (AVS 153, 252, 274, and 376)	\$200
Athletic Fees		* 6	500 (varies)
There are inherent risks involved in the athletic programs offer	ered by the	Lasergrade FAA exam (RMC students, faculty, staff, alumni)	\$165
College. Students are required to carry extra secondary insura	ance cover-		
age to participate and to sign a waiver indicating their under	standing of	Biology Program Fees	
the risk.		BIO 102: General Biology for Non-Majors	\$20
		BIO 311: Botany	\$25
Student athletic insurance (per semester)	\$160	BIO 483: Dissection	\$50
Academic Program Fees		Education Program Fees	
Fees for supplies and services will be charged to the student as	necessarv	Field practicum fee	\$52
in certain programs.		Student teaching fee (K-12)	\$283
1 8		Student teaching fee (elementary/secondary)	\$250
Art Program Fees			
ART 243/499: Digital Photography	\$100	Environmental Management and Policy Program Fees	¢20
ART 247: Digital Nature Photography	\$100	ECO 354: Environmental Economics	\$30
ART 251/351: Clay	\$50	EMP 102: Regional Geography of Landscape Changes EMP 180: Montana Rivers	\$30 \$50
ART 342: Printmaking	\$65	EWIF 100. WIGHTAINA KIVEIS	\$30
Aviation Program Fees		Environmental Science Program Fees	
AVS 153: Private Pilot Flight Lab	\$11,900	ESC 105: Sustainable Communities	\$50
AVS 170: Flight Orientation	\$100	ESC 207: Field Botany	\$50
AVS 200: Intercollegiate Flight Team Competition	\$550	ESC 209: Field Survey Techniques	\$25
AVS 243: Winter Survival	\$120	ESC 215: Fast Food Class	\$20
AVS 244: Helicopter Instrument Flight Training	\$5,000	ESC 280: Special Topics	varies
AVS 245: Helicopter Commercial Flight Training	\$10,000	ESC 314: Range Ecology	\$50
AVS 253: Instrument Rating Flight Lab	\$11,400	ESC 321: Introduction to Geographic Information Systems	\$40
AVS 254: UAS Lab – Basic	\$300	ESC 325: Wetlands & Riparian Ecology	\$75
AVS 272: Commercial Pilot Flight Lab I	\$6,000	ESC 330: Wildlife Ecology & Conservation	\$200
AVS 273: Commercial Pilot Flight Lab II	\$6,000	ESC 436: Yellowstone Field Trip	\$200
AVS 274: Commercial Pilot Flight Lab III	\$6,800		
AVS 343: Altitude Chamber Training	\$700		

<b>Environmental Studies Program Fees</b>		Master of Educational Leadership		
EST 101: Introduction to Environmental Studies \$100		Students can elect to pay the semester's tuition and fees in full at regis-		
EST 226: Energy and Society \$25		tration or may sign up for a payment plan through the College. Contact		
EST 380: Sustainable Development Policy	\$45	the student accounts representative to enroll in the payment		
251 coor susuamucio 25 retopinone i chej	Ψ.υ	Financial aid is available to those who qualify. Contact the f		
Equestrian Program Fees		office for more information.		
Stall deposit (new students – first semester)	\$500			
Stall deposit (returning students)	\$300	Tuition (per semester)	\$9,975	
Equestrian boarding fee	\$3,180	Tuition – superintendent program (per credit)	\$586	
Equestrian summer stall fee	\$1,080	Academic lab fee (per semester)	\$70	
Therapeutic riding horse usage fee	\$360	Campus technology fee (per semester)	\$90	
Therapeutic riding membership application fee	\$110	ASRMC student government fee (>5 credits per semester)	\$90	
Therapeutic riding certification fee	\$750	ASRMC publication fee (>5 credits per semester)	\$15	
Stall fees are subject to fluctuations due to the cost of hay a	nd grain. Sur-	Master of Physician Assistant Studies		
charges may be added to the stall fee to reflect current prices.		Application fee (non-refundable, paid to CASPA)	\$35	
		Admissions deposit (non-refundable)		
Students required to use a horse(s) in their equestrian cur	riculum must	(Applied toward first summer term tuition)	\$1,000	
reserve a stall(s) prior to the beginning of each semester. The	ne reservation	First summer term tuition (7 credits – \$1,052/credit) \$7,623		
is made by paying a \$300 (returning students) or \$500 (new	students) stall	No additional fees for first summer term		
deposit for each horse by April 30 (for fall semester) and	November 30	Fall tuition	\$15,389	
(for spring semester) of each academic year. The deposit will		Spring tuition	\$15,389	
the student's account and applied to the boarding fee. If a stu		Full summer semester tuition	\$15,389	
a stall and does not board a horse in the semester for which		Academic lab fee (per semester)	\$70	
was made, the deposit if forfeited for that semester. Riding	courses must	Campus technology fee (per semester)	\$90	
be dropped by July 10 (for fall semester) and December 1		ASRMC student government fee (per semester)	\$90	
semester) to avoid forfeiture of deposit. Students may receive		ASRMC publication fee (per semester)	\$15	
previously forfeited deposit by registering for a riding cour	se within two			
semesters after forfeiture.		PA master's assessment fee and PA clinical training fee include	led in	
Coology Duognom Food		tuition.		
Geology Program Fees Geology Field Trip	varies			
Geology Field Trip	varies	Payment Policies		
Geology Field Trip  Interdisciplinary Studies Program Fees		Payment Policies Enrollment Deposit		
Geology Field Trip	varies	Payment Policies  Enrollment Deposit A deposit of \$250 is required from the student at time of enro		
Geology Field Trip  Interdisciplinary Studies Program Fees IDS 131: Habitat Mission Lab		Payment Policies  Enrollment Deposit A deposit of \$250 is required from the student at time of enrol deposit will be held in a subsidiary account and may be us	ed to cover	
Geology Field Trip  Interdisciplinary Studies Program Fees IDS 131: Habitat Mission Lab  Music Program Fees	\$25	Payment Policies  Enrollment Deposit A deposit of \$250 is required from the student at time of enrodeposit will be held in a subsidiary account and may be us incidental expenses incurred by the student such as outstand	ed to cover ding library	
Geology Field Trip  Interdisciplinary Studies Program Fees IDS 131: Habitat Mission Lab		Payment Policies  Enrollment Deposit A deposit of \$250 is required from the student at time of enrodeposit will be held in a subsidiary account and may be us incidental expenses incurred by the student such as outstandor parking fines, room damages, etc. The balance of this deposit	ed to cover ding library	
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Geology Field Trip  Interdisciplinary Studies Program Fees IDS 131: Habitat Mission Lab  Music Program Fees Private music fee (per credit)  Health and Human Performance Program Fees	\$25 \$100	Payment Policies  Enrollment Deposit A deposit of \$250 is required from the student at time of enrodeposit will be held in a subsidiary account and may be us incidental expenses incurred by the student such as outstan or parking fines, room damages, etc. The balance of this deprefunded to the student at the end of enrollment.	ed to cover ding library	
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\$50 1. Funding sufficient to pay balance in full:

By email (preferred) – students who have adequate funding to cover their costs in full may send an email message to studentaccounts@

THR 247: Puppetry

THR 318: Properties, Construction, & Design

rocky.edu with the student's name and the word "validate" in the subject line of the message. A reply acknowledging the receipt of the message will be sent within three business days to confirm or deny that validation is complete based on status of expected funding.

 By phone – contact the Student Accounts Office directly at 406.657.1016.

#### 2. Payment in full:

- Online –students can submit payment through their CampusPortal account
- By phone contact the cashier directly at 406.657.1012
- In person contact the cashier located on the main floor of Eaton Hall
- By mail detach the top portion of the registration statement and mail with check or credit card payment information.

Validation will automatically be completed upon receipt of payment in full.

# 3. Four- or five-month installment payment plan

For students choosing the installment payment plan option, Rocky Mountain College will divide the student's remaining balance due for tuition, fees, room and board into four or five payments each semester. The total balance due is determined by calculating the student's total charges for the semester, less all approved financial assistance. The signed Installment Payment Plan Application and Promissory note, along with the down payment and \$35 application fee must be received on or before the established application date each semester to complete validation.

Subsequent monthly payments are due by the 10<sup>th</sup> day of each month. Interest at the rate of 1% per month (12% annual) will commence upon the first installment date of the plan and will continue until the account is paid in full. A \$25 late fee will be charged to the student account each month payment is received after the due date. Failure to make monthly payments may result in declaring all remaining installments due and payable, as outlined in the terms and conditions of the payment agreement. If the student withdraws from school and the payment plan agreement is not paid in full, any refund due the student is applied first to the unpaid balance of the payment plan contract. Withdrawal from school does not void contract.

#### **Student Account Policies**

Late fees are assessed and course schedules deleted for non-payment according to the dates outlined below. A student may not attend classes or participate in athletic or campus events until he or she has completed the validation process.

# Validation and Tuition Payment Schedule

# Fall Semester

- Statement mailed to student: June
- Validation/payment due: August 1 (\$50 late fee applies after this date)
- Schedule deletion date\* for non-payment: Noon (MDT) Friday before classes begin

## **Spring Semester**

- Statement mailed to student: November
- Validation/payment due: December 10 (\$50 late fee applies after this date)
- Schedule deletion date\* for non-payment: Noon (MDT) Friday before classes begin

\*Course schedule deleted for non-payment by noon (MDT) of the Friday before classes begin each semester. A \$150 fee will be charged to re-register. Once deleted, course selection is not guaranteed.

#### **International Students**

Before the start of each semester, registered international students receive by email a billing statement that includes course schedule, tuition, fees, housing and meal plan costs, expected financial assistance and remaining balance. This mailing also includes information regarding payment deadlines specific to international students and options for submitting payment (credit card or wire transfer). Students are asked to review the registration statement and contact the Office of International Programs to address any discrepancies.

Payment options for international students are limited to payment in full each semester for the first academic year of attendance. Payment must be received by the established validation dates for international students in order to occupy student housing, utilize meal plans, attend classes or participate in other campus activities.

# Validation and Tuition Payment Schedule for First-Year International Students

#### **Fall Semester**

- Statement emailed to student: June
- Validation/payment due: August 1 (\$50 late fee applies after this date)
- I-20 cancellation date\*: August 10

## **Spring Semester**

- Statement emailed to student: November
- Validation/payment due: December 10 (\$50 late fee applies after this date)
- I-20 cancellation date\*: December 20

\*I-20 cancelled and course schedule deleted for non-payment by date indicated. A \$150 fee will be charged to re-register. Once deleted, course selection is not guaranteed.

Returning international students who are in good academic standing may apply for the installment payment plan after successfully completing the first year of attendance. Validation dates are the same as domestic students, however, students who have not met the terms of their payment plan by noon (MDT) Friday before classes begin will be considered "out of status" according to federal regulations and the I-20 will be cancelled.

## **Student Account Policies**

Late fees are assessed and course schedules deleted for non-payment according to the dates outlined above. A student may not attend classes or participate in athletic or campus events until he or she has completed the validation process.

No student is allowed to register for or attend classes if he or she has a balance due before the start of each semester, excluding the amount due Rocky Mountain College as it relates to the federal Perkins loan program.

It is the student's responsibility to remain current in payment of charges to his or her account. Failure to pay any amount due may result in Rocky Mountain College withholding work study, transcripts, diplomas, and other related services and privileges until the balance is paid in full.

The privilege of attending or registering for classes may be denied for failure to pay account balances or failure to make payments in accordance with the installment payment plan contract. A hold is placed on the student's account and removed only when the obligation is cleared. Rocky Mountain College will not release the transcript of anyone subject to such a hold.

Past due accounts can result in financial suspension and/or the account being turned over to a collection agency or attorney. Rocky Mountain College reserves the right to add to the debt any attorney fees, court costs, and collection costs subsequently associated with collection of the debt in accordance with statutes set forth by the State of Montana.

# Student Tuition and Fee Refund and Withdrawal Policy Refunds After the 'Add/Drop' Deadline

No financial adjustment is made for credit load reduction after the last day to add or drop a course with no record on transcript, unless approved by the Academic Standards Committee. Students requesting an adjustment to charges must submit a written appeal to the appropriate committee, along with written support from a faculty member or advisor before the appeal will be considered. If a students reduces his or her credit load to less than full time prior to the last day to add or drop a course with no record on transcript, the tuition charges will be recalculated and financial assistance will be revised to reflect the updated credit load.

# Withdrawal from College

Students withdrawing from college completely are required to complete the process of an official academic withdrawal from Rocky Mountain College. The official withdrawal form can be found online at www. rocky.edu > Academics > Academic Forms and Policies > Academic Withdrawal Form.

The date the official withdrawal form is submitted by the student determines the percentage of the term completed. This percentage is used to calculate the proration of tuition, fees, room, board, and financial assistance as governed by the Return of Title IV and Institutional Funds policy set forth by the Department of Education. The percentage is determined by dividing the calendar days completed in the period by the calendar days in the period (excluding scheduled breaks of five days or more). If the withdrawal takes place after the first five days of the semester and before 60% of the term is completed, the Department of Education's prorated schedule is used to determine the amount of Title IV and institutional funds the student has earned, what percentage will be returned to Title IV and institutional programs, and what percentage of tuition will be refunded to the student at the time of withdrawal. If it is determined Title IV funds must be returned, the returns are done in the following order: Unsubsidized Direct Stafford Loan, Subsidized Direct Stafford Loan, Perkins Loan, Direct PLUS (graduate student), Direct PLUS (parent), Pell Grant, FSEOG, TEACH grant, other Title IV funding. No proration of charges or financial assistance is required once 60% of the term is completed.

It is the student's responsibility to contact all departments indicated on the withdrawal form to complete the withdrawal process. The student must contact the Student Accounts Office for information regarding the proration of charges and financial assistance and for the handling of the balance of their account as a result of the withdrawal calculation. Accounts with a balance due Rocky Mountain College are subject to the Student Account Policies outlined herein.

If the student withdraws without official notification, the College will determine the last date of attendance. This date is generally the student's last day of attendance at a documented academically related activity.

Academically related activities include, but are not limited to a lecture, a lab, an exam, attending a study group. Residing in institution-owned facilities or eating at institution-provided food services are not considered to be academically related activities. If a last day of attendance cannot be determined and the College can verify the student attended at least one class during the term, the 50% point of the semester will be used as the withdrawal date.

### Refund of Room if a Student Leaves Residence Hall for Reasons Other Than Withdrawal

The student will be released from their residence hall contract only if he or she meets the criteria for release stated in the Off-Campus Housing Exemption Request Form or Contract Cancellation Request Form. The director of residence life will make the final decision regarding contract releases.

A \$250 cancellation fee and prorated room and board charges may be assessed as of the date of final check-out if completed before the 10<sup>th</sup> day of classes. If final check-out is completed after the 10<sup>th</sup> day of classes, the \$250 cancellation fee and full room and board charges will be assessed. Refunds will not be processed until the final check-out is complete, cleaning and/or damage fees are assessed, furnishings/keys accounting for, and outstanding debt to RMC has been resolved. Any remaining deposit balance will be refunded to the student the semester following the date of termination.

A student whose Off-Campus Housing Exemption Request Form or Contract Cancellation Request Form is denied must pay the full amount of the room and board charges for the full contract period and will not be checked out until the expiration of the contracted term.

This contract may be terminated by the Office of Residence Life at any time for violation of the terms and conditions of this contract. If the contract is terminated, RMC may assess a \$250 contract cancellation fee, retain all payments made under the contract, and may seek any other remedy in law or equity. If this contract is terminated, the student agrees to vacate the residence hall within 24 hours, unless written permission has been obtained from the director of residence life. The student agrees to pay all reasonable costs, attorney's fees, and expenses made or incurred by RMC in enforcing this contract.

# Refund of Meal Plans for Reasons Other Than Withdrawal

Students are allowed to reduce their meal plans until the 5<sup>th</sup> day of class each semester and the lower charge will be assessed.

# **Student Life**

Brad Nason, Vice President and Dean for Student Life

The primary responsibility of college students is academic achievement. However, the broadly educated citizen requires non-academic experiences also. Rocky Mountain College, through its co-curricular program, offers each student an opportunity for personal and social growth outside of the classroom.

The College recognizes the educational value of these co-curricular activities. Through them, the student may gain an understanding of fellow students, increase his or her desire to serve the world, and acquire the technique of living and working with others.

### **Cultural Opportunities**

The cultural advantages of the Billings metropolitan area can make an important contribution to the student's educational progress. The Billings Symphony, the Symphony Chorale, and the Billings Studio Theater (on campus) afford opportunities for participation by qualified students, as well as an aesthetic appreciation gained by attending concerts and productions. The Alberta Bair Theater regularly presents nationally touring musicals and performances of classical and contemporary music and theatre. The galleries at the Yellowstone Art Museum and the Western Heritage Center are open to students and provide a basis for the exploration and appreciation of Western art. The Audubon lecture series, special programs at other educational institutions, and varied presentations of civic-minded groups are among the finest in Montana.

The cultural series events held on-campus supplement the College's objectives as a church-related, liberal arts-rooted school concerned with the development of the student in every facet of his or her personality.

Students are encouraged to augment their formal instruction with a wide variety of programs, including chapel, concerts, lectures, and similar performances. Cultural events stimulate an appreciation of the role of aesthetic values and of moral and spiritual qualities in contemporary life. Speakers on campus include authorities in areas not included in the College's curriculum, as well as those individuals especially qualified to speak on critical contemporary issues.

## **Institute for Peace Studies**

Cindy Kunz, Administrator

Founded in May 1990, the Institute for Peace Studies at Rocky Mountain College operates under a 28-member board of advisors, with the administrator and the board chair reporting directly to the Rocky Mountain College Board of Trustees. Its administrator, assisted by part-time staff, work study, and community volunteers, works year-round to bring programs like the Festival of Cultures, Peace Village, and "We Are Women" conferences to the region. Outreach includes going into the classroom with Rocky Mountain College's international students and sharing a diversity program and bringing the "Second Step" conflict resolution curriculum to rural and reservation elementary schools. The Institute facilitates an upper-division political science class (Bross Peace Seminar) during each spring semester, challenging students to review areas of current conflict and also areas where peace has been successfully maintained or restored. Each year, on the stage of the Alberta Bair Theater, the Institute presents the prestigious Jeannette Rankin Peace Award and the Edith Gronhovd Peace Essay Awards, and features a noted peacemaker along with outstanding entertainers who come together for an evening "In Praise of Peace." The Institute's mission, "to seek through education to explore and promote alternatives to violence in the behavior of individuals, groups, organizations, communities, and nations," continues to attract members from a wide variety of ethnic, political, and socioeconomic backgrounds.

Speakers are available, and visitors are welcome. The Institute for Peace Studies is located in Alden Hall 103. Contact the Institute via email at peacestudies@rocky.edu or at 406.657.1042.

#### **Student Activities**

#### **Concert Band**

The concert band is a combination wind ensemble and pep band. The wind ensemble rehearses and performs selected band literature; the pep band supports the athletic functions of the College.

#### **Concert Choir**

The concert choir is the foundation of choral study at the College. Choristers rehearse daily, sing for church services, and present special programs.

#### **Jazz Ensemble**

The jazz ensemble performs in a variety of big band styles.

#### **Other Groups**

Other performing groups such as the opera workshop, brass quintet, woodwind quintet, four-hand and eight-hand piano ensemble, and jazz quintet are often formed during the year to supplement the program.

#### **Publications**

The College newspaper, "The Summit," is published every two weeks online, and staff membership is open to all interested students. *Sun & Sandstone*, a collection of students' poetry, fiction, and literary works, is published each spring, and all students are invited to submit their work.

#### **Student Government**

The Associated Students of Rocky Mountain College (ASRMC) consists of all students who register for six or more credit hours and others who choose to pay the membership fee. ASRMC operates under a constitution available from the Office of the Vice President/Dean for Student Life. The ASRMC governing council is the executive board of the associated students, duly elected and appointed in accordance with the ASRMC constitution. The executive committee consists of the president, vice president, financial administrator, and secretary. The student senate consists of 12 senators representing various campus constituencies. Three standing committees, appointed by the executive council, are responsible for social, cultural/political, and publication activities and events.

## Theatre

Students perform as many as three main stage shows per year, often using the 260-seat Billings Studio Theatre on campus. A number of student-directed plays are also performed in Losekamp Hall's Taylor Auditorium throughout the year.

# **Campus Ministry**

Kim Woeste, Chaplain

The Chaplain's office strives to provide a variety of opportunities for people to study and grow. While special emphasis is placed on the ministries of the three supporting denominations – the Presbyterian Church (USA), the United Methodist Church, and the United Church of Christ (UCC) – the religious convictions and questions of all members of the College community are taken seriously.

In collaboration with student leaders, faculty, and staff members, the Chaplain's office provides opportunities for worship, study and discussion groups, retreats, lectures, and service are provided. Participation and leadership in all activities are open to everyone. Rocky Mountain College strives to provide an atmosphere in which students, faculty, and staff can grow in Christian discipleship or can shape their own religious perspec-

# **Student Life**

tive and grow in personal and social awareness, as well as service.

# **Support Services**

As an institution grounded in the liberal arts, Rocky Mountain College is interested primarily in the development of the whole person. A caring, personal atmosphere fosters this development. Students are encouraged to seek the counsel of any faculty member, special counseling services through the Office of the Vice President/Dean for Student Life, and/or Services for Academic Success (SAS). Residence hall staff also provide support in educational, vocational, social, and personal matters.

#### **Academic Advising**

The primary purpose of the academic advising program is to assist students in the development of meaningful educational plans that lead to the successful completion of a degree and the development of an interest in lifelong learning. Contact the director of academic advising at advising@rocky.edu with questions or concerns.

## **Counseling Services**

Cynthia Hutchinson, Counselor

Rocky Mountain College counseling services are available to all students at no cost. The counseling center provides support for students experiencing personal, social, or adjustment difficulties. The campus counselor also sponsors special events and programming within the College community and provides referrals to community resources. Contact Cynthia Hutchinson at 406.657.1049 for more information.

#### **LEAP**

Steven Peterman, Director of LEAP

The Rocky Mountain College Leadership, Engagement, and Achievement Program (LEAP) supports student development and growth by providing meaningful advocacy, intervention, and counsel, as well as social and academic support programming. Through peer leadership and a commitment to the community standards philosophy, LEAP strives to empower students to reach their highest personal and academic potential. For more information on LEAP, contact Steven Peterman, director of LEAP, at 406.657.1099.

#### **Career Services**

Lisa Wallace, Director of Career Services

The Office of Career Services provides guidance to students on careerrelated topics, offering a network of opportunities to assist students develop the skills needed to pursue their passion, realize their potential, and achieve success.

The Office of Career Services assists students specifically with:

- · Identifying, securing, and completing internships;
- Exploring career opportunities, including part-time and seasonal employment during school;
- Developing job search tools and strategies, including résumé and cover letter writing, understanding professional attire, developing interviewing and networking skills, and creating a strategy for searching for jobs;
- Making connections with employers at career fairs, on campus, and through programs intended to provide recruitment and networking opportunities;
- Pursuing graduate school opportunities;
- Finding community service and service learning opportunities to enhance their undergraduate experience.

Most students are required to complete a three-credit (minimum) experiential learning component for graduation. Experiential learning can include internships and study abroad, however, several majors require internships as part of the major requirements. Internships provide students an opportunity to put their classroom lessons to work with a qualified employer, conduct career exploration, and make contacts in their field of interest. An internship usually lasts a full semester (12-15 weeks), depending on the position, and requires 45 hours of work per credit hour earned. General requirements for the internship program include:

- Students must be of junior or senior status and have achieved at least a 2.00 cumulative GPA and achieved a 2.25 GPA within the major.
- Students will be required by faculty to complete an academic assignment related to the internship experience, as well as attend an internship orientation provided by the Office of Career Services.
- Students may register for up to 12 semester hours (upper-division)
  of internship credit with the approval of a faculty member. Some
  majors limit internship credits to as few as four. Check the requirements in your field of study.
- Students must be registered for an internship by the first week of classes for the semester in which they will be interning.

Many career services resources are available on the RMC website, under the Office of Career Services section. Additional information and assistance are available in the Office of Career Services.

# **Disability Services**

Rocky Mountain College is committed to assuring an equal educational opportunity for students with disabilities. The College is committed to providing courses, programs, services, and facilities that are accessible to students with disabilities. Support services include counseling, advising, tutoring, note taking, test accommodations, and advocacy. Undergraduate students should register with Services for Academic Success (SAS). Graduate students should register with the Office of the Vice President/Dean for Student Life. The vice president/dean for student life serves as the Section 504/ADA coordinator for the College. These offices provide accommodations in accordance with Section 504 and ADA regulations.

Students with disabilities are responsible for identifying themselves, providing appropriate documentation, and requesting reasonable accommodations. Diagnostic services are not available through the College.

There is no separate admission process for students with disabilities. Students apply through the regular admissions process and must meet the College's admission requirements.

# Services for Academic Success (SAS)

Mary Reiter, Director of Services for Academic Success

Services for Academic Success is a federally funded TRIO program that gives eligible students the academic and social support they need to successfully complete college. SAS provides a comprehensive support program tailored to meet a student's individual needs. Services are free to participants and include academic, career, and personal counseling, tutoring, cultural and academic enrichment opportunities, use of computer labs, graduate school counseling, and accommodations for students with physical and/or learning disabilities. SAS also offers developmental coursework in mathematics, writing, and study skills.

To be eligible, students must meet one of the following criteria:

- 1. A low-income threshold;
- A first-generation college student (neither parent completed a baccalaureate degree);

# **Student Life**

3. A physical or learning disability.

A participant must also be a U.S. citizen and demonstrate an academic need for the program.

The SAS program is located in the Fortin Education Center and is staffed by a director and academic specialists. Enrollment is limited to 250 participants. To determine eligibility and/or apply, contact SAS at 406.657.1070.

#### **Disability Documentation Requirements**

The following documentation is needed to determine eligibility for modifications or accommodations:

- A detailed evaluation from a professional qualified to diagnose a disability. The evaluation should have been completed within the last three years.
- Evaluations from a licensed clinical psychology, school psychologist, LD specialist, medical doctor, and/or neuropsychologist.
- For learning disabilities, evaluations that include test results, with composite and subtest scores, for intelligence, reading, math, written language, processing skills, and speech and language, when appropriate.
- Reports that state the disability as a diagnosis.
- Recommended, but not required: A current IEP or 504 Plan that states modifications and accommodations.

#### **Policy and Procedures for Accommodations**

- All students must submit documentation of a disability to the appropriate office (SAS for undergraduate students or the vice president/dean for student life for graduate students) and have it approved before any accommodations can be granted (see "Disability Documentation Requirements").
- The documentation provided by the student must support the need for the academic adjustments or accommodations that the student requests.
- 3. Undergraduate students must meet with the SAS advisor at least three days prior to the date of the test for testing accommodations. The SAS advisor will fill out and sign a test taking accommodations form. The student will take the form to the professor for instructions on the level of proctoring needed, how the test will be delivered to SAS, and how it will be returned to the professor. The professor's signature is required for approval.
- 4. SAS staff will reserve a testing room for the student and be responsible for the appropriate monitoring or proctoring.
- For students needing extra time on tests, the standard is double time, unless documentation indicates that the student needs more time.
- Failure to abide by these procedures may result in a loss of accommodations.

### **Guidelines for Documentation of Attention Deficit Disorder**

The following documentation is needed to determine eligibility for modifications or accommodations:

- A current ADD assessment, preferable within the last three years, with the exact DSM-IV diagnosis.
- The assessment must be from an individual qualified to diagnose ADD, such as a medical doctor. Diagnostic reports must include the name and title of the evaluator, as well as the date(s) of testing.
- A list of the questionnaires, interviews, and observations used to identify the ADD behaviors.
- A summary of information regarding the onset, longevity, and severity of the symptoms.
- · Medication history and current recommendations regarding medica-

tion

- Recommendations for appropriate accommodations for the college setting (such as testing in a quiet place free from distractions).
- Information concerning comorbidity.
- Recommended, but not required: A complete psycho-educational evaluation, including test results with composite and subtest scores, for intelligence, reading, math, written language, processing skills, and speech and language, when appropriate.

All documentation is confidential.

Undergraduates should submit documentation to:

Rocky Mountain College Services for Academic Success 1511 Poly Drive Billings, MT 59102

Graduate students should submit documentation to:

Rocky Mountain College Dean of Students 1511 Poly Drive Billings, MT 59102

For complaints concerning accommodations for disabilities, follow the process outlined in the section "Complaint Resolution Procedure" under "Harassment and Discrimination Policy."

#### **International Student and Scholar Services**

Amber West Martin, Director of International Programs

The Office of International Programs provides services for foreign students and Rocky Mountain College scholars. Services for Rocky Mountain College scholars include: assistance choosing the study abroad program to fit his/her needs, study abroad application assistance, pre-departure information, and a resource handbook. Services for foreign students include: orientation programs upon arrival, initial academic advising, assistance with employment and internships, as well as events and activities through which the culture of Montana can be explored. Contact the director of international programs at 406.657.1107 for more information.

#### **Student Health Service**

The College maintains a health service office in Fortin Education Center under the direction of physician assistants and a consulting physician. Examinations, the diagnosis of minor illnesses, and the primary treatment of injuries are available to all students at no charge. Prior to enrollment, every student must submit a completed medical history form and provide documentation of two MMR inoculations.

The student must assume the cost of illness and injury requiring hospitalization or other referrals. The College is not responsible in the case of accidents incurred by students in pursuit of their work, on field trips, involved in athletics, or participating in any other student activity.

### **Student Insurance**

All students are encouraged to carry personal health insurance. The College does not offer an institutional health policy; therefore, students should contact an independent insurance agent to secure health insurance coverage. A free brochure on college student health insurance is available in the student services office.

International students are required to have adequate medical/health insurance. After a student is admitted to the College, a packet describing

# **Student Life**

minimum benefits will be provided.

#### **Residence Life and Housing**

Shaydean Saye, Director of Residence Life

The Office of Residence Life serves to ensure that residence life facilities provide students with safe and comfortable surroundings that are conducive to the pursuit of academic excellence. This department is also responsible for developing programs that address students' extracurricular and co-curricular needs. As a residential college, all first- and second-year students enrolled in 7 semester hours or more are required to live on campus. Exceptions to this policy include married students, students 21 years-of-age or older on the first day of fall semester classes, students with dependent(s) living with them during the academic year, or students who are residents of Yellowstone County. The on-campus requirements imply a contractual agreement between the student and the College for the duration of the academic year.

#### Residence Halls

The Anderson-Widenhouse complex is comprised of two co-educational residence halls housing primarily first-year students, joined by a community annex. Rimview Hall residents must have at least sophomore status, and Jorgenson Hall residents must be at least 21 years-of-age. Rooms in Widenhouse, Anderson, and Rimview Halls are furnished with twin beds, mattresses, dressers, desks, closets, and chairs. In addition, a microwave and refrigerator are provided for Rimview and Widenhouse Hall suites. Jorgenson Hall is a good alternative to students eligible to live off campus. These apartments, typically 728 square feet, are unfurnished and include a living room and full kitchen. Laundry facilities are available in each of the residence halls free of charge.

Applications for room reservations for new students are made through the Office of Admissions in connection with other admissions procedures. Assignments are made and further correspondence relating to room assignments are handled through the Office of Residence Life. Assignments are made in the order in which enrollment deposits and applications are received. Returning students make their room reservations in the spring of the year preceding occupancy, and new students are assigned in early summer with room assignments sent in July. The College reserves the right to change a student's room assignment. Information about prices for all of our on-campus housing options are available in the Office of Residence Life.

## **Family Housing**

RMC currently provides a limited number of units to accommodate students and their spouses or children in Jorgenson Hall. Due to the limited number, priority is given to current students. For more information regarding our family housing, please contact the Office of Residence Life.

#### Food Service

Several options are available for all members of the Rocky Mountain College community. The McDonald Commons is open from 7:00 a.m. to 9:30 p.m. Monday through Thursday; 7:00 a.m. to 6:30 p.m. Friday; and 9:00 a.m. to 1:00 p.m. and 5:00 p.m. to 6:00 p.m. Saturday, Sunday, and holidays when classes are in session. The McDonald Commons features hot entrees, soups, salads, bagels, cereals, sandwich bars, beverages, baked goods, and ice cream.

The Carte Blanche meal plan (recommended) allows unlimited access to the McDonald Commons when it is open. The 10-meal plan allows the user any 10 visits to the McDonald Commons each week. All students living in Widenhouse Hall or Anderson Hall are required to have either a Carte Blanche meal plan or a 10-meal plan. Students living in Rimview

Hall, Jorgenson Hall, and off campus are welcome to have a meal plan; however, it is not required. These plans are available through the Office of Residence Life.

#### **Rocktivities**

Rocktivities works to cultivate relationships on campus between students, faculty, staff, and the Billings community. To that end, Rocktivities creates, organizes, and implements events that provide social, political, cultural, and educational activities. All events are free of charge to Rocky Mountain College students. Annual events include dances, homecoming week activities, bowling, educational forums, massages, feasts, ice skating, talent shows, and outdoor movies.

#### **Adventure Recreation and Intramurals**

Tim Lohrenz, Director of Adventure Recreation and Intramurals

RMC's intramural and outdoor recreation programs provide students with experiences that encourage the development of a healthy balance between physical and mental needs, both in the present and for a lifetime. The recreational experiences permit students to discover goals experientially while becoming more aware of themselves and their environment.

#### **Outdoor Recreation Activities**

The outdoor recreation program includes organized outdoor adventures, trip planning and outdoor education resource center, bicycle maintenance, ski/snowboard tuning, gear rental, adventure recreation classes for credit, outdoor skills clinics, and an indoor climbing wall. The following activities are offered: skiing/snowboarding, backpacking, hiking, ice climbing, canoeing, snowshoeing, archery, power kiting, bouldering, slacklining, adventure racing, paintball, and rock climbing.

## **Intramural Activities**

The intramural athletics program offers both individual and team sport activities that include soccer, dodgeball, basketball, volleyball, Quidditch, softball, frisbee golf, ultimate frisbee, tennis, broomball, kickball, and flag football. Intramural athletics organizes the annual homecoming powderpuff football game, as well as the faculty/staff vs. student softball games. All intramural equipment is available for students to check-out and organize their own activities.

#### **Intercollegiate Athletics**

Bruce Parker, Athletic Director

Rocky Mountain College is a member of the National Association of Intercollegiate Athletics and the Frontier Conference. RMC's approximately 250 student-athletes participate in eight varsity sports, including football, men's and women's basketball, volleyball, men's and women's ski racing, men's and women's golf, men's and women's cross country, men's and women's soccer, and cheerleading/stunting. All student-athletes are required to purchase insurance (see the "Tuition and Fees" section of the catalog). A primary goal of RMC intercollegiate sports is to encourage success on the athletic field and in the classroom, carrying on the Rocky Mountain College tradition of the scholar-athlete.

# **General Policies**

The following descriptions reflect a synopsis of the College's general policies. Complete policy and procedure statements are outlined in the student handbook located on the College website under the Student Life tab. Hard copies of all policies and procedures may be obtained by contacting the Office of the Vice President/Dean for Student Life.

# **Discrimination Policy**

Rocky Mountain College does not discriminate on the basis of race, color,

# **Student Life**

sex, religion, national origin, citizenship, age, disability, or sexual orientation in admissions, its policies and/or procedures, employment, or other activities.

#### **Harassment and Discrimination Policy**

Members of the Rocky Mountain College community have the right to work and study in an environment free of harassment and discrimination. Rocky Mountain College strongly disapproves of and forbids the harassment of students. The College will not tolerate discrimination or harassment, which includes discrimination or harassment based on race, color, sex, religion, national origin, citizenship, age, disability, or sexual orientation.

#### **Sexual Harassment Policy**

It is the policy of the College to provide a working, learning, and teaching environment free from unlawful harassment of any kind, including sexual harassment. Sexual harassment of any student, on or off campus, is prohibited and will not be tolerated. Retaliation against a person who reports or complains about harassment, or who participates in the investigation of a harassment complaint, is also prohibited.

The human resources office will distribute copies of this policy to all current students and to all those who join the College community. A periodic notice will be sent to faculty, staff, and students to remind them of the policy. A copy of the policy will be distributed at new student orientation, and copies of the policy will be available at appropriate campus centers and offices. A "no harassment" policy notice will be posted in residence halls, instructional buildings, and administrative office areas.

## **Immunization Policy**

Entering students must present documentation of immunization as part of the enrollment process at Rocky Mountain College. Montana state law requires proof of two measles, mumps, and rubella immunizations for all students unless born before January 1, 1957. Prior to enrollment at Rocky Mountain College, prospective students must complete the immunization section of the health service form. If adequate documentation is not available, immunization must be performed at the Rocky Mountain College health service office upon arrival. Students with incomplete immunization records will not be allowed to register for classes.

#### **Alcohol and Drug Policy**

Rocky Mountain College believes the key to successful control of alcohol abuse lies in education, providing healthy alternatives, and supporting and promoting healthy lifestyles. To this end, the College is committed to providing students the most current information available regarding alcohol and alcohol use; developing and implementing alcohol-free social programming; and encouraging and supporting those students who choose to abstain from use. Alcohol is not permitted in the College's residence halls. Further, the use or possession of illegal drugs and conduct deemed unlawful by the state or federal government is prohibited on campus.

#### Other Policies

## **Motor Vehicles**

All motorized vehicles owned or operated by Rocky Mountain College students are subject to campus regulations.

#### Firearms and Weapons

Firearms and weapons are not permitted on campus.

# Student Right-to-Know Act and Campus Information

The Department of Education and federal regulations require all colleges and universities to make available to students, prospective students, faculty, and staff information regarding campus crime rates (Clery Act),

freshmen retention and graduation rates (Student Right-to-Know Act), and athletic programs (Equity in Athletics). This information is available in the Office of the Vice President/Dean for Student Life.

#### **Directory Information Policy**

Directory information will be released upon inquiry unless a request to withhold this information is filed by the student in the Office of Student Records by the last day to add a class each semester. Directory information includes the name of the student, local address, local phone, Rocky Mountain College email address, hometown, class, major, dates of attendance, degree and date awarded, honors, and/or varsity sport participation.

Registered students have the right to request that the College not release any information. Any student wishing to withhold directory information must inform the Office of Student Records in writing. Students must submit a request to withhold information each semester they are enrolled. Students should be aware that a request to withhold information would preclude release of verifications of enrollment or graduation. More information about this policy is available from the Office of Student Records.

Please notify the Office of Student Records of any change of name (requires legal proof), address, and/or phone number either in person or via CampusPortal.

#### **Student Conduct Systems**

Restorative justice is a theory of justice that emphasizes repairing the harm caused or revealed by violations of the student code of conduct and/ or campus policy. It is best accomplished through cooperative processes that include all stakeholders. Practices and programs reflecting restorative purposes will respond to campus incidents by identifying and taking steps to repair harm, involving all stakeholders, and transforming the traditional relationship between students and the institution by the way we respond to incidents.

#### **Conduct Boards**

While the vast majority of conduct issues at RMC are managed informally on a one-on-one basis, the College maintains a variety of conduct programs in support of student learning, development, safety, and the protection of RMC's community standards.

#### **Peer Review Board**

The Peer Review Board can serve as a board of original jurisdiction or of appeal. Students may be referred to the Peer Review Board by a residence director, the director of residence life, or the director of LEAP. It is a hearing body comprised of five students empowered to determine if a student is responsible for violating the student code of conduct and/or College policy. The Peer Review Board collaborates with students concerning their alleged violations to find a mutually beneficial resolution that protects the interests of the College community, allows the student to be accountable for his or her actions, and facilitates learning opportunities.

#### **Student Conduct Board**

The Student Conduct Board serves as either a board of original jurisdiction or of appeal. It conducts hearings related to academic dishonesty and student disciplinary matters in which there are violations of College regulations that may result in a student's suspension or dismissal from the College. It also hears matters related to the constitution of ASRMC. The Student Conduct Board is comprised of four students selected by ASRMC and four faculty members elected through the annual faculty nomination process or nomination by the academic vice president. The complete Student Conduct Board policy and procedures are outlined in the student handbook or on the College's website under the Student Life tab.

## **Baccalaureate Degree Programs**

Students may earn a bachelor's degree in the following programs. Some majors have several concentrations; see the department description for details.

#### **Bachelor of Arts**

Art

Communication Studies

Education

English

**Environmental Studies** 

History

History and Political Science

Individualized Program of Study

Music

Philosophy and Religious Thought

Theatre

#### **Bachelor of Science**

Aviation

Biology

**Business Management** 

Chemistry

Computer Science

Education

**Environmental Management and Policy** 

Environmental Science

**Equestrian Studies** 

Geology

Health and Human Performance

Individualized Program of Study

Managerial Accounting

Mathematics

Psychology

Sociology

#### Minors

Minors are offered in all of the major programs listed above. In addition, minors are also offered in the following programs:

Organizational Leadership

Physics

Pre-Law

Reading

Writing

# **Graduate Programs**

Rocky Mountain College offers master's degrees in the following programs:

- Master of Accountancy (M.Acc.)
- Master of Physician Assistant Studies (MPAS)
- Master of Educational Leadership (M.Ed.)

#### **Individualized Program of Study (IPS)**

An individualized program of study allows students to design a program that is not regularly offered by Rocky Mountain College. A student determines, with the help of faculty advisors, a program of study tailored to meet individual needs and interests. An IPS can be developed for either a major or a minor. All other graduation requirements must be completed, including all core curriculum requirements.

An IPS must be a pre-planned program of study; therefore, IPS propos-

als should be submitted to the Curriculum Committee by the end of the sophomore year.

Proposals offered after the sophomore year require approval of submission to the committee by the academic vice president.

IPS proposals are reviewed by the Curriculum Committee for approval. Applications should include the educational rationale behind the program along with a list of all courses to be applied toward the program. The application should also include requirements of similar programs from at least two other accredited institutions. All IPS majors and minors must meet the minimum criteria listed in the requirements for a baccalaureate degree. Proposals are evaluated on the basis of whether or not an IPS provides a coherent program of study, whether the proposed program is similar in breadth and depth to programs at other institutions, whether such a program can better meet the needs of the student, and whether or not the student can offer evidence of the ability to plan and carry out such an individualized program. To be eligible for consideration, the student must be available for regular on-campus contact with the major advisor. Contact the Office of Student Records for further guidance on the preparation of an IPS proposal.

## **Teaching Licensure**

For information about licensure, see "Education" in the "Academic Programs" section of the catalog.

## **Associate of Arts Degree Requirements**

A minimum of 62 semester hours are required, of which at least the last 31 have been taken at Rocky Mountain College; the core curriculum requirements listed below must be met. A candidate must have a cumulative GPA of 2.00 ("C") for all courses applying to the degree.

#### **Baccalaureate Degree Requirements**

A minimum of 124 semester hours (certain programs may require more) are required. No more than 64 semester hours (96 quarter hours) are acceptable in transfer from a two-year college. Unless being counted toward a major, a maximum of eight credits in applied music, eight credits in ensemble, eight credits in theatre production, or eight credits in physical education activity courses (only two courses in the same physical education activity) may be counted toward graduation. Unless being counted toward the major, no more than a total of 12 of these activity credits can count toward the total credit requirement.

## The degree requirements listed below must be met:

- A candidate must have a cumulative GPA of at least 2.00 for all courses applying to the degree and a cumulative GPA of at least 2.00 in all courses taken at RMC.
- Students must complete a major with a GPA of at least 2.25 in courses in the major. The specific requirements for a particular major are listed in the catalog under the program concerned. The student must complete at least three courses in his/her major field at RMC
- Forty semester hours must be earned in upper-division courses, including at least 12 in the major field. If a minor is chosen, it must include a minimum of six upper-division semester hours.

A candidate for a baccalaureate degree must complete a minimum of 30 semester hours at Rocky Mountain College, including at least 20 upperdivision semester hours (toward the required 40 semester hours of upperdivision credits).

Twenty-four of the last 30 semester hours required for graduation must be earned in residence. This requirement may be waived in exceptional cases

upon the approval of the academic vice president.

#### **Core Curriculum**

Students must complete the following core curriculum requirements to earn a baccalaureate degree at Rocky Mountain College. Methods of completing each requirement are explained below.

# Students who complete the core curriculum at Rocky Mountain College will be able to:

- Compose essays that demonstrate critical thinking, command of standard grammar, and logical organization;
- 2. Demonstrate critical, analytical, and creative problem-solving skills.
- 3. Analyze texts and other materials critically and creatively;
- Construct and analyze models using approximation or statistical techniques;
- 5. Construct and deliver clear, well-organized oral presentations;
- Demonstrate an understanding of key concepts and methods of the natural sciences;
- Demonstrate an understanding of key concepts and methods of the social sciences;
- Demonstrate an understanding of key concepts and methods of the fine arts:
- Demonstrate an understanding of key concepts and methods of the humanities.

#### **Mathematics**

After completing the core curriculum requirement in mathematics, students will be able to:

- 1. Solve algebraic equations and manipulate algebraic expressions;
- Create graphs and tables of mathematical objects and identify properties of the graphs and tables;
- Construct mathematical models of real-world situations using approximation or statistical techniques;
- Make decisions based on mathematical analysis of real-world situations:
- Apply abstract mathematical methods independent of a disciplinespecific application.

The core curriculum requirement in mathematics is fulfilled by both of the following:

- MAT 100: College Algebra or a placement exam score necessary to test out of College Algebra (see the following chart).
- One of the following courses:

MAT 152: To Infinity and Beyond

MAT 175: Calculus I

MAT 176: Calculus II

MAT 210: Probability and Statistics

Advanced placement credit in math may not be used to satisfy this requirement, but may be applied to overall elective credit.

Event	Course
ACT score less than 19 or SAT score less than 450 or Accuplacer Elementary Algebra Score < 57	MAT 090: Elementary Algebra
ACT score 19-22  or  SAT score 450-549  or  Accuplacer Elementary Algebra  Score ≥ 57	MAT 100: College Algebra
ACT score 23-25 or SAT score 550-609 or Accuplacer College Level Math Score 80-99	Student tests out of the MAT 100 requirement.  MAT 103: Mathematics for Elementary School Teachers I MAT 110: Precalculus MAT 152: To Infinity and Beyond MAT 210: Probability and Statistics
ACT score 26 or higher or SAT score 610 or higher or Accuplacer College Level Math Score ≥ 100	Student tests out of the MAT 100 requirement.  MAT 175: Calculus I

Students without ACT or SAT scores must take the Accuplacer exam to determine placement. If a student wishes to take a course at a higher level than where he or she places, the student must take the Accuplacer exam to challenge that placement.

## Writing

After completing the core curriculum requirement in writing, students will be able to:

- 1. Support a thesis using credible, appropriate, accurate, and sufficient source material;
- 2. Read texts from a variety of genres and cultural perspectives;
- 3. Demonstrate a command of standard written English and academic writing standards;
- 4. Employ multiple analytical and rhetorical methods of writing;
- 5. Incorporate research and cite sources correctly;
- 6. Demonstrate competence of the close reading of texts.

Requirement (6 semester hours)

Students must successfully complete both of the following:

- ENG 119: First Year Writing
- ENG 120: Critical Reading and Evaluative Writing

Advanced placement courses may not be used to satisfy this requirement, but may be applied to overall elective credit.

# Cut-off scores for entering freshman and Accuplacer challenge scores for placement at a higher level:

Entering students who have not completed an equivalent first-year writing course (ENG 119 at RMC) at the college-level must complete ENG 119 and ENG 120 as part of the core curriculum. To determine whether a student is prepared to succeed in ENG 119, the English faculty have established.

lished the following cut-off scores on the ACT and SAT tests:

- ACT English 20 and greater: ENG 119
- SAT Reading and Writing 470 and greater: ENG 119

Students scoring under 20 on the ACT or under 470 on the SAT should be enrolled in ENG 118: Basic Composition. Students who believe their skills in reading and writing would enable them to perform well in ENG 119, despite ACT or SAT scores that recommend ENG 118, may challenge placement by taking the Accuplacer exam. Students who wish to challenge placement must take the Accuplacer Reading Comprehension and Sentence Skills tests.

Cut-off scores for admission to ENG 119 on these two Accuplacer tests are:

- Reading Comprehension 79 and greater
- Sentence Skills 90 and greater

#### Communication

After completing the core curriculum requirement in communication studies, students will be able to:

- 1. Develop an organized, cogent speech;
- Develop a persuasive speech that ethically utilizes evidence and persuasive appeals;
- 3. Effectively deliver speeches;
- Use critical listening skills to evaluate the evidence and arguments of others.

Requirement: Public Speaking (3 semester hours) Fulfilled by successfully completing the following:

COM 102: Public Speaking

#### Fine Arts

Upon completion of Requirement 1 in the fine arts, students will be able to:

- Demonstrate knowledge of the fundamental concepts and methods of a fine art:
- Describe the interrelationships between a fine art, history, and culture.

Requirement 1: (3 semester hours) Students must successfully complete a course from the following:

- Art: ART 220, ART 221, ART 222, ART 244, ART 321, ART 322, ART 323
- Music: MUS 101, MUS 140, MUS 201, MUS 202, MUS 204/304, MUS 205/305
- Theatre: THR 101, THR 131, THR 433, THR 434

Upon completion of Requirement 2 in the fine arts, students will able to:

- Demonstrate the capacity to evaluate works of a fine art based on disciplinary criteria;
- Demonstrate competence in applying fundamental concepts, methods, skills, and techniques to a specific fine art.

Requirement 2: (3 semester hours) Students must successfully complete a course from the following:

- Art: ART 101, ART 121, ART 215/315, ART 224, ART 243, ART 251, ART 252
- Music: MUS 215/315; three semesters in concert band (MUS 283/383), concert choir (MUS 271/371), or jazz ensemble (MUS 286/386) can fulfill this requirement. The three credits must be taken in the same ensemble.
- Theatre: THR 132, THR 135, THR 230, THR 235, THR 240, THR 245, THR 310, THR 315, THR 318, THR 320, THR 336, THR 347, THR 391

The fine arts core curriculum requirement is fulfilled by successfully completing one course of at least three semester hours from each requirement. The two courses must be from different disciplines.

#### Humanities

After completing the core curriculum requirements in the humanities, students will be able to:

- Critically analyze source material and compose clearly reasoned and supported written arguments;
- Demonstrate knowledge of key terms, methods, and figures of literature, philosophy and religious thought, and history, as per course discipline;
- Demonstrate knowledge of how cultures express and negotiate complex social and ethical concerns and conflict.

Requirement 1: History (3 semester hours)

Students must successfully complete a course in history from the following:

History: HST 103, HST 104, HST 211, HST 212, HST 232, HST 260, HST 303, HST 304, HST 311, HST 313, HST 324, HST 325, HST 356, HST 358, HST 363, HST 365, HST 370

Requirement 2: Literature (3 semester hours)

Students must successfully complete a course in literature from the following:

 English: ENG 223, ENG 224, ENG 242, ENG 244, ENG 245, ENG 247, ENG 252, ENG 270, ENG 272, ENG 273, ENG 282, ENG 283, ENG 291

Requirement 3: Philosophy and Religious Studies (3 semester hours) Students must successfully complete a course in philosophy and religious studies from the following:

Philosophy and Religious Studies: PHR 100, PHR 120, PHR 205, PHR 210, PHR 211, PHR 212, PHR 218, PHR 220, PHR 236, PHR 303, PHR 304, PHR 312, PHR 317, PHR 320, PHR 321, PHR 330, PHR 340, PHR 362, PHR 370, PHR 375, PHR 378, PHR 421, PHR 460, PHR 490

#### **Social Sciences**

Upon successfully completing the core curriculum requirement in the social sciences, students will be able to:

- Demonstrate critical thinking about major ideas in the field through writing;
- 2. Use the appropriate disciplinary approach to study human behavior;
- 3. Identify ethical issues relevant to the human condition.

Requirement: (6 semester hours)

Students must complete two courses of at least three semester hours each in psychology, sociology, economics, or political science. These two

courses must be in different disciplines. Courses satisfying this core curriculum requirement include:

Psychology: PSY 101, PSY 205, or PSY 206

Sociology: SOC 101 or SOC 225

Political Science: POL 101, POL 225, or POL 313

Economics: ECO 205

Environmental Management and Policy: EMP 102, EMP 224

### **Natural Sciences**

After successfully completing the core curriculum requirements in the natural sciences, students will be able to:

- Characterize and describe the importance of the scientific method in one of the following fields: biology, chemistry, computer science, environmental science, geology, or physics;
- Identify, locate, interpret, and evaluate scientific information from various sources;
- Conduct basic experiments that investigate scientific questions using appropriate equipment and methods. This objective is satisfied only when the class has a laboratory component.

Requirement: (7 semester hours)

Fulfilled by successfully completing two courses in biology, chemistry, environmental science, geology, or physics. At least one the courses must have a laboratory component. Both courses cannot be in the same discipline. Courses that satisfy this core curriculum requirement include:

Biology: BIO 102\*, BIO 105, BIO 120\*

Chemistry: CHM 100\*, CHM 101\*, CHM 260

Computer Science: CSC 112

Environmental Science: ESC 105\*, ESC 215, ESC 243\*, ESC 244\*, ESC 260

Geology: GEO 101/104\*, GEO 218/104\* Physics: PHS 101\*, PHS 105\*, PHS 201\*

Courses marked with a \* have a laboratory component.

#### **Transfer Credits for Core Curriculum Requirements**

Although the College reserves the right to refuse incoming transfer credits, credits from accredited colleges normally will be accepted subject to these conditions:

- No more than 94 semester hours or 135 quarter hours of credit are acceptable from four-year colleges.
- No more than 64 semester hours or 96 quarter hours are acceptable from two-year colleges.
- No junior- or senior-level credit will be allowed for courses from two-year colleges.
- No "F" grades will be accepted.
- No preparatory/developmental classes below 100-level will be accepted.

## **Second Degree**

A student may earn a second bachelor's degree at Rocky Mountain College by taking a minimum of 150 credits (of which at least 49 must be upper-division) and by completing all requirements for declared majors. Students may also transfer to Rocky Mountain College to attain a second degree. These students must meet all degree requirements outlined for transfer students to Rocky Mountain College. Students wanting to obtain a second degree must file a graduation application to the Office of Student Records.

#### **Masters Programs Curriculum Requirements**

## Master of Accountancy Degree Requirements

The accountancy program at Rocky Mountain College is designed to prepare students for careers in public, government, not-for-profit, or industrial accounting. The program is designed to allow students to build on skills and knowledge developed through undergraduate coursework to become skilled, entry-level professional accountants upon graduation. The curriculum is based on the American Institute of Certified Public Accountants (AICPA) core competencies and prepares students to sit for the certified public accountant exam. In its entirety, the program is comprised of both undergraduate and graduate study, which leads, ultimately, to the master of accountancy degree.

Students who begin the accountancy program as undergraduates will graduate, upon completion of all requirements, with both a bachelor's of science in business management and a master's of accountancy. The entire curriculum consists of 150 semester hours for both the bachelor's of science and master's of accountancy.

Students who enter the accountancy program as baccalaureate degree holders from an institution other than Rocky Mountain College must meet only the master's of accountancy requirements and graduate only with the master's of accountancy degree. These students should consult with their academic advisor to ensure that, in total, their academic preparation makes them eligible for the CPA exam. Depending upon the student's academic background, additional courses may be necessary to become eligible for the CPA exam.

Students must complete all courses in the professional program with a GPA of at least 2.25.

### Master of Physician Assistant Studies Degree Requirements

A minimum of 63 sequential semester hours in the didactic phase, followed by 42 semester hours in the clinical instruction phase is required. Students must satisfactorily complete all courses in the professional program with a GPA of at least 3.00.

## Master of Educational Leadership Degree Requirements

The master of educational leadership program is designed to prepare educational leaders for a career as a principal or superintendent. This cohortbased program begins in the early fall and completes in late spring over a course of 11 months. The program follows the state and national standards for educational leadership and is rooted in Effective School Research. Blending theory and practice through coursework and an intensive internship, candidates will be prepared to be instructional leaders at the K-12 level. The program is 34 credits in length depending on previous coursework. This program has a minimal residency requirement.

## Accountancy

Anthony R. Piltz, Professor Cedric Snelling, Assistant Professor

The accountancy program at Rocky Mountain College is designed to prepare students for careers in public, governmental, not-for-profit, or industrial accounting. The program is designed to allow students to build on skills and knowledge developed through undergraduate coursework to become skilled, entry-level professional accountants upon graduation. The curriculum is based on the American Institute of Certified Public Accountants (AICPA) core competencies and prepares students to sit for the certified public accountant exam. In its entirety, the program is comprised of both undergraduate and graduate study, which leads, ultimately, to the master of accountancy degree.

Students who begin the accountancy program as undergraduates will graduate, upon completion of all requirements, with both a bachelor of science in business management and a master of accountancy. The entire curriculum consists of 150 semester hours, and students are required to meet all Rocky Mountain College degree requirements.

#### **Learning Outcomes**

Students who graduate with a master of accountancy will be able to:

- Demonstrate sufficient knowledge of measurement and disclosure criteria (Measurement):
- Formulate and communicate, in an objective and clear manner, findings and recommendations (Reporting);
- 3. Employ research skills pertinent to ascertaining the application of legislation, standards, and other rules (Research);
- Employ risk analysis techniques per Generally Accepted Auditing Standards (Risk Analysis);
- Demonstrate mastery of decision modeling techniques (Decision Modeling);
- 6. Use technological resources efficiently and effectively (Technology);
- Provide useful information for decision making (Strategic/Critical Thinking):
- 8. Identify sources of resources and the appropriate strategies or actions necessary to preserve and enhance resources (Resource Management);
- 9. Describe the legal and regulatory environment in which organizations operate (Legal/Regulatory Perspective);
- 10. Describe the economic environment in which organizations operate (Industry/Sector Perspective);
- 11. Articulate the needs of clients, employers, customers, and markets (Marketing/Client Focus);
- Exchange information within a meaningful context and with appropriate delivery (Communication);
- Demonstrate an ability to interact productively with others (Interaction);
- 14. Demonstrate an understanding of effective leadership (Leadership);
- 15. Control the course of a multi-dimensional, multi-step undertaking (Project Management);
- 16. Employ effective problem-solving and decision-making skills (Problem Solving/Decision Making);
- 17. Behave in a manner consistent with the character and standards of the discipline of accounting (Professional Demeanor).

#### Master of Accountancy with a BS in Business Management

A minimum of 45 semester hours is required, including:

ACC 210: Foundations of Accounting

ACC 309: Managerial Accounting

BSA 101: Introduction to Business

BSA 303: Principles of Management BSA 304: Principles of Marketing

BSA 311: Principles of Finance

BSA 401: Production and Operations Management

BSA 421: Strategic Management

BSA 450: Internship

ECO 205: Principles of Economics

ENG 325: Professional Writing

MAT 210: Probability and Statistics

Nine semester hours of undergraduate ACC, BSA, ECO electives are also required and should include ACC 351, ACC 352, and BSA 331.

#### Master of Accountancy

A minimum of 27 semester hours are required, including:

ACC 505: Cost Accounting

ACC 521: Advanced Financial Management

ACC 522: Accounting Information Systems

ACC 553: Financial Reporting III

ACC 623 Taxation of Partnerships and Corporations

ACC 624 Taxation of Estates and Trusts

ACC 653: Financial Reporting IV

ACC 672: Auditing

ACC 673: Not-for-Profit Accounting

ACC 352: Financial Reporting II is a prerequisite for the master-level courses.

CPA exam eligibility requirements for the state in which the candidate intends to sit for the exam should be consulted to ensure that the candidate's educational program satisfies exam eligibility requirements.

Students who enter the accountancy program as baccalaureate degree holders from an institution other than Rocky Mountain College must meet only the master of accountancy requirements and will graduate only with the master of accountancy. These students should consult with their academic advisor to ensure that, in total, their academic preparation makes them eligible for the CPA exam. Depending upon the student's academic background, additional courses may be necessary to become eligible for the CPA exam.

## **Accountancy courses**

# **ACC 210**

## Foundations of Accounting

Semester: Fall and Spring

Semester Hours: 3

This course is designed to give students a basic understanding of the uses and limitations of accounting information, particularly from financial statements. Students will understand how to take information from the financial statements and make informed business decisions.

Prerequisite: BSA 101

#### **ACC 309**

## **Managerial Accounting**

Semester: Fall and Spring

Semester Hours: 3

Students examine how managers use accounting information and how that information should be gathered and provided. Topics include the measurement and use of cost information, cost control, budgeting, performance appraisal, and decision-making using accounting information.

Prerequisite: ACC 210, ECO 205

### ACC 352

## Financial Reporting II

Semester: Spring Semester Hours: 3

This course, a continuation of ACC 351, considers proper accounting for current and long-term liabilities, investments, pensions, and leases. Various aspects of stockholders' equity and the analysis of financial statements are also included.

Prerequisite: ACC 210, ECO 205

#### ACC 505

#### **Cost Accounting**

Semester: Spring, Alternate years

Semester Hours: 3

This course introduces the primary principle of cost management – costs do not just happen; they are the results of management decisions. Topics of study include cost concepts and applications, costing methods, the value chain, costprofit-volume analysis, best cost management practices, and other techniques to aid management in planning and controlling business activities.

Prerequisite: ACC 323, ACC 352

#### ACC 521

#### **Advanced Financial Management**

Semester: Spring, Alternate years

Semester Hours: 3

An advanced study of financial management issues as they pertain to public and private corporations. Topics include capital budgeting, cost of capital, capital structure, financing strategy, dividend policy, and business valuation

Prerequisite: ACC 323, ACC 352

#### ACC 522

## **Accounting Information Systems**

Semester: Spring, Alternate years

Semester Hours: 3

Students explore the elements of both manual and computerized accounting information systems. Topics include system development, internal control, and the role of database and network technology in accounting information systems.

Prerequisite: ACC 323, ACC 352

#### **ACC 553**

## Financial Reporting III

Semester: Fall, Alternate years

Semester Hours: 3

Students examine advanced topics in the financial reporting process including leases, post-retirement benefits, deferred taxes, revenue recognition, and investments. The FASB standard setting process will also be discussed, and accounting research processes will be introduced.

Prerequisite: ACC 323, ACC 352

#### **ACC 623**

# **Taxation of Partnerships and Corporations**

Semester: Spring, Alternate years

Semester Hours: 3

A study of federal income tax law as it applies to partnerships and corporations. Further application of the tax research process through case analysis is also addressed.

Prerequisite: ACC 323, ACC 352

#### **ACC 624**

# **Taxation of Estates and Trusts**

Semester: Fall, Alternate Years

Semester Hours: 3

A study of income tax law as it applies to estates and trusts. Further application of the tax research process through case analysis is also addressed. Prerequisite: ACC 323, ACC 352

# ACC 653

## Financial Reporting IV

Semester: Spring, Alternate years

Semester Hours: 3

This course introduces the theory and practice relative to business combinations, mergers, consolidations, and acquisitions. Other topics include partnerships, foreign operations, financial reporting and the Securities and Exchange Commission, segment and interim reporting, legal reorganiza-

tions and liquidations, estates and trusts, and governmental and not-for-profit accounting.

Prerequisite: ACC 323, ACC 352

## **ACC 672**

#### Auditing

Semester: Fall, Alternate years

Semester Hours: 3

This course addresses the many changes implemented in the corporate sector and the auditing profession since the passage of the Sarbannes-Oxley Act and the implementation of the Public Company Accounting Oversight Board (PCAOB). Areas of study include professional ethics, auditor's legal liability, the auditing environment, internal controls, working papers, the auditor's report, and the accounting profession's credibility crisis.

Prerequisite: ACC 323, ACC 352

#### ACC 673

#### **Not-For-Profit Accounting**

Semester: Fall, Alternate years

Semester Hours: 3

This course provides the fundamental knowledge necessary to learn about the operation of governments, universities, hospitals, and other nonprofits. The specific accounting, auditing, and financial reporting practices and standards used by these entities will be emphasized.

Prerequisite: ACC 323, ACC 352

#### **BSA 303**

## **Principles of Management**

Semester: Fall and Spring

Semester Hours: 3

Students examine the management functions and basic concepts and principles of management, including planning, organization, coordination, control, job design, and human resource management. Topics in human resource management include recruitment, selection, administration of personnel policies, and dismissals. This course is often required as a prerequisite for master's-level business programs.

Prerequisite: ACC 210, ECO 205

#### **BSA 304**

## **Principles of Marketing**

Semester: Fall and Spring

Semester Hours: 3

This course studies the marketing process from product development through consumer purchase. The course includes examination of consumer buying behavior, marketing channels, physical distribution, pricing policies, and promotion along with their role in the marketing process.

Prerequisite: BSA 101, ECO 205

## **BSA 311**

#### **Principles of Finance**

Semester: Fall Semester Hours: 3

Students are introduced to the principles of business finance. Topics covered include financial analysis and planning, working capital management, the time value of money, and capital budgeting.

Prerequisite: ACC 210, ECO 205

## BSA 401

### **Production and Operations Management**

Semester: Fall and Spring

Semester Hours: 3

An introduction to various aspects of production, resource, and operations management that focuses on production methodologies, scheduling, inventory control, quality control, and project management. Performance evaluation and resource planning are also emphasized. This course is often required as a prerequisite for master's-level business programs.

Prerequisite: BSA 303, ACC 309

#### BSA 450 Internship

Semester: On Demand Semester Hours: 1-12

Guided work experience and study of a professional nature in an established business, government agency, or other institution. Contract is required. A minimum of three semester hours is required, but no more than three semester hours will count toward the major. Pass/no pass.

Prerequisite: ACC 309, BSA 303, BSA 311

#### **ECO 205**

## **Principles of Economics**

Semester: Fall and Spring Semester Hours: 3

This course will introduce the principles of firm-level decision making, consumer choices and their rationale, differing forms of industry competition, and how market-clearing prices and quantities are determined in a market environment. Additionally, the students will gain an understanding of how the major participants in the economy interact and what drives economic growth, interest rates, and inflation. The possible impacts of a variety of fiscal and monetary policy choices will be presented to assist the student in understanding how those policies will impact incomes, employment, and trade for a country. At the completion of the course, the student should have a basic understanding of both the microeconomic and macroeconomic environments and their impacts on businesses and the general population.

#### **ENG 325**

#### **Professional Writing**

Semester: Fall Semester Hours: 3

This course teaches concepts, practices, and skills for communicating technical, scientific, or business-related information. Topics include understanding how people read, designing documents, incorporating graphics, writing about statistical results, rewriting, editing, and using the Internet. This course may be especially useful for non-English majors, providing them with the tools and techniques to communicate their messages effectively.

Prerequisite: ENG 119

## **MAT 210**

## **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

## Art

James A. Baken, Professor Mark S. Moak, Professor

Students who participate in the art program can expect to discover and explore materials, techniques, and cultures from the dawn of human artistic experience to today. They will be guided on their journey by faculty who are passionate about art and believe in the importance of individualized instruction and experience; creativity as a problem-solving endeavor; critical-thinking; traveling to monuments and museums of the region, nation, and the world; alternative methods of learning; and the interrelatedness of the studio, art history, aesthetics, art criticism, and a variety of other disciplines. The ultimate goal is self-expression through self-discovery.

Committed to the liberal arts, the art department strives to provide a learning environment that is challenging, yet encouraging, to art majors and non-majors alike. Some will go on to graduate school, some to teach or work in an art-related field, some will acquire an avocational skill, others

will become educated consumers of art, but all will look at and truly see the world with all of its visual wealth and its amazing peoples in a new light.

## **Learning Outcomes**

Students who graduate with a major in art will be able to:

- Demonstrate knowledge of the fundamental concepts, skills, and techniques specific to the fine arts;
- Describe the interrelationships between the fine arts, history, and culture;
- Apply aesthetic judgment based upon both personal and objective criteria to critique works of art; and
- 4. Employ creative processes.

#### Note

- Students with exceptional preparation in some area of art study may consult with faculty concerning substitutions or waivers of prerequisites
- Independent study, directed reading, and field practica, among others, may not be taken in art until at least 15 semester hours of regular coursework have been satisfactorily completed.
- 3. Internship credits may be used for no more than three semester hours of the required total for the major or minor.
- 4. Art education majors must complete the professional education program for K-12 teaching. See the "Education" section of the catalog.
- 5. Students wishing for more depth in a studio course may take that course a second time at a higher level, with the instructor's approval.
- Additional expenses for tools and materials can be expected in most art courses.

#### Major in Art

A minimum of 39 semester hours is required, including:

ART 101: Drawing I

ART 121: Design

ART 220: Art History Survey I

ART 221: Art History Survey II

ART 222: Art History Survey III

ART 483: Senior Project

ART 490: Art Seminar

Choose one of the following:

ART 243: Digital Photography

ART 247: Digital Nature Photography

Choose one of the following:

ART 321: Topics in Art History I

ART 322: Topics in Art History II

ART 323: Topics in Art History III

The additional 15 semester hours for the major are to be chosen in consultation with the student's academic advisor. Courses may include art courses, one business-related course (BSA 418 or BSA 425), and/or internships (pass/no pass) up to six semester hours.

#### Major in Art Education

Requirements include a minimum of 42 semester hours including the 39 semester hours listed under the major in art plus ART 338. Discipline-based art education, art production, art history, aesthetics, and criticism are the foci for this major. Art education majors must complete the professional education program for K-12 teaching as described in the "Education" section of the catalog.

#### Minor in Art

A minimum of 21 semester hours is required, including:

One of the following: ART 101: Drawing I

ART 121: Design

Two of the following:

ART 220: Art History Survey I ART 221: Art History Survey II ART 222: Art History Survey III

One of the following:

ART 243: Digital Photography

ART 247: Digital Nature Photography

ART 321: Topics in Art History I ART 322: Topics in Art History II

ART 323: Topics in Art History III

Nine semester hours of ART electives also are needed.

#### **Minor in Art Education**

A minimum of 27 semester hours is required, including:

One of the following: ART 101: Drawing I ART 121: Design

Two of the following:

ART 220: Art History Survey I ART 221: Art History Survey II ART 222: Art History Survey III

One of the following:

ART 243: Digital Photography

ART 247: Digital Nature Photography

ART 321: Topics in Art History I ART 322: Topics in Art History II

ART 323: Topics in Art History III

All of the following:

ART 338: Methods & Materials

ART 483: Senior Project

ART 490: Art Seminar

Nine semester hours of ART electives also are required.

Discipline-based art education is the goal of this minor. Art education minors must complete the professional education program for K-12 teaching as described in the "Education" section of the catalog.

#### Art courses

## ART 101 Drawing I

Semester: Fall Semester Hours: 3

This foundation course explores basic drawing techniques in a variety of dry and wet drawing media. This studio course offers the student an opportunity to learn about pictures as language and expressions using the vocabulary of the elements of art: line, value, shape, form, texture, perspective, and composition. Students will create, critique, and display original works of art.

## ART 114 Gallery

Semester: Fall and Spring

Semester Hours: 1

This course is designed to provide the student with gallery experience. Responsibilities include preparing the gallery for all exhibits, providing and collecting entry forms, cataloguing, making and placing labels for all student show work, hanging the student show, organizing the artist's reception and advertising for the student show, helping with the hanging/reception/advertising of all other exhibits including senior shows and those of guest artists, and working with art faculty.

#### **ART 121**

#### Design

Semester: Spring Semester Hours: 3

This studio course closely examines both two- and three-dimensional design by studying the principles of design and the elements of art. Students will create, display, and formally present for criticism to the course academic exercises and works of art.

#### **ART 214**

## Gallery

Semester: Fall and Spring

Semester Hours: 1

This course is designed to provide the student with gallery experience. Responsibilities include preparing the gallery for all exhibits, providing and collecting entry forms, cataloging, making and placing labels for all student show work, hanging the student show, organizing the artist's reception and advertising for the student show, helping with the hanging/reception/advertising of all other exhibits including senior shows and those of guest artists, and working with art faculty.

#### **ART 215**

## Creativity

Semester: Fall, Alternate years

Semester Hours: 3

This course approaches creativity as a skill to develop, not as a magical gift bestowed on a few select people. The last three weeks of the course will be devoted to a large-scale project in an area chosen by the student at the time of registration. Two important elements of the course involve a specific style of journaling and a weekly artist's date. Through the activities in this course, students will bring a higher degree of creativity to their daily lives. This course may be taken either at the lower-division level or at the upper-division level, but not both. This course is cross-listed with MUS 215.

### **ART 220**

## **Art History Survey I**

Semester: Fall

Semester Hours: 3

This is a general survey of art historical periods including the Prehistoric in Europe, the Near East, and the Americas; Ancient Egypt; the Bronze Age and Ancient Greece; the Etruscans; and the Romans. Study focuses on the materials, techniques, style, historical context, aesthetics, and criticism of this wide variety of art. Traditional art historical methods of slide lecture, discussion, written exams, and papers are de rigueur as well as exploration of relevant topics on the Internet and via the course website. Though sequential, ART 220, ART 221, and ART 222 may be taken separately.

## ART 221

## **Art History Survey II**

Semester: Spring Semester Hours: 3

This is a general survey of art historical periods including the Early Christian, Byzantine, Islamic, Early Medieval, Gothic, and Renaissance. Study focuses on the materials, techniques, style, historical context, aesthetics, and criticism of this wide variety of art. Traditional art historical methods of slide lecture, discussion, written exams, and papers are de rigueur as well as exploration of relevant topics on the Internet and via the course website. Though sequential, ART 220, ART 221, and ART 222 may be taken separately.

## **ART 222**

## **Art History Survey III**

Semester: Fall

Semester Hours: 3

This is a general survey of art historical periods and movements during the 17th, 18th, 19th, 20th, and 21st centuries. Study focuses on the ma-

terials, techniques, style, historical context, aesthetics, and criticism of this wide variety of art. Traditional art historical methods of slide lecture, discussion, written exams, and papers are de rigueur as well as exploration of relevant topics on the Internet and via the course website. Though sequential, ART 220, ART 221, and ART 222 may be taken separately.

#### ART 231 Painting I

Semester: Fall Semester Hours: 3

This studio course explores techniques of oil and acrylic paints as well as mixed media. The contemporary view as well as the traditional is examined. Students will create, critique, and display original works of art.

# ART 232 Painting II

Semester: Spring Semester Hours: 3

This course explores the theories and techniques of traditional watercolor painting. However, non-traditional approaches to watercolor and other types of painting, e.g., mixed media, are often introduced. Students will create, critique, and display original works of art.

#### **ART 243**

## **Digital Photography**

Semester: On Demand Semester Hours: 3

This course introduces students to the process of digital photography. Camera handling, editing techniques, and the elements of design are covered. Students are encouraged to pursue this art form in the surrounding community and landscape.

## **ART 244**

#### Calligraphy

Semester: On Demand

Semester Hours: 3

The purpose of this course is to connect with scribes, past and present, to learn their skills and apply them today. Though immersed in art history, students of calligraphy spend most of the course studying, practicing, and laying out a variety of hands including Roman, Insular, National, Caroline, Gothic, Italian, Humanist, and post-Renaissance scripts. Traditional tool-making and usage include quill, reed, and bamboo pens and ink, other tools, media, and techniques may include brushes, steel pens, paper, papyrus, vellum, watercolor, gouache, embossing, relief printing, resist, computer-generated layouts, and more. Projects range from quotes to cards to wine labels to small books. Students will create, critique, and display original works of art.

#### **ART 247**

# **Digital Nature Photography**

Semester: On Demand Semester Hours: 3

This course explores the practice of digital photography as it relates to the field of nature photography. Camera selection, technology, and use are covered, as are field practices, editing techniques, elements of composition, and trip planning. Students are encouraged to pursue this art form in the surrounding area including a trip to Yellowstone National Park. Students will create, critique, and present original works of art.

### ART 251 Clay I

Semester: Spring Semester Hours: 3

Students in this studio course create original works of art using handbuilding techniques such as pinching, slab-building, coiling, and modeling (sculpting). Wheel-throwing is also introduced. Students are encouraged to explore the use of design elements in the clay medium. They are also expected to be able to identify and articulate qualities that characterize notable ceramic works by studying both modern and historic ceramic pieces. Students will create, critique, and display original works of art.

#### ART 252

## Jewelry and Metalwork I

Semester: Spring Semester Hours: 3

This course is an introduction to basic jewelry and metalworking processes and techniques, such as lost wax casting, raising, forging, fabrication, and lapidary work. Copper, brass, bronze, sterling silver, and semi-precious stones are commonly used; more expensive materials may be used if the student can afford them. Functional and non-functional objects may be made with an emphasis on craftsmanship and aesthetics. Designs from nature, art history, and contemporary culture are encouraged. Students will create, critique, and display original works of art. ART 352 is a continuation of ART 252.

#### **ART 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **ART 301**

## Drawing II

Semester: On Demand

Semester Hours: 3

This is primarily a life-drawing class. Working mainly from the human nude and from animals, the student is allowed to explore techniques and create drawings in dry and wet media. "Nature as teacher" is the academic approach in live-model sessions; however, other drawing approaches, subject matter, and advanced techniques may be explored. Students will create, critique, and display original works of art.

Prerequisite: ART 101

### **ART 314**

#### Gallery

Semester: Fall Semester Hours: 1

This course is designed to provide the student with gallery experience. Responsibilities include preparing the gallery for exhibits, providing and collecting entry forms, cataloging, making and placing labels for student show work, hanging the student show, organizing the artist's reception and advertising for the student show, helping with the hanging/reception/advertising of all other exhibits including senior shows and those of guest artists, and working with art faculty.

## **ART 315**

#### Creativity

Semester: Fall, Alternate years

Semester Hours: 3

This course approaches creativity as a skill to develop, not as a magical gift bestowed on a few select people. The last three weeks of the course will be devoted to a large-scale project in an area chosen by the student at the time of registration. Two important elements of the course involve a specific style of journaling and a weekly artist's date. Through the activities in this course, students will bring a higher degree of creativity to their daily lives. This course may be taken either at the lower-division level or at the upper-division level, but not both. This course is cross-listed with MUS 315.

#### **ART 317**

## Art, Art History, and Archaeology

Semester: Summer Semester Hours: 3

Students participate in the various aspects of archaeology at a particular locale – in the classroom and on site. Areas of study include, but are not limited to, the following: excavating, drafting, conservation, pottery analysis, history, art history, and cataloging. In addition to working at an excavation, students will explore other historical sites and museums.

#### **ART 321**

## Topics in Art History I

Semester: On Demand Semester Hours: 3

Choosing from the prehistoric (as early as 30,000 BC) through the Gothic (as late as AD 1500), this course may explore such topics as Ancient Egypt, Bronze Age and Classical Greece, Imperial Rome, or Medieval Europe. Study focuses on art materials, techniques, style, prehistorical and historical context, aesthetics, and criticism. While traditional methods of studying art history are used (e.g., slide lectures, discussion, written exams, and papers), students are expected to authentically replicate an objet d'art from the studied historical periods as a major project. This course is also web-enhanced, with an interactive class website and required web research and project presentation. This course may be taken twice, with up to six credits counting toward the art major or minor requirements.

#### **ART 322**

## **Topics in Art History II**

Semester: On Demand Semester Hours: 3

The topic for this course is chosen from Western artistic traditions ranging from the Renaissance, Baroque, Rococo, the 19th, or the 20th centuries. Study focuses on art materials, techniques, style, historical context, aesthetics, and criticism. While traditional methods of studying art history are used (e.g., slide lectures, discussion, written exams, and papers), students are expected to authentically replicate an objet d'art from the studied historical periods as a major project. This course is also web-enhanced, with an interactive class website and required web research and project presentation. This course may be taken twice, with up to six credits counting toward the art major or minor requirements.

#### **ART 323**

## **Topics in Art History III**

Semester: On Demand Semester Hours: 3

This is a study of the peoples and their art from the non-European traditions. Topics vary and may include Native American cultures such as the Anasazi, Mogollon, or Mimbres and/or the art of Africa or Asia, among others. Study focuses on art materials, techniques, style, prehistorical and historical context, aesthetics, and criticism. While traditional methods of studying art history are used (e.g., slide lectures, discussion, written exams, and papers), students are expected to authentically explicate an objet d'art from the studied historical periods as a major project. This course is also web-enhanced, with an interactive class website and required web research and project presentation. This course may be taken twice, with up to six credits counting toward the art major or minor requirements.

### **ART 331**

# **Painting III**

Semester: Fall Semester Hours: 3

This studio course continues the exploration of techniques of oil, acrylic, and mixed mediums. It allows students more time to develop techniques and pursue individual projects. The student and instructor will develop a mutually agreeable plan of study at the beginning of the semester. Students will create, critique, and display original works of art. Usually, ART 331 is offered concurrently with ART 231.

Prerequisite: ART 231

#### **ART 332**

#### **Painting IV**

Semester: Spring Semester Hours: 3

This studio course allows the student to continue exploration in the watercolor medium. It allows students more time to develop techniques and pursue individual projects. The option of branching into other mediums is available near mid-semester. The student and instructor will develop a mutually agreeable plan of study at the beginning of the semester. Students will create, critique, and display original works of art. Usually, ART 332 is offered concurrently with ART 232.

Prerequisite: ART 232

#### **ART 338**

# Methods and Materials: Teaching Art in the Elementary and Secondary Schools

Semester: Spring Semester Hours: 3

This course focuses on the methods and materials for teaching art in the elementary, middle, and secondary schools.

Prerequisite: admission to the teacher education program

## ART 342

## Printmaking

Semester: On Demand Semester Hours: 3

Students are introduced to basic relief printmaking, as well as techniques such as linoleum and wood cut and calligraphy. Other processes include monoprint, intaglio, silkscreen, and/or computer-generated graphics. Students will create, critique, and display original works of art.

Prerequisite: ART 101

# **ART 347**

## **Topics in Photography**

Semester: Spring Semester Hours: 3

This course explores the methodology of digital photography as it applies to the fields of adventure/lifestyle/commercial photography. Camera selection, technology, and use are covered, as are field practices, editing techniques, and elements of composition. Students will create, critique, and present original works of art.

Prerequisite: ART 243 or ART 247

# ART 350

# Sculpture

Semester: Fall Semester Hours: 3

Students will explore the third dimension by creating works in a variety of materials such as clay, plaster, wood, metal, found objects, and mixed media. Processes and techniques include modeling, carving, lost wax casting, and construction. Students will create, critique, and display original works of art.

Prerequisite: ART 121

## **ART 351**

# Clay II

Semester: Spring

Semester Hours: 3

This clay class offers the student an opportunity to expand ceramic skills according to individual interests. The student and instructor will develop a mutually agreeable plan of study at the beginning of the semester. Students will create, critique, and display original works of art. Usually, ART 351 is offered concurrently with ART 251.

Prerequisite: ART 251

#### **ART 352**

#### Jewelry and Metalwork II

Semester: Spring Semester Hours: 3

Students are allowed to pursue areas of individual interest by investigating advanced techniques and/or by expanding basic jewelry and metalworking skills. The student and instructor will develop a mutually agreeable plan of study at the beginning of the semester. Students will create, critique, and display original works of art. ART 352 is a continuation of, and is offered concurrently with, ART 252.

Prerequisite: ART 252

## ART 450

# Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. Contract is required.

Prerequisite: junior or senior standing

#### **ART 483**

## **Senior Project**

Semester: On Demand Semester Hours: 1

For art majors and art education majors and minors, this course is designed to help students develop the concept, philosophy, and direction of a body of work for their senior show. Students meet with professor(s) on a weekly basis.

Prerequisite: permission of professor

## ART 490

#### **Art Seminar**

Semester: Fall, Alternate years

Semester Hours: 2

Designed for art majors and art education majors and minors, this course explores what it means to be an art professional. Discussion, field trips (e.g., to museums, galleries, artists' studios), art community service, and preparation of a résumé, a portfolio, an artist's statement, and a senior show are the focus of the course. The art seminar is further enhanced by visits from a career counselor and art professionals. The course not only serves as an opportunity for self-assessment by each student, but also requires the assessment of fellow classmates, the art program, and, in the case of art education majors and minors, the application of age-appropriate assessment formats.

Prerequisite: permission of professor

## **ART 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

### **BSA 418**

# Entrepreneurship I

Semester: Fall Semester Hours: 3

Students will learn the characteristics of successful entrepreneurs, how to seek and evaluate opportunities for new ventures, how to prepare a complete business plan, and how to plan strategies and gather resources to create business opportunities.

Prerequisite: ACC 309, BSA 303, BSA 304, BSA 311

#### **BSA 425**

#### **Small Business Operations**

Semester: Spring Semester Hours: 3

This course focuses on how owners and managers grow companies in a professional manner while maintaining the entrepreneurial spirit. Students draw from varied disciplines to create and understand strategies for building and growing a successful venture.

Prerequisite: BSA 418

#### Aviation

Daniel Hargrove, Professor and Director of Aviation Scott Wilson, Professor Clete Knaub, Associate Professor Josh McDowell, Assistant Professor

The mission of the Rocky Mountain College aviation program is to educate and train individuals to be professionals and leaders in the aviation industry.

The aviation program provides students with the knowledge and skills required to enter the exciting world of professional aviation. Graduates are prepared to begin careers as pilots or managers in the airline business, air cargo, military, or other sectors in the aviation industry.

Flight training is conducted in Piper and Beechcraft aircraft owned by the College. Glass cockpit aircraft and sophisticated simulators are used in training to prepare graduates for competitive careers in aviation. Further training is conducted using state-of-the-art Canadair Regional Jet (CRJ) flight management system (FMS) simulation. The program emphasizes professional experiences, relevant classroom instruction, and safe flight operations that will help transition the students to a successful career after graduation.

Majors are offered in aeronautical science and aviation management, and minors are offered in aeronautical science, aircraft dispatch, and unmanned aerial systems (UAS). The aeronautical science major combines pilot certification with studies of the air transportation operating environment. The aviation management major combines studies of aviation with business and economics. Pilot certification is elective under this major.

The minor in aeronautical science includes private pilot certification, plus the knowledge to safely and efficiently use air transportation as part of a business operation or for personal use. The aircraft dispatch minor prepares students for a career as a dispatcher, a position that shares responsibility for the movement of an airplane with the plane's captain and handles such issues as maintenance, weight and balance, changing weather, diverts, and passenger issues. The minor in unmanned aerial systems (UAS) includes private pilot certification, plus regulatory knowledge about UAS and practical hands-on experience operating various unmanned aerial systems that give a foundation for a career in this exciting new field.

The program emphasizes professional relationships with companies and individuals across the aviation industry and internship opportunities tailored to the desires of each individual student.

## **Learning Outcomes**

### **Aeronautical Science Major**

Students who graduate with a major in aeronautical science will be able to:

- Demonstrate attributes of an aviation professional, career planning, and understanding certification;
- 2. Demonstrate understanding of aircraft design, performance, operating characteristics, and maintenance;

- 3. Demonstrate understanding of aviation operations in terms of aviation safety and human factors;
- Demonstrate understanding of national and international aviation law, regulations, and labor issues;
- Demonstrate understanding of design and operations of airports, airspace, and the air traffic control system;
- 6. Demonstrate understanding of meteorology and environmental issues;
- Apply mathematics, science, and applied sciences to aviation-related disciplines;
- 8. Analyze and interpret data;
- 9. Work effectively on multi-disciplinary and diverse teams;
- 10. Make professional and ethical decisions;
- 11. Communicate effectively, using both written and oral communication skills:
- 12. Engage in and recognize lifelong learning;
- 13. Assess contemporary issues;
- Use the techniques, skills, and modern technology necessary for professional practice;
- 15. Assess the national and international aviation environment;
- 16. Apply pertinent knowledge in identifying and solving problems;
- 17. Apply knowledge of business sustainability to aviation issues;
- 18. Meet FAA commercial pilot standards, with instrument and multiengine ratings, and demonstrate the ability to operate in a crew environment;
- 19. Demonstrate knowledge and application of aerodynamic principles.

## **Aviation Management Major**

Students who graduate with a major in aviation management will be able to:

- Demonstrate attributes of an aviation professional, career planning, and understanding of certification;
- Demonstrate understanding of aircraft design, performance, operating characteristics, and maintenance;
- Demonstrate understanding of aviation operations in terms of aviation safety and human factors;
- Demonstrate understanding of national and international aviation law, regulations, and labor issues;
- Demonstrate understanding of design and operations of airports, airspace, and the air traffic control system;
- 6. Demonstrate understanding of meteorology and environmental issues;
- Apply mathematics, science, and applied sciences to aviation-related disciplines;
- 8. Analyze and interpret data;
- 9. Work effectively on multi-disciplinary and diverse teams;
- 10. Make professional and ethical decisions;
- Communicate effectively, using both written and oral communication skills;
- 12. Engage in and recognize the need for lifelong learning;
- 13. Assess contemporary issues;
- Use the techniques, skills, and modern technology necessary for professional practice;
- 15. Assess the national and international aviation environment;
- 16. Apply pertinent knowledge in identifying and solving problems;
- 17. Apply knowledge of business sustainability to aviation issues;
- 18. Communicate the principles necessary to integrate as an employee at a fixed base operations company, an airline, and an airport;
- Apply classroom concepts to the aviation industry through an internship.

#### **Program Accreditation**

The aeronautical science and aviation management majors are both accredited by the Aviation Accreditation Board International (AABI). There are only 26 aeronautical science programs and 31 aviation management programs worldwide accredited by AABI. The organization sets standards for all aerospace programs taught in colleges and universities around the United States and the world.

#### **Pilot Certification**

Flight education is conducted under Federal Aviation Regulation Part 141 certification. Classroom instruction is conducted on campus, and flight instruction is conducted at Flight Operations at nearby Billings Logan International Airport. Students majoring in aeronautical science may receive credit for prior learning for the private pilot certificate and the instrument rating completed prior to enrollment. Credit for other FAA certification is reviewed and determined on a case-by-case basis. Once students enroll in the aviation program, all subsequent flight instruction must be received through the Rocky Mountain College Aviation Program.

Students who have had previous private pilot training will take Private Pilot Ground School and Private Pilot Flight Lab at RMC unless they have passed the FAA Private Pilot Practical Test before arriving at RMC. Previous training will likely help the student complete the Private Pilot Flight Lab in less flight time than other students. Students who already hold a Private Pilot Certificate must still pass a written exam or he/she will be required to take AVS 101: Private Pilot Ground School. The student will not be required to repeat private pilot flight training. The number of students taking private pilot flight training in the fall semester may be restricted to balance classroom and flight instruction capabilities. First-year, onseason athletes who are not already private pilots will not fly in the fall.

#### **Medical Certification**

Aeronautical science major students must obtain a minimum of a Class II FAA medical certificate prior to the start of flight training. A Class I certificate is recommended. Students minoring in aeronautical science must obtain at least a Class III FAA medical certificate, which is required for the private pilot certificate. Students minoring in unmanned aerial systems must obtain at least a Class III medical certificate.

#### **Program Costs**

The cost of flight training is in addition to normal college tuition and fees. The fee for each flight laboratory course is payable at the time of registration. These fees are based on the cost for an average student to complete the flight instruction in the specified syllabus and include costs for FAA knowledge and flight exams. Flight lab completion may carry over from one semester to another.

# Citizenship

All students must show proof of citizenship before beginning flight training. Common forms of proof of U.S. citizenship are an original birth certificate or a current passport. International students may take flight training, but must comply with procedures established by the U.S. Transportation Security Administration. Contact Flight Operations for details.

#### Aeronautical Science (Professional Pilot) Major

The following are required as part of the core curriculum courses:

MAT 131: Trigonometry and Applied Calculus

PSY 101: General Psychology

Choose one of the following:

PHS 101: Fundamental Physics

PHS 105: Principles of Physics

PHS 201: General Physics I

A minimum of 51 semester hours is required, including:

AVS 100: Introduction to Professional Aviation

AVS 101: Private Pilot Ground School

AVS 150: Aviation Meteorology

AVS 153: Private Pilot Flight Lab

AVS 201: Instrument Rating Ground School

AVS 202: Commercial Pilot Ground School

AVS 203: Introduction to Air Traffic Control

AVS 253: Instrument Rating Flight Lab

AVS 272: Commercial Pilot Flight Lab

AVS 273: Commercial Pilot Flight Lab II AVS 274: Commercial Pilot Flight Lab III

AVS 306: Multi-Engine Rating Ground School

AVS 308: Aviation Safety

AVS 312: Aviation Law

AVS 317: Aircraft Power Plants

AVS 318: Advanced Aircraft Systems

AVS 376: Multi-Engine Rating Flight Lab

AVS 400: Aviation Professional Development

AVS 404: Crew Resource Management with Lab

AVS 405: Air Transportation Management

AVS 419: Air Carrier Operations

Three semester hours of upper-division aviation electives are also required. No internship is required, but is recommended. The first three credits of an internship will be graded. Additional credits up to a maximum of nine will be graded pass/fail.

Graduation note: All coursework must be scheduled for completion by the end of the last term of enrollment. Students applying for spring graduation may complete a maximum of six credits in the summer session if a plan and enrollment documentation is submitted to the Office of Student Records by March 1. For Aeronautical Science majors, required flight labs may not be part of the six credits.

#### **Aviation Management Major**

The following courses are required:

MAT 131: Trigonometry and Applied Calculus

MAT 210: Probability and Statistics

PSY 101: General Psychology

Choose one of the following:

PHS 101: Fundamentals of Physics

PHS 105: Principles of Physics

PHS 201: General Physics I

A minimum of 55 semester hours is required, including:

ACC 210: Foundations of Accounting

AVS 100: Introduction to Professional Aviation

AVS 101: Private Pilot Ground School

AVS 150: Aviation Meteorology

AVS 170: Flight Training Observation Lab

AVS 307: FBO and General Aviation Operations

AVS 308: Aviation Safety

AVS 310: Airport Planning and Administration

AVS 312: Aviation Law

AVS 400: Aviation Professional Development

AVS 405: Air Transportation Management

AVS 450: Internship

BSA 101: Introduction to Business

BSA 303: Principles of Management

BSA 304: Principles of Marketing

BSA 311: Principles of Finance

ECO 205: Principles of Economics

Six semester hours of upper-division aviation or business electives are also required. Three credits of internship are required and will be graded. Additional credits up to a maximum of nine will be graded pass/fail. Internship credits may not be used for any part of the required six semester hours of upper-division electives.

### **Minor in Aeronautical Science**

A minimum of 20 semester hours is required, including:

AVS 101: Private Pilot Ground School

AVS 150: Aviation Meteorology

AVS 153: Private Pilot Flight Lab

AVS 203: Introduction to Air Traffic Control

AVS 308: Aviation Safety

Five semester hours of aviation electives are required. At least three of the elective credits must be in upper-division courses.

#### Minor in Aircraft Dispatch

A minimum of 20 semester hours is required, including:

AVS 101: Private Pilot Ground School

AVS 150: Meteorology

AVS 203: Introduction to Air Traffic Control

AVS 318: Advanced Aircraft Systems

AVS 419: Air Carrier Operations

AVS 443: Airline Dispatcher Certification

AVS 447: Boeing 737 Aircraft Systems

Choose one of the following:

AVS 201: Instrument Pilot Ground School

AVS 224: Introduction to Instruments for Dispatchers

To obtain the minor, the student must obtain the FAA Aircraft Dispatcher certificate.

## Minor in Unmanned Aerial Systems

A minimum of 23 semester hours is required, including:

AVS 101: Private Pilot Ground School

AVS 118: Introduction to Unmanned Aerial Systems

AVS 153: Private Pilot Flight Lab

AVS 254: Basic Unmanned Aerial Systems Lab

AVS 312: Aviation Law

AVS 354: Intermediate Unmanned Aerial Systems Lab

ESC 321: Introduction to Geographic Information Systems

ESC 322: Remote Sensing

## **Aviation courses**

#### **ACC 210**

#### Foundations of Accounting

Semester: Fall and Spring

Semester Hours: 3

This course is designed to give students a basic understanding of the uses and limitations of accounting information, particularly from financial statements. Students will understand how to take information from the financial statements and make informed business decisions.

Prerequisite: BSA 101

#### **AVS 100**

## **Introduction to Professional Aviation**

Semester: Fall Semester Hours: 1

This course introduces students to the aviation curriculum and the liberal arts core curriculum as a foundation for personal growth and development. It investigates aviation career options with an emphasis on the necessary knowledge, skills, and attributes of an aviation professional. The course also introduces aviation safety and human factor issues. Learning activities include professional reading and writing.

## AVS 101

# Private Pilot Ground School

Semester: Fall and Spring

Semester Hours: 4

This course prepares the student for the FAA private pilot knowledge examination. The student is introduced to the principles of aerodynamics, aircraft systems and performance, meteorology and aviation weather data, aviation physiology, navigation, flight planning, and aviation decision-making.

Corequisite: AVS 153

#### **AVS 118**

#### **Introduction to Unmanned Aerial Systems**

Semester: Fall Semester Hours: 3

This course provides an overview of unmanned aircraft system (UAS) operations from a non-engineering civilian operational perspective. The course covers the history of UAS, then explores current technology and potential UAS developments in the future. The course examines all facets of UAS operations, including safety procedures and relevant human factors.

#### **AVS 150**

#### **Aviation Meteorology**

Semester: Spring Semester Hours: 3

This course provides a detailed knowledge of the environmental factors critical to safe flight operations. The course covers weather systems, upper-air characteristics, flight hazards, weather-related topics in flight safety, meteorological flight planning, use of weather information systems, and the reports and charts used for aviation weather reporting and forecasting.

Corequisite: AVS 101

#### **AVS 153**

## Private Pilot Flight Lab

Semester: Fall, Spring, and Summer

Semester Hours: 2

Students complete all three stages of the private pilot flight syllabus. This course includes dual and solo flight and covers pre-flight preparation, aircraft operation procedures, proper aircraft flight control, air and ground safety, flight maneuvers, air traffic control procedures and communication, and VFR navigation. This course prepares students for the FAA private pilot oral and flight examinations. The FAA private pilot certificate must be completed to fulfill course requirements. This course must be completed within one year of completing AVS 101.

Corequisite: AVS 101

### AVS 170

#### Flight Training Observation Lab

Semester: Fall and Spring Semester Hours: 1

This course is for students majoring in aviation management. The course provides students with guided observation of private, instrument, commercial, multi-engine, and crew resource management flight training. It is designed to increase the student's understanding of factors basic to flight operations, aviation meteorology, air traffic control, flight navigation, and the development of a professional pilot.

Prerequisite: AVS 101

#### AVS 200

## **Intercollegiate Flight Team Competition**

Semester: Fall and Spring

Semester Hours: 1

Students train for and participate in intercollegiate flight competition as a member of the Rocky Mountain College Flight Team. An additional fee is required during semesters in which the team participates in competition.

### **AVS 201**

## **Instrument Rating Ground School**

Semester: Fall, Spring, and Summer

Semester Hours: 4

This course prepares students for the FAA instrument rating knowledge examination, providing an in-depth study of flight instruments, physiology of flight, aviation weather reports and forecasting, radio navigation, instrument departure, en route and arrival procedures, flight planning, and emergency procedures. Students may take AVS 201 or AVS 224, but not both

Prerequisite: AVS 101, AVS 153; or permission of the director of aviation

Corequisite: AVS 253

## **AVS 202**

#### Commercial Pilot Ground School

Semester: Fall and Spring

Semester Hours: 3

This course prepares students for the FAA commercial pilot knowledge examination, covering meteorology, airspace, pilotage, aviation physiology, advanced aerodynamics, commercial flight maneuvers, aircraft stability and performance, flight in complex aircraft, flight management and emergency procedures, and regulations related to commercial flight operations.

Prerequisite: AVS 201, AVS 253, or permission of the director of aviation

Corequisite: AVS 272

#### **AVS 203**

#### **Introduction to Air Traffic Control**

Semester: Fall Semester Hours: 3

This course provides a detailed study of the science of air traffic control for professional pilots and aviation managers. Topics include the national airspace system, air traffic control, navigation aids, communications and operations procedures, airport traffic control, radar operations, and ATC facility management.

Prerequisite: AVS 101

#### **AVS 224**

#### **Introduction to Instruments for Dispatchers**

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course prepares students with the background in instrument flight and in-flight publications necessary to prepare for the aircraft dispatcher practical test. The course includes study of flight instruments, aviation weather reports and forecasting, instrument departure, en route and arrival procedures, and flight planning. Students may take AVS 201 or AVS 224, but not both.

Prerequisite: AVS 101

#### **AVS 231**

## **Aviation History**

Semester: Spring Semester Hours: 3

This course outlines the evolution of aviation from early glider and balloon flights to modern jets and the space age. The course examines the multiple ways that technology and warfare have advanced aviation. Topics of study include specific flights, significant aviators, and particular aircraft that have improved general, commercial, and military aviation. The course discusses current developments and future trends in aviation.

## **AVS 243**

#### **Aviation Winter Survival**

Semester: Spring Semester Hours: 1

This course consists of a trip to another town in Montana for training over a weekend in January. The course includes classroom and field work on how to survive in winter conditions. Training includes staying in the field overnight for one night. There is a small fee, plus cost of travel and one night of lodging. Registration with the Montana Aeronautics Division, which is the sponsor, must be completed by December 1st. Pass/no pass grading.

Prerequisite: AVS 101

#### AVS 244

## **Instrument Flight Training, Helicopter**

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course provides flight and ground instruction to prepare a commercial, multi-engine fixed wing pilot to take the FAA practical test to add on

an instrument rating for helicopters. The FAA instrument pilot practical test for helicopters must be completed to fulfill course requirements.

Prerequisite: AVS 376

#### **AVS 245**

## **Commercial Flight Training, Helicopter**

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course provides flight and ground instruction to prepare a commercial, multi-engine fixed wing pilot to take the FAA practical test to add on a commercial rating for helicopters. The FAA commercial pilot practical test for helicopters must be completed to fulfill course requirements.

Prerequisite: AVS 376

#### **AVS 253**

## **Instrument Rating Flight Lab**

Semester: Fall, Spring, and Summer

Semester Hours: 2

Students complete all three stages of the instrument pilot flight syllabus, which includes instrument departure and en route and approach procedures in both the airplane and flight training device (simulator). This course prepares students for the FAA instrument rating oral and flight examinations. FAA instrument rating must be completed to fulfill course requirements. This course must be completed within one year of completing AVS 201.

Prerequisite: AVS 101 and AVS 153 or private pilot certificate

Corequisite: AVS 201

#### AVS 254

# **Unmanned Aerial Systems Lab - Basic**

Semester: Fall and Spring

Semester Hours: 1

This course provides training in the safe and effective control of basic Unmanned Aerial Systems (UAS). Students will utilize manual control units within a UAS simulator to fly a variety of UAS scenarios. They may also fly actual UAS (both vertical lift and fixed wing) via handheld transmitters in a nearby controlled environment with a safety observer.

Prerequisite: AVS 118 or instructor approval

#### **AVS 272**

### Commercial Pilot Flight Lab I

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course provides flight instruction covering commercial navigation, cross-country flights, and night-flying procedures, allowing students to complete stage one of the flight syllabus.

Prerequisite: AVS 253 Corequisite: AVS 202

#### AVS 273

#### Commercial Pilot Flight Lab II

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course provides flight instruction covering commercial flight maneuvers, allowing students to complete stage two of the flight syllabus.

Prerequisite: AVS 272

### **AVS 274**

# Commercial Pilot Flight Lab III

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course provides flight instruction providing a continuation of commercial flight maneuvers and complex aircraft flight procedures. Students complete stage three of the flight syllabus and become prepared for the FAA commercial pilot oral and flight examinations. The FAA commercial pilot certificate must be completed to fulfill course requirements. This course must be completed within one year of completing AVS 202.

Prerequisite: AVS 273

#### **AVS 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a strong student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **AVS 301**

## **Certified Flight Instructor Ground School**

Semester: Fall and Spring

Semester Hours: 3

This is a two-part course that prepares students for the FAA Fundamentals of Instruction and Flight Instructor Knowledge Examinations. Part one covers fundamentals of teaching and learning, including effective teaching methods, aerodynamics analysis, instructional syllabus development, and flight instructor responsibilities. Part two addresses the analysis of flight maneuvers involved in the private, commercial, and flight instructor certificates.

Prerequisite: AVS 202 and AVS 274; or permission of the director of avia-

#### **AVS 306**

## **Multi-Engine Rating Ground School**

Semester: Fall and Spring

Semester Hours: 1

This course covers the operation of multi-engine airplanes including performance, normal and emergency operating procedures, electrical and hydraulic systems, and other installed equipment commonly found on multi-engine airplanes.

Prerequisite: AVS 202, AVS 274, or permission of the director of aviation

Corequisite: AVS 376

#### **AVS 307**

#### **FBO and General Aviation Operations**

Semester: Fall

Semester Hours: 3

This course examines the factors involved in running a successful fixed base operation (FBO) and operating a general aviation business. The course includes the certification process, management operations, and marketing strategies. The course also studies the evolving role of FBOs, from their pilot-oriented roots to their business-oriented future.

#### **AVS 308**

## **Aviation Safety**

Semester: Spring Semester Hours: 3

This course provides a forum for understanding the safe operation of aircraft. The focus is on human factors in the aviation safety environment. Topics of study include aircraft technology, human physiology, psychology, air traffic control, navigational facilities, weather, accident investigation, and crew resource management.

Prerequisite: sophomore standing, junior standing preferred

#### **AVS 310**

#### **Airport Planning and Administration**

Semester: Spring

Semester Hours: 3

This course provides a forum for understanding the elements of proper airport planning and the importance of achieving a successful airport operation. The course studies the duties and responsibilities of an airport manager at a large airport, as well as departments such as crash/fire/rescue, facilities, administration, and maintenance. The course also covers the criteria for blending the airport into federal and state plans and for achieving FAA approval.

Prerequisite: sophomore standing, junior standing preferred

#### **AVS 312**

#### **Aviation Law**

Semester: Fall Semester Hours: 3

This course provides a forum for understanding the statutes, regulations, and case law governing aviation. Topics of study include administrative law, FAA enforcement, aviation medical issues, business organizations, airline liability, aircraft accidents, aircraft transactions, and airline labor law

Prerequisite: sophomore standing

#### **AVS 317**

#### **Aircraft Power Plants**

Semester: Fall Semester Hours: 3

An in-depth study of reciprocating, turbine, and turbo-prop engines and propeller systems and the engine accessory equipment used on modern aircraft

Prerequisite: AVS 202, PHS 101 or PHS 105 or PHS 201, or permission of professor

#### **AVS 318**

## **Advanced Aircraft Systems**

Semester: Spring Semester Hours: 3

An in-depth study of advanced aircraft systems including fuel, hydraulic,

electrical, engine accessory, and auxiliary systems. Prerequisite: AVS 202 or permission of professor

#### **AVS 325**

#### **Advanced Flight Systems**

Semester: Spring Semester Hours: 3

This course provides an introduction to modern cockpit technology used in air transport aircraft. The course addresses the function and operation of glass cockpit aircraft operating equipment such as satellite-based and inertial navigation systems, auto-pilots, flight management systems, electronic flight information systems, ground proximity warning systems, traffic collision avoidance systems, datalink systems, electronic flight bags, weather radar, enhanced/synthetic vision systems, flight data, cockpit voice recording systems, and emergent technologies.

Prerequisite: AVS 201, AVS 253

#### **AVS 343**

## **Altitude Chamber Training**

Semester: Spring Semester Hours: 1

This course provides classroom instruction and hands-on training on the physiological effects and hazards associated with high altitude flight. The course includes a field trip to participate in training in an altitude chamber. Pass/no pass grading. There is a course fee.

Prerequisite: AVS 101, AVS 153, current medical certificate required

#### AVS 354

## **Unmanned Aerial Systems Lab - Intermediate**

Semester: Fall and Spring

Semester Hours: 2

This course provides training in the safe and effective control of intermediate sized Unmanned Aerial Systems (UAS). Students will utilize manual control devices to fly a variety of UAS scenarios. The course will have at least 15 hours of ground school in addition to 6 hours of UAS flight training. While sitting in a classroom at Rocky Mountain College via computer datalinks, students will fly actual UAS (both vertical lift and fixed wing) located near Kalispell in a controlled environment with a safety observer. Prerequisite: AVS 118, AVS 254, current medical certificate required; or instructor approval

#### **AVS 371**

#### Certified Flight Instructor Flight Lab

Semester: Fall, Spring, and Summer

Semester Hours: 2

This course provides flight instruction, preparing students for the FAA flight instructor oral and flight examinations. The course includes dual flights covering all maneuvers necessary to instruct students for the private and commercial pilot certificates. The FAA flight instructor certificate must be completed to fulfill course requirements.

Prerequisite: AVS 274 Corequisite: AVS 301

#### AVS 372

#### **Instrument Flight Instructor**

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course provides ground and flight instruction, preparing students for the FAA instrument flight instructor written, oral, and flight examinations. The FAA instrument instructor rating must be completed to fulfill course requirements.

Prerequisite: AVS 371

#### **AVS 373**

#### **Multi-Engine Flight Instructor**

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course provides ground and flight instruction, preparing students for the FAA multi-engine flight instructor rating oral and flight examinations. The FAA multi-engine instructor rating must be completed to fulfill course requirements.

Prerequisite: AVS 371

## **AVS 376**

## Multi-Engine Rating Flight Lab

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course provides flight instruction, preparing students for the FAA multi-engine rating oral and flight examinations. Areas covered include emergency procedures, single-engine operations, and control of the aircraft by sole reference to flight instruments. The FAA multi-engine rating must be completed to fulfill course requirements. This course must be completed within one year of completing AVS 306.

Prerequisite: AVS 274 Corequisite: AVS 306

## AVS 400

## **Aviation Professional Development**

Semester: Fall and Spring

Semester Hours: 1

This culminating course focuses on professional issues and integrates all facets of the student's college educational experience. Students explore issues in aviation including professional standards, ethics, and career advancement. Guest lectures will provide perspectives from leaders in the aviation industry. This course prepares the graduate for the transition to a career in aviation and develops job placement skills.

Prerequisite: senior standing

### **AVS 404**

## Crew Resource Management with Lab

Semester: Fall and Spring

Semester Hours: 2

This course provides advanced ground and simulator instruction with an emphasis on the application of aviation and human factors in crew resource management skills. The lab includes Line-Oriented Flight Training (LOFT) sessions in a flight-training device to develop crew resource management skills in a variety of realistic situations encountered by flight crews

Prerequisite: AVS 376 or permission of the director of aviation

#### **AVS 405**

### **Air Transportation Management**

Semester: Fall Semester Hours: 3

This course provides a comprehensive experience for the aviation student by examining the air transportation industry. Areas of concentration include airline operation, maintenance, marketing, and economic factors affecting the industry. The class uses a simulation program where students create an airline and then compete with other students.

Prerequisite: junior or senior standing

#### **Advanced Aerodynamics and Aircraft Performance**

Semester: Spring, Alternate years

Semester Hours: 3

This course covers advanced theories of flight and performance factors including airfoil shape; theories of lift and drag; velocity; power and thrust; stability and control; high speed aerodynamics; Mach effects; advanced principles of performance, capabilities, and limitations; performance design criteria; and load factors.

Prerequisite: PHS 101 or PHS 105; AVS 202 and MAT 131; AVS 274 is

preferred

#### **AVS 419**

## **Air Carrier Operations**

Semester: Fall Semester Hours: 3

This course focuses on a study of transport category, flight planning, airport analysis, advanced weather analysis, and economic and safety issues related to transport category aircraft operations, including HMR 175 and FAR Part 135 and 121 regulatory requirements. This course provides the knowledge required to qualify for the FAA airline transport pilot and aircraft dispatcher knowledge examinations.

Prerequisite: AVS 202

### **AVS 443**

## **Airline Dispatcher Certification**

Semester: Spring Semester Hours: 2

This course is a culminating study of airline operations, preparing students for the FAA dispatcher certification knowledge and practical examinations. Students must be 21 years-of-age by the middle of the semester that the course is taken to meet FAA examination requirements.

Prerequisite: AVS 150, AVS 201 or AVS 224, AVS 203, AVS 318, and AVS 419

**AVS 447** 

## **Boeing 737 Aircraft Systems**

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course is an in-depth study of the systems of the Boeing 737 aircraft, including hydraulics, avionics, electrics, air conditioning, and flight controls. Students work with computer-based training software as used by numerous airlines. This independent study course is conducted and tested much like initial 737 ground training at an airline.

Prerequisite: AVS 202 Corequisite: AVS 318

## **AVS 449**

### **Regional Jet Aircraft Systems**

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course is an in-depth study of the systems of the Canadair Regional Jet (CRJ) aircraft, including hydraulics, avionics, electrics, air conditioning, flight controls, etc. Students work with computer-based training software as used by numerous airlines. This independent study course is conducted and tested much like initial CRJ ground training at an airline.

Prerequisite: AVS 202

Corequisite: AVS 318

# **AVS 450**

Internship

Semester: Fall, Spring, and Summer

Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required.

Prerequisite: junior or senior standing and permission of the director of aviation

#### **AVS 499**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a strong student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

#### **BSA 101**

## **Introduction to Business**

Semester: Fall and Spring

Semester Hours: 3

A beginning business course designed to introduce students to the areas of business study, including historical foundations of America's free enterprise system, ethics and social responsibility in the business setting, entrepreneurship, the legal structures of business, marketing, and general management.

#### **BSA 303**

#### **Principles of Management**

Semester: Fall and Spring

Semester Hours: 3

Students examine the management functions and basic concepts and principles of management, including planning, organization, coordination, control, job design, and human resource management. Topics in human resource management include recruitment, selection, administration of personnel policies, and dismissals. This course is often required as a prerequisite for master's-level business programs.

Prerequisite: ACC 210, ECO 205

### **BSA 304**

#### **Principles of Marketing**

Semester: Fall and Spring

Semester Hours: 3

This course studies the marketing process from product development through consumer purchase. The course includes examination of consumer buying behavior, marketing channels, physical distribution, pricing policies, and promotion along with their role in the marketing process.

Prerequisite: BSA 101, ECO 205

#### **BSA 311**

#### **Principles of Finance**

Semester: Fall

Semester Hours: 3

Students are introduced to the principles of business finance. Topics covered include financial analysis and planning, working capital management, the time value of money, and capital budgeting.

Prerequisite: ACC 210, ECO 205

#### ECO 205

#### **Principles of Economics**

Semester: Fall and Spring

Semester Hours: 3

This course will introduce the principles of firm-level decision making, consumer choices and their rationale, differing forms of industry competition, and how market-clearing prices and quantities are determined in a market environment. Additionally, the students will gain an understanding of how the major participants in the economy interact and what drives economic growth, interest rates, and inflation. The possible impacts of a variety of fiscal and monetary policy choices will be presented to assist the student in understanding how those policies will impact incomes, employment, and trade for a country. At the completion of the course, the student should have a basic understanding of both the microeconomic and macroeconomic environments and their impacts on businesses and the general population.

#### **ESC 321**

#### **Introduction to Geographic Information Systems**

Semester: On Demand Semester Hours: 4

This course introduces students to the theory and practical application of geographic information systems (GIS). Topics include fundamentals of cartography, GIS data types, data input, GIS database structure and management, analysis of spatially distributed data, and report preparations using GIS.

Prerequisite: MAT 100 and a previous science course

#### **ESC 322**

#### **Remote Sensing**

Semester: Spring Semester Hours: 4

This course is designed to introduce the principles of remote sensing to students who are new to the field but who have experience with GIS (particularly with ArcMap). The focus is on hands on application of remote sensing data and workflows to natural resource management, earth science, and environmental systems monitoring.

Prerequisite: ESC 321 or instructor approval

#### **MAT 131**

## **Trigonometry and Applied Calculus**

Semester: Spring Semester Hours: 3

This course is available to aeronautical science majors and aviation management majors only. This course introduces applied trigonometry, vectors, and basic differential and integral calculus to model and solve real-world problems.

Prerequisite: MAT 100 or satisfactory score on a placement exam

#### MAT 210

## **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

## **PHS 101**

### Fundamental Physics I

Semester: Fall, Alternate years

Semester Hours: 4

Students examine a survey of the laws and phenomena of classical physics, including motion, force, energy, momentum, waves, and thermodynamics. This course is suitable for non-science majors who have a strong background in high school algebra and who wish to have a more rigorous understanding of physics than provided in most courses for non-science majors. The course will satisfy the requirements of geology and biology

majors. Students considering graduate work in these areas should take PHS 201 and PHS 202 instead. Three lecture periods and one two-hour laboratory per week.

#### **PHS 105**

## **Principles of Physics**

Semester: On Demand

Semester Hours: 4

A survey of the laws and phenomena of classical physics, including motion, force, energy, momentum, waves, thermodynamics, and their application to aviation topics such as weight and balance, aerodynamics, aircraft maneuvering, g forces, braking, acceleration, and propellors. This course is algebra-based and is intended for aviation majors. Other admitted with permission of instructor when space allows. Course includes a laboratory.

Prerequisite: proficiency in high school algebra and trigonometry or MAT 110 or MAT 131

#### **PHS 201**

## General Physics I

Semester: Fall Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including force and motion, energy and momentum, their conservation laws, and their oscillations. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Corequisite: MAT 175

#### **PSY 101**

## General Psychology

Semester: Fall and Spring

Semester Hours: 3

A survey of the field of psychology investigating such topics as learning, motivation, human development, personality, social psychology, and physiological psychology. In order to make inquiry into any academic discipline, the student must first learn the language and methodology of that discipline; the field of psychology is no exception. Therefore, this course will include the study of major psychological theories, terminology, and investigative methods, as well as limited opportunity to apply those methods.

#### **Biology**

Daniel Albrecht, Professor Cristi Hunnes, Professor Mark Osterlund, Associate Professor Kayhan Ostovar, Associate Professor Holly Basta, Assistant Professor

The biology program studies the breadth of life, from cellular mechanisms to ecosystem processes. Students are encouraged to view biological concepts from historical, political, and ethical perspectives as they integrate new ideas and concepts with older ones. The faculty stress the process of science and the ability to analyze the surrounding world by generating hypotheses, testing hypotheses, analyzing data, and drawing conclusions. Students develop oral and written communication skills through active participation in lecture/discussions and collaborative projects both in the classroom and in laboratory/field settings.

Biology students at Rocky Mountain College get a broad exposure to the three main areas of biology: cell and molecular biology, anatomy and physiology, and evolution and ecology. Our goal is that graduates, no matter what career path they may choose, will have a solid understanding of the cellular and molecular basis of life, the design and function of individual organisms, and the ecological interactions between organisms. Furthermore, we emphasize research skills, experimental design, and data

analysis throughout all courses. The program provides biology majors with a broad foundation, which prepares them for professional schools, the workplace, or graduate school.

## **Learning Outcomes**

Students who graduate with a major in biology will be able to:

- 1. Describe the integration between biological processes;
- 2. Conduct experiments;
- 3. Analyze data and communicate appropriate conclusions.

#### Major in Biology

A minimum of 29 semester hours of biology courses is required, including:

Biology core:

BIO 120: Principles of Biology

BIO 203: Genetics BIO 306: Evolution

One course from each of the following three categories:

Cell and Molecular Biology: BIO 312: Cell Biology

BIO 344/345: Molecular Genetics

BIO 350: Microbiology

BIO/CHM 452: Biochemistry I

BIO/CHM 460: Biochemistry II

Ecology and Behavior: BIO 311: Botany

BIO 347: Animal Behavior

BIO 410: Conservation Biology

BIO 415: Ecology

Structure and Function:

BIO 305: Vertebrate Anatomy

BIO 317: Ornithology

BIO 321: Human Anatomy and Physiology I BIO 322: Human Anatomy and Physiology II

BIO 324: Developmental Biology

Students must have a capstone course and may choose from the following:

BIO 415: Ecology

BIO/CHM 452: Biochemistry

(This capstone choice may be included as one of the categories above.)

In addition:

CHM 101: General Chemistry I CHM 102: General Chemistry II

Choose:

CHM 220: Fundamental Organic Chemistry

CHM 251/252: Organic Chemistry I / II

Choose:

PHS101/102: Fundamental Physics I / II

PHS201/202: General Physics I / II

Only three credits of the following electives count toward the 29 semester hours required in the major:

BIO 143: Introduction to Research I BIO 243: Introduction to Research II BIO 343: Introduction to Research III BIO 443: Advanced Biology Research

Internship: BIO 450 credits do not count toward the 29 semester hour minimum

### **Major in Biology Education**

Students must complete the above biology major and the required secondary education courses along with BIO 420.

#### Major in Science Broadfield Education Biology

This major serves those who desire to teach the several sciences necessary in American schools. In addition to the science courses listed below, students must complete the professional education program for secondary teaching as described in the "Education" section of the catalog. The following courses are required:

Biology: A total of 19 semester hours in biology, including:

BIO 120: Principles of Biology

BIO 203: Genetics BIO 306: Evolution

Choose any two of the following:

BIO 321: Human Anatomy and Physiology I

BIO 350: Microbiology BIO 415: Ecology

Mathematics:

MAT 175: Calculus I

MAT 210: Probability and Statistics

Chemistry:

CHM 101: General Chemistry I CHM 102: General Chemistry II

Choose any one of the following:

CHM 220: Fundamental Organic Chemistry

CHM 251: Organic Chemistry I

Physics:

PHS 101: Fundamental Physics I PHS 102: Fundamental Physics II PHS 225: Modern Physics

Geology:

GEO 101: Fundamentals of Geology

GEO 104: Fundamentals of Geology Laboratory

Environmental Science:

ESC 105: Environmental Science: Sustainable Communities

IDS 422: Methods and Materials: Teaching Natural Science in the Secondary School

Minor in Biology

A minimum of 20 semester hours in biology (six credits of upper-division courses), plus one course in chemistry with a laboratory component is required.

## Minor in Biology Education

For students pursuing a biology education minor, the following courses must be taken in addition to coursework required in the secondary education program.

A minimum of 23 semester hours is required, including:

BIO 120: Principles of Biology

BIO 203: Genetics BIO 306: Evolution

BIO 321: Human Anatomy and Physiology I

BIO 415: Ecology

Choose one of the following:

BIO 311: Botany

BIO 317: Ornithology BIO 350: Microbiology

Additionally, one chemistry course with a laboratory component is required.

Note: The following courses are eligible for biology credit:

ESC 307: Montana Wildflowers ESC 314: Range Ecology

ESC 325: Wetlands and Riparian Ecology

EQS 300 will be accepted as a biology elective for students who have successfully completed BIO 120, CHM 101, and CHM 102. Note: EQS 300 and EQS 400 are highly recommended for students pursuing veterinary school or graduate programs in animal science.

## **Biology courses**

#### **BIO 102**

#### **Introduction to Biology**

Semester: On Demand Semester Hours: 4

This course is a broad survey of biology approaching different levels of biological organization from the perspective of the organism in the environment. Specific topics include genetics, evolution, ecology, metabolism, and the cell. The laboratory emphasizes the process of scientific investigation, including the design, conduct, analysis, and presentation of biological experiments. This course is appropriate for non-biology majors and does not count toward a major or minor in biology.

#### **BIO 105**

#### **Current Biology**

Semester: On Demand Semester Hours: 3

This course for non-majors will explore concepts that are both rooted in biology and important in our everyday lives. One such example is the stem cell: what exactly are stem cells, and why are they important tools for biology and medicine? In this course we will examine a broad range of topics including stem cells, genetically modified organisms, evolution, cancer, and the practice of science itself. These subjects will be addressed in a traditional classroom setting, but assignments will demand that students apply the course material to current happenings in our society. Points will be earned by completing quizzes, response papers, and projects. This course has no laboratory component and does not count toward a major or minor in biology.

#### **BIO 120**

## **Principles of Biology**

Semester: Fall and Spring

Semester Hours: 4

An introductory survey course that covers cell structure and metabolism, patterns of inheritance, molecular genetics, evolutionary mechanisms, and diversity. The weekly laboratory sessions teach basic laboratory skills, experimental design, application of statistics, and communication of results via laboratory reports. This course is appropriate for both major and nonmajors. Three hours of lecture and one two-hour laboratory period per week.

## **BIO 143**

### **Introduction to Research I**

Semester: Spring Semester Hours: 1

Introduction to Research I is a laboratory-based course that teaches students the fundamentals of biological research. The course is limited to ten freshmen students who must submit an application and be accepted into the course. Those students gain exposure to several of the model organisms that are commonly used in research. They learn techniques for growing, handling, and characterizing those organisms, along with routine

procedures that are universally applicable for molecular biology. Students who complete Introduction to Research I are eligible to enroll in Introduction to Research II. Students must apply for acceptance to the course.

#### **BIO 203**

#### Genetics

Semester: Fall Semester Hours: 4

The course provides a detailed overview of the mechanisms of heredity. Topics include Mendelian, quantitative, and molecular genetics. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 120 and CHM 101

#### **BIO 243**

## **Introduction to Research II**

Semester: Fall Semester Hours: 2

Introduction to Research II is a laboratory- and lecture-based course that meets for three hours once a week. As a continuation of Introduction to Research I, sophomore students learn advanced biological research protocols in a laboratory setting. Protocols include DNA cloning and various forms of DNA and RNA hybridization. Students also participate in a weekly discussion format where they learn to read, analyze, and present scientific journal articles. Students who have completed Introduction to Research I are eligible to enroll in Introduction to Research III. Students completing Introduction to Research III are eligible to enroll in Introduction to Research III.

Prerequisite: BIO 143

#### **BIO 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **BIO 305**

## **General Vertebrate Zoology**

Semester: Fall, Odd years

Semester Hours: 4

This course provides a detailed overview of the species diversity, natural history, and evolution of vertebrates. These concepts are highlighted through comparisons within and between vertebrate groups. Special emphasis is placed on evolutionary relationships to track key innovations in morphology, physiology, and ecology that have contributed to vertebrate diversification. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 306

#### **BIO 306**

# **Evolution**

Semester: Spring Semester Hours: 3

A broad but detailed discussion of the genetic, ontogenetic, and morphologic changes inherent in populations. Topics include population genetics, molecular evolution, natural selection, genetic drift, gene flow, speciation, phylogenetics, and coevolution. Three hours of lecture per week.

Prerequisite: BIO 120

#### **BIO 307**

## **Bacteria and Antibiotic Resistance**

Semester: On Demand Semester Hours: 3

This course will focus on antimicrobial drugs and their use in fighting bacterial infections. Topics will include the history of antibiotics, antibiotic resistance of bacteria, including resistance mechanisms and transfer

of resistance, development of new antibiotics and the drug development pipeline, how antibiotics work, antibiotic stewardship, and use of antibiotics in the animal industry. Bacteria of particular public health concern, such as methicillin-resistant Staphylococcus aureus (MRSA) and Pseudomonas aeruginosa, will be featured.

Prerequisite: BIO 203 and CHM 102, both passed with a grade of C- or

higher

# **BIO 311**

# **Botany**

Semester: Spring, Odd years

Semester Hours: 4

This course provides a detailed exploration of plant anatomy and physiology. Microscope study allows for detailed observation of roots, stems, and leaves and their component tissues. Examination of flowers, fruits, and seeds provides the details of pollination, fertilization, dispersal, and germination. During the laboratory, students explore topics such as plant physiological responses to hormones and nutrients, characteristics and mechanisms of genetic inheritance, and ecological aspects of plant competition. The course emphasizes the relationship between plant form and function.

Prerequisite: BIO 120 and CHM 101

## **BIO 312**

# Cell Biology

Semester: Spring Semester Hours: 3

Cells are the basic units of life, and understanding cells is important for many disciplines within biology. This course examines fundamental cell biology, with emphasis on the mechanisms of molecular biology, cellular trafficking, and cell-to-cell signaling. The semester will culminate with the discussion of complex cellular behaviors such as regulation of the cell cycle, renewal of stem cells, and the progression of cancer. Each of these concepts will be discussed in the context of experimentation and hypothesis-driven research. Three hours of lecture per week.

Prerequisite: BIO 203

### **BIO 317**

#### Ornithology

Semester: Fall, Even years

Semester Hours: 3

This lecture course details the anatomy, physiology, and evolution of birds. Topics include evolutionary origins of birds and flight, development, and an overview of avian anatomy, physiology, and ecology. Three hours of lecture per week.

Prerequisite: BIO 306

#### **BIO 319**

## **Ornithology Lab**

Semester: On Demand Semester Hours: 1

This combined field and laboratory course covers the anatomy, physiology, ecology, evolution, and identification of birds. Topics include evolutionary origins of birds and flight, development, avian anatomy, and bird identification in the field. One two-hour laboratory session per week.

Corequisite: BIO 317

### **BIO 321**

## **Human Anatomy and Physiology I**

Semester: Fall Semester Hours: 4

A course requiring students to incorporate concepts from physics, chemistry, and biology to understand the interface between human structure and function and the regulatory mechanisms in play. Topics include tissue types, skeletal, muscular, nervous, respiratory, and reproductive anatomy and physiology. Three hours of lecture and one two-hour laboratory session per week. Human cadavers are used in the laboratory.

Prerequisite: BIO 120 and CHM 101 and CHM 102. CHM 251 and CHM 252 and PHS 102 or PHS 202 are highly recommended.

#### **RIO 322**

#### **Human Anatomy and Physiology II**

Semester: Spring Semester Hours: 4

In this continuation of BIO 321, topics include digestive, cardiovascular, renal, urinary acid-base balance, endocrine, and immune system anatomy and physiology. Three hours of lecture and one two-hour laboratory session per week. Human cadavers are used in the laboratory.

Prerequisite: BIO 321

## **BIO 324**

## **Developmental Biology**

Semester: Spring, Odd years

Semester Hours: 3

How do many animals develop from a fertilized egg into complex animals, some with trillions of cells? This course examines the development of complex animals from embryo to adult. In this course, students will explore the mechanisms behind how an embryo establishes a body plan, grows new structures, and determines its sex. The course concludes by considering environmental effects on this process, as well as its implications for medicine and evolutionary biology. Each of these concepts will be discussed in the context of experimentation and hypothesis-driven research.

Prerequisite: BIO 203

#### **BIO 338**

#### **Natural History of Puget Sound**

Semester: Spring, Alternate years

Semester Hours: 2

Natural History of Puget Sound is a two credit course featuring a field trip to the Washington coast in early May. During the spring semester, a series of six lectures introduces students to the basic natural history (ecology, geology, climate, etc.) of the Puget Sound area. During the field portion of the course, students stay on Whidbey Island at the Pacific Rim Institute's field station. Daily classroom and field sessions focus on the variety of coastal habitats (rainforest, estuaries, rocky inter-tidal zone), with an emphasis on the marine conservation issues. The trip includes visits to the Hoh Rainforest, the Olympic Peninsula, and Friday Harbor. The course and its contents are a collaborative effort of Dan Albrecht and on-site instructors from the Pacific Rim Institute.

Prerequisite: BIO 306

### **BIO 343**

#### **Introduction to Research III**

Semester: Spring Semester Hours: 2

Introduction to Research III is a laboratory- and lecture-based course that prepares students for independent upper-division research. By working with individual faculty members, each student will develop an independent research project. Using techniques learned in Introduction to Research I and II, students will perform preliminary research associated with their projects, and they will learn to write and present formal research proposals for those projects. Students enrolled in Introduction to Research III will also act as mentors to students enrolled in Introduction to Research I. Students must complete Introduction to Research I and II to be eligible to enroll in Introduction to Research III.

Prerequisite: BIO 243

#### **BIO 344**

## **Molecular Genetics**

Semester: Fall Semester Hours: 3

Students will study the molecular mechanisms that compose the central dogma of molecular biology. Special attention will be given to genomic structure, DNA replication, transcription, RNA processing, translation,

and post-translational modification. Basic techniques in molecular biology will be discussed, and these techniques will be practiced during BIO 345, which is a co-requisite course. Three hours of lecture per week. (Note: Students who have completed BIO 143 and who are enrolled in BIO 243 are approximately as a BIO 245 behavior as a supervisor.)

BIO 243 are exempt from the BIO 345 laboratory course.)

Prerequisite: BIO 120 Corequisite: BIO 345

#### **BIO 345**

## **Molecular Genetics Laboratory**

Semester: Fall Semester Hours: 1

This course includes a hands-on, laboratory-based introduction to basic molecular biology techniques, with special emphasis on cloning and manipulation of DNA. Techniques include electrophoresis, restriction digestion, polymerase chain reaction (PCR), logation, transformation, DNA extraction, and Southern blotting. Students who have completed BIO 143 and who are enrolled in BIO 243 are exempt from this course. Two hours of laboratory per week.

Prerequisite: BIO 120 Corequisite: BIO 344

#### **BIO 347**

#### **Animal Behavior**

Semester: Spring, Even years

Semester Hours: 3

This course provides a broad overview of the development, expression, and control of behavior. This course provides a foundation for understanding animal ecology, revealing evolutionary relationships, and managing fish and wildlife populations. Topics include communication, predation, foraging, mating, parental care, and sociality.

Prerequisite: BIO 306

#### **BIO 349**

#### **Animal Behavior Lab**

Semester: On Demand Semester Hours: 1

This course provides a broad overview of the development, expression, and control of behavior. This course provides a foundation for understanding animal ecology, revealing evolutionary relationships, and managing fish and wildlife populations. Topics include communication, predation, foraging, mating, parental care, and sociality. One two-hour laboratory session per week.

Corequisite: BIO 347

#### BIO 350 Microbiology

Semester: Fall Semester Hours: 4

This course is an investigation of the structure, metabolism, and reproduction of microorganisms. The course will emphasize understanding microbiology as it pertains to human health, including normal flora, disease mechanisms, immunology and immunity, and a sampling of major microbial diseases. In the laboratory, students will detect, isolate, and identify both harmless and pathogenic microbes.

Prerequisite: BIO 203 and CHM 102, both passed with a grade of C- or higher

## **BIO 354**

# Virology

Semester: Fall Semester Hours: 3

Why are some viruses harmless while others are deadly? This course focuses on viral diseases: how and why viruses cause disease and how they evade the immune system. From this course students will gain an appreciation for the diversity of viral replication strategies, their accelerated evolution, and the arms race between viruses and the host immune system. We will discuss vaccines, including how they work and why we don't

have them for all viruses. This course will cover primary scientific data and cutting-edge research methodologies.

Prerequisite: BIO 120 and BIO 203

#### **BIO 410**

## **Conservation Biology**

Semester: Spring, Odd years Semester Hours: 2-3

Students experience a multi-disciplinary approach to conservation encompassing genetics to ethics. Discussions emphasize biological diversity, extinction probability theory, reserve design, management, and reintroduction strategies. Written and oral presentations are required.

Prerequisite: BIO 306

# BIO 415

# **Ecology**

Semester: Fall Semester Hours: 5

Students are provided with an overview of the interactions among biotic and abiotic environments. Topics include climate and vegetation, resource acquisition and allocation, demography, population growth and regulation, sociality, competition, niche theory, predation, and community and ecosystem ecology. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 306

#### **BIO 420**

#### Methods and Materials of Teaching Secondary Science

Semester: On Demand Semester Hours: 2

This course requires focused study with a science teacher in an accredited secondary school or other acceptable professional. Hours will be arranged in consultation with the content area professor, the secondary education professor, the student, and the professional mentor. The course provides competence for the delivery and evaluation of planned learning activities. Areas of concentration include active hands-on experiences, reviewing texts for content appropriate to various grade levels, and the use of technology in the classroom.

Prerequisite: acceptance into the teacher education program; senior standing required

#### BIO 443

## **Advanced Biology Research**

Semester: Fall and Spring Semester Hours: 1-3

In this course, students work with a research advisor on an independent research project. Enrollment is based upon instructor consent and requires each participant to have arranged a working agreement with a research advisor. Included in the course is a weekly forum for students to present and discuss their research projects. All enrolled students are required to give presentations highlighting their research. Through those presentations, participants in the class will be exposed to the diverse research initiatives at Rocky Mountain College. This course is offered every semester and can be taken up to four times.

Prerequisite: BIO 343 or consent of instructor

#### BIO 450 Internship

Semester: On Demand Semester Hours: 1-12

An internship is arranged between a member of the discipline's faculty and the student. The internship will not count as part of the minimum number of required credits to the major or minor. A contract is required. If an internship is two or more credits, the student will typically be required to write a paper. The contract will specify the minimum length of the paper and the required scholarly sources. Pass/no pass grading.

Prerequisite: junior or senior standing

#### **BIO 452**

#### Biochemistry I

Semester: Spring Semester Hours: 5

Biochemistry focuses on the study of the molecules and chemical reactions of life, bringing together principles learned in biology and chemistry. After an introduction to the chemistry and structure of carbohydrates, lipids, and proteins, discussions of enzyme structure and kinetics set the stage for a detailed exploration of metabolism and its regulation. The laboratory component of this course involves a semester-long integrated project that requires independent student work. This project incorporates many different types of instrumentation, including low pressure chromatography, electrophoresis, UV-visible spectroscopy, electrochemistry, and ultrafiltration. Three lecture hours plus one laboratory lecture hour per week. Significant time working independently in the laboratory is required. Prerequisite: CHM 220 or CHM 252 with a grade of C- or higher; BIO 120 is strongly recommended. Junior or senior standing is required.

#### **BIO 460**

#### **Biochemistry II**

Semester: Spring, Odd years

Semester Hours: 3

An introduction to the chemistry and structure of nucleotides and nucleic acids is followed by a detailed study of DNA replication and repair, RNA transcription and processing, protein synthesis, and the regulation of these processes. Bioethics, an important and interesting topic, is covered as an extension to the scientific content. This course covers topics in more depth and with a different emphasis than genetics.

Prerequisite: CHM 220 or CHM 252 with a grade of C- or higher and junior or senior status required. BIO 120 and BIO/CHM 452 recommended.

### **BIO 483**

#### Dissection

Semester: Summer Semester Hours: 2-3

Students begin to learn how to dissect a human cadaver. Each student chooses or is assigned to a region. By permission of the instructor only. Prerequisite: BIO 322

#### **BIO 490**

### Seminar

Semester: Spring Semester Hours: 1

Selected topics in biology are explored.

### **BIO 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

# CHM 101

#### General Chemistry I

Semester: Fall

Semester Hours: 4

This course introduces students to the science of chemistry. The concepts of atoms, molecules, bonding, and energy successfully explain the properties of matter and how reactions happen. Goals of this course include introducing students to representative materials and reactions, to important models and theories of the science, and to the symbols and language of chemists. The laboratory will involve observations of elements, compounds and their reactions (including synthesis), and quantitative measurements of properties or amounts of matter. Three hours of lecture, one two-hour laboratory session, and one hour of recitation per week.

Corequisite: MAT 100 or placement into higher mathematics course

## CHM 102

## General Chemistry II

Semester: Spring Semester Hours: 4

This course will further develop the principles presented in CHM 101 with emphasis on the following core concepts: chemical kinetics, chemical equilibria, solution and acidbase chemistry, thermodynamics of reactions, and electrochemistry. Examples used in this course will point to the various branches of chemical studies (organic, physical, biological, inorganic, analytical, geological, materials, and nuclear). The knowledge and skills gained over the two semesters will be applied to the analysis of a contemporary topic or issue in chemistry. The laboratory experiments are designed to explore chemical principles and to expose students to more advanced chemical instrumentation in the department. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: CHM 101 with a grade of C- or higher

#### **CHM 220**

## **Fundamental Organic Chemistry**

Semester: Fall Semester Hours: 4

This course is a one-semester introduction to carbon-containing compounds, including their structure, bonding, properties, and reactivity. The different functional groups are introduced, including the key reactions and mechanisms of these groups. This course is designed to serve as a prerequisite for biochemistry. Four lecture hours per week. This course will not count as an elective for the chemistry major or minor.

Prerequisite: CHM 102 with a grade of C- or higher

#### **CHM 251**

## Organic Chemistry I

Semester: Fall

Semester Hours: 4

An introduction to the chemistry of carbon-containing compounds, concentrating on the structures, properties, and reactions of some of the important families of organic compounds. Considerable emphasis is placed on reaction mechanisms and stereochemistry. The laboratory experiments introduce techniques for the isolation and preparation of compounds. Three hours of lecture and one three-hour laboratory session per week.

Prerequisite: CHM 102 with a grade of C- or higher

#### **CHM 252**

# Organic Chemistry II

Semester: Spring Semester Hours: 4

This course, a continuation of Organic Chemistry I, concentrates on the chemistry of additional important families of organic compounds, emphasizing reaction mechanisms, synthesis, stereochemistry, and spectroscopy. The laboratory experiments include the synthesis and analysis of compounds with biological and industrial importance and qualitative analysis. Prerequisite: CHM 251 with a grade of C- or higher. CHM 220 will not be accepted as a prerequisite for this course.

#### **EQS 300**

# Reproduction and Growth

Semester: Spring Semester Hours: 3

This course covers the anatomy and physiology of reproduction in the horse, endocrinology, principles of artificial insemination, embryo transfer, genetics, breeding systems, application of the scientific method, and care and management of breeding stock. This course will be accepted as a biology elective, provided students have completed BIO 120, CHM 101, and CHM 102. This course is highly recommended for students pursuing veterinary school or graduate studies in animal science.

Prerequisite: EQS 201

#### **EQS 400**

## **Advanced Reproduction**

Semester: On Demand Semester Hours: 3

The student focuses on common breeding problems such as organizing and operating a routine teasing program, natural breeding, artificial insemination, and improving conception rates. Students engage in practical application in this course. Class is limited to six students. This course is highly recommended for students pursuing veterinary school or graduate studies in animal science.

Prerequisite: EQS 300

#### **ESC 105**

#### **Environmental Science: Sustainable Communities**

Semester: Fall and Spring Semester Hours: 4

An introductory course designed for students entering the environmental sciences and studies program and for other students who would like to take an ecology lab course. Topics address the central concepts of ecology, including the physical environment in which life exists. Students will explore the properties and processes of populations and communities, ecosystem dynamics, biogeography and biodiversity, as well as issues in conservation and restoration ecology. In the laboratory, students will apply these concepts to ecological studies in the natural environment and learn how to present their results in a scientific report. Three hours of lecture and one two-hour laboratory session per week.

#### **ESC 307**

#### Montana Wildflowers

Semester: Summer Semester Hours: 4

Students receive an intensive introduction to the evolutionary relationships of vascular plants and their classification. The course emphasizes plant identification based on use of taxonomic keys and focuses on angiosperm species in the Yellowstone River watershed, particularly the prairie habitats, the Pryor Mountains, the riparian habitats of the Yellowstone, and the foothills of the Beartooth Mountains. Field trips are required. Students in the 300-level course will collect, identify, and prepare a greater number of plants for the herbarium. This course may be taken at the lower-division level or at the upper-division level, but not both.

Prerequisite: BIO 120 or ESC 105

### **ESC 314**

## Range Ecology

Semester: Fall, Alternate years

Semester Hours: 4

Range ecology is the study of mixed grass prairies of the West and an introduction to ecological concepts applicable to that area. Topics include historical and current land use, ecosystem responses to change, methods for maintaining natural prairie habitats, the use of prairies as rangelands, and determinations of ecological conditions and trends on rangelands. The laboratory focuses on identification of common prairie plant species and their importance for both wildlife and domestic animals. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 120, CHM 101, and CHM 102

#### **ESC 325**

### Wetlands and Riparian Ecology

Semester: Fall, Alternate years

Semester Hours: 4

The biology and chemistry of wetlands is studied in this course. Topics include the investigation of wetland structure, wetland functions, and the ecological value of wetlands. The laboratory introduces protocols for analyzing wetland plant communities and includes a field study of a wetland in the Billings community. Students learn legally acceptable methods for determining wetland boundaries. The course examines the ecology of rivers and compares differences in hydrological processes of rivers and

wetlands. Three hours of lecture and one two-hour laboratory session per

Prerequisite: BIO 120, CHM 101, and CHM 102

#### **GEO 101**

## **Fundamentals of Geology**

Semester: Fall and Spring

Semester Hours: 3

This course provides an introduction to the science of earth materials, earth systems, and earth history, including the study of minerals, rocks, volcanoes, earthquakes, rock deformation and metamorphism, weathering, and erosion within the modern paradigm of plate tectonics. Special emphasis is placed on interpreting the geologic landscape and history of the Rocky Mountains through an understanding of Earth processes. Three hours of lecture and one recommended two-hour laboratory per week, plus field trips. This course fulfills a natural lab science core curriculum requirement if taken concurrently with GEO 104.

#### **GEO 104**

#### **Fundamentals of Geology Laboratory**

Semester: Fall and Spring

Semester Hours: 1

Focus on description of the earth materials and earth systems within the framework of plate tectonic theory. Introduction to identification of minerals, rocks, geologic maps, and structures.

Corequisite: GEO 101 or GEO 218

#### **IDS 243**

#### Scientific Writing and Analysis

Semester: Fall and Spring

Semester Hours: 2

Students will write clear and concise scientific papers and reports. Writing assignments will focus on grammatical requirements for formal scientific writing; abstracts; outlines and organization including paper, paragraph, and sentence structure; paraphrasing and citation usage; and methods of data presentation. A portion of the course will be devoted to data analysis, drafting of tables, and preparation of graphs. IDS 243 is required for biology and chemistry majors and minors.

Prerequisite: ENG 120 and declared major or minor in a natural science or permission of instructor

#### IDS 422

# Methods And Materials: Teaching Natural Science In The Secondary School

Semester: Fall Semester Hours: 2

This course emphasizes the teaching of biology or chemistry at the secondary 5-12 level. Methods of teaching these subjects, including incorporation of active hands-on experiences, reviewing texts for content appropriate to various grade levels, and the use of technology in the classroom constitute major parts of the course. Particular attention will be paid to thinking, reading, listening, writing, and speaking instruction. Teaching diverse and at-risk student populations will also be discussed. This course is the capstone course for the biology or chemistry education major.

Corequisite: EDC 420

# MAT 175

# Calculus I

Semester: Fall

Semester Hours: 5

This course is a study of the functions of one real variable and includes a brief review of circular functions. The ideas of limit, continuity, and differentiation are explained and applied to physical problems. Topics include the use of approximations and problem solving. The use of graphing calculators is required.

Prerequisite: satisfactory score on a placement exam or MAT 110

#### **MAT 210**

#### **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

#### **PHS 101**

## **Fundamental Physics I**

Semester: Fall, Alternate years

Semester Hours: 4

Students examine a survey of the laws and phenomena of classical physics, including motion, force, energy, momentum, waves, and thermodynamics. This course is suitable for non-science majors who have a strong background in high school algebra and who wish to have a more rigorous understanding of physics than provided in most courses for non-science majors. The course will satisfy the requirements of geology and biology majors. Students considering graduate work in these areas should take PHS 201 and PHS 202 instead. Three lecture periods and one two-hour laboratory per week.

#### **PHS 102**

#### **Fundamental Physics II**

Semester: Spring, Alternate years

Semester Hours: 4

Students examine a survey of the laws and phenomena of classical and modern physics, including light, electricity, magnetism, and atomic and nuclear physics. This course is suitable for non-science majors who have a strong background in high school algebra and who wish to have a more rigorous understanding of physics than provided in most courses for non-science majors. This course will satisfy the requirements of geology and biology majors. Students considering graduate work in these areas should take PHS 201 and PHS 202 instead. Three lecture periods and one two-hour laboratory per week.

Prerequisite: PHS 101

#### **PHS 201**

#### General Physics I

Semester: Fall Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including force and motion, energy and momentum, their conservation laws, and their oscillations. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Corequisite: MAT 175

## **PHS 202**

#### **General Physics II**

Semester: Spring Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including mechanics, waves, light, electricity, and magnetism. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Prerequisite: PHS 201 Corequisite: MAT 176

#### PHS 225

#### **Modern Physics**

Semester: Fall, Odd years

Semester Hours: 3

This course covers selected concepts from early 20th century physics. Topics covered include special relativity, photoelectric effect, Compton scattering, and the wave nature of particles.

Prerequisite: PHS 202 or permission from the instructor

### **Business Administration**

Anthony R. Piltz, Professor Scott Severance, Professor James Smith, Professor Ann Adair, Associate Professor Karen Beiser, Associate Professor Clete Knaub, Associate Professor Cedric Snelling, Assistant Professor

The objective of the business administration program is to provide graduates with the skills necessary for successful careers in business. To this end, several major concentrations are available, all of which are built on a traditional liberal arts foundation. Students may explore interests in business management and accounting. These concentrations are designed to provide not only a strong business background, but also basic foundational skills. In combination with the liberal arts core, the major provides students with the opportunity to develop communication and teamwork skills. Graduates should also be prepared to be effective problem solvers, ready to face the challenges of an ever-changing business environment.

An important part of the major for many students is the opportunity to apply what they have learned through an internship experience. As a part of the major, students work in organizations and earn credit for the experience. The internship requirement provides students with valuable, realworld, practical experiences that are helpful in finding and performing well in later employment. Another hands-on learning opportunity is available through an investment course in which the students determine how to invest \$100,000 of the Anderson Special Endowment.

# **Learning Outcomes**

#### **Management Concentration**

Students who graduate with a concentration in management will be able to:

- Employ knowledge and skills associated with accounting, economics, marketing, management, and finance to make effective organizational decisions;
- Integrate the above fields in problem analysis and the development of organizational strategy;
- 3. Assess the performance impact of organizational decisions;
- Apply the knowledge, skills, and dispositions derived from the core curriculum to organizational settings.

## **Managerial Accounting Concentration**

Students who graduate with a concentration in managerial accounting will be able to:

- 1. Provide relevant information to support organizational decisions;
- 2. Prepare financial statements and other decision-support documents;
- 3. Employ accounting information systems for both financial reporting and internal decision-making;
- 4. Distinguish among the information needs of internal decision-makers and financial statement users;
- Integrate the fields of accounting, economics, finance, and management in problem analysis and the development of organizational strategy:
- 6. Assess the impact of organizational decisions;

7. Apply the knowledge, skills, and dispositions derived from the core curriculum to organizational settings.

#### **Small Business Management Concentration**

Students who graduate with a concentration in small business management will be able to:

- 1. Employ knowledge and skills associated with accounting, economics, marketing, management, and finance to make effective organizational
- 2. Integrate the above fields in problem analysis and the development of organizational strategy;
- Assess the performance impact of organizational decisions;
- Integrate disciplines to effectively plan, develop strategies, and implement controls that are necessary in the entrepreneurial process;
- 5. Develop business ideas or initiatives and take the necessary steps to bring the idea into fruition;
- 6. Apply the knowledge, skills, and dispositions derived from the core curriculum to organizational settings.

## **Management Concentration**

A minimum of 45 semester hours is required, including:

ACC 210: Foundations of Accounting

ACC 309: Managerial Accounting

BSA 101: Introduction to Business

BSA 303: Principles of Management

BSA 304: Principles of Marketing

BSA 311: Principles of Finance

BSA 401: Production and Operations Management

BSA 421: Strategic Management

BSA 450: Internship

ECO 205: Principles of Economics

ENG 325: Professional Writing

MAT 210: Probability and Statistics

Nine semester hours of upper-division electives in BSA, ACC, ECO, at least three of which must be business, are required.

## **Managerial Accounting Concentration**

A minimum of 45 semester hours is required, including:

ACC 210: Foundations of Accounting

ACC 309: Managerial Accounting

ACC 323: Taxation of Individuals

ACC 351: Financial Reporting I

ACC 352: Financial Reporting II

BSA 101: Introduction to Business

BSA 303: Principles of Management

BSA 304: Principles of Marketing

BSA 311: Principles of Finance

BSA 320: Management Information Systems

BSA 401: Production and Operations Management

BSA 450: Internship

ECO 205: Principles of Economics

ENG 325: Professional Writing

MAT 210: Probability and Statistics

## **Small Business Management Concentration**

A minimum of 45 semester hours is required, including:

ACC 210: Foundations of Accounting

ACC 309: Managerial Accounting

BSA 101: Introduction to Business

BSA 303: Principles of Management

BSA 304: Principles of Marketing

BSA 311: Principles of Finance

BSA 361: Retailing

BSA 401: Production and Operations Management

BSA 418: Entrepreneurship I

BSA 425: Small Business Operations

BSA 450: Internship

ECO 205: Principles of Economics

ENG 325: Professional Writing

MAT 210: Probability and Statistics

One of the following:

ACC 323: Taxation of Individuals

BSA 362: Professional Sales

BSA 419: Entrepreneurship II: The Entrepreneurship Experience

### Minor in Management

A minimum of 18 semester hours is required, including:

ACC 210: Foundations of Accounting

BSA 101: Introduction to Business

BSA 303: Principles of Management

ECO 205: Principles of Economics

MAT 210: Probability and Statistics

Three credits of upper-division BSA or ECO electives are required.

#### Minor in Accounting

A minimum of 18 semester hours is required, including:

ACC 210: Foundations of Accounting

ACC 309: Managerial Accounting

ACC 324: Taxation for Managers

ACC 351: Financial Reporting I

ACC 352: Financial Reporting II

BSA 101: Introduction to Business

#### **Minor in Economics**

A minimum of 18 semester hours is required, including:

ECO 205: Principles of Economics

ECO 345: Intermediate Microeconomics

ECO 346: Intermediate Macroeconomics

Nine credits in ECO electives are required.

#### **Business Administration courses**

### **ACC 210**

# Foundations of Accounting

Semester: Fall and Spring

Semester Hours: 3

This course is designed to give students a basic understanding of the uses and limitations of accounting information, particularly from financial statements. Students will understand how to take information from the financial statements and make informed business decisions.

Prerequisite: BSA 101

#### **ACC 299**

# **Independent Study**

Semester: On Demand

Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

# **ACC 309**

# Managerial Accounting

Semester: Fall and Spring

Semester Hours: 3

Students examine how managers use accounting information and how that information should be gathered and provided. Topics include the measurement and use of cost information, cost control, budgeting, performance appraisal, and decision-making using accounting information.

Prerequisite: ACC 210, ECO 205

#### **ACC 323**

#### **Taxation of Individuals**

Semester: Fall Semester Hours: 3

A study of federal income tax law as it applies to individual taxpayers, including sole-proprietorship entities. The course also includes an introduction to the tax research process. Cases will be used to apply the tax research process.

Prerequisite: ACC 309

#### **ACC 351**

#### Financial Reporting I

Semester: Fall Semester Hours: 3

A course that covers proper income statement and balance sheet presentation in accordance with current professional pronouncements. Other topics included are current value concepts, inventory, cash and receivables, plant assets, and intangible assets.

Prerequisite: ACC 210, ECO 205

#### **ACC 352**

### Financial Reporting II

Semester: Spring Semester Hours: 3

This course, a continuation of ACC 351, considers proper accounting for current and long-term liabilities, investments, pensions, and leases. Various aspects of stockholders' equity and the analysis of financial statements are also included.

Prerequisite: ACC 210, ECO 205

#### **ACC 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

#### BSA 101

## **Introduction to Business**

Semester: Fall and Spring Semester Hours: 3

A beginning business course designed to introduce students to the areas of business study, including historical foundations of America's free enterprise system, ethics and social responsibility in the business setting, entrepreneurship, the legal structures of business, marketing, and general management.

## BSA 291

#### **Field Practicum**

Semester: On Demand Semester Hours: 1-3

This course provides practical experience in an organization for students interested in exploring career opportunities. The course does not satisfy the experiential learning requirement, nor does it count toward the major. Prerequisite: permission of professor

## BSA 299

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **BSA 303**

#### **Principles of Management**

Semester: Fall and Spring

Semester Hours: 3

Students examine the management functions and basic concepts and principles of management, including planning, organization, coordination, control, job design, and human resource management. Topics in human resource management include recruitment, selection, administration of personnel policies, and dismissals. This course is often required as a prerequisite for master's-level business programs.

Prerequisite: ACC 210, ECO 205

## **BSA 304**

#### **Principles of Marketing**

Semester: Fall and Spring

Semester Hours: 3

This course studies the marketing process from product development through consumer purchase. The course includes examination of consumer buying behavior, marketing channels, physical distribution, pricing policies, and promotion along with their role in the marketing process.

Prerequisite: BSA 101, ECO 205

#### **BSA 311**

## **Principles of Finance**

Semester: Fall Semester Hours: 3

Students are introduced to the principles of business finance. Topics covered include financial analysis and planning, working capital management, the time value of money, and capital budgeting.

Prerequisite: ACC 210, ECO 205

#### **BSA 313**

# **Enactus: Entrepreneurship in Action**

Semester: Fall and Spring

Semester Hours: 2

Students will develop skills in leadership, communication, and teamwork through learning and practicing the principles of free enterprise. Students select, plan, and implement real-world projects and compete annually at the national Enactus competition. This course can be taken a maximum of four times, but only four credits may count toward the major.

Prerequisite: BSA 101

### **BSA 316**

## Studying and Experiencing International Business Environments

Semester: Spring Semester Hours: 3

This course is designed to introduce students to business environments in foreign countries. Focusing on a select country, students will study the differences from the United States business environment in market systems, legal structures, management, and marketing. They will also explore variations in ethics, communication, and social norms. This course culminates in a short-term study abroad program to the selected country. This course may be taken twice to alternate international locations, but only 3 credits count toward the major.

Prerequisite: BSA101 or ECO205

#### **BSA 320**

## **Management Information Systems**

Semester: Spring Semester Hours: 3

Students study information technology and its relationship to the business world. This course is designed to provide business students with general insights into information technology beyond the introductory level. This course is often required as a prerequisite for master's level business programs.

Prerequisite: BSA 101

#### **BSA 331**

#### **Business Law**

Semester: Fall Semester Hours: 3

A course that explores the legal principles relating to business transactions: contracts, sales, commercial paper, intellectual property, and ecommerce. A study of the legal environment of business is emphasized. This course is often required as a prerequisite for master's level business

programs.

Prerequisite: ACC 210, ECO 205

#### **BSA 336**

#### **Human Resource Management**

Semester: Spring Semester Hours: 3

Introduction to the human resource functions of workforce planning, legal requirements, work design, recruiting, selection, training and development, performance management, labor, and employee relations.

Prerequisite: BSA 303

#### **BSA 347**

### **Principles of Investing**

Semester: Spring Semester Hours: 3

This course explores those financial institutions that serve our free market society. Along the way, students will learn about common stocks and bonds and how to analyze those instruments. Students will be exposed to "contrary thinking" and will be encouraged to think for themselves. All of these issues will be interwoven with logical lessons about life and the pursuit of high ethical standards.

Prerequisite: BSA 311

#### BSA 361 Retailing

Semester: Fall Semester Hours: 3

This course focuses on the study of retail institutions, basic principles of retail merchandising, buying and selling products, the importance of store location and layout, and the principles of store and personnel management.

Prerequisite: BSA 304

### **BSA 362**

#### **Professional Sales**

Semester: Fall Semester Hours: 3

This course teaches the basic concepts required to become successful in the field of sales, focusing primarily on business-to-business selling. It includes such topics as understanding the sales cycle, how to make successful sales presentations, understanding the importance of relationships in the sales process, handling objections, and how to close.

Prerequisite: BSA 304

#### **BSA 401**

## **Production and Operations Management**

Semester: Fall and Spring

Semester Hours: 3

An introduction to various aspects of production, resource, and operations management, which focuses on production methodologies, scheduling, inventory control, quality control, and project management. Performance evaluation and resource planning are also emphasized. This course is often required as a prerequisite for master's-level business programs.

Prerequisite: BSA 303, ACC 309

#### **BSA 412**

#### **Business Ethics**

Semester: Fall, Alternate years

Semester Hours: 3

A study of the ethical problems that evolve in the modern business world, including a brief history of ethics and the practical ethical problems associated with running a business. Knowledge of ethical concepts as they apply to business management is explored through case studies and student class presentations. Emphasis is on the role of management as it affects stockholders, employees, customers, and competitors. Issues such as product safety, plant closures, advertising, doing business in other countries, and the overall role of business and society are discussed.

Prerequisite: ACC 309, BSA 303, BSA 304, BSA 311

## **BSA 418**

#### Entrepreneurship I

Semester: Fall Semester Hours: 3

Students will learn the characteristics of successful entrepreneurs, how to seek and evaluate opportunities for new ventures, how to prepare a complete business plan, and how to plan strategies and gather resources to create business opportunities.

Prerequisite: ACC 309, BSA 303, BSA 304, BSA 311

#### BSA 419

## **Entrepreneurship II: The Entrepreneurial Experience**

Semester: Spring Semester Hours: 3

Students will engage in a variety of related activities that help validate the marketability of their ideas. These will include further product/service development, prototyping, test marketing, small scale manufacturing, and contingency planning. Students will take actions that further prove the viability of the product or service and move the aspiring entrepreneur several steps closer to actual start-up. Students will be required to pay a fee that serves as seed money or initial start-up capital to pursue ways or means to bring the entrepreneurial venture into existence or reality.

Prerequisite: BSA 418

#### **BSA 421**

## Strategic Management

Semester: Spring Semester Hours: 3

The primary goal of this course is to prepare students to think like general managers. Through discussions, supplementary readings, and case studies, we will explore the strategies that cause some businesses to fail and others to succeed. This course provides a capstone experience for the business management major.

Prerequisite: BSA 401

## **BSA 425**

## **Small Business Operations**

Semester: Spring Semester Hours: 3

This course focuses on how owners and managers grow companies in a professional manner while maintaining the entrepreneurial spirit. Students draw from varied disciplines to create and understand strategies for building and growing a successful venture.

Prerequisite: BSA 418

#### BSA 450 Internship

Semester: On Demand Semester Hours: 1-12

Guided work experience and study of a professional nature in an established business, government agency, or other institution. Contract is required. A minimum of three semester hours is required, but no more than three semester hours will count toward the major. Pass/no pass grading.

Prerequisite: ACC 309, BSA 303, BSA 311

#### **BSA 455**

#### **Topics in Leadership**

Semester: Fall Semester Hours: 1

This course is designed to expose students to a variety of leadership styles and traits through the use of guest speakers. Students will have the opportunity to gain insight into various careers: insight that goes beyond typical classroom exploration. Furthermore, students will have the opportunity to practice critical-analysis skills through a variety of case studies.

Prerequisite: BSA 303

## **BSA 490**

#### Seminar

Semester: On Demand Semester Hours: 1-3

Selected topics in business are explored.

#### **BSA 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

#### **ECO 205**

#### **Principles of Economics**

Semester: Fall and Spring

Semester Hours: 3

This course will introduce the principles of firm-level decision making, consumer choices and their rationale, differing forms of industry competition, and how market-clearing prices and quantities are determined in a market environment. Additionally, the students will gain an understanding of how the major participants in the economy interact and what drives economic growth, interest rates, and inflation. The possible impacts of a variety of fiscal and monetary policy choices will be presented to assist the student in understanding how those policies will impact incomes, employment, and trade for a country. At the completion of the course, the student should have a basic understanding of both the microeconomic and macroeconomic environments and their impacts on businesses and the general population.

#### **ECO 299**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### ECO 301

## Money and Banking

Semester: Spring, Alternate years

Semester Hours: 3

This course provides a critical analysis of the theoretical and practical operations of modern financial intermediaries and their relation to the Federal Reserve Bank and international money markets.

Prerequisite: ECO 205

#### ECO 305

#### **American Economic History**

Semester: On Demand Semester Hours: 3

Students explore a history of the American economy from colonial to modern times with emphasis on industrial growth, government policy,

and agriculture.
Prerequisite: ECO 205

#### ECO 345

#### **Intermediate Microeconomics**

Semester: Spring Semester Hours: 3

Students explore a theoretical study of industry, business, and household decision-making in the context of perfect and imperfect competition. The theory of production, exchange, and distribution under static and dynamic conditions will be examined.

Prerequisite: ECO 205

## ECO 346

#### **Intermediate Macroeconomics**

Semester: Fall Semester Hours: 3

This course examines an analysis of Keynesian and post-Keynesian economic theories of national income, employment, and growth.

Prerequisite: ECO 205

#### ECO 354

#### **Environmental Economics**

Semester: Fall, Even years

Semester Hours: 3

Students examine the application of microeconomics to problems of the environment. This course is offered both for the major and for those interested in environmental problems.

Prerequisite: ECO 205

## ECO 401

### **International Trade**

Semester: Spring, Alternate years

Semester Hours: 3

This course explores the structure of world trade, the effect of international trade upon national income, exchange rates, problems of foreign aid and investment, and industrialization of underdeveloped countries.

Prerequisite: ECO 345

### ECO 402

#### **Development of Economic Ideas**

Semester: Fall, Alternate years

Semester Hours: 3

This course explores historic development of economic theory. Emphasis is analytical; consideration is given to institutional and philosophical backgrounds.

Prerequisite: ECO 345, ECO 346

## ECO 450 Internship

Semester: On Demand

Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required.

Prerequisite: junior or senior standing

#### ECO 490

#### Seminar

Semester: On Demand Semester Hours: 1-3

Selected topics in economics are explored.

#### **ECO 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

#### **ENG 325**

#### **Professional Writing**

Semester: Fall Semester Hours: 3

This course teaches concepts, practices, and skills for communicating technical, scientific, or business-related information. Topics include understanding how people read, designing documents, incorporating graphics, writing about statistical results, rewriting, editing, and using the Internet. This course may be especially useful for non-English majors, providing them with the tools and techniques to communicate their messages effectively.

Prerequisite: ENG 119

#### **MAT 210**

#### **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

#### Chemistry

John Barbaro, Professor Cristi H. Hunnes, Professor Ivy Fortmeyer, Assistant Professor

Chemistry is the central science and an important component of a liberal arts education. The program emphasizes a molecular view of matter and reactions, a view that combines the intrigue of theories and the power of practical applications. Our own bodies, the clothes we wear, the medicines we take, the food we eat, and the fuel we pump into our vehicles – all are various combinations of incredibly tiny particles called molecules, which are themselves composed of atoms. The knowledge of substances and chemical reactions is essential to the practice of the other physical and health sciences. Our program teaches the fundamentals of general chemistry, analytical chemistry, organic chemistry, physical chemistry, and biochemistry with a consideration of the other sciences and applications to societal issues and everyday life. In addition, our students develop critical-thinking skills and problem-solving skills, both desirable attributes for graduates.

Chemistry is an experimental science, and laboratory work is a key component to many of the courses in our program. Students are trained to propose hypotheses, test them qualitatively and quantitatively by experiments, and form conclusions. In addition to learning the classical laboratory techniques, our students also obtain hands-on experience in operating a variety of modern chemical instrumentation, including the gas chromatograph and the nuclear magnetic resonance spectrometer. Students are also encouraged to participate in research projects within the department.

The chemistry program prepares students for graduate study in chemistry and for acceptance into graduate programs at medical, veterinary, pharmacy, physical therapy, or law schools. The program also prepares graduates for direct entry into several chemistry-related careers. Graduates of our chemistry program have excelled in graduate and professional schools and in their careers.

### **Learning Outcomes**

Students who graduate with a major in chemistry will be able to:

- 1. Apply the principles of chemistry to their everyday lives and profession of choice;
- 2. Solve problems and critically evaluate information with respect to chemistry issues;
- Design scientific experiments, interpret experimental results, and draw reasonable conclusions from these results;
- Effectively communicate scientific ideas and the results of scientific inquiry;
- Properly use chemical instrumentation to conduct chemical inquiries in composition, structure, and reactivity.

#### **Major in Chemistry**

A minimum of 37 semester hours in chemistry is required, including:

CHM 101: General Chemistry I CHM 102: General Chemistry II CHM 251: Organic Chemistry I CHM 252: Organic Chemistry II CHM 336: Instrumental Analysis

CHM 338: Chemical Equilibrium & Analysis CHM 401: Chemical Thermodynamics

CHM 452: Biochemistry I

#### In addition:

MAT 175: Calculus I MAT 176: Calculus II PHS 201: General Physics I PHS 202: General Physics II

All electives must be 200-level and higher chemistry courses. Internship credits do not count toward the 37 chemistry semester hours required in the major.

## Major in Science Broadfield Education Chemistry

This major serves those who desire to teach the several sciences necessary in American schools. In addition to the science courses listed below, students must complete the professional education program for secondary teaching as described in the "Education" section of the catalog.

The following courses are required:

Chemistry: A minimum of 20 semester hours in chemistry courses is required, including:

CHM 101: General Chemistry I CHM 102: General Chemistry II CHM 251: Organic Chemistry I

Choose two of the following:

CHM 252: Organic Chemistry II CHM 336: Instrumental Analysis

CHM 338: Chemical Equilibrium & Analysis CHM 401: Chemical Thermodynamics

#### Mathematics:

MAT 175: Calculus I MAT 176: Calculus II

MAT 210: Probability and Statistics

#### Biology:

BIO 120: Principles of Biology

BIO 203: Genetics

BIO 306: Evolution

Physics:

PHS 201: General Physics I PHS 202: General Physics II PHS 225: Modern Physics

Geology:

GEO 101: Fundamentals of Geology

GEO 104: Fundamentals of Geology Laboratory

Environmental Science:

ESC 105: Environmental Science

Also required:

IDS 422: Methods and Materials: Teaching Natural Science in the Sec-

ondary School

#### **Minor in Chemistry**

A minimum of 24 semester hours in chemistry is required, including:

CHM 101: General Chemistry I CHM 102: General Chemistry II CHM 251: Organic Chemistry I

Choose one of the following: CHM 336: Instrumental Analysis

CHM 338: Chemical Equilibrium & Analysis

All electives must be 200-level and higher chemistry courses. Internship credits do not count toward the 24 chemistry semester hours required in the minor.

# **Chemistry courses**

#### **BIO 120**

### Principles of Biology

Semester: Fall and Spring Semester Hours: 4

An introductory survey course that covers cell structure and metabolism, patterns of inheritance, molecular genetics, evolutionary mechanisms, and diversity. The weekly laboratory sessions teach basic laboratory skills, experimental design, application of statistics, and communication of results via laboratory reports. This course is appropriate for both major and nonmajors. Three hours of lecture and one two-hour laboratory period per week.

# **BIO 203**

#### Genetics

Semester: Fall Semester Hours: 4

The course provides a detailed overview of the mechanisms of heredity. Topics include Mendelian, quantitative, and molecular genetics. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 120 and CHM 101

Corequisite: IDS 243

# **BIO 306**

### **Evolution**

Semester: Spring Semester Hours: 3

A broad but detailed discussion of the genetic, ontogenetic, and morphologic changes inherent in populations. Topics include population genetics, molecular evolution, natural selection, genetic drift, gene flow, speciation, phylogenetics, and coevolution. Three hours of lecture per week.

Prerequisite: BIO 120

#### **CHM 100**

## Chemistry of Everyday Life

Semester: Spring Semester Hours: 4

An introductory course for students interested in learning about the major role that chemistry plays in our modern society and in our daily lives. Emphasis will be on how chemical principles relate to topics such as diet and nutrition, food additives, pharmaceutical compounds, household chemicals, natural and synthetic fibers, pesticides, batteries, and alternative energy sources. This course is a lab science elective for non-science majors but does not count as credit toward a chemistry major or minor. A previous background in science or college-level mathematics is not required for enrollment. Three hours of lecture and one two-hour laboratory session per week.

### **CHM 101**

### General Chemistry I

Semester: Fall Semester Hours: 4

This course introduces students to the science of chemistry. The concepts of atoms, molecules, bonding, and energy successfully explain the properties of matter and how reactions happen. Goals of this course include introducing students to representative materials and reactions, to important models and theories of the science, and to the symbols and language of chemists. The laboratory will involve observations of elements, compounds and their reactions (including synthesis), and quantitative measurements of properties or amounts of matter. Three hours of lecture, one two-hour laboratory session, and one hour of recitation per week.

Corequisite: MAT 100 or placement into higher mathematics course

#### **CHM 102**

#### General Chemistry II

Semester: Spring Semester Hours: 4

This course will further develop the principles presented in CHM 101 with emphasis on the following core concepts: chemical kinetics, chemical equilibria, solution and acidbase chemistry, thermodynamics of reactions, and electrochemistry. Examples used in this course will point to the various branches of chemical studies (organic, physical, biological, inorganic, analytical, geological, materials, and nuclear). The knowledge and skills gained over the two semesters will be applied to the analysis of a contemporary topic or issue in chemistry. The laboratory experiments are designed to explore chemical principles and to expose students to more advanced chemical instrumentation in the department. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: CHM 101 with a grade of C- or higher

#### **CHM 123**

## Introduction to Chemistry Research I

Semester: Fall Semester Hours: 1

This course is a laboratory-based introduction to the common techniques of research in the chemical sciences. Students will learn about safety, chemical hygiene, laboratory organization, solution and sample preparation, storage and labeling of chemical bottles, separation and purification methods, use of equipment, and about keeping records in a notebook. In addition, an introduction to the use of handbooks, databases, and common software including structure-drawing programs will be presented. The student will also begin selecting a research project with a chosen faculty member of the chemistry department. One two-hour laboratory session per week.

Prerequisite: CHM 101 with a grade of C- or higher, and students must apply for acceptance to the course

#### **CHM 205**

## **Chemical Magic**

Semester: Fall Semester Hours: 1

This course will involve the student in chemistry demonstrations and chemistry magic shows to the community and to students in the CHM 101 lectures. Students will not only learn the "secrets" behind visually spectacular reactions, but they will also learn aspects of chemical preparation, presentation of chemistry to the general public, safe handling of chemicals, and proper clean-up after the show. Much of this course is dedicated to selecting, testing, and developing chemical demonstrations in the laboratory. Students taking this course for two semester hours will be required to participate in off-campus magic shows. One one-hour laboratory session per week.

Prerequisite: CHM 102 with a grade of C- or higher

#### **CHM 220**

#### **Fundamental Organic Chemistry**

Semester: Fall Semester Hours: 4

This course is a one-semester introduction to carbon-containing compounds, including their structure, bonding, properties, and reactivity. The different functional groups are introduced, including the key reactions and mechanisms of these groups. This course is designed to serve as a prerequisite for biochemistry. Four lecture hours per week. This course will not count as an elective toward the chemistry major or minor.

Prerequisite: CHM 102 with a grade of C- or higher

#### **CHM 223**

#### **Introduction to Chemistry Research II**

Semester: Fall Semester Hours: 2

This course will further develop laboratory, experimental, instrumental, and computational techniques from Introduction to Research I. The use and capabilities of selected instruments in the department will be explored according to the interests and projects of the students. Students will begin working on research with close supervision by a faculty mentor. In addition, students will participate in a weekly discussion to learn how to read, analyze, and present articles from scientific journals. One one-hour lecture/discussion and one two-hour laboratory session per week.

Prerequisite: CHM 123

### **CHM 224**

# **Introduction to Chemistry Research III**

Semester: Spring Semester Hours: 2

This course is designed to prepare students for independent research, so that less immediate supervision by their faculty mentor is required. They will continue working on research with supervision by a faculty mentor. Students in this course will also learn about research proposals and funding agencies. They will use their background and planning from Introduction to Research I and II to develop and present their proposal of a research project, in consultation with their individual faculty mentor. Students will formally present preliminary results of their research to faculty and students in a seminar or poster presentation. In addition, students in this course will be expected to mentor students in Introduction to Research I. One one-hour lecture and one two-hour laboratory session per week.

Prerequisite: CHM 223

# CHM 251

## Organic Chemistry I

Semester: Fall Semester Hours: 4

This course is an introduction to the chemistry of carbon-containing compounds, concentrating on the structures, properties, and reactions of some of the important families of organic compounds. Considerable emphasis is placed on reaction mechanisms and stereochemistry. The laboratory experiments introduce techniques for the isolation and preparation of com-

pounds. Three hours of lecture and one three-hour laboratory session per

Prerequisite: CHM 102 with a grade of C- or higher

#### **CHM 252**

## **Organic Chemistry II**

Semester: Spring Semester Hours: 4

This course, a continuation of CHM 251, concentrates on the chemistry of additional important families of organic compounds, emphasizing reaction mechanisms, synthesis, stereochemistry, and spectroscopy. The laboratory experiments include the synthesis and analysis of compounds with biological and industrial importance and qualitative analysis. Three hours of lecture and one three-hour laboratory session per week.

Prerequisite: CHM 251 with a grade of C- or higher. CHM 220 will not be accepted as a prerequisite for this course.

#### **CHM 260**

#### **History of Chemistry: Chemical Connections**

Semester: Fall, Even years

Semester Hours: 3

Considering history as a web of related events, rather than as a series of unrelated timelines, allows interesting connections between seemingly unrelated historical events. This course looks at how seemingly unrelated events in history are connected to various chemical discoveries and also how these chemical discoveries led to unforeseen future results. Although chemistry will be the recurring thread throughout the connections made in the course, the discussions of chemical concepts and discoveries will be at a level easily understandable by students with just a basic background in chemistry and science. This course is a non-laboratrory science elective for non-science majors and does not count toward a chemistry major or minor.

## **CHM 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

### **CHM 316**

#### Geochemistry

Semester: Spring, Even years

Semester Hours: 4

Scientific literature and other resources will be used to illustrate the current ideas about the mechanisms that control water quality and chemistry in aqueous systems. Lecture topics will include hydrogeology, acid-base and reduction-oxidation reactions in natural systems, the geochemistry of metals, stable isotope geochemistry, and case studies of contaminated sites in Montana and throughout the West. Laboratory exercises will include basic sample collection, measurement of major ion concentration, and geochemical modeling with several field exercises. Three hours of lecture and two hours of laboratory per week. This course is cross-listed with ESC 316 and GEO 316.

Prerequisite: CHM 101; GEO 101 is recommended.

## **CHM 336**

### **Instrumental Analysis**

Semester: Spring, Odd years

Semester Hours: 4

This course introduces students to the theory and practice of using advanced chemical instruments available in the department, including UV-visible spectrophotometers, atomic absorption (AA) spectrometer, infrared (FTIR) spectrometer, nuclear magnetic resonance (NMR) spectrometer, gas chromatograph (GC), liquid chromatograph (LC), ion-selective electrodes (ISE), and cyclic voltammetry (CV). Basic theory of each

instrument and interpretation of the output will be presented. Students will also learn sample preparation and loading for each instrument, as well as have the opportunity to explore the effects of changing operating conditions. Three hours of lecture and one three-hour laboratory session per week.

Prerequisite: CHM 252 with a grade of C- or higher. CHM 338 is recommended. CHM 220 will not be accepted as a prerequisite for this course.

#### **CHM 338**

## Chemical Equilibrium & Analysis

Semester: Fall, Even years

Semester Hours: 4

The classical methods of chemical analysis of samples rely on stoichiometry and various classes of chemical reactions introduced in CHM 101 and CHM 102. In particular, the concept of chemical equilibrium and Le Châtelier's principle will be further explored in this course as it is central to chemical analyses, both classical and instrumental. The lectures will also include chemical calculations, statistical testing, and error analysis of experimental data. The principles of precipitation, acid-base neutralization, complex-formation, and redox reactions presented in the lecture will be applied in the laboratory to titrimetric, gravimetric, and potentiometric analyses of samples in the laboratory. The laboratory will also emphasize methods to enable accurate and precise determinations of composition. Three hours of lecture and one three-hour laboratory session per week. Prerequisite: CHM 102 with a grade of C- or higher

#### CHM 401

#### **Chemical Thermodynamics**

Semester: Fall, Odd years Semester Hours: 4

The relationship between heat and work (thermodynamics) is enormously powerful for predicting the behavior of material systems in chemistry and biology. Students will explore the properties of matter (gases, solids, liquids, solutions, and mixtures) using classical thermodynamics enriched with the molecular insight from chemistry. State functions such as enthalpy, entropy, and Gibbs free energy will be explored and used for predicting the spontaneous direction of physical transformations and chemical reactions. Students will also explore a complementary view of chemistry from kinetics, or the rate at which changes happen. The use of rate laws to discern the mechanism of reactions will be explained, as well as the importance of catalysis to life and industry. Laboratory experiments will emphasize the measurement of physical properties of materials, as well as experimental design and development toward this purpose. Three lectures and one three-hour lab session per week.

Prerequisite: CHM 252 with a grade of C- or higher. CHM 220 will not be accepted as a prerequisite for this course.

Corequisite: PHS 201

#### **CHM 402**

## **Quantum Chemistry**

Semester: Spring, Even years

Semester Hours: 4

The experimental behavior of tiny, nanoscopic objects like electrons and atoms are best explained by quantum theory developed in the early 20th century. This course will give the historical overview and an introduction to applying quantum theory to simple systems like a particle confined in a box. The use of wave functions, operators, and Schrödinger's equation will be explained. Students will explore systems like electrons in conjugated bonds, the harmonic oscillator, the hydrogen atom, multi-electron atoms, and molecules. Since spectroscopy probes the quantized energy levels in chemical species, the basics of modern molecular spectroscopy will also be discussed and will be the focus of laboratory experiments. There will also be exercises in computational modeling of molecules. Three lectures per week and one three-hour lab per week.

Prerequisite: CHM 401 and PHS 201, both with a grade of C- or higher; previous or concurrent enrollment in PHS 202 is advised.

#### **CHM 432**

#### **Introduction to the Pharmaceutical Sciences**

Semester: Spring, Even years

Semester Hours: 3

Understanding how drugs cause biochemical and physiological effects stems from an analysis of the structure of drugs and the interactions that occur at their target sites. Chemical properties such as ionization, solubility, partition coefficients, and diffusion coefficients provide a basis for understanding how drugs get from the point of administration to their targets. The chemistry of drug distribution, metabolism, elimination, and the mechanism of action of specific classes of drugs will be discussed, along with toxicology (the potential adverse effects of drugs), drug discovery, and the FDA approval process.

Prerequisite: CHM 220 or CHM 252 with a grade of C- or higher

#### **CHM 450**

#### Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with a chemistry advisor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required. Prerequisite: junior or senior standing

#### **CHM 452**

## **Biochemistry I**

Semester: Spring Semester Hours: 5

Biochemistry focuses on the study of the molecules and chemical reactions of life, bringing together principles learned in biology and chemistry. After an introduction to the chemistry and structure of carbohydrates, lipids, and proteins, discussions of enzyme structure and kinetics set the stage for a detailed exploration of metabolism and its regulation. The laboratory component of this course involves a semester-long integrated project that requires independent student work. This project incorporates many different types of instrumentation, including low pressure chromatography, electrophoresis, UV-visible spectroscopy, electrochemistry, and ultrafiltration. Three lecture hours plus one laboratory lecture hour per week. Significant time working independently in the laboratory is required. Prerequisite: CHM 220 or CHM 252 with a grade of C- or higher. BIO 120 is strongly recommended. Junior or senior standing is required.

#### **CHM 460**

#### **Biochemistry II**

Semester: Spring, Odd years

Semester Hours: 3

An introduction to the chemistry and structure of nucleotides and nucleic acids is followed by a detailed study of DNA replication and repair, RNA transcription and processing, protein synthesis, and the regulation of these processes. Bioethics, an important and interesting topic, is covered as an extension to the scientific content. This course covers topics in more depth and with a different emphasis than genetics.

Prerequisite: CHM 220 or CHM 252 with a grade of C- or higher and junior or senior status required. BIO 120 and BIO/CHM 452 recommended.

#### **CHM 490**

#### Seminar

Semester: Fall

Semester Hours: 1-3

This course is a discussion of a specialized area in chemistry. The subject matter and requirements of the course will vary semester to semester and by instructor. Students should see the instructor of that semester's seminar for information about the course description and the prerequisites. Students may take this course up to three times for credit; a maximum of three credit hours can count toward the major or minor.

#### **CHM 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

#### **ESC 105**

#### **Environmental Science: Sustainable Communities**

Semester: Fall and Spring Semester Hours: 4

An introductory course designed for students entering the environmental sciences and studies program and for other students who would like to take an ecology lab course. Topics address the central concepts of ecology, including the physical environment in which life exists. Students will explore the properties and processes of populations and communities, ecosystem dynamics, biogeography and biodiversity, as well as issues in conservation and restoration ecology. In the laboratory, students will apply these concepts to ecological studies in the natural environment and learn how to present their results in a scientific report. Three hours of lecture and one two-hour laboratory session per week.

#### **GEO 101**

## **Fundamentals of Geology**

Semester: Fall and Spring

Semester Hours: 3

This course provides an introduction to the science of earth materials, earth systems, and earth history, including the study of minerals, rocks, volcanoes, earthquakes, rock deformation and metamorphism, weathering, and erosion within the modern paradigm of plate tectonics. Special emphasis is placed on interpreting the geologic landscape and history of the Rocky Mountains through an understanding of Earth processes. Three hours of lecture and one recommended two-hour laboratory per week, plus field trips. This course fulfills a natural lab science core curriculum requirement if taken concurrently with GEO 104.

#### **GEO 104**

## **Fundamentals of Geology Laboratory**

Semester: Fall and Spring Semester Hours: 1

Focus on description of the earth materials and earth systems within the framework of plate tectonic theory. Introduction to identification of minerals, rocks, geologic maps, and structures.

Corequisite: GEO 101 or GEO 218

#### **IDS 422**

# Methods And Materials: Teaching Natural Science In The Secondary School

Semester: Fall Semester Hours: 2

This course emphasizes the teaching of biology or chemistry at the secondary 5-12 level. Methods of teaching these subjects, including incorporation of active hands-on experiences, reviewing texts for content appropriate to various grade levels, and the use of technology in the classroom, constitute major parts of the course. Particular attention will be paid to thinking, reading, listening, writing, and speaking instruction. Teaching diverse and at-risk student populations will also be discussed. This course is the capstone course for the biology or chemistry education major.

Corequisite: EDC 420

#### MAT 175

#### Calculus I

Semester: Fall Semester Hours: 5

This course is a study of the functions of one real variable and includes a brief review of circular functions. The ideas of limit, continuity, and differentiation are explained and applied to physical problems. Topics include the use of approximations and problem solving. The use of graphing calculators is required.

Prerequisite: satisfactory score on a placement exam or MAT 110

#### **MAT 176**

#### Calculus II

Semester: Spring Semester Hours: 5

Continuing the study of the functions of one real variable, the idea of integration is applied to physical problems. This course is an introduction to sequences and series. The use of graphing calculators is required.

Prerequisite: MAT 175

#### **MAT 210**

#### **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

#### **PHS 201**

#### General Physics I

Semester: Fall

Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including force and motion, energy and momentum, their conservation laws, and their oscillations. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Corequisite: MAT 175

## PHS 202

## **General Physics II**

Semester: Spring Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including mechanics, waves, light, electricity, and magnetism. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Prerequisite: PHS 201 Corequisite: MAT 176

#### **PHS 225**

## **Modern Physics**

Semester: Fall, Odd years

Semester Hours: 3

This course covers selected concepts from early 20th century physics. Topics covered include special relativity, photoelectric effect, Compton scattering, and the wave nature of particles.

Prerequisite: PHS 202 or permission from the instructor

## **Communication Studies**

Erin Reser, Professor Shelby Jo Long-Hammond, Associate Professor Jolane Flanigan, Assistant Professor

In studying communication, students learn to express themselves, develop critical-thinking skills, and explore ethical issues. Students become articulate and intentional communicators, respecting the power of the spoken and written word.

Communication studies is a strong stand-alone major and is also common as a double-major or minor. The skills learned when studying communication are some of those most sought after by employers. Careers available to a communication studies major include diverse professions such as public relations, event planning, graduate school, teaching, sales, or law.

## **Learning Outcomes**

Students who graduate with a major in communication studies will be able to:

- 1. Discuss and apply communication theories;
- 2. Articulate important features of key communication theories;
- 3. Demonstrate the ability to support arguments and reason soundly;
- 4. Conduct original research and present cogent results.

#### **Major in Communication Studies**

A minimum of 33 semester hours is required, including:

COM 101: Interpersonal Communication

COM 102: Public Speaking

COM 490: Seminar in Communication

Choose any three of the following:

COM 240: Rhetoric of Western Thought

COM 250: Small Group Communication

COM 252: Communication and Gender

COM 272: Communication in Politics

Choose any four from the following:

COM 306: Organizational Communication

COM 308: Intercultural Communication

COM 319: Environmental Communication

COM 325: Theories of Persuasion

COM 331: Rhetoric of Popular Culture

COM 355: Mass Media

Choose one of the following:

COM 418: Rhetorical Theory and Criticism

COM 423: Communication, Culture, and Social Identities

#### **Minor in Communication Studies**

A minimum of 21 semester hours is required, including:

COM 101: Interpersonal Communication

COM 102 Public Speaking

Choose two:

COM 240: Rhetoric of Western Thought

COM 250: Small Group Communication

COM 252: Communication and Gender

COM 272: Communication in Politics

Choose three:

COM 306: Organizational Communication

COM 308: Intercultural Communication

COM 319: Environmental Communication

COM 325: Theories of Persuasion

COM 331: Rhetoric of Popular Culture

COM 355: Mass Media

COM 418: Rhetorical Theory and Criticism

COM 423: Communication, Culture, and Social Identities

## **Communication Studies courses**

## **COM 101**

## **Interpersonal Communication**

Semester: Fall

Semester Hours: 3

This course examines how intimate, personal, and professional relationships are created and maintained. Students develop an increased awareness of and sensitivity to communication that facilitates interpersonal relationships, as well as communication that creates obstacles to building relationships. Topics discussed include perception, self-concept, listening, and conflict.

#### **COM 102**

#### **Public Speaking**

Semester: Fall and Spring

Semester Hours: 3

This course examines key aspects of writing and delivering public speeches. Focal topics include audience analysis, speech organization, developing supporting materials, argumentation, and delivery. By the end of the course, students will have written and delivered informative, persuasive, and ceremonial speeches.

#### **COM 240**

## Rhetoric of Western Thought

Semester: Spring Semester Hours: 3

This course investigates the evolution of rhetorical theories from ancient Greece to contemporary models of communication. It focuses on the application of theories to communication events in order to explicate how communication shapes culture.

Prerequisite: COM 102

## **COM 250**

## **Small Group Communication**

Semester: Spring Semester Hours: 3

This course explores how and why people come together in groups, how groups develop norms for acceptable behavior, and how individuals can help groups work efficiently and effectively. Because employers seek competent communicators, this course is designed to provide students an opportunity to develop communication skills that can be applied in both personal and professional contexts.

#### **COM 252**

## **Communication and Gender**

Semester: Fall, Even years

Semester Hours: 3

This course examines the relationship between gender and communication. We will combine readings, discussions, lectures, and research to define "gender" and to develop an understanding of how gender connects with personal identity, experiences, and our position in society.

#### **COM 257**

## **Intercollegiate Forensics**

Semester: Fall and Spring

Semester Hours: 1

This course is designed for students to prepare and engage in intercollegiate debate competition. A focus on British Parliamentary debate provides national and international opportunities for debate competition. Pass/no pass grading.

#### **COM 272**

### **Communication in Politics**

Semester: Spring, Even years

Semester Hours: 3

This course will explore the role of communication in the political sphere. The course will explain how political messages are constructed, strategized, and communicated to frame public controversy. The course will examine how political debates are communicated in mass media, from grassroots organizations, social media, and public advocacy groups.

## **COM 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **COM 306**

### **Organizational Communication**

Semester: Fall Semester Hours: 3

This course examines how communication occurs in large cooperative networks, especially in professional work settings. It focuses on the roles leadership, management, and conflict resolution play in larger organizations. By the end of the course, students will understand how the values and cultures of any organization emerge through communication.

Prerequisite: COM 102 or permission of instructor

#### **COM 308**

#### **Intercultural Communication**

Semester: Fall, Alternate years

Semester Hours: 3

As global communication and transnational movement facilitate increased cross-cultural contact, there is a need to develop an understanding of intercultural communication. To this end, this course examines the ways in which culture influences communication and communication influences culture. Verbal and nonverbal communication will be analyzed as it conveys messages about identity, beliefs, and values. Conflict is discussed as a product of cultural orientations and interpretations. By the end of this course, students will understand communication as a vital aspect of intercultural contact.

Prerequisite: COM 102 or permission of instructor

### **COM 319**

#### **Environmental Communication**

Semester: Fall, Even years

Semester Hours: 3

This course investigates how symbols are used to construct and reflect nature and its relationship with humans. It examines intersections between the environment and humanity through a variety of communicative lenses, including theories of social-symbolic discourse, mass media, rhetoric, and public advocacy.

Prerequisite: COM 102 or permission of instructor

#### **COM 325**

### **Theories of Persuasion**

Semester: Fall, Even years

Semester Hours: 3

This course will examine multiple theories of persuasion through examination of artifacts in popular culture including advertising, campaigns, media, the Internet, and organizations. The course will explore how persuasive messages are constructed and delivered to the general public. Major topics in this course will include persuasion theory, argumentation, ethics, and critical approaches of persuasion theory.

#### **COM 331**

#### **Rhetoric of Popular Culture**

Semester: Spring, Even years

Semester Hours: 3

The purpose of this course is to demonstrate how the rhetorical tradition can be joined with popular culture to provide a critical analytical tool for understanding a variety of mediated messages. By sampling from rhetorical theory, rhetorical criticism, and critical theory, students will be able to examine the messages they encounter every day in a more discerning and ethical manner.

Prerequisite: COM 102 or permission of instructor

#### **COM 355**

#### Mass Media

Semester: Spring Semester Hours: 3

This course explores the social and cultural roles of media – from local newspapers to the global reach of the Internet. By the end of this course, students will be able to understand and articulate the social, cultural, and economic power of media in order to better manage its influence in their lives

Prerequisite: COM 102 or permission of instructor

## **COM 418**

## **Rhetorical Theory and Criticism**

Semester: Fall, Even years

Semester Hours: 3

This course builds on the historical foundations of rhetoric, focusing on contemporary rhetorical theories. Students will examine rhetorical artifacts through a variety of theoretical lenses, including narrative, metaphoric, and feminist theories, in order to better understand and explain social, political, and cultural conditions.

Prerequisite: COM 102, one 300-level COM course

#### **COM 423**

#### Communication, Culture, and Social Identities

Semester: Fall, Odd years

Semester Hours: 3

This course will explore (a) how culture and communication are intertwined and (b) how key social identities (race, class, and gender) are made and remade through cultural communication practices. Emphasis will be placed on how cultural backgrounds and social identities affect how we perceive and interpret the world.

Prerequisite: any 200-level COM course

## **COM 450**

#### Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an established institution such as a non-profit or for-profit organization or a governmental institution. The student must arrange the internship in agreement with the instructor and with the Office of Career Services, and the internship must be a learning experience that is connected with the communication studies degree. A contract is required. A maximum of three semester hours can be counted toward the major in communication.

Prerequisite: junior or senior standing

## **COM 457**

### **Intercollegiate Forensics**

Semester: Fall and Spring

Semester Hours: 1

This course is designed for students to prepare and engage in intercollegiate debate competition. A focus on British Parliamentary debate provides national and international opportunities for debate competition. Pass/no pass grading.

#### **COM 490**

### **Seminar in Communication**

Semester: Spring Semester Hours: 3

This course is a senior-level capstone, variable topic seminar for communication studies majors. Past topics have included gender, international political communication, and freedom of speech. Whatever the topic, students will engage in a substantial amount of academic reading and writing that reflects theoretical expertise, research acumen, and heightened critical-thinking skills.

Prerequisite: senior standing, two 300-level COM courses

#### **COM 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

## **Computer Science**

Andrew Wildenberg, Associate Professor Melissa Holmes, Assistant Professor

The computer science program combines the analysis of computing systems with the art and science of creating computer software. The program emphasizes the development of software solutions and the study of the hardware and software systems that provide the execution environment for those solutions. We firmly believe that the development of software has two distinct components: creation of programs to solve problems and the subsequent translation of those programs into code using an appropriate language.

Students choosing computer science will receive education far beyond the ability to write functional programs. The program is designed to serve as a basis for obtaining employment in industry or as a foundation for graduate studies through required internships and undergraduate research opportunities.

## **Learning Outcomes**

Students who graduate with a major in computer science will be able to:

- Apply computer science principles and practices to problems in a variety of disciplines;
- Analyze a problem and identify and define the computing requirements appropriate to its solution;
- 3. Design problem-solving algorithms for problems of varying complexity;
- 4. Articulate and demonstrate the use of software development processes;5. Use current techniques, skills, and common tools for software development
- opment;
  6. Evaluate the tradeoffs involved in algorithm design and implementa-
- tion choices in software development;

  7. Utilize a protocol description to develop a program that communicates
- with another program, either on the same machine or another machine across the network as designated by the protocol description;

  8. Communicate effectively in groups, with a range of audiences and us-
- Communicate effectively in groups, with a range of audiences and us ing a variety of media;
- Work effectively on teams to develop substantial software development projects;
- Critique one's own work and the work of others to evaluate success of a software development project;
- 11. Analyze and articulate the local and global impact of computing on individuals, organizations, and society;

12. Understand and use appropriate ethical and normal business interactions.

### **Major in Computer Science**

A minimum of 35 semester hours is required, including:

Choose either:

CSC 130: Fundamentals of Programming I

CSC 131: Fundamentals of Programming II

CSC 143: Programming Foundations

#### Also required:

CSC 214: Technology and Society

CSC 251: Data Structures

CSC 330: Computer Networking

CSC 344: Programming in C and Assembler Language

CSC 352: Programming Language Study I (Traditional Languages)

CSC 353: Programming Language Study II (Web Languages)

Choose one of the following:

CSC 351: Algorithms

CSC 360: Programming Paradigms

Choose one of the following (CSC 450 strongly preferred):

CSC 450: Internship

CSC 499: Independent Study

An additional nine semester hours of elective computer science coursework is required to complete the major, of which at least six semester hours must be upper-division coursework.

A minimum grade of "C" is required in each of the non-elective computer science courses. Computer science prerequisite courses must have a minimum grade of "C" to continue to dependent coursework.

### Notes:

- CSC 352 and CSC 353 may each be taken twice and applied to the major requirements so long as each study represents a different programming language. At least one credit each of CSC 352 and CSC 353 are required for completion of the major.
- No more than three semester hours of CSC 450 can be applied toward completion of the computer science major requirements, and a "pass/ fail" grade will be awarded for CSC 450 after the first three semester hours.

## **Minor in Computer Science**

A minimum of 20 semester hours is required, including:

Choose either:

CSC 130: Fundamentals of Programming I

CSC 131: Fundamentals of Programming II

or

CSC 143: Programming Foundations

Also required:

CSC 251: Data Structures

Choose two of the following:

CSC 344: Programming in C and Assembler Language

CSC 352: Programming Language Study I (Traditional Languages)

CSC 353: Programming Language Study II (Web Languages)

Six semester hours of upper-division computer science coursework are also required.

## **Computer Science courses**

#### **CSC 112**

## **Principles of Computing for Non-CS Majors**

Semester: Spring Semester Hours: 3

Offered to non-computer science majors, this course provides a comprehensive introduction to computing for students seeking an overview of the discipline. Students acquire necessary concepts and skills to apply computing principles and resources effectively in their chosen profession. Topics include the history of computing, logical reasoning, problem solving, data representation, and the creation of "digital artifacts" including web pages and computer programs. The course also explores software development methodologies, software as part of a computing system, information technology careers, and ethical, legal, and contemporary social aspects of information technology.

Prerequisite: MAT 100

#### **CSC 130**

### **Fundamentals of Programming I**

Semester: Fall Semester Hours: 4

Students are introduced to the fundamental concepts of computer programming and the practical aspects of composing, testing, proving, and documenting computer programs. Topics covered include development of programmable processes, representation and manipulation of foundation data types, simple input/output processing, and elementary program control structures.

#### **CSC 131**

#### **Fundamentals of Programming II**

Semester: Spring Semester Hours: 4

This course builds upon the foundation established in Fundamentals of Programming I with treatments of arrays, exception handling, event models, and elementary GUI frameworks. Students are introduced to basic object-oriented design patterns.

Prerequisite: CSC 130

### **CSC 143**

## **Programming Foundations**

Semester: Fall Semester Hours: 5

This course, intended for students with significant prior programming experience, provides a foundation in object-oriented programming through an accelerated presentation, including the use of APIs, basic design patterns, and IDEs. Formal models for program development, including flowcharts, requirements models, and state models are introduced. Four hours of lecture and two hours of lab per week.

Prerequisite: permission of the department

## **CSC 214**

#### **Technology and Society**

Semester: Fall Semester Hours: 3

Accelerating development in technology (computer-centric technology, in particular) underlies enormous changes in the acquisition, application, and extension of knowledge and information, impacting virtually every aspect of modern life in ways that are often underappreciated by a generally unaware public. Even those involved in the development of technology are often inconsiderate of the social implications of the technologies they introduce. This course explores technology development from several perspectives. Students consider several past and present visions of the near future as expressed in the writings of several notable (and less notable) futurists, particularly as related to computer-based technologies. Topics include consideration of why we're not living in the future predicted only several decades ago, what today's technology futurists are envisioning as our unavoidable future, and how accelerating technological

change is impacting every facet of modern life, from the playground to the workplace and from home to school, while technological rifts open across semi-generations. Great potential benefits are balanced against equally impressive opportunities for abuse; society expects that those responsible for the creation and application of technology accept the role of faithful stewards. Therefore this course includes a concurrent exploration of the personal, organizational, and legal decisions encountered in the development and deployment of computer-based technology.

#### **CSC 251**

#### **Data Structures**

Semester: Fall Semester Hours: 3

Data structures and their characteristic algorithms are studied, including analysis of performance predictions and "Big-O" characterizations inherent to the various data organizations. Lists, stacks, queues, trees, and elementary graphs are considered. Fundamental sorting algorithms are also treated

Prerequisite: CSC 131 or CSC 143

#### CSC 256

#### **Discrete Structures and Computability**

Semester: On Demand Semester Hours: 3

The mathematical and theoretical underpinnings of computer science will be explored. Students will be introduced to Boolean algebra and elementary logic and their application to computer implementation and algorithm development. This course explores the historical development of computer science from its roots in mathematical models, including early models of computation, such as Turing machines and other finite state machines.

### **CSC 258**

## **Topics in Computer Science**

Semester: On Demand Semester Hours: 3

This occasional offering will study special areas of computer science not otherwise covered in the curriculum.

Prerequisite: permission of professor

#### **CSC 299**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

Under the guidance of a faculty sponsor, students may study facets of computer science not available for study through offered computer science courses. Independent study is an ideal vehicle for students wishing to explore interdisciplinary applications of computer-related technology. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **CSC 313**

#### **Designing User Interaction**

Semester: Spring, Alternate years

Semester Hours: 3

This course provides an introduction to designing and evaluating user interfaces for a variety of interactive systems, emphasizing the development of interfaces from the user (as opposed to a system-oriented) perspective. The course focuses on using real users to complete the specification, design, evaluation, and testing of a software interface. The course also presents human-computer interaction concepts and theory, which involves computer science, psychology, social behavior, and other human factors associated with computer use. Students will work in teams and participate in thoughtful group critique sessions, experiment design, and usability experiments. This course has significant research, writing, and presentation components.

Prerequisite: sophomore, junior, or senior standing in any major

### CSC 326 Graphics

Semester: On Demand, Every third semester

Semester Hours: 3

The use of computer technology to create and display information in a visual manner is studied. Topics include display technology, graphic user interfaces (GUI), graphics algorithms, and computer-based imagery. Exercises will involve the use of current graphics software and systems.

Prerequisite: CSC 344

#### **CSC 330**

#### **Computer Networking**

Semester: Fall Semester Hours: 3

The organization of computer systems into networks and the theory of computer communication across those networks will be studied. Communications protocols from design to implementation perspectives will be considered with a focus on current technology and software. Students will construct and test software implementations of the technologies as they are discussed.

Prerequisite: CSC 251; CSC 344 is recommended

#### CSC 333

## **Network Programming**

Semester: On Demand Semester Hours: 3

Network Programming picks up where CSC 330 leaves off. The goal of the course is to provide students with an in-depth look at network application programming and the techniques and tools that are used therein. The student is assumed to have a fundamental knowledge of the protocollayering model of networking, as well as an understanding of the network, transport, and application layers of the Internet protocol stack. The material for the course focuses on Java's streams and IP-based protocols. The discussion is extended to include topics such as RMI, servlets, and other components from the Java API.

Prerequisite: CSC 330

## **CSC 335**

#### **Database Systems**

Semester: On Demand Semester Hours: 3

This course will introduce the student to the fundamental concepts and implementation of modern database systems, including relational and object-oriented databases. Topics include entity relationship models, transaction processing, concurrency, and query processing.

Prerequisite: CSC 251

#### **CSC 344**

## Programming in C and Assembler Language

Semester: Spring Semester Hours: 4

This course introduces two of the most fundamental languages for computer programming: assembler language, the language most closely related to the hardware of the computer, and C, the language most commonly used for operating systems and whose syntax has influenced most modern programming languages. Students will study the representation of data and programs in the processor and memory of modern computers and be led to understand how the basic operations in high-level languages are implemented. Topics will include data structure definition and reference mechanisms and using libraries for I/O and operating system interfaces. This course has a substantial programming component.

Prerequisite: CSC 131 or CSC 143

#### **CSC 351**

#### Algorithms

Semester: On Demand Semester Hours: 3

This course of study extends the study of algorithms that began in CSC 251, focusing on algorithmic paradigms (backtracking, greedy, dynamic programming, branch and bound, etc.) and patterns that have general application in both theoretical and practical computer science. Solutions for classical optimization problems, P and NP characterization, and shortest path algorithms will be considered.

Prerequisite: MAT 110 and CSC 251

#### **CSC 352**

### Programming Language Study I (Traditional Languages)

Semester: Fall Semester Hours: 1

This course provides instruction and experience using modern computer programming languages. Students are required to implement basic and intermediate programming tasks in order to explore the syntax, semantics, and dominant paradigm of the topic language. Students cannot apply more than two semester hours of CSC 352 toward completion of the computer science major requirements.

Prerequisite: CSC 251 Data Structures

#### **CSC 353**

## **Programming Language Study II (Web Languages)**

Semester: Fall Semester Hours: 1

This course provides instruction and experience using modern computer programming languages. Students are required to implement basic and intermediate programming tasks in order to explore the syntax, semantics, and dominant paradigm of the topic language. Students cannot apply more than two semester hours of CSC 353 toward completion of the computer science major requirements.

Prerequisite: CSC 251 Data Structures

## **CSC 357**

## Software Engineering: Analysis and Design

Semester: On Demand Semester Hours: 3

This course will introduce the student to techniques for performing requirements analysis and design for software projects. Topics include requirements gathering techniques, prototyping, modeling, use cases, risk analysis, functional and non-functional requirements, and software development processes including user-centered design methodology, spiral model, and iterative design.

Prerequisite: CSC 251

#### **CSC 360**

## **Programming Paradigms**

Semester: Fall Semester Hours: 3

The history, development, and evolution of programming languages are studied in this course, which deals with the programming paradigms utilized by modern languages. Experience with alternative paradigms is gained through programming exercises. Related topics covered in this course include regular expressions, interpreters and compilers, and tools for language processing.

Prerequisite: CSC 131, CSC 143, or CSC 251

## CSC 410

## **Operating Systems**

Semester: On Demand

Semester Hours: 3

This course will introduce the student to the principles, mechanisms, and algorithms underlying modern operating systems. Topics will include management of memory, I/O and processor resources, elementary queuing theory, and inter-process communication.

Prerequisite: CSC 344

#### **CSC 430**

### **Advanced Networking and Security**

Semester: On Demand Semester Hours: 3

Participants will explore the techniques and study issues relevant to maintaining and securing computers in a modern networked environment. The course will focus on techniques and methods used to compromise networked computer systems and the methods that are used to counter these attacks. Topics covered will include human and automated intrusion, viruses, and social engineering.

Prerequisite: CSC 330

### **CSC 433**

## **Compiler Construction**

Semester: On Demand Semester Hours: 4

This course considers algorithms and data structures used in translation of high-level languages to executable machine language. Topics include general organization, lexicographic analysis, management of name spaces and storage, error detection and recovery, code generation, and optimization. This course requires significant programming. Evaluation is heavily dependent upon the successful development of substantial portions of a compiler. Students should expect to spend a minimum of 10 hours weekly on this course.

Prerequisite: CSC 344, CSC 360; senior standing is recommended

## CSC 450

## Internship

Semester: Fall, Spring, and Summer

Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. A maximum of three semester hours will be counted toward a computer science major, and a "pass/fail" grade will be awarded for CSC 450 after the first three semester hours. Contract is required.

Prerequisite: junior or senior standing or permission of the department

#### **CSC 490**

## **Computer Science Research Seminar**

Semester: On Demand Semester Hours: 1-3

Students participate in ongoing research and development projects. Areas of focus vary as projects are undertaken and evolve. Participants are expected to be active contributors to research and development teams operating under the guidance of faculty sponsors, and students are required to make both formal and informal presentations based on team progress and participate in critical project reviews. Students should expect to contribute at least nine hours each week toward team efforts.

Prerequisite: junior standing (Note: CSC 490 is required to fulfill the requirements of the major in computer science; CSC 490 may be taken a second time to fulfill an upper-division elective in the major.)

#### **CSC 499**

### **Independent Study**

Semester: On Demand Semester Hours: 1-3

Under the guidance of a faculty sponsor, students may study facets of computer science not available for study through offered computer science courses. Independent study is an ideal vehicle for students wishing to explore interdisciplinary applications of computer-related technology. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

### **Economics**

Anthony R. Piltz, Professor Scott Severance, Professor James Smith, Professor Ann Adair, Associate Professor Karen Beiser, Associate Professor Clete Knaub, Associate Professor Cedric Snelling, Assistant Professor

For course listings, see the "Business Administration" section of this catalog.

## Education

Shelley Ellis, Professor

Stevie Schmitz, Director of Educational Leadership

To address the educational needs of America's diverse student population, the professional preparation program in teacher education at Rocky Mountain College utilizes a strong theoretical component and applies that theory to the classroom via two practica, many volunteer opportunities, and numerous in-class teaching situations. Rocky Mountain College's program also provides pre-service teachers with opportunities to explore personal and group relationships so they will have confidence in facilitating student interaction in their own future classrooms.

The goal of Rocky Mountain College's education program is to provide students with the knowledge, skills, and dispositions necessary to be successful as beginning teachers in schools today and to continue as lifelong reflective professionals. To achieve this goal, Rocky Mountain College provides students with a strong liberal arts background, in-depth study in the fields in which they plan to teach, the professional knowledge and skills essential for effective teaching, and extensive school-based experience in a variety of school settings.

#### Career Paths:

Completion of the elementary, secondary, or K-12 program provides a strong base for students who wish to go directly into teaching or who wish to pursue advanced professional training in specialized educational programs such as special education, guidance and counseling, and school administration. Completion of the non-teaching endorsement education program provides a strong base for students who wish to work with children or youth in settings that do not require a teaching license.

#### **Learning Outcomes**

Students who graduate with a major in education will be able to:

- Understand the central concepts, tools of inquiry, and structures of the discipline and can create learning experiences that make the subject meaningful to students;
- Understand how children learn and develop, and can provide learning opportunities that support their intellectual, social, and personal development;
- 3. Understand how students differ in their approaches to learning and create instructional opportunities that are adapted to learners from diverse cultural backgrounds and with exceptions;
- 4. Understand and use a variety of instructional strategies to encourage students' development of critical-thinking, problem-solving, and performance skills:
- Use an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation;
- Use knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom;
- Plan and manage instruction based upon knowledge of subject matter, students, the community, and curriculum goals;

- 8. Understand and use formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner;
- 9. Be a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other profes-sionals in the learning community) and who actively seeks out oppor-tunities to grow professionally; and
- 10. Communicate and interact with parents/guardians, families, school colleagues, and the community to support students' learning and well-

#### **Program Basics for Admittance to the Teacher Education Program**

The competencies expected by the Rocky Mountain College teacher education program include:

- 1. Communication: Communication competencies are demonstrated by such behaviors as using the appropriate syntax, inflection, and word choice in oral communication; speaking distinctly and with confidence; and using correct spelling, standard English language mechanics, and meaningful word choice in written expression. Further, communication with students and families is demonstrated by sensitivity to the situation and family circumstances of the students.
- Intellectual ability (conceptual, integrative, and quantitative) for problem solving and effective teaching: The student must have the cognitive abilities necessary to master relevant content in subjects commonly taught in K-12 schools and pedagogical principles and their application in field settings at a level deemed appropriate by the faculty. These skills may be described as the ability to comprehend, memorize, analyze, and synthesize material. Students must be able to develop reasoning and decision-making skills appropriate to the practice of teaching.
- 3. Dispositions: The candidate must demonstrate the professional, behavioral, and social dispositions necessary for the effective perfor-

#### Admission to the Teacher Education Program

To be admitted to the teacher education program, students must do the following:

- 1. Successfully complete ENG 119 or an equivalent writing course, EDC 202, and PSY 205 or PSY 206 depending on their major, earning at least a grade of "C" in each;
- 2. Successfully complete the first required field practica (EDC 291E or
- 3. Receive a passing score on the education department's supervised writing examination;
- Conduct a satisfactory interview with representatives of the teacher education committee; and
- Have an overall minimum GPA of 3.00 with a minimum GPA of 3.00 in the education field and in the major courses.
- Once admitted into the teacher education program, a copy of the official notification will be placed in the student's permanent record in the Office of Student Records. Also, the student will be registered for EDC 040: Acceptance into the Teacher Education Program for the current term with a final grade of "P," which will serve as a prerequisite for the core education courses.

Students who receive a grade lower than "C" in any required education course, even if that grade does not result in a GPA lower than the required 3.00 GPA, must re-take that course(s). A grade of "C" or better will be required for the repeated course(s).

Students admitted to the teacher education program must continue to meet minimum program standards. Students who fail to meet the program standards may elect to switch to the non-licensure track or withdraw from the program. These standards include maintaining the required GPA (see #5 above) and demonstrating responsible dispositions toward learning in all college work as indicated under the "Dispositions" section of the teacher education program handbook. The teacher education program handbook is on the College's website under Academics > Undergraduate Majors >

Education. All education students are required to adhere to the requirements and guidelines in the handbook.

Education majors who fail to maintain a minimum 3.00 GPA may choose to remain in the education program as non-licensure education majors. Non-licensure education majors will take all required education courses except for EDC 452/453/454 (student teaching) and EDC 490 (student teaching seminar). Non-licensure majors must complete EDC 450 and will receive a BA in education but will not be eligible to be licensed.

A student whose GPA falls below the 3.00 minimum should consult with his or her advisor to discuss the above-described non-licensure path or the option of an alternate major.

If a student subsequently achieves and maintains an overall GPA of 3.00 or higher prior to registering for his or her final semester at Rocky Mountain College, that student may register for EDC 452/453/454 and EDC 490 and thereby be eligible for licensure.

#### Praxis II Exam

All students must take and pass the appropriate portions of the Praxis II exam (consult your academic advisor for the required portions) before or directly subsequent to the student teaching semester. This is a licensure requirement.

#### **Admission to Student Teaching**

To be admitted to student teaching, students must meet the following requirements:

- 1. Admission to the teacher education program (see the teacher education program handbook for details);
- Senior standing with a minimum overall GPA of 3.00;
- Completion of all required coursework except student teaching and its related seminar; and
- 4. Approval of the teacher education committee.

#### **Transfer Courses**

All transfer courses used to substitute for courses required in the teacher education program must be approved by the teacher education committee. An official transcript must be sent directly to the Office of Student Records from any previous institution(s).

#### **Transfer Students**

Students transferring into the teacher education program must meet all Rocky Mountain College requirements for transfer students and must complete a minimum of 12 semester hours in the Rocky Mountain College teacher education program prior to student teaching.

### **Students with Degrees from Other Colleges**

Students with degrees from other colleges:

- 1. Must complete a minimum of 12 semester hours at Rocky Mountain College before student teaching;
- 2. Must meet all Rocky Mountain College teacher education program requirements for student teaching; and
- 3. Must meet all Rocky Mountain College teacher education program requirements for the teaching major and minor and be recommended by the respective department before student teaching.

## Major in Elementary Education

A major in elementary education prepares students for teaching at the elementary school level (K-8). Candidates must be admitted to the teacher education program to pursue the elementary education degree.

The following courses are required:

EDC 202: Foundations of Education

EDC 291E: Field Practicum: Elementary School

EDC 302: Educational Psychology

EDC 310: Classroom Management

EDC 330: Introduction to Teaching Exceptional Learners

EDC 336: Education Technology

EDC/ART 338: Methods and Materials: Teaching Art in the Elementary School

EDC 341: Methods and Materials: Teaching Health in the Elementary School

EDC 342: Methods and Materials: Teaching Physical Education in the Elementary School

EDC/MUS 344: Methods and Materials: Teaching General Music in the Elementary School

EDC 349: Methods and Materials: Teaching Mathematics in the Elementary School

EDC 350: Methods and Materials: Teaching Reading and Language Arts in the Elementary School

EDC 355: Methods and Materials: Teaching Social Studies in the Elementary School

EDC 356: Methods and Materials: Teaching Science in the Elementary School

EDC 360: Children's Literature

EDC 365: American Indian Education: History and Best Practices

EDC 370: Student Health and Safety

EDC 376: Writing Process for K-12 Students

EDC 391E: Field Practicum: Elementary School

EDC 402: Curriculum and Pedagogy

EDC 427: Standards, Instruction, and Student Assessment

EDC 453: Student Teaching in the Elementary School

EDC 490E: Seminar: Elementary Education

ENG 119: First Year Writing

HST 211: American History I or HST 212: American History II

MAT 103: Mathematics for Elementary School Teachers I

MAT 104: Mathematics for Elementary School Teachers II

PSY 205: Human Development I

## Content Knowledge Assessment

The assessment for content knowledge required by the No Child Left Behind Act for elementary education majors consists of the following multiple measures:

- 1. 30 semester hours of content coursework. A GPA of that coursework will be calculated on a 0 to 4 point scale prior to program completion. The range will be 3.00-4.00 = 4 points; 2.50-2.99 = 3 points; 2.00-2.49 = 1 point; below 2.00 = 0 points.
- 2. Assessment of content knowledge demonstrated during student teaching by a highly qualified teacher and a college supervisor on a scale of 0 to 3 based on demonstration of content knowledge. The following descriptors will be used: "knowledge is advanced" = 3 points; "knowledge is proficient" = 2 points; "knowledge is basic" = 1 point; "knowledge is unacceptable" = 0 points.

Score on the PRAXIS II Elementary Content Knowledge Test determined as follows: 163-200 = 3 points; 146-162 = 2 points; 130-145 = 1 point; < 130 = 0 points.

Rocky Mountain College's education department will use the above components to develop a Content Knowledge Score (CKS) to be calculated as follows: CKS = Content GPA points + Student Teaching Assessment points + PRAXIS points. The possible range for the CKS is 0-11. Students scoring lower than CKS = 7, or who score zero on any of the three multiple measures, shall not be recommended for licensure.

\*A score of one (1) on any of the multiple measures will trigger an indi-vidualized review of the student's content knowledge and teaching skill by Rocky Mountain College's teacher education program faculty before recommending that student for licensure.

#### **Major in Secondary Education**

A major in secondary education prepares students for teaching at the secondary school level (5-12).

The following courses are required:

EDC 202: Foundations of Education

EDC 291S: Field Practicum: Secondary or K-12 School

EDC 302: Educational Psychology

EDC 310: Classroom Management

EDC 330: Introduction to Teaching Exceptional Learners

EDC 336: Educational Technology

EDC 353: Teaching Reading and Writing in the Content Areas

EDC 365: American Indian Education: History and Best Practices

EDC 370: Student Health and Safety

EDC 376: Writing Process for K-12 Students

EDC 391S: Field Practicum: Secondary or K-12 School

EDC 402: Curriculum and Pedagogy

Appropriate Content-Area-Specific Senior Methods Course: HST

422, IDS 420

EDC 427: Standards, Instruction, and Student Assessment

EDC 452: Student Teaching in the Secondary School

EDC 490S: Seminar: Secondary/K-12 Education

ENG 119: First Year Writing

PSY 206: Human Development II

Students must complete an education major in one of the following fields: biology, English, mathematics, psychology, social studies broadfield, science broadfield – biology, or science broadfield – chemistry.

## **Content Knowledge Assessment**

The assessment for content knowledge required for licensing by the state of Montana consists of the following multiple measures:

- 1. A GPA of 30 semester hours of content coursework that will be calculated on a 0 to 4 point scale prior to program completion.
- Assessment of content knowledge demonstrated during student teaching as rated on a 0 to 3 point scale by a highly qualified teacher and a college supervisor.

Score on the appropriate PRAXIS II content knowledge test as calculated on a 0 to 4 point scale.

Rocky Mountain College's licensing officer will use the above components to develop a Content Knowledge Verification Score (CKS) to be calculated as follows: CKS = Content GPA points + Student Teaching Assessment points + PRAXIS points. The possible range for the CKS is 0-11. Students scoring lower than CKS = 7, or who score zero on any of the three multiple measures, shall not be recommended for licensure.

A score of one (1) on any of the multiple measures will trigger an individualized review of the student's content knowledge and teaching skill by Rocky Mountain College's teacher education program faculty before recommending that student for licensure.

## Major in K-12 Education

To become a teacher of art, music, or health and human performance, the student must be prepared to teach at all levels, K-12. Students must complete an education major in one of the following fields: art, music, or health and human performance.

The following courses are required:

ENG 119: First Year Writing

EDC 202: Foundations of Education

Choose one:

EDC 291E: Field Practicum: Elementary School or EDC 291S: Field Practicum: Secondary or K-12 School

EDC 302: Educational Psychology

EDC 310: Classroom Management

EDC 330: Introduction to Teaching Exceptional Learners

EDC 336: Educational Technology

EDC 353: Teaching Reading and Writing in the Content Areas

EDC 365: American Indian Education: History and Best Practices

EDC 370: Student Health and Safety

EDC 376: Writing Process fo K-12 Students

EDC 402: Curriculum and Pedagogy

EDC 427: Standards, Instruction, and Student Assessment

EDC 454: Student Teaching (Grades K-12)

EDC 490S: Seminar: Secondary/K-12 Education

HHP 420: Methods and Materials: Teaching Secondary Health Enhance-

ment (for HHP majors only)

PSY 205: Human Development I or PSY 206: Human Development II

Choose one of the following:

EDC 391E: Field Practicum: Elementary School

EDC 391S: Field Practicum: Secondary or K-12 School

Note: K-12 majors must have one elementary-level practicum experience and one secondary-level practicum experience.

#### Content Knowledge Assessment

The assessment for content knowledge required for licensing by the state of Montana consists of the following multiple measures:

- 1. A GPA of 30 semester hours of content coursework that will be calculated on a 0 to 4 point scale prior to program completion.
- 2. Assessment of content knowledge demonstrated during student teaching as rated on a 0 to 3 point scale by a highly qualified teacher and a college supervisor.

Score on the appropriate PRAXIS II content knowledge test as calculated on a 0 to 4 point scale.

Rocky Mountain College's licensing officer will use the above components to develop a Content Knowledge Verification Score (CKS) to be calculated as follows: CKS = Content GPA points + Student Teaching Assessment points + PRAXIS points. The possible range for the CKS is 0-11. Students scoring lower than CKS = 7, or who score zero on any of the three multiple measures, shall not be recommended for licensure.

A score of one (1) on any of the multiple measures will trigger an individualized review of the student's content knowledge and teaching skill by Rocky Mountain College's teacher education program faculty before recommending that student for licensure.

## Nonteaching Major in Education

A student who wants to graduate in education, but does not plan to teach, must be admitted into the program and complete the requirements for the elementary, secondary, or K-12 major with the exception of student teaching. An educationally related internship is required. The courses required for the elementary, secondary, and K-12 majors are listed above. Nonteaching education majors do not need to take EDC 452, EDC 453, EDC 454, EDC 490E, or EDC 490S. The nonteaching major must also take EDC 450: Internship.

### Minor in Reading

The reading minor is targeted at K-12 education majors aspiring to obtain a K-12 reading endorsement. Upon successful completion of the required courses, the candidate is eligible to apply for the State of Montana Reading Specialists K-12 endorsement. Following the completion of eight

required courses, Rocky Mountain College students are eligible for the reading endorsement.

The following courses are required:

EDC 305: Emergent Literacy

EDC 318: Diagnostic Assessment of Reading

EDC 350: Methods and Materials: Teaching Reading and Language Arts

in the Elementary School

EDC 353: Teaching Reading and Writing in the Content Areas

EDC 357: Reading Clinic EDC 360: Children's Literature

EDC 362: Adolescent Readers

EDC 376: Writing Process for K-12 Students

## **Education courses**

#### **EDC 202**

#### **Foundations of Education**

Semester: Fall Semester Hours: 2

This is an introductory course for students considering teaching as a career. It provides an overview of the purposes of education, the legal basis for schools, school organization and finance, the job of the teacher, general curriculum concepts, school-community relationships, partnering with parents, multicultural education, gender equity in the classroom, and other issues in education today. Students are assisted in clarifying their career goals related to teaching and in planning an educational program to meet those goals.

#### **EDC 291E**

## Field Practicum: Elementary School

Semester: Fall and Spring

Semester Hours: 1

This course provides practical field experience in an elementary class-room. Each credit hour requires 40 hours of experience. Students must complete the practicum during the fall or spring semester over a period of between 10-14 weeks. Students must complete a field practicum before they can be admitted to the teacher education program. Sophomore standing is required. Students must be able to schedule 2-3 hour blocks of time twice a week and provide their own transportation.

Prerequisite: EDC 202

## **EDC 291S**

## Field Practicum: Secondary and/or K-12 School

Semester: Fall and Spring

Semester Hours: 1

This course provides practical field experience in a middle or secondary school. Each credit hour requires 40 hours of experience. Students must complete the practicum during the fall or spring semester over a period of between 10-14 weeks. Students must complete a field practicum before they can be admitted to the teacher education program. Sophomore standing is required. Students must be able to schedule 2-3 hour blocks of time twice a week and provide their own transportation.

Prerequisite: EDC 202

#### **EDC 299**

## **Independent Study**

Semester: On Demand

Semester Hours: 1-3
This course allows a superior

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: EDC 040

#### **EDC 302**

#### **Educational Psychology**

Semester: Fall and Spring

Semester Hours: 3

This course is designed to aid the student in continuing to develop an understanding of human behavior, especially as that understanding applies to elementary and secondary classrooms. Emphasis will be on why and how human learning takes place and how that learning relates to schools and teaching situations where the needs of each student must be considered. The course also includes participation in and the analysis of interpersonal relations and communication skills. Students must complete EDC 302 before they can be admitted to the teacher education program. This course is cross-listed with PSY 302.

Prerequisite: PSY 205 or PSY 206

## **EDC 305**

## **Emergent Literacy**

Semester: Spring Semester Hours: 3

This course will provide students with in-depth information regarding the acquisition of language as it pertains to the reading process. Primary focus will be on birth to age 5 and the importance of expressive and receptive language acquisition as it relates to the reading and writing process. Particular emphasis will be placed on key research relating to English as a second language, limited English proficiency, and bilingual learners as that research relates to overall reading and writing achievement. Students will be required to administer reading and writing assessments that will guide instruction for the emergent reader. The alphabetic principle and phonemic awareness will be of primary focus.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 310**

## **Classroom Management**

Semester: Spring Semester Hours: 2

This course reviews the fundamental skills of classroom management. Students will be presented with a systemic approach to classroom management. Enforcing classroom standards, building patterns of cooperation, maximizing learning, and minimizing disruptions in order to establish and maintain an effective and safe classroom learning environment will be emphasized.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 318**

## Diagnostic Assessment of Reading

Semester: Spring Semester Hours: 3

This course will provide students with extensive knowledge relating to reading assessment tools. Students will become knowledgeable about reading diagnostic tools that provide information about placing children at instructional and independent reading levels, improving sight word vocabulary (DIBELS), improving oral reading fluency (DIBELS), and miscue analysis (running records). Students will also become skilled in the use of criterion and norm-referenced reading and writing assessments to drive reading and writing instruction. Students will be required to acquire all reading data on a specific student, create, and then implement both an enrichment and remediation plan for the student(s).

Prerequisite: EDC 040, admission to the teacher education program

Corequisite: EDC 357

#### **EDC 330**

## **Introduction to Teaching Exceptional Learners**

Semester: Fall Semester Hours: 3

This course introduces students to the characteristics, legal requirements, programming, and service requirements for exceptional learners, including gifted and talented students. Categories of disabilities addressed will

be those outlined within PL94-142. Emphasis will be given to education within the least restrictive environment.

Prerequisite: EDC 040, admission to teacher education program

#### **EDC 336**

## **Educational Technology**

Semester: Fall Semester Hours: 1

This course is designed to prepare pre-service elementary, secondary, and K-12 teachers in the appropriate use of instructional technology, thus fostering an intellectually active and technologically supportive classroom. Students must complete a practical field visit during the semester which will take place on two evenings during the semester.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 338**

# Methods and Materials: Teaching Art in the Elementary and Secondary Schools

Semester: Spring Semester Hours: 3

This course focuses on the methods and materials for teaching art in the elementary, middle, and secondary schools.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 341**

## Methods and Materials: Teaching Health in the Elementary School

Semester: Fall Semester Hours: 2

This course provides competency in the delivery and evaluation of planned learning programs for elementary school children. Content will include knowledge of the purpose and scope of a health curriculum, appropriate health topics, and lesson planning. Multimedia based learning will be examined.

Prerequisite: EDC 040, admission to the teacher education program

## **EDC 342**

# **Methods and Materials: Teaching Physical Education in the Elementary School**

Semester: Spring Semester Hours: 2

This course provides competency in the delivery and evaluation of planned learning programs for elementary school children. Content will include knowledge of the physiological, psychological, and motor developmental needs of elementary-age children and the implication for curriculum development and implementation. This course includes experience working with children in an on-campus Saturday morning program.

Prerequisite: EDC 040, admission to teacher education program

#### EDC 344

## Methods and Materials: Teaching General Music in the Elementary School

Semester: Fall Semester Hours: 3

This course provides a study of trends in philosophy, curriculum and program development, traditional instructional materials, Orff/Kodaly, and other innovative teaching techniques for elementary school and early childhood general music. This course is cross-listed with MUS 344. Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 349**

# Methods and Materials: Teaching Mathematics in the Elementary School

Semester: Spring Semester Hours: 3

This course focuses on the methods and materials for teaching mathematics in the elementary school based on the National Council of Teachers of Math standards.

Prerequisite: MAT 103 or MAT 104, EDC 040, admission to the teacher education program

#### EDC 350

# Methods and Materials: Teaching Reading and Language Arts in the Elementary School

Semester: Fall Semester Hours: 4

This course provides an integrated approach to the language arts curriculum of listening, speaking, reading, and writing, an approach that corresponds to the development of language skills. Methods of teaching the language arts; the use of books, other written materials, and audiovisual materials; the use of computer programs; methods of assessing and evaluating achievement; and ways of organizing the curriculum form a major portion of the course. The course provides increased familiarity with literature appropriate for elementary school children.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 353**

## Teaching Reading and Writing in the Content Areas

Semester: Spring Semester Hours: 2

This course provides K-12 music, art, and health and human performance pre-service teachers as well as secondary-level pre-service teachers with the tools to teach listening, speaking, grammar, vocabulary, spelling, writing, and study skills with the aim of helping their future students achieve content area literacy and basic necessary reading skills. Learners with special reading needs are addressed, and the writing process and the use of literature in the content classroom are examined. Students also evaluate content-based materials for their reading difficulty level and appropriateness and apply the 6-Traits Writing Projects' techniques across disciplines. Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 355**

# Methods and Materials: Teaching Social Studies in the Elementary School

Semester: Fall Semester Hours: 3

This course provides an integrated approach to the social studies K-8 curriculum in elementary and middle schools. Emphasis is on the development of daily, weekly, and unit lesson plans. A variety of instructional strategies will be reviewed and practiced. Methods of organizing the curriculum, methods of teaching, and the use of various technological tools are emphasized. The scope and sequence of various curricula will be examined.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 356**

## Methods and Materials: Teaching Science in the Elementary School

Semester: Fall Semester Hours: 3

This course is designed to provide an integrated approach to the science K-8 curriculum in elementary and middle schools. Emphasis is on the development of daily, weekly, and unit lesson plans. A variety of instructional strategies, including hands-on activities, will be reviewed and practiced. Students will be expected to participate in a teaching team and create integrated thematic lessons.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 357**

## **Reading Clinic**

Semester: Spring Semester Hours: 2

This course will provide students the opportunity to work with off-level readers in a clinical setting. Students will complete 40 hours of clinical instruction for a reluctant or underachieving reader or writer. Individualized prescriptive plans will be developed based on reading and writing

assessments given in the clinical setting. Special attention will be placed on reading and writing assessment driving reading and writing instruction through the use of one-to-one instruction. Students will become familiar with K-12 reading/writing curriculum to use for instruction. A written clinical report will be the culminating project for the reading clinic course. This course may be taken more than once.

Prerequisite: EDC 040, admission to the teacher education program

Corequisite: EDC 318

#### **EDC 358**

#### Reading Clinic II

Semester: Spring, As needed

Semester Hours: 2

Reading Clinic II will provide students additional opportunities to work with off-level readers in a clinical setting. Individualized prescriptive plans will be developed based on reading and writing assessments. Special attention will be placed on these assessments, which must drive instruction. RMC students will become familiar with K-12 reading/writing curricula. Remedial instruction will be implemented in after-school programs, summer programs, or during the reading course opportunities available in a K-12 school setting. Students choosing this elective may participate in the Learn and Serve Campus Corps program, providing ongoing reading remediation to individual students for a total of 200 hours. At the end of this service, RMC students will be eligible for an education award, which can be applied to current or future education expenses.

Prerequisite: EDC 040, admission to the teacher education program,

EDC 318, EDC 357

#### **EDC 360**

#### Children's Literature

Semester: Spring Semester Hours: 3

This course is designed to increase familiarity with a variety of genres of literature appropriate to the elementary classroom: traditional, modern fantasy, contemporary realistic fiction, poetry, historical fiction, biography, and multi-ethnic literature. Students will evaluate literature for its personal, social, and aesthetic values and will develop effective reading selection criteria.

Prerequisite: EDC 040, admission to the teacher education program or permission of instructor

#### **EDC 362**

## **Adolescent Readers**

Semester: Fall, Summer Semester Hours: 3

This course will provide information on how to work with struggling readers at the middle and high school level. Students will become familiar with high-interest/low-vocabulary literature and how to infuse this tool as part of a remediation plan. Students will be required to develop and implement an individualized remediation plan for a middle or high school student who is reading off level.

Prerequisite: EDC 040, admission to the teacher education program

## **EDC 365**

## **American Indian Education: History and Best Practices**

Semester: Fall and Spring

Semester Hours: 3

This course examines the forms of traditional American Indian education, historic federal boarding schools, and sectarian and public school approaches to American Indian education. Federal educational policies are reviewed, including 1930's Indian school reform, 1960's community control, civil rights related developments, and 1970's tribal control of education. American Indian education best practices include approaches to language and culture issues, intergenerational learning, dropout prevention, American Indian student educational experiences, and pedagogical practice that works best with Indian students.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 370**

#### **Student Health and Safety**

Semester: Spring Semester Hours: 2

This course focuses on the recognition of issues that obstruct student learning and on referral to appropriate services, since teachers must help ensure a healthy and safe learning environment. Topics to be studied are classroom safety, communicable diseases, drug abuse, first aid, nutritional deficiencies, physical and emotional abuse, psychological disorders, and school violence.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 376**

#### Writing Process for K-12 Students

Semester: Fall Semester Hours: 3

This course will provide students with knowledge about the writing process starting from the emergent level to the advanced level. In addition, students will become knowledgeable about numerous researched-based writing models, which implement both an analytical and holistic rubric for assessment. Focus will be how writing assessment drives the writing instructional process. Using literature to teach writing will be a key component of this course. Topics will include student conferencing, conducting a writing assessment, and the revision and editing process.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 391E**

#### Field Practicum: Elementary School

Semester: Fall and Spring

Semester Hours: 1

This course provides practical field experience in an elementary class-room. Each credit hour requires 40 hours of experience. Students are required to take an active part in classroom activities by teaching a minimum of two full lessons. Students must complete the practicum during the fall or spring semester over a period of between 10-14 weeks. Students must be able to schedule 2-3 hour blocks of time twice a week and provide their own transportation.

Prerequisite: EDC 040, admission to the teacher education program

## **EDC 391S**

## Field Practicum: Secondary or K-12 School

Semester: Fall and Spring

Semester Hours: 1

This course provides practical field experience in a middle or secondary school. Each credit hour requires 40 hours of experience. Students are required to take an active part in classroom activities by teaching a minimum of two full lessons. Students must complete the practicum during the fall or spring semester over a period of between 10-14 weeks. Students must be able to schedule 2-3 hour blocks of time twice a week and provide their own transportation.

Prerequisite: EDC 040, admission to the teacher education program

#### **EDC 402**

#### **Curriculum and Pedagogy**

Semester: Fall and Spring

Semester Hours: 3

This course blends theory and practice to provide a comprehensive overview of the principles and practical application of curriculum. The historical, psychological, ethical, and theoretical foundations of curriculum will be explored as well as current issues, trends, and pedagogical practices. Case studies, class discussion, and DVD study of pre-service teachers at various levels of expertise will be utilized to study K-12 curriculum and instruction, with an emphasis on planning, student-teacher communication, motivation, positive student management as it relates to curriculum, instructional methodology, ethics, and overall professionalism.

Prerequisite: EDC 040, admission to the teacher education program; junior standing required

#### **EDC 427**

## Standards, Instruction, and Student Assessment

Semester: Spring Semester Hours: 3

This course focuses on various forms of assessment including federal, state, and local testing and the appropriate use of assessment results. Ways of establishing meaningful and fair assessments will be explored. The reliability and validity of some assessment tools will be examined, and methods of item analysis are discussed.

Prerequisite: MAT 100 or equivalent; EDC 040, admission to the teacher education program; junior standing strongly recommended

#### **EDC 450**

#### Internship

Semester: On Demand Semester Hours: 6

This course serves as a capstone course for nonteaching education majors and will consist of a field experience for qualified senior students graduating with this major. Internships will take place in nontraditional educational settings and will be supervised by education faculty.

Prerequisite: EDC 040; completion of all required education courses in elementary education, secondary education, or K-12 education, except student teaching (EDC 452, EDC 453, or EDC 454, and EDC 490E or EDC 490S); permission of the teacher education committee; and an internship contract

#### **EDC 452**

## Student Teaching in the Secondary School

Semester: Fall and Spring

Semester Hours: 9

This course requires a minimum of 15 weeks of practice teaching at the 5-12 grade level; student teachers are required to modify their assignment according to the host school's calendar. Students must pay a student teaching fee in addition to regular college expenses.

Prerequisite: EDC 040; permission of the teacher education committee and completion of all required education coursework

#### EDC 453

## **Student Teaching in the Elementary School**

Semester: Fall and Spring

Semester Hours: 9

This course requires a minimum or 15 weeks of practice teaching at the K-8 grade level; student teachers are required to modify their assignment according to the host school's calendar. Students must pay a student teaching fee in addition to regular college expenses.

Prerequisite: EDC 040, permission of the teacher education committee and completion of all required education coursework

#### **EDC 454**

## Student Teaching (Grades K-12)

Semester: Fall and Spring

Semester Hours: 9

This course requires a minimum of 15 weeks of practice teaching at both the K-8 and 5-12 grade levels for health and human performance, art, and music education majors. Student teachers are required to modify their assignment according to the host school's calendar. Students must pay a student teaching fee in addition to regular college expenses.

Prerequisite: EDC 040; permission of the teacher education committee and completion of all required education coursework

#### **EDC 490E**

**Seminar: Elementary Education** 

Semester: Fall and Spring Semester Hours: 3

This course examines selected topics in elementary education at regularly scheduled meetings. Registration in this seminar is mandatory for all el-

ementary education student teachers.

Prerequisite: EDC 040, admission to the teacher education program

Corequisite: EDC 453

#### **EDC 490S**

#### Seminar: Secondary/K-12 Education

Semester: Fall and Spring Semester Hours: 3

This course examines selected topics in secondary and K-12 education at regularly scheduled meetings. Registration in this seminar is mandatory for all secondary and K-12 students.

Prerequisite: EDC 040, admission to the teacher education program

Corequisite: EDC 452 or EDC 454

## **EDC 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: EDC 040, junior or senior standing

## **Educational Leadership**

Stevie Schmitz, Director of Educational Leadership Jo Swain, Associate Professor Christine Unquera, Program Assistant

The master of educational leadership program at Rocky Mountain College is designed to prepare educational leaders for careers as principals or superintendents. This cohort-based program incorporates state and national standards for educational leadership and is based on Effective School Research. Blending theory and practice through coursework and intensive internship, candidates will be prepared to be instructional leaders at the K-12 level. The program is 34 semester hours in length depending on previous coursework and has a minimal residence requirement. Graduates of this program will meet the education requirement for licensure as a principal. Separate courses are also available for the superintendent endorsement. Candidates should check with the Montana Office of Public Instruction for other licensure requirements.

The following courses are required:

EDL 500: Foundations of Leadership

EDL 505: Dimensions of Leadership I

EDL 510: Dimensions of Leadership II

EDL 520: Supervision of Educational Personnel

EDL 530: Public School Law

EDL 554: Public School Finance

EDL 560: Organizational Change

EDL 570: School Curriculum

EDL 575: Public School and Community Relationships

EDL 590: Leadership Seminar I

EDL 591E: Internship in the Elementary School

EDL 591S: Internship in the Secondary School

EDL 683: Educational Leadership CapstoneSuperintendent Endorsement ClassesAdministrators who have served as a licensed principal for one year and have completed 12 semester hours beyond the masters degree in areas determined by the Office of Public Instruction are eligible for a Class 3 Administrative License as a superintendent. A review of the student's transcript will result in a specific plan of study.

The following courses are required:

EDL 562: District Superintendent Challenges: Boardrooms and Court-

rooms

EDL 565: Getting District Results: The Role of the Superintendent

EDL 576: Superintendent as CEO EDL 690: Superintendent Seminar EDL 691: Superintendent Practicum

Candidates should check with the Montana Office of Public Instruction for other licensure requirements.

#### **Learning Outcomes**

- 1. PEPPS 10.58.705 (1): The program requires that successful candidates: (a) facilitate the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community in order to promote the success of all students.
- 2. ISLLC Standard #1: A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.
- 3. ELCC Standard 1.0: Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by facilitating the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community.
- 4. PEPPS 10.58.705 (1): The program requires that successful candidates (b) promote a positive school culture, provide an effective instructional program, apply best practice to student learning, and design comprehensive professional growth plans for staff in order to promote the success of all students.
- 5. ISLLC Standard #2: A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.
- 6. ELLC Standard 2.0: Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional plans for staff.
- 7. PEPPS 10.58.705 (1): The program requires that successful candidates (c) manage the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment in order to promote the success of all students.
- 8. ISLLC #3: A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.
- 9. ELLC Standard 3.0: Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment.
- 10. PEPPS 10.58.705 (1): The program requires that successful candidates (d) collaborate with families and other community members, respond to diverse community interests and needs, including Montana American Indian communities, and mobilize community resources in order to promote the success of all students.
- 11. ISLLC Standard #4: A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.
- 12. ELLC Standard 4.0: Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources.

- 13. PEPPS 10.58.705 (1): The program requires that successful candidates (e) act with integrity, fairness, and in an ethical manner in order to promote the success of all students.
- 14. ISSLC Standard #5: A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner.
- 15. ELLC Standard 5.0: Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by acting with integrity, fairly, and in an ethical manner
- 16. PEPPS 10.58.705 (1): The program requires that successful candidates (f) understand, respond to, and influence the larger political, social, economic, legal, and cultural context in order to promote the success of all students.
- 17. ISLLC Standard #6: A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.
- 18. ELCC Standard 6.0: Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.
- 19. PEPPS 10.58.705 (1): The program requires that successful candidates (g) complete an internship/field experience that provides at least 216 hours of significant opportunities to synthesize and apply the knowledge and practice and develop the skills identified in this rule through substantial, sustained, standards-based work in real settings, planned and guided cooperatively by the institution and properly administratively endorsed school district personnel for graduate credit.
- 20. ELCC 7.0: The internship provides significant opportunities for candidates to synthesize and apply the knowledge and practice and develop the skills identified in Standards 1-6 through substantial, sustained, standards-based work in real settings, planned and guided cooperatively by the institution and school district personnel for graduate credit.

All candidates in this program will complete a minimum of 216 hours of internship with a licensed mentor in an accredited educational setting. In addition, students will participate in a reflective seminar regarding their internship experience. Logs and demonstrative outcomes will be a measurable component and will meet this PEPPS and ELLC Standard.

## **Educational Leadership courses**

#### **EDL 500**

## Foundations of Leadership

Semester: Fall Semester Hours: 2

The focus of this course is on public school education – past, present, and future. Course content will include exploration of the roles of federal, state, and local governance systems as they pertain to leadership roles in public education. No Child Left Behind legislation will be discussed and analyzed from the perspective of the building or district leader. In addition, participants will be introduced to the process of creating a school ethnography and exploring the school culture, climate, and dynamics from the perspective of a school as a social organization. This experiential course invites class participation, team building and group activities, roleplaying, guest lecturers, and group dynamics.

### **EDL 505**

### Dimensions of Leadership I

Semester: Fall Semester Hours: 3

The focus of this course is on the roles and responsibilities of K-12 school administrators including leadership styles and behaviors. Additionally, the influence leadership has on the overall operation of a school building will be explored. Participants will discuss such topics as defining school

climate and culture, sustaining partnerships and building collegial teams, and sharing leadership.

#### **EDL 510**

#### **Dimensions of Leadership II**

Semester: Spring Semester Hours: 3

The focus of this course is to build on the knowledge and understanding of how leadership influences instruction and teacher practice. Participants will explore the leadership skills required to nurture instructional improvement in schools.

#### **EDL 520**

## **Supervision of Educational Personnel**

Semester: Spring Semester Hours: 3

The focus of this course is on improving, coordinating, and evaluating modern trends of supervisory practice. Students will evaluate and develop instruments for use in the formative and summative evaluation of teaching, as well as for support roles within the school environment. Participants will explore best practice instructional models from which to base the evaluation instrument or process. Participants will become familiar with the evaluation process as it pertains to marginal staff. Students will be required to recommend specific staff development options aligned to improvement of instruction.

#### **EDL 530**

#### **Public School Law**

Semester: Fall Semester Hours: 3

This course will study the legal framework of public education (Constitutional law, case law, and Montana law) with emphases on Montana and national legislation and case law pertaining to public education and the rights of board members, administrators, students, and parents.

### **EDL 554**

## **Public School Finance**

Semester: Spring Semester Hours: 3

This course will focus on the development of educational budgets within the confines of available revenue. Taxation, policy analysis, applicable case law, and reporting will be covered.

#### **EDL 560**

## **Organizational Change**

Semester: Fall Semester Hours: 3

The focus of this course is on topics such as the theory of management, communication, human relations, social systems, motivation, decision making, and change. A particular focus in this course is on the role of the building administrator in improving student achievement in a school reform effort. Practical application of analyzing school data followed by program intervention will be explored. Participants will explore how today's leaders must create and nurture a culture of collaboration, collegiality, and continuous improvement.

#### **EDL 562**

#### The School Superintendent Challenges - Boardrooms and Courtrooms

Semester: On Demand

Semester Hours: 3

Members of the superintendent cohort will apply course content to the actual superintendent internship experience (EDL 691), which is taken concurrently with this course. The overall purpose of the course is to reflect on and demonstrate competency pertaining to the national AASA standards as it relates to school board governance and legal issues. Students will explore the role of the superintendent as it relates to board relations, creating district policy, and legal issues ranging from personnel issues,

collective bargaining statutes, and to other case law. Particular emphasis will be placed on superintendents serving small, rural school districts, as this is of particular interest in a rural state such as Montana.

Prerequisite: Students must have earned a master of educational leadership or a master of education.

#### EDL 565

#### Getting District Results: The Role of the Superintendent

Semester: On Demand Semester Hours: 3

Members of the superintendent cohort will apply course content to the actual superintendent internship experience (EDL 691), which is taken concurrently with this course. The overall purpose of the course is to reflect on and demonstrate competency pertaining to the national AASA standards as it relates to leading an organizational change and increasing overall student achievement. Students will discover how the largest elementary school district in Illinois became a flourishing professional learning community. Each step of the PLC journey, from the superintendent perspective, will be discussed discerning how the district approached the vital components of a successful PLC, such as building shared knowledge, forming collaborative teams, and setting priorities. Particular focus will be on the clarification of essential learning assessments such as common, formative assessments. Additionally, focus will be on how superintendents prioritize establishing a systematic intervention and enrichment delivery throughout daily instruction. Finally, the importance of the superintendent's roles and responsibilities sustaining the change initiative will be identified.

Prerequisite: Students must have earned a master of educational leadership or a master of education.

#### **EDL 570**

### **School Curriculum**

Semester: Spring

Semester Hours: 3

The focus of this course is on the role of leadership in curriculum planning and development with topics including educational and cultural foundations; curricular outcomes; K-12 alignment; standards and community values; developing, managing, and evaluating curriculum; multicultural education; equal access; differentiated instruction; academic freedom; technology; scheduling; censorship; and curriculum associated with various student populations.

#### **EDL 575**

## **Public School and Community Relationships**

Semester: Fall Semester Hours: 3

This course will focus on the interdependence of school and community; identifying and defining societal expectations of schools and the effects of those expectations on educational policy; and the impact of social, political, economic, and demographic changes on public school policy.

#### **EDL 576**

## The Superintendent as CEO

Semester: On Demand Semester Hours: 3

Members of the superintendent cohort will apply course content to the actual superintendent internship experience (EDL 691), which is taken concurrently with this course. The overall purpose of the course is to reflect on and demonstrate competency pertaining to the national AASA standards (i.e., leadership and school culture; policy and governance; communications and community relations; organizational management; curriculum planning and development; instructional management; human resources management; and values and ethics of leadership). The required internship evaluation instrument will be completed on each of the standards listed above. The text serves as an up-to-date resource to guide course discussions. The text outlines various scenarios and case studies that will assist in guiding cohort discussions.

Prerequisite: Students must have earned a master of educational leadership or a master of education.

#### EDL 590F

## Leadership Seminar (Elementary)

Semester: Fall and Spring

Semester Hours: 1

The focus of this course will be reflection and inquiry regarding the administrative practicum. Problem solving and best practices will be a component of this course. Discussions will revolve around the ISLLC, ELCC, and PEPP standards. Initial development of the administrative portfolio will be completed during this course.

Corequisite: EDL 591

#### **EDL 590S**

## **Leadership Seminar (Secondary)**

Semester: Fall and Spring

Semester Hours: 1

The focus of this course will be reflection and inquiry regarding the administrative practicum. Problem solving and best practices will be a component of this course. Discussions will revolve around the ISLLC, ELCC, and PEPP standards. Initial development of the administrative portfolio will be completed during this course.

Corequisite: EDL 591

#### **EDL 591E**

### **Practicum for Elementary School**

Semester: Fall and Spring Semester Hours: 2

A directed internship experience designed to relate theories and concepts explored in coursework to educational settings is the primary focus of the field experience. Practical application of theories will be implemented in fieldwork

Corequisite: EDL 590

### **EDL 591S**

## **Practicum for Secondary School**

Semester: Fall and Spring

Semester Hours: 2

A directed internship experience designed to relate theories and concepts explored in coursework to educational settings is the primary focus of the field experience. Practical application of theories will be implemented in fieldwork.

Prerequisite: EDL 590

### EDL 683

#### **Educational Leadership Capstone**

Semester: Spring Semester Hours: 2

This course will be the culminating experience for students in the educational leadership program. A comprehensive review of material covered, as well as an exit interview, will be components of this experience. Theories and principles of advanced leadership practiced in educational settings will be explored within the context of the overall program.

## EDL 690

#### **Superintendent Seminar**

Semester: Spring Semester Hours: 1

This course is a continuation of EDL 590 and will focus on problem solving and best practices in the administrative practicum. Practical application of theories will be implemented in fieldwork. Discussions will revolve around the ISLLC, ELCC, and PEPP standards. Initial development of the administrative portfolio will be completed during this course. Continued review and development of the school ethnography will be a part of the seminar.

Corequisite: EDL 691

#### EDL 691

#### **Superintendent Practicum**

Semester: Spring Semester Hours: 2

A directed internship experience designed to relate theories and concepts explored in coursework to educational settings are the primary focus of the field experience. Practical application of theories will be implemented in fieldwork.

Corequisite: EDL 690

## **English**

Stephen Germic, Professor Andrew Kirk, Professor Jacqueline Dundas, Associate Professor Nicholas Plunkey, Associate Professor Precious McKenzie, Assistant Professor

The English program offers major concentrations in literary studies and creative writing along with a major in English education. Students who focus on literary studies will immerse themselves in principal works of the Western and non-Western traditions. Whether analyzing themes, characters, styles, or synthesizing ideas, students develop the analytical and communication skills that are exceptional preparation for rich and rewarding personal and professional lives. Students who pursue creative writing will discover and refine their own voices in poetry, fiction, and playwriting. Studying both literature and the complex craft of writing, they learn to view texts as a bridge to self-discovery and creative engagement with the world and its rich literary traditions. English education students take extensive coursework in English and education curricula to prepare them for careers as middle school and/or high school English teachers. We are pleased to say that our English education program has an excellent record of placing students in teaching jobs.

#### **Learning Outcomes**

## **Literary Studies**

Students who graduate with a concentration in literary studies will:

- 1. Demonstrate a thorough understanding of the major authors and movements of British and American literature;
- Interpret literary texts employing appropriate techniques and terms of literary analysis;
- Demonstrate an understanding of multiple theoretical perspectives of literary analysis, including feminist, formalist, psychoanalytic, and historicist perspectives; and
- Demonstrate well-developed skills in reading closely, thinking critically, and communicating effectively in writing.

## **Creative Writing**

Students who graduate with a concentration in creative writing will:

- 1. Develop a portfolio of works of fiction, drama, and poetry;
- 2. Develop an active, experimental, and reflective writing process that includes invention, drafting, revision, and editing;
- Read as a writer, which involves understanding processes and craft techniques for contemporary fiction, drama, and poetry;
- Demonstrate the professional habits of active creative writers: give public readings, read literary magazines, and submit work for publication according to professional standards of manuscript preparation;
- 5. Provide feedback for multiple genres of writing in a workshop setting;
- 6. Demonstrate a thorough knowledge of the key figures, movements, and genres of literary history; and
- Demonstrate a command of grammar and conventions of Standard Written English.

#### **Literary Studies Concentration**

A minimum of 36 semester hours is required, including:

ENG 252: Close Reading of Poetry

ENG 272: British Literature: 800 to 1800

ENG 273: British Literature: 1800 to Present ENG 282: American Literature: Origins to 1865

ENG 283: American Literature: 1865 to Present

ENG 331: Literary Criticism

ENG 471: Studies in Shakespeare

Also, 15 additional English semester hours, at least nine of which must be at the 300-level or higher.

### **Creative Writing Concentration**

A minimum of 42 semester hours is required, including:

ENG 251: Imaginative Writing

ENG 252: Close Reading of Poetry

ENG 317: Poetry Writing

**ENG 319: Creative Nonfiction Writing** 

ENG 324: Fiction Writing

ENG 325: Professional Writing

ENG 365: Journalism

ENG 482: Creative Writing Capstone

ENG 491: Sun & Sandstone Literary Journal I ENG 493: Sun & Sandstone Literary Journal II

Choose one of the following:

ENG 272: British Literature: 800 to 1800 ENG 273: British Literature: 1800 to Present

Choose one of the following:

ENG 282: American Literature: Origins to 1865 ENG 283: American Literature: 1865 to Present

Choose one of the following:

ENG 223: Introduction to Native American Literature ENG 224: Introduction to African-American Literature

ENG 291: Contemporary World Fiction

Choose one of the following:

ENG 445: The American Novel

ENG 447: The American Short Story

ENG 452: American Poetry in the 20th Century

ENG 456: Studies in Drama

ENG 471: Studies in Shakespeare

#### Major in English Education

A minimum of 42 semester hours is required, including:

ENG 252: Close Reading of Poetry

ENG 272: British Literature: 800 to 1800

ENG 273: British Literature: 1800 to Present

ENG 282: American Literature: Origins to 1865

ENG 283: American Literature: 1865 to Present

ENG 319: Creative Nonfiction Writing

ENG 331: Literary Criticism

ENG 338: Literature, Film, and Media

ENG 359: History and Grammar of English

ENG 420: Methods and Materials: Teaching English in the Secondary School

ENG 471: Studies in Shakespeare

Choose one of the following:

ENG 223: Introduction to Native American Literature

ENG 224: Introduction to African American Literature

ENG 291: Contemporary World Fiction

Choose one of the following:

ENG 445: The American Novel

ENG 447: The American Short Story

ENG 452: American Poetry in the 20th Century

Students must also take one upper-division elective. To fulfill the degree, students must complete the professional education program for secondary teaching (grades 5-12) as described in the "Education" section of the catalog.

#### **Minor in Literary Studies**

A minimum of 18 semester hours is required, including:

ENG 252: Close Reading of Poetry

ENG 331: Literary Criticism

Choose one of the following:

ENG 272: British Literature: 800 to 1800 ENG 273: British Literature: 1800 to Present

Choose one of the following:

ENG 282: American Literature: Origins to 1865 ENG 283: American Literature: 1865 to Present

Plus six additional upper-division semester hours in literature.

## **Minor in Writing**

A minimum of 18 semester hours is required, including:

ENG 251: Imaginative Writing

ENG 319: Creative Nonfiction Writing

ENG 325: Professional Writing

ENG 365: Journalism

ENG 482: Creative Writing Capstone

Choose one of the following:

ENG 317: Poetry Writing

ENG 324: Fiction Writing

#### Minor in English Education

A minimum of 27 semester hours is required, including:

ENG 252: Closed Reading of Poetry

ENG 319: Creative Nonfiction Writing

ENG 331: Literary Criticism

ENG 338: Literature, Film, and Media

ENG 420: Methods and Materials: Teaching English in the Secondary

School

ENG 471: Studies in Shakespeare

Choose one of the following:

ENG 223: Introduction to Native American Literature

ENG 224: Introduction to African-American Literature

ENG 291: Contemporary World Fiction

Choose one of the following:

ENG 272: British Literature: 800 to 1800 ENG 273: British Literature: 1800 to Present

Choose one of the following:

ENG 282: American Literature: Origins to 1865 ENG 283: American Literature: 1865 to Present

## **English courses**

**ENG 090** 

Support ESL I

Semester: On Demand

Semester Hours: 3

These credits will count for the semester in which it is taken but will not be counted toward the 124 credits needed for graduation. Students for whom English is a second language may request this course or may be required to take this course, which will help build intermediate academic

English skills. The course will be customized to meet the needs of a particular student or group of students.

#### ENG 091

## Support ESL II

Semester: On Demand Semester Hours: 3

These credits will count for the semester in which it is taken but will not be counted toward the 124 credits needed for graduation. Students for whom English is a second language may request this course or may be required to take this course, which will help build intermediate academic English skills. The course will be customized to meet the needs of a particular student or group of students.

#### **ENG 103**

#### Advanced ESL I

Semester: On Demand Semester Hours: 3

These credits will count for the semester in which it is taken but will not be counted toward the 124 credits needed for graduation. This advanced-level course is offered to students for whom English is a second language and who wish to refine their English language skills. The course will be customized to meet the needs of a particular student or group of students.

#### **ENG 104**

#### **Advanced ESL II**

Semester: On Demand Semester Hours: 3

These credits will count for the semester in which it is taken but will not be counted toward the 124 credits needed for graduation. This advanced-level course is offered to students for whom English is a second language and who wish to refine their English language skills. The course will be customized to meet the needs of a particular student or group of students.

#### **ENG 118**

## **Basic Composition**

Semester: Fall

Semester Hours: 3

This course introduces students to the basic skills necessary for writing effectively at the college level and prepares students for the writing demands of other college courses. Students explore many types of writing projects, beginning with a personal essay and ending with a formal critique. Using writing theory, the course emphasizes writing as a process, the importance of revising, and the value of peer editing and evaluating. This course may not be taken to satisfy core curriculum requirements.

#### **ENG 119**

## **First-Year Writing**

Semester: Fall and Spring

Semester Hours: 3

This course is an introduction to college writing. Students critically read and discuss texts, learn that writing is a process, experiment with academic prose, develop the skills necessary to create and support a thesis, practice incorporating research into their analysis, and develop grammatical and stylistic competence. Students keep a portfolio of their work, which includes a self-evaluation of their writing progress. This course fulfills a core curriculum requirement. It cannot be used to fulfill any major or minor requirement.

#### ENG 120

## **Critical Reading and Evaluative Writing**

Semester: Fall and Spring

Semester Hours: 3

Designed to follow ENG 119, students analyze texts and create effective writing based on their insights. Students practice generating questions that lead to the formation of complex theses and effective support. Building on the idea of integrated knowledge, students develop strategies aiding them in cross-disciplinary and multi-cultural reasoning. They compose essays

deploying diverse strategies, such as definition, classification, comparison/contrast, analysis, and argumentation. Students keep a portfolio of their work, which includes a self-evaluation of their writing progress. This course fulfills a core curriculum requirement. It cannot be used to fulfill any major or minor requirement.

Prerequisite: ENG 119

#### **ENG 223**

#### **Introduction to Native American Literature**

Semester: Fall, Alternate years

Semester Hours: 3

This course is an examination of selected literature produced by such Native American writers as Momaday, Welch, Erdrich, McNickle, Silko, and others. Students will consider issues of genre, history, and politics as they relate to American literature. Special emphasis is given to the oral tradition and its relationship to contemporary American writing.

#### **ENG 224**

#### **Introduction to African American Literature**

Semester: Fall, Alternate years

Semester Hours: 3

This course is a study of selected topics in African American literature and criticism. Topics vary but may include such areas as the literature of civil rights, African American memoir, captivity and freedom narratives, African American poetry, theories of race and class, and black feminist writing, among others.

#### **ENG 242**

#### **Modern Dramatic Literature**

Semester: Fall, Alternate years

Semester Hours: 3

Focusing on script analysis, students consider diverse trends in playwriting and theatrical performances over the past 100 years as viewed through the works of the major playwrights of Europe and the United States. Trends studied include expressionism, surrealism, cubism, and absurdism. This course encourages cross-cultural understanding. This course is cross-listed with THR 242.

#### **ENG 244**

## Literature and the Environment

Semester: Spring, Alternate years

Semester Hours: 3

This course is a comparative study of the environmental imagination as expressed in literature. By reading and discussing a wide range of literary texts, students investigate timeless and more urgent questions, such as "What is nature?; "What is our responsibility to the environment?"; and "How do various cultures express their relation to the natural world?".

#### **ENG 245**

## **Travel Literature**

Semester: On Demand Semester Hours: 3

Students in this course explore the world of travel writing through the diverse narratives of selected contemporary and classic travel writers. The course emphasizes literary analysis, with particular attention paid to understanding the cultural and historical contexts of this literature.

## **ENG 247**

## War Literature

Semester: Spring, Alternate years

Semester Hours: 3

Students explore how a variety of writers through time have represented the tragedy, trauma, and psychology of war. The course covers fictional and non-fictional works from various historical and literacy periods as well as genres such as epic and lyric poetry, romance, and drama.

#### **ENG 251**

#### **Imaginative Writing**

Semester: Fall Semester Hours: 3

This introduction to imaginative writing explores poetry and short fiction. The course is a workshop focusing on the stages of free writing, drafting, presenting, and revising poems and prose. Elements of poetry discussed include tone, voice, image, metaphor, and devices of sound, meter, traditional structure, and innovations. Elements of fiction emphasized include setting, character development, dialogue, plot, and conflict.

Prerequisite: ENG 119

#### **ENG 252**

### **Close Reading of Poetry**

Semester: Fall Semester Hours: 3

Students are introduced to the genre of poetry. The course provides students with a foundation in the methods of detailed reading and analysis essential to an understanding of poetry and, more broadly, to the study of literature. The course addresses the basics of prosody, poetic devices such as diction, metaphor, image, and tone, and major verse forms such as the sonnet, elegy, ode, ballad, dramatic monologue, and free verse. The texts reflect the continuity and variation in the history of British and American poetry and provide a sample of works from the 16th century to the present.

#### **ENG 270**

#### Literature of Montana and the American West

Semester: On Demand Semester Hours: 3

This course examines literature written by and about people living in Montana and the western United States, including American Indians, women, and immigrants.

#### **ENG 272**

#### British Literature: 800 to 1800

Semester: Fall Semester Hours: 3

The first in the sequence of two British literature surveys, this course provides an introduction to the formative period of British language and literature. Students read representative works from the Anglo-Saxon, Middle English, Renaissance, Restoration, and 18th century periods against their literary, historical, linguistic, and philosophical backgrounds.

#### **ENG 273**

#### **British Literature: 1800 to Present**

Semester: Spring Semester Hours: 3

The second in the sequence of two British literature surveys, this course introduces students to Romantic, Victorian, Modern, and Postmodern literature, analyzing selected texts, from the end of the 18th century to the end of the 20th, against their literary, historical, ideological, and cultural backgrounds.

#### **ENG 282**

## **American Literature: Origins to 1865**

Semester: Fall Semester Hours: 3

This course provides a survey of major literary works from the Puritan, Enlightenment, and Romantic periods. Emphasis is placed on such figures as Edwards, Franklin, Emerson, Hawthorne, Poe, Thoreau, Jacobs, Whitman, Douglass, Melville, and Dickinson. The literature is examined in the context of literary, historical, and philosophical backgrounds.

#### **ENG 283**

#### American Literature: 1865 to Present

Semester: Spring Semester Hours: 3

This course provides a survey of major literary works since the Civil War. Emphasis is placed on such figures as Twain, James, Crane, DuBois, Chopin, Wharton, Toomer, Cather, Hughes, Hemingway, and Stevens. The literature is examined in the context of literary, historical, and philosophical backgrounds.

#### **ENG 291**

#### **Contemporary World Fiction**

Semester: Spring Semester Hours: 3

This course introduces students to recent prose fiction, with special attention paid to non-Western and non-American works.

#### **ENG 299**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

## **ENG 317 Poetry Writing**

Semester: Fall Semester Hours: 3

This course offers extensive imaginative work in poetry. Students explore the creative process and challenge themselves with longer and more complex assignments than in ENG 251. They experiment with points of view other than their own and with various forms of poetry. They also work independently to produce a significant amount of polished work and engage in poetry workshops. Students keep a writing journal and have considerable input into the development of assignments.

Prerequisite: ENG 251

#### **ENG 319**

## **Creative Nonfiction Writing**

Semester: Fall Semester Hours: 3

Students study examples of creative nonfiction and practice writing their own. They also gain experience incorporating research into their prose.

Prerequisite: ENG 119

#### **ENG 322**

#### **Renaissance Literature**

Semester: Fall, Alternate years

Semester Hours: 3

Students examine the Renaissance as expressed in British literature. Typical subjects of study include the early humanism of More; the courtly poetry of Wyatt and Surrey; the sonnets of Drayton, Sidney, and Wroth; the chivalric romance of Spencer; the satire of Nashe; the drama of Kyd, Marlow, Shakespeare, Webster, Jonson, and Ford; the essays of Francis Bacon; and the poetry of Donne, Herbert, Herrick, and Marvel.

## **ENG 324**

## **Fiction Writing**

Semester: Spring Semester Hours: 3

This course offers extensive imaginative work in fiction writing. Students explore the creative process and challenge themselves with longer and more complex assignments than in ENG 251. They experiment with points of view other than their own and with various forms of fiction. They also work independently to produce a significant amount of polished

work and engage in fiction workshops. Students keep a writing journal and have considerable input into the development of assignments.

Prerequisite: ENG 251

#### **ENG 325**

#### **Professional Writing**

Semester: Fall

Semester Hours: 3

This course teaches concepts, practices, and skills for communicating technical, scientific, or business-related information. Topics include understanding how people read, designing documents, incorporating graphics, writing about statistical results, rewriting, editing, and using the Internet. This course may be especially useful for non-English majors, providing them with the tools and techniques to communicate their messages effectively.

Prerequisite: ENG 119

#### **ENG 331**

### **Literary Criticism**

Semester: Fall Semester Hours: 3

This course introduces students to current controversies in literary criticism. The course discusses approaches to literary analysis such as deconstruction, cultural criticism, and postcolonialism. Students typically use a casebook method, observing how critics from divergent backgrounds interpret a single text. Students critique these various approaches and refine their own critical practices.

#### **ENG 333**

#### **British Romantic Literature**

Semester: Fall, Alternate years

Semester Hours: 3

This course examines a wide range of British Romantic texts. Students read and analyze selected works against the literary, historical, and philosophical background of late 18th and early 19th century England. Representative authors include Blake. Radcliffe. Wordsworth. Wollstonecraft. Coleridge, Byron, Shelley, Keats, and DeQuincy.

#### **ENG 334**

#### The British Novel

Semester: Spring, Alternate years

Semester Hours: 3

This course surveys the rise and development of the British novel. It includes an analysis of such 18th century writers as Defoe, Sterne, Fielding, Radcliffe, and Burney; early 19th-century writers such as Austen, Shelley, and Scott; such Victorian novelists as Dickens, the Brontë sisters, Eliot, Thackeray, Trollope, and Hardy; and such Modernists as Conrad, Woolf, Joyce, Forster, and Lawrence.

## **ENG 338**

#### Literature, Film, and Media

Semester: Spring, Alternate years

Semester Hours: 3

This course investigates interrelations among literature, film, and other forms of non-print media. Subject matter will include literary works, films, television, web-content, and emerging technologies through which cultural narratives are increasingly transmitted and developed. Theories of audience reception, textual production, and modes of critical interpretation will be emphasized.

#### **ENG 354**

## Writing Consultant Practicum

Semester: Spring

Semester Hours: 3

Students examine current scholarship in writing center theory and practice and develop instructional approaches to collaborative learning. Course discussions stemming from these readings, subsequent research that stu-

dents conduct, and students' routine observations of writing consultants inform several writing projects.

Prerequisite: ENG 119, ENG 120, and official endorsement from faculty member

## **ENG 359**

#### History and Grammar of English

Semester: Fall, Alternate years

Semester Hours: 3

Students are introduced to the linguistic and theoretic approaches to the study of English, including phonology and morphology. Students pursue an in-depth study of syntax, focusing on the grammar of words, phrases, clauses, and sentences. Students also review the history of English from proto-Germanic to the development of regional dialects, cultural variations, and "global" English.

#### **ENG 362**

#### Literary Modernism

Semester: Fall, Alternate years

Semester Hours: 3

Students examine the major movement in Western art in the first half of the 20th century as reflected in representative literary texts. Attention is focused on the questions: What is modernism? What is its relation to naturalism and realism? How does literary art fuse with the other arts during this period? Authors may include Joyce, Stein, Pound, Eliot, Williams, Cather, Toomer, Ford, Lawrence, Woolf, Hemingway, Fitzgerald, and Faulkner.

#### **ENG 365**

#### Journalism

Semester: Fall Semester Hours: 3

Providing an introduction to writing print, broadcast, and multimedia articles and producing a professional publication, this course is strongly recommended for all students participating on the student newspaper.

## **ENG 370**

### **Religion and Literature**

Semester: On Demand

Semester Hours: 3

A study of religious issues, conflict, and hopes in modern literature. Studied works will vary from year to year, but they may include texts by authors such as Melville, Tolstoy, Hemingway, Flannery O'Connor, and John Updike. This is a writing-intensive course. This course is cross-listed with PHR 370.

#### **ENG 418**

## Writing and Publishing in New York City

Semester: Fall Semester Hours: 3

Students will meet regularly throughout the term and spend eight days in New York City attending workshops and seminars on publishing, editing, and freelance writing. They meet professional writers, editors, and agents who introduce them to all aspects of the writing and publishing professions. Students also visit museums and attend cultural and literary events. Prerequisite: ENG 120

### **ENG 420**

## Methods and Materials: Teaching English in the Secondary School

Semester: Fall, Alternate years

Semester Hours: 3

This seminar requires focused study and consultation with a public school English/language arts teacher or other acceptable professional in the field. Hours will be arranged in consultation with the content area professor, the appropriate education professor, the student, and the professional mentor. The course focuses on English pedagogy with special attention to reading and writing instruction. Students study methods for creating a classroom conducive to learning, select materials for motivational and instructional

purposes, incorporate technology in classroom strategies, evaluate and assess student work, integrate the language arts with other content areas, and examine the scope and sequence of literature and writing for grades 5-12. This seminar strongly emphasizes practical methodologies and is the capstone course for the English education major.

Prerequisite: EDC 040, admission to the teacher education program; senior standing

#### **ENG 445**

#### The American Novel

Semester: Spring, Alternate years

Semester Hours: 3

Students examine American novels from the 19th century to the present. Attention is given both to the genre of the novel as well as to the individual literary works. Content varies, but representative topics include the way in which personal and national identities are shaped or defined in the fictional texts, the role of the marketplace in influencing literary practice, and the relation between American fiction and philosophy.

## **ENG 447**

## The American Short Story

Semester: Spring, Alternate years

Semester Hours: 3

Students are introduced to the genre of the short story, emphasizing major American writers from the 19th century to the present. Particular attention is directed to historical and cultural backgrounds. Students cultivate skills in critical analysis by focusing on issues of character, plot, theme, point of view, setting, tone, style, and other literary devices as they function within the context of individual stories.

#### **ENG 450**

### Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required.

Prerequisite: junior or senior standing

#### ENG 452

#### American Poetry in the 20th Century

Semester: Fall, Alternate years

Semester Hours: 3

An in-depth study of American poetry in the 20th century, focusing on representative poets in the context of literary and cultural history. Representative poets include Pound, Lowell, H.D., Eliot, Frost, Stevens, Williams, Oppen, Niedecker, Sexton, Rich, Kerouac, Rexroth, and Ronan. Particular emphasis is on developing and strengthening students' skills in the close reading of poetry.

## ENG 456

#### **Studies in Drama**

Semester: Fall, Alternate years

Semester Hours: 3

Students examine authors, themes, and/or movements significant in British, American, European, or world drama. It includes reading and analysis of selected plays. Focus is on variety in period, type, and technique. Content varies.

#### **ENG 471**

## Studies in Shakespeare

Semester: Spring

Semester Hours: 3

Students engage in the advanced study of Shakespeare's works, analyzing them within their literary, historical, theatrical, linguistic, and cultural contexts. Particular attention in this course is devoted to the major critical and theoretical approaches to Shakespeare, providing a foundation for

students intending to go to graduate school in English or teach English at the secondary level.

### **ENG 482**

## **Capstone in Creative Writing**

Semester: Spring Semester Hours: 3

This course is the capstone for the creative writing concentration. In this course, the students will produce advanced creative writing work, put together their final portfolios (including both writing new work and revised previous works), and organize a public reading.

Prerequisite: ENG 251 and one of the following: ENG 317, ENG 324, or

**ENG 319** 

#### **ENG 491**

## Sun & Sandstone Literary Journal I

Semester: Fall Semester Hours: 3

This course focuses on the production of Sun & Sandstone, the undergraduate literary journal. In this course, we will read other literary journals and review submissions to Sun & Sandstone, hold meetings to determine what pieces will be accepted, and design the journal itself.

Prerequisite: ENG 251, ENG 319, or permission of instructor

#### **ENG 493**

## Sun & Sandstone Literary Journal II

Semester: Spring Semester Hours: 3

This is a continuation of ENG 491: Sun & Sandstone Literary Journal I. In this course, we will bring the annual issue of Sun & Sandstone to completion. Editors will meet to complete submission review, complete correspondence with rejected and accepted authors, and finish journal design and production.

Prerequisite: ENG 251, ENG 319, or permission of instructor

### **ENG 499**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

## **Environmental Management & Policy**

Kayhan Ostovar, Associate Professor

Lucas Ward, Assistant Professor, Program Coordinator of Environmental Management and Policy

Megan Poulette, Assistant Professor

The environmental management and policy program (EMP) provides students with rigorous, problem-oriented training in the theories and practical skills they will need to contribute meaningfully to ongoing efforts to craft a sustainable, just world. Through interdisciplinary coursework, unique fieldwork, internship, and service-learning opportunities in the Yellowstone River watershed (and beyond), EMP students learn to think, speak, and write critically and pragmatically about the links between environmental science, human development, and decision-making. Rocky Mountain College's location along the Yellowstone River and proximity to the both the Beartooth Mountains and Yellowstone National Park provide EMP students with unique opportunities to explore first-hand the human-environment-dynamics and development patterns that drive resource management policies.

#### **Learning Outcomes**

Students who graduate with a major in environmental management and policy will be able to:

- 1. Apply fundamental theories from the disciplines of business, the natural science and social sciences, and the humanities to environmental
- 2. Demonstrate knowledge of political, legal, and economic processes associated with environmental management and policy;
- 3. Demonstrate knowledge of the ethical implications of environmental management and policy decisions;
- Demonstrate a capacity to think critically and communicate effectively about the relationships between global processes and regional- and sub-regional-scale environmental management and policy issues.

## Major in Environmental Management & Policy

A minimum of 54 semester hours is required, including:

EMP 102: Regional Geography of Landscape Change

EMP 118: Montana Rivers

EMP 302: Sustainable Development Policy and Practice

EMP 411: Science Policy and the Environment

ESC 105: Environmental Science: Sustainable Communities ESC 321: Introduction to Geographic Information Systems

EST 103: Introduction of Environmental Studies

ACC 210: Principles of Accounting BSA 101: Introduction to Business

BSA 303: Principles of Management ECO 205: Principles of Economics

ECO 354: Environmental Economics

PHR 304: Environmental Ethics

Choose one of the following:

EST 226: Energy and Society EMP 224: Environment and Society

POL 204: Political Geography

Choose three of the following:

ESC 209: Field Survey Techniques in Zoology

ESC 314: Range Ecology ESC 322: Remote Sensing

ESC 330: Wildlife Ecology and Conservation

ESC 436: Yellowstone Winter Ecology

BSA 331: Business Law BSA 412: Business Ethics

BSA 418: Entrepreneurship I

ENG 244: Literature and the Environment

GEO 101: Fundamentals of Geology GEO 331: Oil and Gas Geology

HST 365: American Environmental History

POL 301: International Relations

POL 313: Environmental Politics

## **Environmental Management & Policy courses**

## Foundations of Accounting

Semester: Fall and Spring

Semester Hours: 3

This course is designed to give students a basic understanding of the uses and limitations of accounting information, particularly from financial statements. Students will understand how to take information from the financial statements and make informed business decisions.

Prerequisite: BSA 101

#### **BSA 101**

#### **Introduction to Business**

Semester: Fall and Spring Semester Hours: 3

A beginning business course designed to introduce students to the areas of business study, including historical foundations of America's free enterprise system, ethics and social responsibility in the business setting, entrepreneurship, the legal structures of business, marketing, and general management.

#### **BSA 303**

#### **Principles of Management**

Semester: Fall and Spring Semester Hours: 3

Students examine the management functions and basic concepts and principles of management, including planning, organization, coordination, control, job design, and human resource management. Topics in human resource management include recruitment, selection, administration of personnel policies, and dismissals. This course is often required as a prerequisite for master's level business programs.

Prerequisite: ACC 210, ECO 205

#### **BSA 331**

### **Business Law**

Semester: Fall Semester Hours: 3

A course that explores the legal principles relating to business transactions: contracts, sales, commercial paper, intellectual property, and ecommerce. A study of the legal environment of business is emphasized. This course is often required as a prerequisite for master's level business programs.

Prerequisite: ACC 210, ECO 205

## **BSA 412**

#### **Business Ethics**

Semester: Fall, Alternate years

Semester Hours: 3

A study of the ethical problems that evolve in the modern business world, including a brief history of ethics and the practical ethical problems associated with running a business. Knowledge of ethical concepts as they apply to business management is explored through case studies and student class presentations. Emphasis is on the role of management as it affects stockholders, employees, customers, and competitors. Issues such as product safety, plant closures, advertising, doing business in other countries, and the overall role of business and society are discussed.

Prerequisite: ACC 309, BSA 303, BSA 304, BSA 311

#### **BSA 418**

#### Entrepreneurship I

Semester: Fall Semester Hours: 3

Students will learn the characteristics of successful entrepreneurs, how to seek and evaluate opportunities for new ventures, how to prepare a complete business plan, and how to plan strategies and gather resources to create business opportunities.

Prerequisite: ACC 309, BSA 303, BSA 304, BSA 311

### ECO 205

## **Principles of Economics**

Semester: Fall Semester Hours: 3

This course will introduce the principles of firm-level decision making, consumer choices and their rationale, differing forms of industry competition, and how market-clearing prices and quantities are determined in a market environment. Additionally, the students will gain an understanding of how the major participants in the economy interact and what drives economic growth, interest rates, and inflation. The possible impacts of a variety of fiscal and monetary policy choices will be presented to as-

sist the student in understanding how those policies will impact incomes, employment, and trade for a country. At the completion of this course, the student should have a basic understanding of both the microeconomic and macroeconomic environments and their impacts on businesses and the general population.

#### ECO 354

#### **Environmental Economics**

Semester: Fall, Even years

Semester Hours: 3

Students examine the application of microeconomics to problems of the environment. This course is offered both for the major and for those interested in environmental problems.

Prerequisite: ECO 205

#### EMP 102

## Regional Geography of Landscape Change

Semester: Spring Semester Hours: 3

This course is an integrative course in environmental science, environmental studies, and environmental management and policy. The course is intended to provide students with tools and knowledge from the social and physical sciences that will help them to think critically about how global systems work and how they connect and transform social activity and bio-geographical landscapes around the world. The course focuses on three main topics:

- 1. The cultural, political-economic, and bio-geophysical characteristics that distinguish the world's diverse regions.
- 2. How these place-specific characteristics shape and are shaped by global processes.
- 3. The role of policy in shaping global flows and their local expressions.

#### **EMP 118**

## **Montana Rivers**

Semester: Fall Semester Hours: 3

This course is a required laboratory component for Environmental Program students. This is an integrative, field-based course designed to introduce students to environmental programs at Rocky Mountain College (RMC) and to key regional environmental issues through hands-on experiences in the outdoor classrooms of the Yellowstone and Missouri River watersheds. Students will be involved in a combination of activities, including a canoe trip on the Missouri River or Yellowstone River and outdoor service learning activities, including the annual Yellowstone River Cleanup. They will be expected to read, keep journals, write papers, examine basic ecology, analyze patterns of landscape change and management, and work as part of a team of outdoor professionals. Students will also be expected to learn basic GPS and mapping skills.

Corequisite: EST 103, ESC 105, or instructor approval

#### **EMP 224**

#### **Environment & Society**

Semester: Spring, Odd years

Semester Hours: 3

This course is an integrative course in Environmental Studies (EST), Environmental Management and Policy (EMP), and Environmental Science (ESC). The course is designed to be an elective that will satisfy an elective requirement for EST, EMP, and ESC majors. It will also satisfy core curriculum requirements for the social sciences. The course introduces students to the scholarly context, core ideas, terminology, major controversies, and complexities that surround contemporary socio-environmental problems. The course focuses on four main topics:

- 1. The landscape as a dynamic artifact of human-environment interaction
- 2. The roots of (mostly American) environmental thinking.
- 3. The social, environmental, and political-economic forces that shape human environment interaction and, in doing so, give rise to specific landscapes and environmental problems.

4. The roles of consumers, markets, governments, policies, science, and collective action in shaping human use of and efforts to conserve ecosystem goods and services.

**EMP 299** 

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **EMP 302**

## **Sustainable Development Policy and Practice**

Semester: Fall, Odd years Semester Hours: 3

This course is intended to help students better understand key themes of sustainable development policy and practice. More importantly, perhaps, the goal of the readings is to raise questions about and inspire students to critically examine the "taken-for-granted" assumptions that many of us have regarding sustainable development and, more broadly, out relationships with it. During this class we will constantly return to the following questions:

- 1. What spatial processes and linkages lead to particular development outcomes?
- 2. Whose needs do orthodox approaches to sustainable development best meet?
- 3. What is development success, and how can it be achieved through policy and practice?

The readings, lectures, and assignments for this course track the theory and practice of development as it has evolved since the colonial period of human history, when development policies were focused almost exclusively on empire-building, to the present era of "sustainable development," when the focus is, in theory, on meeting the needs of the current generation without jeopardizing the ability of future generations their own needs

Prerequisite: EMP 102

#### **EMP 411**

## Science Policy and the Environment

Semester: Spring, Even years

Semester Hours: 3

This is a seminar-style "capstone" course for environmental management and policy majors in their second-to-last semester at RMC. This corse focuses on three interrelated themes: 1) the production and contestation of environmental knowledge; 2) the use of environmental knowledge in policy-making; and 3) understanding the historical, scientific, and policy contexts that shape responses to local and global environmental problems. Prerequisite: EMP 102

#### **EMP 499**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

#### **ENG 244**

## Literature and the Environment

Semester: Spring Semester Hours: 3

This course is a comparative study of the environmental imagination as expressed in literature. By reading and discussing a wide range of literary texts, students investigate timeless and more urgent questions, such

as "What is nature?"; "What is our responsibility to the environment?"; "How do various cultures express their relation to the natural world?".

#### ESC 105

## **Environmental Science: Sustainable Communities**

Semester: Fall and Spring

Semester Hours: 4

An introductory course designed for students entering the environmental sciences and studies program and for other students who would like to take an ecology lab course. Topics address the central concepts of ecology including the physical environment in which life exists. Students will explore the properties and processes of populations and communities, ecosystem dynamics, biogeography and biodiversity, as well as issues in conservation and restoration ecology. In the laboratory, students will apply these concepts to ecological studies in the natural environment and learn how to present their results in a scientific report. Three hours of lecture and one two-hour laboratory session per week.

#### **ESC 209**

#### Field Survey Techniques in Zoology

Semester: Spring Semester Hours: 4

A field and laboratory course covering basic field techniques to survey and inventory areas to assess biodiversity, with an emphasis on Montana mammal, bird, reptile, amphibian, and fish fauna. Topics include species identification, survey and trapping, experimental design, data analysis, and report completion. Once identification and survey skills are learned, field teams will be formed and assigned to survey and inventory local habitats of concern with the goal of helping guide local management and restoration of these habitats. An additional fee is required.

Prerequisite: ESC 105 and/or BIO 120

#### **ESC 314**

## Range Ecology

Semester: Fall

Semester Hours: 4

This course is the study of mixed grass prairies of the West and an introduction to ecological concepts applicable to that area. Topics include historical and current land use, ecosystem responses to change, methods for maintaining natural prairie habitats, the use of prairies as rangelands, and determinations of ecological conditions and trends on rangelands. The laboratory focuses on identification of common prairie plant species and their importance for both wildlife and domestic animals. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 120, CHM 101, and CHM 102

#### **ESC 321**

## **Introduction to Geographic Information Systems**

Semester: On Demand Semester Hours: 4

This course introduces students to the theory and practical application of geographic information systems (GIS). Topics include fundamentals of cartography, GIS data types, data input, GIS database structure and management, analysis of spatially distributed data, and report preparations using GIS.

Prerequisite: MAT 100 and a previous science course

### **ESC 330**

## Wildlife Management and Conservation

Semester: Spring Semester Hours: 4

A multidisciplinary approach to conservation and management issues encompassing genetics to ethics. Topics include population genetics, evolutionary mechanisms, biodiversity, reserve design, and re-introduction strategies. Written reports and oral presentations are required. An additional fee is required.

Prerequisite: BÎO 120 and ESC 105

#### **ESC 436**

## Yellowstone Winter Ecology

Semester: Spring Semester Hours: 4

This course focuses on the ecology of Yellowstone National Park, particularly emphasizing the complex interactions of large mammals with the forest and range plant communities. Students explore the methods used by the National Park Service to establish natural resource policies and examine the Park's scientific research priorities. Two extended weekend laboratories provide research opportunities that include topics in winter ecology and aspects of the role of large mammals in the Yellowstone ecosystem. An additional fee is required.

Prerequisite: ENG 119, ENG 120, and BIO 120

#### **EST 103**

#### **Introduction to Environmental Studies**

Semester: Fall Semester Hours: 4

This course explores the complexity of environmental issues as approached from the perspectives of the arts, humanities, and social sciences. Since environmental issues are inherently complex, attention is focused on how human beings perceive, understand, and respond to environmental change. Emphasis is placed on developing students' abilities to investigate matters critically and to respond in original, thoughtful, and imaginative ways. The laboratory portion of this course introduces students through field experience to some of the landscape and environmental issues in our region. Students will be involved in some combination of various activities, such as backpacks, a river cleanup, a film festival, special speaker events, among other activities. They will be expected to keep journals, write papers, take exams, and learn basic photography and watercolor techniques.

#### **EST 226**

#### **Energy and Society**

Semester: Fall, Odd years

Semester Hours: 3

This course is designed to introduce students to baseline knowledge, theories, and analytical techniques that will help them better understand and communicate effectively about the scientific, technical, economic, social, political, and environmental dimensions of Earth-Energy-Society interactions. While other energy sources will be discussed, the course focuses primarily on human use of energy from hydrocarbons (fossil fuels). In this class, students will examine patterns in Earth-Energy-Society interactions from a historical-geographic perspective. Particular attention will be given to policy tools and technical options for addressing problematic/unsustainable patterns of energy production.

#### **GEO 101**

## **Fundamentals of Geology**

Semester: Fall and Spring

Semester Hours: 3

This course provides an introduction to the science of earth materials, earth systems, and earth history, including the study of minerals, rocks, volcanoes, earthquakes, rock deformation and metamorphism, weathering, and erosion within the modern paradigm of plate tectonics. Special emphasis is placed on interpreting the geologic landscape and history of the Rocky Mountains through an understanding of Earth processes. Three hours of lecture and one recommended two-hour laboratory per week, plus field trips. This course fulfills a natural lab science core curriculum requirement if taken concurrently with GEO 104.

#### **GEO 334**

### Oil and Gas Geology

Semester: Fall Semester Hours: 4

This course provides an introduction to oil and gas geology, illustrating the various processes that take place from petroleum source to sink. Lectures will focus on the generation of oil and gas, the nature of source rocks and reservoirs, exploration of petroleum traps, as well as drilling and production. Special consideration will be given to regional oil and gas fields in Montana, Wyoming, and North Dakota. Exercises will include basic rock description (hand sample and thin section), as well as geologic map and seismic interpretation and structural analysis. Assignments will focus on weekly reading and laboratory assignments, as well as field trips. Students will be assessed via laboratory exercises, midterm and final exam, and final project presented in written and oral form.

Prerequisite: GEO 101, GEO 104, GEO 204, and GEO 218

#### **HST 365**

#### American Environmental History

Semester: Fall, Alternate years

Semester Hours: 3

This course examines the interrelationship of human society and nature in American history. Topics will include ecology as it relates to European conquest of the Americas, Native American peoples, public lands policies, American national character, technological society, conservation, and the modern environmental movement.

#### **PHR 304**

#### **Environmental Ethics**

Semester: Spring Semester Hours: 3

This course will address issues such as whether natural beings and the natural world have rights or whether only humans have rights. Students will determine what is ethically appropriate for humans in their relationship with the environment as well as what environmental ethics must take account of to be consequential in the world today.

#### **POL 204**

## **Political Geography**

Semester: Fall, Even years

Semester Hours: 3

This course introduces students to the scholarly context, core ideas, terminology, major controversies, and complexities associated with taking a geographical perspective on political issues. In addition to introducing students to the "discipline" of political geography, the course is designed to help students develop tools to think critically about the mutually constitutive relationship between politics and places as well as the conflict-laden politics of human-environment relations. The readings, videos, music, and other materials used in the course are drawn from political geography, political science, the humanities, government and multi-lateral agencies, and substantive news and media outlets (e.g., Economist, National Geographic, and The World Bank).

The course focuses on five main topics:

- 1. The evolution of political geography as a field of inquiry;
- 2. Places as domains of power (e.g., public places)
- 3. Changing relationships between territory, sovereignty, and identity
- 4. Globalization and environmental governance
- 5. Paradoxes and contradictions of post-September 11 geopolitics

#### POL 301

## **International Relations**

Semester: On Demand

Semester Hours: 3

Students examine an analysis of the way nations interact with one another and how the necessities of power and the desire to regulate the use of power in the international arena have influenced 20th century world politics. Prerequisite: a lower-division history or political science course

#### **POL 313**

### **Environmental Politics**

Semester: Spring Semester Hours: 3

This course explores the political problems associated with the human impact on the natural environment: pollution, natural resources, public lands, land use, energy, cultural/social justice, and population.

## **Environmental Science**

Kayhan Ostovar, Associate Professor Megan Poulette, Assistant Professor

The environmental science program at Rocky Mountain College, while simultaneously cultivating skills in critical thinking and effective communication, provides students with the intellectual training necessary for understanding the complexity of natural ecosystems as they interface with human concerns.

The environmental science program provides an education of multiple dimensions uniquely characterized in two general ways: through specialty and interdisciplinary courses in the environment ranging from the natural and social sciences to the humanities and arts and through an intensive hands-on approach to our great outdoor classroom, Yellowstone County.

Upon graduation, students are prepared for a wide and rapidly evolving range of careers concerned with the interface between human beings and their environment. For those students whose career choices require graduate or professional study, the environmental science program provides the training and discipline necessary for the pursuit of an advanced degree.

#### **Learning Outcomes**

Students who graduate with a major in environmental science will be able to:

- Understand the principles of ecology and environmental issues that apply to air, land, and water issues on a global scale;
- 2. Develop critical thinking and/or observation skills and apply them to the analysis of a problem or question related to the environment;
- Demonstrate ecology knowledge of a complex relationship between predators, prey, and the plant community;
- Apply their ecological knowledge to illustrate and graph a problem and describe the realities that managers face when dealing with a complex issues;
- Understand how politics and management have ecological consequences.

## Major in Environmental Science

The major requires a minimum of 62 total semester hours. A minimum of 31 semester hours must comet from ESC courses. A total of seven semester hours must be 300-level or above from ESC or BIO electives (3 semester hours may be through the Yellowstone Association Institute agreement with RMC).

The following courses are required:

ESC 105: Environmental Science: Sustainable Communities

ESC 209: Field Survey Techniques in Zoology

ESC 321: Introduction to Geographic Information Systems

ESC 436: Yellowstone Winter Ecology

EST 103: Introduction to Environmental Studies

EMP 102: Regional Geography of Landscape Change

EMP 118: Montana Rivers/Lab ESC 223: Organismal Biology

CHM 101: General Chemistry I

GEO 101: Fundamentals of Geology

GEO 104: Fundamentals of Geology Laboratory

MAT 210: Probability and Statistics

Choose one of the following:

ESC 314: Range Ecology

ESC 325: Wetlands and Riparian Ecology

ESC 347: Forest Ecology

Choose one of the following:

ESC 317: Bird Conservation and Research

ESC 330: Wildlife Management and Conservation

Choose one of the following:

CHM 102: General Chemistry II

ESC 316: Geochemistry

Choose three of the following:

ESC 251: Env. Document Writing

ESC 322: Remote Sensing

ECO 354: Environmental Economics

EST 226: Energy and Society

EMP 224: Env. and Society

EMP 302: Sustainable Development

ENG 244: Literature and the Environment

HST 365: American Environmental History

PHR 304: Environmental Ethics

PHR 378: Philosophy of Technology and Modern Culture

POL 313: Environmental Politics

An internship is required and can be used for up to four semester hours of science electives with permission from faculty.

## **Minor in Environmental Science**

A minimum of 26 semester hours is required, including:

ESC 105: Environmental Science: Sustainable Communities

ESC 251: Environmental Document Writing and Review EST 226: Energy and Society

Choose one of the following:

BIO 120: Principles of Biology

CHM 101: General Chemistry I

GEO 101/104: Fundamentals of Geology and Laboratory

In addition, 12 semester hours in upper-division courses are required from any upper-division ESC course.

## **Environmental Science courses**

### **CHM 101**

## General Chemistry I

Semester: Fall

Semester Hours: 4

This course introduces students to the science of chemistry. The concepts of atoms, molecules, bonding, and energy successfully explain the properties of matter and how reactions happen. Goals of this course include introducing students to representative materials and reactions, to important models and theories of the science, and to the symbols and language of chemists. The laboratory will involve observations of elements, compounds and their reactions (including synthesis), and quantitative measurements of properties or amounts of matter. Three hours of lecture, one two-hour laboratory session, and one hour of recitation per week.

Corequisite: MAT 100 or placement into higher mathematics course

## CHM 102

#### **General Chemistry II**

Semester: Spring Semester Hours: 4

This course will further develop the principles presented in CHM 101 with emphasis on the following core concepts: chemical kinetics, chemical equilibria, solution and acidbase chemistry, thermodynamics of reactions, and electrochemistry. Examples used in this course will point to the various branches of chemical studies (organic, physical, biological, inorganic, analytical, geological, materials, and nuclear). The knowledge and skills gained over the two semesters will be applied to the analysis of a contemporary topic or issue in chemistry. The laboratory experiments are designed to explore chemical principles and to expose students to more advanced chemical instrumentation in the department. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: CHM 101 with a grade of C- or higher

#### ECO 354

#### **Environmental Economics**

Semester: Spring, Alternate years

Semester Hours: 3

Students examine the application of microeconomics to problems of the environment. This course is offered both for the major and for those interested in environmental problems.

Prerequisite: ECO 205

#### **EMP 102**

## Regional Geography of Landscape Change

Semester: Spring Semester Hours: 3

This course is an integrative course in environmental science, environmental studies, and environmental management and policy. The course is intended to provide students with tools and knowledge from the social and physical sciences that will help them to think critically about how global systems work and how they connect and transform social activity and bio-geographical landscapes around the world. The course focuses on three main topics:

- 1. The cultural, political-economic, and bio-geophysical characteristics that distinguish the world's diverse regions.
- How these place-specific characteristics shape and are shaped by global processes.
- 3. The role of policy in shaping global flows and their local expressions.

#### **EMP 118**

#### **Montana Rivers**

Semester: Fall Semester Hours: 3

This course is a required laboratory component for Environmental Program students. This is an integrative, field-based course designed to introduce students to environmental programs at Rocky Mountain College (RMC) and to key regional environmental issues through hands-on experiences in the outdoor classrooms of the Yellowstone and Missouri River watersheds. Students will be involved in a combination of activities, including a canoe trip on the Missouri River or Yellowstone River and outdoor service learning activities, including the annual Yellowstone River Cleanup. They will be expected to read, keep journals, write papers, examine basic ecology, analyze patterns of landscape change and management, and work as part of a team of outdoor professionals. Students will also be expected to learn basic GPS and mapping skills.

Corequisite: EST 103, ESC 105, or instructor approval

#### **EMP 224**

## **Environment & Society**

Semester: Spring, Odd years

Semester Hours: 3

This course is an integrative course in Environmental Studies (EST), Environmental Management and Policy (EMP), and Environmental Science (ESC). The course is designed to be an elective that will satisfy an elective requirement for EST, EMP, and ESC majors. It will also satisfy core curriculum requirements for the social sciences. The course introduces students to the scholarly context, core ideas, terminology, major controversies, and complexities that surround contemporary socio-environmental problems. The course focuses on four main topics:

- The landscape as a dynamic artifact of human-environment interaction.
- 2. The roots of (mostly American) environmental thinking.
- 3. The social, environmental, and political-economic forces that shape human environment interaction and, in doing so, give rise to specific landscapes and environmental problems.
- The roles of consumers, markets, governments, policies, science, and collective action in shaping human use of and efforts to conserve ecosystem goods and services.

#### **EMP 302**

#### Sustainable Development Policy and Practice

Semester: Fall, Odd years

Semester Hours: 3

This course is intended to help students better understand key themes of sustainable development policy and practice. More importantly, perhaps, the goal of the readings is to raise questions about and inspire students to critically examine the "taken-for-granted" assumptions that many of us have regarding sustainable development and, more broadly, out relationships with it. During this class we will constantly return to the following questions:

- 1. What spatial processes and linkages lead to particular development outcomes?
- Whose needs do orthodox approaches to sustainable development best meet?
- 3. What is development success, and how can it be achieved through policy and practice?

The readings, lectures, and assignments for this course track the theory and practice of development as it has evolved since the colonial period of human history, when development policies were focused almost exclusively on empire-building, to the present era of "sustainable development," when the focus is, in theory, on meeting the needs of the current generation without jeopardizing the ability of future generations their own needs.

Prerequisite: EMP 102

### **ENG 244**

#### Literature and the Environment

Semester: Spring, Alternate years

Semester Hours: 3

This course is a comparative study of the environmental imagination as expressed in literature. By reading and discussing a wide range of literary texts, students investigate timeless and more urgent questions, such as "What is nature?"; "What is our responsibility to the environment?"; and "How do various cultures express their relation to the natural world?".

## **ESC 105**

### **Environmental Science: Sustainable Communities**

Semester: Fall and Spring

Semester Hours: 4

An introductory course designed for students entering the environmental sciences and studies program and for other students who would like to take an ecology lab course. Topics address the central concepts of ecology including the physical environment in which life exists. Students will explore the properties and processes of populations and communities, ecosystem dynamics, biogeography and biodiversity, as well as issues in conservation and restoration ecology. In the laboratory, students will apply these concepts to ecological studies in the natural environment and learn how to present their results in a scientific report. Three hours of lecture and one two-hour laboratory session per week.

## **ESC 207**

#### **Montana Wildflowers**

Semester: Spring Semester Hours: 4

Students receive an intensive introduction to the evolutionary relationships of vascular plants and their classification. The course emphasizes plant identification based on use of taxonomic keys and focuses on angiosperm species in the Yellowstone River watershed, particularly the prairie habitats, the Pryor Mountains, the riparian habitats of the Yellowstone, and the foothills of the Beartooth Mountains. Field trips are required. This course may be taken at the lower-division level or at the upper-division level, but not both.

Prerequisite: BIO 120 or ESC 105

#### **ESC 209**

## Field Survey Techniques in Zoology

Semester: Spring, Even years

Semester Hours: 4

A field and laboratory course covering basic field techniques to survey and inventory areas to assess biodiversity, with an emphasis on Montana mammal, bird, reptile, amphibian, and fish fauna. Topics include species identification, survey and trapping, experimental design, data analysis, and report completion. Once identification and survey skills are learned, field teams will be formed and assigned to survey and inventory local habitats of concern with the goal of helping guide local management and restoration of these habitats. An additional fee is required.

Prerequisite: ESS 105 and/or BIO 120

#### **ESC 215**

#### **Fast Food Nation**

Semester: On Demand Semester Hours: 3

Are we what we eat? This course focuses on the environmental impacts of our food systems. Plants matter to us at the most basic level. They have evolved to provide us with nutrients by appealing to our senses of taste, touch, smell, and sight. We humans have responded by manipulating plants in a quest for "fast" (and cheap) food. This course uses the scientific concepts of plant growth, technology, and ecology to evaluate our environmental health in our diet and to explore several new, alternative approaches for healthy eating.

#### **ESC 223**

#### **Organismal Biology**

Semester: Spring Semester Hours: 4

This course provides students with an overview of general evolutionary principles, systematics, and biological diversity, primarily in multicellular organisms. Topics include evolution and biodiversity, the structure and function of plant and animal forms, and the physiology of plant and animal systems. Weekly laboratory sections will provide a hands-on introduction to the major groups of living organisms, evolution, and systematics. Students will also design and conduct a semester long independent research project. Three hours of lecture and one two-hour laboratory sessions per week.

Prerequisite: BIO 120 or ESC 105

### **ESC 243**

#### **Tropical Ecology**

Semester: Fall and Spring, Semester offered subject to faculty discretion Semester Hours: 4

This field course takes place in a tropical ecosystem over a break or during two weeks in the summer. In lectures and in the field, students will learn about the complexity and diversity of tropical ecosystems. Lectures and field activities focus on those ecological concepts particular to the tropics, natural history walks, bird studies, field activities that explore adaptation of plants and animals to tropical ecosystems, and examination of issues of tropical conservation. Students stay at field stations in different tropical environments. Additional travel fees required. This course is taught concurrently with ESC 343.

#### **ESC 244**

## Island Biogeography in the Galapagos

Semester: Spring Semester Hours: 4

This field course takes place in the Galapagos Islands over spring break. Students will have the opportunity to examine various islands and their associated species in the Galapagos from a small sleep-aboard boat. Lectures and readings will cover the theory of island biogeography, unique flora and fauna of the islands, speciation of Darwin's Finches, conservation in developing countries, ecotourism, and marine ecosystems. Opportunities will exist for nature hikes, bird watching, and snorkeling. Ad-

ditional travel fees are required. This course is taught concurrently with ESC 344.

#### **ESC 251**

#### **Environmental Document Writing and Review**

Semester: Spring Semester Hours: 3

This course will help participants learn to identify the writing and editing requirements unique to environmental and National Environmental Policy Act (NEPA) documents, including making graphics, writing chapters, and reviewing documents for accuracy. Participants will also practice interdisciplinary team skills as they relate to each phase of the analysis and documentation process. Students will also learn how to review the full range of NEPA documents including Environmental Impact Statements (EISs), Environmental Assessments (EAs), Findings of No Significant Impacts (FONSIs), and Records of Decisions (RODs). We will also review documents in support of NEPA such as Biological Survey Reports. Participants will concentrate on setting review priorities and reviewing for compliance with the law and for quality and clarity.

Prerequisite: ESC 105 or EST 103

## **ESC 260**

## Ethnobotany

Semester: Spring Semester Hours: 3

Life on earth is sustained by plants and we are enriched daily by our interactions with them in the form of food, medicine, fuel, fibers, building materials, and other resources. Plants have significantly shaped the human societies growing in their midst, and this course will examine the relationship between plants and human culture. We will explore the role of plants in material culture, religion and ritual, nutrition, local and global economies, medicine and pharmaceuticals, and recreational drug culture. We will also discuss basic plant biology: what is a plant, how are they related to other organisms, how do we identify them, and why do plants look the way they do. Finally, we will use the primary literature to compare cultural and scientific evaluations of plants and their utility.

## **ESC 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **ESC 307**

#### **Montana Wildflowers**

Semester: Summer Semester Hours: 4

Students receive an intensive introduction to the evolutionary relationships of vascular plants and their classification. The course emphasizes plant identification based on use of taxonomic keys and focuses on angiosperm species in the Yellowstone River watershed, particularly the prairie habitats, the Pryor Mountains, the riparian habitats of the Yellowstone, and the foothills of the Beartooth Mountains. Field trips are required. Students in the 300-level course will collect, identify, and prepare a greater number of plants for the herbarium. This course may be taken at the lower-division level or at the upper-division level, but not both.

Prerequisite: BIO 120 or ESC 105

#### **ESC 314**

## Range Ecology

Semester: Fall, Alternate years

Semester Hours: 4

This course is the study of mixed grass prairies of the West and an introduction to ecological concepts applicable to that area. Topics include historical and current land use, ecosystem responses to change, methods

for maintaining natural prairie habitats, the use of prairies as rangelands, and determinations of ecological conditions and trends on rangelands. The laboratory focuses on identification of common prairie plant species and their importance for both wildlife and domestic animals. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 120, CHM 101, and CHM 102

#### ESC 316 Geochemistry

Semester: Spring, Even years

Semester Hours: 4

Scientific literature and other resources will be used to illustrate the current ideas about the mechanisms that control water quality and chemistry in aqueous systems. Lecture topics will include hydrogeology, acid-base and reduction-oxidation reactions in natural systems, the geochemistry of metals, stable isotope geochemistry, and case studies of contaminated sites in Montana and throughout the West. Laboratory exercises will include basic sample collection, measurement of major ion concentration, and geochemical modeling with several field exercises. Three hours of lecture and two hours of laboratory per week. This course is cross-listed with GEO 316 and CHM 316.

Prerequisite: CHM 101; GEO 101 is recommended

#### **ESC 317**

### **Bird Conservation and Research**

Semester: Spring, Alternate years

Semester Hours: 4

This is a field and laboratory course covering bird evolution, life histories, behavior, populations, and conservation. Laboratory time will focus on survey techniques and bird observations and identification in the field. The primary objective of this course is to teach students the role of evolution in the development of special adaptations of bird characteristics and systems as well as the importance of conservation of populations and bird habitats around the world. Specific case studies will examine complex conservation issues of North America species. Students will be required to design a field study project to address a bird conservation question.

Prerequisite: ESC 105 or BIO 120 and ESC 209

#### **ESC 321**

## Introduction to Geographic Information Systems

Semester: On Demand Semester Hours: 4

This course introduces students to the theory and practical application of geographic information systems (GIS). Topics include fundamentals of cartography, GIS data types, data input, GIS database structure and management, analysis of spatially distributed data, and report preparations using GIS.

Prerequisite: MAT 100 and a previous science course

## **ESC 322**

#### **Remote Sensing**

Semester: Spring Semester Hours: 4

This course is designed to introduce the principles of remote sensing to students who are new to the field but who have experience with GIS (particularly with ArcMap). The focus is on hands on application of remote sensing data and workflows to natural resource management, earth science, and environmental systems monitoring.

Prerequisite: ESC 321 or instructor approval

#### **ESC 325**

## Wetlands and Riparian Ecology

Semester: Fall, Alternate years

Semester Hours: 4

The biology and chemistry of wetlands is studied in this course. Topics include the investigation of wetland structure, wetland functions, and the ecological value of wetlands. The laboratory introduces protocols for analyzing wetland plant communities and includes a field study of a wetland

in the Billings community. Students learn legally acceptable methods for determining wetland boundaries. The course examines the ecology of rivers and compares differences in hydrological processes of rivers and wetlands. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 120, CHM 101, and CHM 102

#### ESC 330

#### Wildlife Management and Conservation

Semester: Spring, Alternate years

Semester Hours: 4

A multidisciplinary approach to conservation and management issues encompassing genetics to ethics. Topics include population genetics, evolutionary mechanisms, biodiversity, reserve design, and re-introduction strategies. Written reports and oral presentations are required. An additional fee is required.

Prerequisite: BIO 120 and ESC 105

#### **ESC 343**

#### **Tropical Ecology**

Semester: Fall and Spring, Semester offered subject to faculty discretion Semester Hours: 4

This field course takes place in a tropical ecosystem over a break or during two weeks in the summer. In lectures and in the field, students will learn about the complexity and diversity of tropical ecosystems. Lectures and field activities focus on those ecological concepts particular to the tropics, natural history walks, bird studies, field activities that explore adaptation of plants and animals to tropical ecosystems, and examination of issues of tropical conservation. Students stay at field stations in different tropical environments. Additional travel fees required. This course is taught concurrently with ESC 243.

#### **ESC 344**

#### Island Biogeography in the Galapagos

Semester: Spring Semester Hours: 4

This field course takes place in the Galapagos Islands over spring break. Students will have the opportunity to examine various islands and their associated species in the Galapagos from a small sleep-aboard boat. Lectures and readings will cover the theory of island biogeography, unique flora and fauna of the islands, speciation of Darwin's Finches, conservation in developing countries, ecotourism, and marine ecosystems. Opportunities will exist for nature hikes, bird watching, and snorkeling. Additional travel fees are required. This course is taught concurrently with ESC 244.

Prerequisite: ESC 105 or BIO 120

## ESC 345

#### Soil Science

Semester: Fall, Alternate years

Semester Hours: 4

This course provides an introduction to the physical, chemical, and biological properties of soils; soil formation and classification; nutrient cycling; and land resource planning and protection. The laboratory includes field trips. Three hours of lecture and one two-hour laboratory session per week

Prerequisite: CHM 101, GEO 101, and GEO 104

## **ESC 347**

### Forest Ecology

Semester: Spring, Alternate years

Semester Hours: 4

This course is designed to introduce students to the forest ecosystems of the West. Topics include the forest environment, biotic and abiotic components of a forest, forest composition, tree physiology, forest production, patterns across space and time, disturbance, urban ecology, forest ecosystem services, and the role and impact of humans on forest communities. The laboratory focuses on identification of common Montana tree species,

forest ecosystems in Montana, and the importance of these species and systems. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: ESC 223 or BIO 120 and CHM 102

#### ESC 401

#### **Application of Geographic Information Systems**

Semester: Spring Semester Hours: 4

Application of GIS is used to produce a professional report using real-world data in cooperation with a business, an industry, or a government agency. Software and projects vary from year to year. Three two-hour

sessions per week. Prerequisite: ESC 321

## **ESC 408**

### Research Analysis

Semester: Fall Semester Hours: 4

This course is designed to help Yellowstone River Research Center (YRRC) scholars or independent student researchers complete the analysis and dissemination portions of their research projects. This is an advanced course for students who have gathered data during a YRRC-funded research project or other similar independent student research. Class exercises will be carried out with the data collected by students and focus on data analysis, presentation completion, and a final written document appropriate to the student's area of study.

#### **ESC 436**

## Yellowstone Winter Ecology

Semester: Spring, Alternate years

Prerequisite: permission of the instructor

Semester Hours: 4

This course focuses on the ecology of Yellowstone National Park, particularly emphasizing the complex interactions of large mammals with the forest and range plant communities. Students explore the methods used by the National Park Service to establish natural resource policies and examine the Park's scientific research priorities. Two extended weekend laboratories provide research opportunities that include topics in winter ecology and aspects of the role of large mammals in the Yellowstone ecosystem. An additional fee is required.

Prerequisite: ENG 119, ENG 120, and BIO 120

## ESC 450 Internship

Semester: On Demand Semester Hours: 1-4

A maximum of three semester hours can be counted toward a major in environmental studies or a major or minor in environmental science. This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. Contract is required. Pass/ no pass grading.

Prerequisite: junior or senior standing

#### **ESC 490**

#### Seminar

Semester: On Demand Semester Hours: 2-3

Selected topics in environmental sciences or environmental studies are explored.

#### ESC 495

## **Advanced Field Research Techniques**

Semester: Fall and Spring Semester Hours: 4

Designed as an advanced research techniques class, this course takes students through the process of research development. The focus will be on

more in-depth student-developed field projects that will include several overnight field trips in Montana. Additional skills learned will include marking and population assessments, survey and trapping techniques (such as electro-fishing – or for specialized species (such as bats)), and radio-telemetry and tracking. The development of independent or team projects implemented locally will be required for the latter portion of the semester.

Prerequisite: ESC 209 or BIO 306

#### **ESC 496**

## Research Analysis

Semester: Fall Semester Hours: 3

This course is designed to help independent student researchers complete the analysis and dissemination portions of their research projects. This is an advanced course for students who have gathered data during a research project or other similar independent student research. Class exercises and lab assignments will be carried out with the data collected by students and focus on data analysis, presentation completion, and a final written document appropriate to the student's area of study.

Prerequisite: By permission of the instructor.

#### ESC 499

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

#### **EST 103**

## **Introduction to Environmental Studies**

Semester: Fall Semester Hours: 4

This course explores the complexity of environmental issues as approached from the perspectives of the arts, humanities, and social sciences. Since environmental issues are inherently complex, attention is focused on how human beings perceive, understand, and respond to environmental change. Emphasis is placed on developing students' abilities to investigate matters critically and to respond in original, thoughtful, and imaginative ways. The laboratory portion of this course introduces students through field experience to some of the landscape and environmental issues in our region. Students will be involved in some combination of various activities, such as backpacks, a river cleanup, a film festival, special speaker events, among other activities. They will be expected to keep journals, write papers, take exams, and learn basic photography and watercolor techniques.

#### **EST 226**

#### **Energy and Society**

Semester: Fall, Odd years

Semester Hours: 3

This course is designed to introduce students to baseline knowledge, theories, and analytical techniques that will help them better understand and communicate effectively about the scientific, technical, economic, social, political, and environmental dimensions of Earth-Energy-Society interactions. While other energy sources will be discussed, the course focuses primarily on human use of energy from hydrocarbons (fossil fuels). In this class, students will examine patterns in Earth-Energy-Society interactions from a historical-geographic perspective. Particular attention will be given to policy tools and technical options for addressing problematic/unsustainable patterns of energy production.

#### **GEO 101**

#### **Fundamentals of Geology**

Semester: Fall and Spring

Semester Hours: 3

This course provides an introduction to the science of earth materials, earth systems, and earth history, including the study of minerals, rocks, volcanoes, earthquakes, rock deformation and metamorphism, weathering, and erosion within the modern paradigm of plate tectonics. Special emphasis is placed on interpreting the geologic landscape and history of the Rocky Mountains through an understanding of Earth processes. Three hours of lecture and one recommended two-hour laboratory per week, plus field trips. This course fulfills a natural lab science core curriculum requirement if taken concurrently with GEO 104.

#### **GEO 104**

## **Fundamentals of Geology Laboratory**

Semester: Fall and Spring Semester Hours: 1

Focus on description of the earth materials and earth systems within the framework of plate tectonic theory. Introduction to identification of minerals, rocks, geologic maps, and structures.

Corequisite: GEO 101 or GEO 218

#### **HST 365**

#### **American Environmental History**

Semester: Fall, Alternate years

Semester Hours: 3

This course examines the interrelationship of human society and nature in American history. Topics will include ecology as it relates to European conquest of the Americas, Native American peoples, public lands policies, American national character, technological society, conservation, and the modern environmental movement.

## **MAT 210**

#### **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

## **PHR 304**

#### **Environmental Ethics**

Semester: Spring, Alternate years

Semester Hours: 3

This course will address issues such as whether natural beings and the natural world have rights or whether only humans have rights. Students will determine what is ethically appropriate for humans in their relationship with the environment as well as what environmental ethics must take account of to be consequential in the world today.

#### **PHR 378**

## Philosophy of Technology and Modern Culture

Semester: Fall, Alternate years

Semester Hours: 3

It is often a difficult task to understand one's own culture and age. Recent philosophical work offers profound insights into our age and places these insights within a much wider context.

#### **POL 204**

## **Political Geography**

Semester: Fall, Even years

Semester Hours: 3

This course introduces students to the scholarly context, core ideas, terminology, major controversies, and complexities associated with taking a geographical perspective on political issues. In addition to introducing students to the "discipline" of political geography, the course is designed

to help students develop tools to think critically about the mutually constitutive relationship between politics and places as well as the conflict-laden politics of human-environment relations. The readings, videos, music, and other materials used in the course are drawn from political geography, political science, the humanities, government and multi-lateral agencies, and substantive news and media outlets (e.g., Economist, National Geographic, and The World Bank).

The course focuses on five main topics:

- 1. The evolution of political geography as a field of inquiry
- 2. Places as domains of power (e.g., public places)
- 3. Changing relationships between territory, sovereignty, and identity
- 4. Globalization and environmental governance
- 5. Paradoxes and contradictions of post-9/11 geopolitics

#### **POL 313**

#### **Environmental Politics**

Semester: Spring Semester Hours: 3

This course explores the political problems associated with the human impact on the natural environment: pollution, natural resources, public lands, land use, energy, cultural/social justice, and population.

## **Environmental Studies**

David Strong, Professor Kayhan Ostovar, Associate Professor Megan Poulette, Assistant Professor Lucas Ward, Assistant Professor

The environmental studies major provides students with an interdisciplinary opportunity to investigate the relationship between humans and their environment. As distinct from environmental science, the curriculum in environmental studies is based in the arts, humanities, and social sciences, emphasizing the political, economic, and social organization of human cultures in relation to the natural world, as well as the artistic, philosophical, and experiential responses to natural and built environments.

## **Learning Outcomes**

Students who graduate with a major in environmental studies will:

- 1. Become environmentally literate, broadly aware of the types of problems facing the world as well as the local region;
- 2. Study the impact of human actions on the environment;
- Develop an appreciation for the interdisciplinary nature of environmental studies;
- 4. Investigate the complexity of social issues historical, philosophical, cultural, political, and economic that underlie the formation of environmental policy;
- 5. Cultivate effective communication and critical-thinking skills to be applied toward environmental issues;
- 6. Develop an ethic and attitude of care toward the environment.

## **Major in Environmental Studies**

A minimum of 48 semester hours is required, including:

COM 319: Environmental Communication

EMP 102: Regional Geography of Landscape Change

EMP 118: Montana Rivers

ESC 105: Environmental Science: Sustainable Communities

ESC 209: Field Survey Techniques in Zoology EST 103: Introduction to Environmental Studies

EST 226: Energy & Society

EST 490: Seminar

HST 365: American Environmental History

PHR 304: Environment Ethics

PHR 378: Philosophy of Technology and Modern Culture

POL 313: Environmental Politics

Choose two of the following:

ART 222: Art History Survey III

ART 243: Digital Photography

ART 247: Digital Nature Photography

ART 322: Topics in Art History II

ART 323: Topics in Art History III

ENG 244: Literature and the Environment

HST 260: Montana and the West

HST 311: History of Western America

PHR 303: Ethics

Choose one of the following:

BIO 410: Conservation Biology

ECO 354: Environmental Economics

EMP 224: Environment and Society

EMP 302: Sustainable Development Policy and Practice

EMP 411: Science Policy and the Environment

ESC 314: Range Ecology

ESC 317: Bird Conservation and Research

ESC 321: Introduction to Geographic Information Systems

ESC 330: Wildlife Management and Conservation

ESC 436: Yellowstone Winter Ecology

#### **Environmental Studies courses**

#### **ART 222**

## **Art History Survey III**

Semester: Fall Semester Hours: 3

This is a general survey of art historical periods and movements during the 17th, 18th, 19th, 20th, and 21st centuries. Study focuses on the materials, techniques, style, historical context, aesthetics, and criticism of this wide variety of art. Traditional art historical methods of slide lecture, discussion, written exams, and papers are de rigueur as well as exploration of relevant topics on the Internet and via the course website. Though sequential, ART 220, ART 221, and ART 222 may be taken separately.

## **ART 243**

### **Digital Photography**

Semester: On Demand Semester Hours: 3

This course introduces students to the process of digital photography. Camera handling, editing techniques, and the elements of design are covered. Students are encouraged to pursue this art form in the surrounding community and landscape.

#### ART 247

#### **Digital Nature Photography**

Semester: On Demand Semester Hours: 3

This course explores the practice of digital photography as it relates to the field of nature photography. Camera selection, technology, and use are covered, as are field practices, editing techniques, elements of composition, and trip planning. Students are encouraged to pursue this art form in the surrounding area including a trip to Yellowstone National Park. Students will create, critique, and present original works of art.

#### **ART 322**

## **Topics in Art History II**

Semester: On Demand

Semester Hours: 3

The topic for this course is chosen from Western artistic traditions ranging from the Renaissance, Baroque, Rococo, the 19th, or the 20th centuries. Study focuses on art materials, techniques, style, historical context, aesthetics, and criticism. While traditional methods of studying art history are used (e.g., slide lectures, discussion, written exams, and papers), students are expected to authentically replicate an objet d'art from the studied historical periods as a major project. This course is also web-enhanced, with an interactive class website and required web research and project pre-

sentation. This course may be taken twice, with up to six credits counting toward the art major or minor requirements.

#### ART 323

## **Topics in Art History III**

Semester: On Demand Semester Hours: 3

This is a study of the peoples and their art from the non-European traditions. Topics vary and may include Native American cultures such as the Anasazi, Mogollon, or Mimbres and/or the art of Africa or Asia, among others. Study focuses on art materials, techniques, style, prehistorical and historical context, aesthetics, and criticism. While traditional methods of studying art history are used (e.g., slide lectures, discussion, written exams, and papers), students are expected to authentically explicate an objet d'art from the studied historical periods as a major project. This course is also web-enhanced, with an interactive class website and required web research and project presentation. This course may be taken twice, with up to six credits counting toward the art major or minor requirements.

#### **BIO 410**

## **Conservation Biology**

Semester: Spring, Odd years

Semester Hours: 2-3

Students experience a multi-disciplinary approach to conservation encompassing genetics to ethics. Discussions emphasize biological diversity, extinction probability theory, reserve design, management, and reintroduction strategies. Written and oral presentations are required.

Prerequisite: BIO 306

#### **COM 319**

#### **Environmental Communication**

Semester: Fall, Even years

Semester Hours: 3

This course investigates how symbols are used to construct and reflect nature and its relationship with humans. It examines intersections between the environment and humanity through a variety of communicative lenses, including theories of social-symbolic discourse, mass media, rhetoric, and public advocacy.

Prerequisite: COM 102 or permission of instructor

### ECO 354

#### **Environmental Economics**

Semester: Spring, Alternate years

Semester Hours: 3

Students examine the application of microeconomics to problems of the environment. This course is offered both for the major and for those interested in environmental problems.

Prerequisite: ECO 205

#### EMP 102

#### Regional Geography of Landscape Change

Semester: Spring Semester Hours: 3

This course is an integrative course in environmental science, environmental studies, and environmental management and policy. The course is intended to provide students with tools and knowledge from the social and physical sciences that will help them to think critically about how global systems work and how they connect and transform social activity and bio-geographical landscapes around the world. The course focuses on three main topics:

- 1. The cultural, political-economic, and bio-geophysical characteristics that distinguish the world's diverse regions.
- How these place-specific characteristics shape and are shaped by global processes.
- 3. The role of policy in shaping global flows and their local expressions.

#### **EMP 118**

#### **Montana Rivers**

Semester: Fall Semester Hours: 3

This course is a required laboratory component for environmental program students. This is an integrative, field-based course designed to introduce students to environmental programs at Rocky Mountain College (RMC) and to key regional environmental issues through hands-on experiences in the outdoor classrooms of the Yellowstone and Missouri River watersheds. Students will be involved in a combination of activities, including a canoe trip on the Missouri River or Yellowstone River and outdoor service learning activities, including the annual Yellowstone River Cleanup. They will be expected to read, keep journals, write papers, examine basic ecology, analyze patterns of landscape change and management, and work as part of a team of outdoor professionals. Students will also be expected to learn basic GPS and mapping skills.

Corequisite: EST 103, ESC 105, or instructor approval

#### **EMP 224**

## **Environment & Society**

Semester: Spring, Odd years

Semester Hours: 3

This course introduces students to the scholarly context, core ideas, terminology, major controversies, and complexities that surround contemporary socio-environmental problems. The readings, discussions, videos, art, music, first-hand experiences, and assignments are drawn from social sciences, the humanities, and, to a lesser degree, the natural sciences. Students walk away with an interdisciplinary set of tools and concepts that will help them to examine environmental problems from ethical, scientific, political-economic, risk and vulnerability, and policy perspectives.

#### **EMP 302**

## **Sustainable Development Policy and Practice**

Semester: Fall, Odd years

Semester Hours: 3

This course is intended to help students better understand key themes of sustainable development policy and practice. More importantly, perhaps, the goal of the readings is to raise questions about and inspire students to critically examine the "taken-for-granted" assumptions that many of us have regarding sustainable development and, more broadly, out relationships with it. During this class we will constantly return to the following questions:

- 1. What spatial processes and linkages lead to particular development outcomes?
- Whose needs do orthodox approaches to sustainable development best meet?
- 3. What is development success, and how can it be achieved through policy and practice?

The readings, lectures, and assignments for this course track the theory and practice of development as it has evolved since the colonial period of human history, when development policies were focused almost exclusively on empire-building, to the present era of "sustainable development," when the focus is, in theory, on meeting the needs of the current generation without jeopardizing the ability of future generations their own needs.

Prerequisite: EMP 102

### **EMP 411**

## Science Policy and the Environment

Semester: Spring, Even years

Semester Hours: 3

This is a seminar-style "capstone" course for environmental management and policy majors in their second-to-last semester at RMC. This corse focuses on three interrelated themes: 1) the production and contestation of environmental knowledge; 2) the use of environmental knowledge in policy-making; and 3) understanding the historical, scientific, and policy contexts that shape responses to local and global environmental problems. Prerequisite: EMP 102

#### **ENG 244**

#### Literature and the Environment

Semester: Spring, Alternate years

Semester Hours: 3

This course is a comparative study of the environmental imagination as expressed in literature. By reading and discussing a wide range of literary texts, students investigate timeless and more urgent questions, such as "What is nature?"; "What is our responsibility to the environment?"; "How do various cultures express their relation to the natural world?".

#### **ESC 105**

#### **Environmental Science: Sustainable Communities**

Semester: Fall and Spring

Semester Hours: 4

An introductory course designed for students entering the environmental sciences and studies program and for other students who would like to take an ecology lab course. Topics address the central concepts of ecology including the physical environment in which life exists. Students will explore the properties and processes of populations and communities, ecosystem dynamics, biogeography and biodiversity, as well as issues in conservation and restoration ecology. In the laboratory, students will apply these concepts to ecological studies in the natural environment and learn how to present their results in a scientific report. Three hours of lecture and one two-hour laboratory session per week.

#### **ESC 209**

#### Field Survey Techniques in Zoology

Semester: Spring Semester Hours: 4

A field and laboratory course covering basic field techniques to survey and inventory areas to assess biodiversity, with an emphasis on Montana mammal, bird, reptile, amphibian, and fish fauna. Topics include species identification, survey and trapping, experimental design, data analysis, and report completion. Once identification and survey skills are learned, field teams will be formed and assigned to survey and inventory local habitats of concern with the goal of helping guide local management and restoration of these habitats. An additional fee is required.

#### **ESC 314**

## Range Ecology

Semester: Fall, Alternate years

Semester Hours: 4

This course is the study of mixed grass prairies of the West and an introduction to ecological concepts applicable to that area. Topics include historical and current land use, ecosystem responses to change, methods for maintaining natural prairie habitats, the use of prairies as rangelands, and determinations of ecological conditions and trends on rangelands. The laboratory focuses on identification of common prairie plant species and their importance for both wildlife and domestic animals. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 120, CHM 101, and CHM 102

#### **ESC 317**

#### **Bird Conservation and Research**

Semester: Spring, Alternate years

Semester Hours: 4

This is a field and laboratory course covering bird evolution, life histories, behavior, populations, and conservation. Laboratory time will focus on survey techniques and bird observations and identification in the field. The primary objective of this course is to teach students the role of evolution in the development of special adaptations of bird characteristics and systems as well as the importance of conservation of populations and bird habitats around the world. Specific case studies will examine complex conservation issues of North America species. Students will be required to design a field study project to address a bird conservation question.

Prerequisite: ESC 105 or BIO 120 and ESC 209

#### **ESC 321**

#### **Introduction to Geographic Information Systems**

Semester: On Demand Semester Hours: 4

This course introduces students to the theory and practical application of geographic information systems (GIS). Topics include fundamentals of cartography, GIS data types, data input, GIS database structure and management, analysis of spatially distributed data, and report preparations using GIS.

Prerequisite: MAT 100 and a previous science course

#### Wildlife Management and Conservation

Semester: Spring, Alternate years

Semester Hours: 4

A multidisciplinary approach to conservation and management issues encompassing genetics to ethics. Topics include population genetics, evolutionary mechanisms, biodiversity, reserve design, and re-introduction strategies. Written reports and oral presentations are required. An additional fee is required.

Prerequisite: BIO 120 and ESC 105

#### **Yellowstone Winter Ecology**

Semester: Spring, Alternate Years

Semester Hours: 4

This course focuses on the ecology of Yellowstone National Park, particularly emphasizing the complex interactions of large mammals with the forest and range plant communities. Students explore the methods used by the National Park Service to establish natural resource policies and examine the Park's scientific research priorities. Two extended weekend laboratories provide research opportunities that include topics in winter ecology and aspects of the role of large mammals in the Yellowstone ecosystem. An additional fee is required.

Prerequisite: ENG 119, ENG 120, and BIO 120

## **ESC 490**

## Seminar

Semester: On Demand Semester Hours: 2-3

Selected topics in environmental sciences or environmental studies are explored.

#### **EST 103**

#### **Introduction to Environmental Studies**

Semester: Fall Semester Hours: 4

This course explores the complexity of environmental issues as approached from the perspectives of the arts, humanities, and social sciences. Since environmental issues are inherently complex, attention is focused on how human beings perceive, understand, and respond to environmental change. Emphasis is placed on developing students' abilities to investigate matters critically and to respond in original, thoughtful, and imaginative ways. The laboratory portion of this course introduces students through field experience to some of the landscape and environmental issues in our region. Students will be involved in some combination of various activities, such as backpacks, a river cleanup, a film festival, special speaker events, among other activities. They will be expected to keep journals, write papers, take exams, and learn basic photography and watercolor techniques.

#### **EST 226**

## **Energy & Society**

Semester: Fall, Odd years

Semester Hours: 3

This course is designed to introduce students to baseline knowledge, theories, and analytical techniques that will help them better understand and communicate effectively about the scientific, technical, economic, social,

political, and environmental dimensions of Earth-Energy-Society interactions. While other energy sources will be discussed, the course focuses primarily on human use of energy from hydrocarbons (fossil fuels). In this class, students will examine Earth-Energy-Society interactions from a historical-geographic perspective. Particular attention will be given to policy tools and technical options for addressing problematic/unsustainable patterns of energy production.

#### **EST 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### EST 490

## Seminar

Semester: On Demand Semester Hours: 2-3

This capstone course for environmental studies majors will explore selected topics in environmental humanities through common readings and student research projects.

#### EST 499

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

### **HST 260**

## Montana and the West

Semester: Spring, Alternate years

Semester Hours: 3

Students survey the history of Montana in its regional context, focusing on the 19th and 20th centuries.

### **HST 311**

## **History of Western America**

Semester: Spring, Alternate years

Semester Hours: 3

The development of the American West from the first explorations to the 20th century is examined.

#### American Environmental History

Semester: Fall, Alternate years

Semester Hours: 3

This course examines the interrelationship of human society and nature in American history. Topics will include ecology as it relates to European conquest of the Americas, Native American peoples, public lands policies, American national character, technological society, conservation, and the modern environmental movement.

### **PHR 303**

#### **Ethics**

Semester: Spring, Alternate years

Semester Hours: 3

A study relating ethics, as traditionally conceived in philosophy, to one or more current philosophical works in ethics. This course will provide students with a solid background in ethics, from Plato to Nietzsche. A discussion of a contemporary work in ethics will introduce students to topics that may be covered in depth in later seminars.

#### **PHR 304**

### **Environmental Ethics**

Semester: Spring Semester Hours: 3

This course will address issues such as whether natural beings and the natural world have rights or whether only humans have rights. Students will determine what is ethically appropriate for humans in their relationship with the environment as well as what environmental ethics must take account of to be consequential in the world today.

#### **PHR 378**

#### Philosophy of Technology and Modern Culture

Semester: Fall, Alternate years.

Semester Hours: 3

It is often a difficult task to understand one's own culture and age. Recent philosophical work offers profound insights into our age and places these insights within a much wider context.

#### **POL 313**

#### **Environmental Politics**

Semester: Spring Semester Hours: 3

This course explores the political problems associated with the human impact on the natural environment: pollution, natural resources, public lands, land use, energy, cultural/social justice, and population.

## **Equestrian Studies**

Christi Brown, Associate Professor Amy Neuman, Associate Professor Scott Neuman, Associate Professor, Director of Equestrian Studies Hollis Edwards, Assistant Professor

The equestrian studies program at Rocky Mountain College provides the student a venue for his or her passion for horses. The program offers a firm foundation in equitation to increase skills as a rider; a progressive training approach to encourage the student to form a valuable structure for educating a horse using generally accepted training principles; and a solid background in equine management fundamentals. These fundamentals include a broad-based series of courses designed to give each student exposure to the reality of living with and being responsible for horses. From the basic care of the horse through veterinary courses and stable management, to responsible breeding program development with selection and reproduction, to managing a program of therapeutic riding, the program encourages each student to find his or her place.

When core subjects are met, the student can choose a program increasingly more tailored to his or her interests, whether it is teaching, training, business, therapeutic riding, or technology implementation. Combined with Rocky Mountain College's traditional liberal arts program, students are provided a variety of experiences promoting lifelong learning and an understanding of the world around them. This multifaceted approach not only prepares the equine student to succeed in a complex and ever-changing global equestrian industry, but to meet the challenges of life in a world of diversity as well.

Equestrian facility use fees are not included in basic tuition and are charged in addition to tuition, fees, and other incidental expenses normally charged during registration (see the "Tuition and Fees" section).

### **Learning Outcomes**

## **Equitation and Training Concentration**

Students who graduate with a concentration in equitation and training will be able to:

1. Demonstrate proactive, safe, efficient stable management skills related to horse maintenance, nutrition, and health care;

- Demonstrate technical riding proficiency within a chosen riding discipline;
- 3. Demonstrate a clear understanding of safe, humane training practices;
- 4. Identify ideal conformation as it relates to equine form and function;
- 5. Demonstrate the characteristics of an equestrian professional in appearance, language, and conduct;
- Develop a focused marketing program specifically for equine sales and business;
- Demonstrate a chronological training methodology as it pertains to various disciplines.

#### **Equine Business Concentration**

Students who graduate with a concentration in equine business will be able to:

- Demonstrate key elements in equine business planning, marketing, and development;
- 2. Articulate economic factors impacting the equine industry;
- Identify revenue sources and differentiate between fixed and variable costs;
- 4. Exhibit practical knowledge relating to the management of an equine facility:
- 5. Demonstrate proactive, safe, efficient stable management skills relating to horse maintenance, nutrition, and health care;
- 6. Demonstrate a clear understanding of safe, humane training practices;
- Identify ideal conformation as it relates to equine form and function; and
- 8. Demonstrate the characteristics of an equestrian professional in appearance, language, and conduct.

#### **Riding Instructor Concentration**

Students who graduate with a concentration in riding instruction will be able to:

- Demonstrate an applied understanding of equestrian teaching techniques:
- Demonstrate a chronological training methodology as it pertains to various disciplines;
- 3. Demonstrate proactive, safe, efficient stable management skills related to horse maintenance, nutrition, and health care;
- Demonstrate technical riding proficiency within a chosen riding discipline;
- 5. Demonstrate a clear understanding of safe, humane training practices;
- 6. Identify ideal conformation as it relates to equine form and function;
- 7. Demonstrate the characteristics of an equestrian professional in appearance, language, and conduct; and
- 8. Develop a focused marketing program specifically for equine sales and business.

#### **Therapeutic Riding Concentration**

Students who graduate with a concentration in therapeutic riding will be able to:

- Demonstrate an applied understanding of therapeutic horsemanship teaching techniques for a broad spectrum of disorders and disabilities;
- 2. Demonstrate relevant skills for PATH certification;
- Demonstrate proactive, safe, efficient stable management skills related to horse maintenance, nutrition, and health care;
- Demonstrate technical riding proficiency within a chosen riding discipline;
- 5. Demonstrate a clear understanding of safe, humane training practices;
- 6. Identify ideal conformation as it relates to equine form and function and the therapeutic need of clients with disabilities;
- 7. Demonstrate the characteristics of an equestrian professional in appearance, language, and conduct; and

8. Demonstrate the application of a chronological training method as it pertains to various disciplines.

#### **Equine Science Concentration**

Students who graduate with a concentration in equine science will be able to:

- Demonstrate proactive, safe, efficient stable management skills relating to horse maintenance, nutrition, and health care;
- 2. Demonstrate a clear understanding of safe, humane training practices;
- 3. Identify ideal conformation as it relates to equine form and function;
- Demonstrate the characteristics of an equestrian professional in appearance, language, and conduct; and
- 5. Effectively communicate scientific ideas and the results of scientific inquiry.

#### **Equine Science Pre-Vet Concentration**

Students who graduate with a concentration in equine science pre-vet will be able to:

- Demonstrate proactive, safe, efficient stable management skills relating to horse maintenance, nutrition, and health care;
- 2. Demonstrate a clear understanding of safe, humane training practices;
- 3. Identify ideal conformation as it relates to equine form and function;
- Demonstrate the characteristics of an equestrian professional in appearance, language, and conduct; and
- Effectively communicate scientific ideas and the results of scientific inquiry.

### **Major in Equestrian Studies**

Students have a choice of one of six concentrations in the equestrian studies major:

**Equitation and Training** 

**Equine Business** 

Riding Instructor

Therapeutic Riding

Equine Science

Equine Science with Pre-Vet

## **Equitation and Training Concentration**

A minimum of 51 semester hours is required, including:

EQS 101: Introduction to Equestrian Studies

EQS 102: Equine Conformation and Selection

EQS 121: Fundamental Horsemanship I

EQS 122: Fundamental Horsemanship II

EQS 201: Equine Preventive Medicine

EQS 300: Reproduction and Growth

EQS 308: Ranch and Stable Management

EQS 318: Equine Nutrition

EQS 321: Advanced Horse Training I

EQS 322: Advanced Horse Training II

EQS 325: Basic Colt Training I

EQS 326: Basic Colt Training II

EQS 402: Equine Marketing

EQS 450: Internship (6 semster hours)

Choose one of the following:

EQS 231/232: Hunter Seat Equitation I / Hunter Seat Equitation II

or

EQS 251/252: Fundamental Horsemanship III / Fundamental Horsemanship IV

Students in this major are strongly recommended to take EQS 401, EQS 421, and EQS 422 as electives.

#### **Equine Business Concentration**

A minimum of 45 semester hours is required, including:

ACC 210: Foundations of Accounting

BSA 101: Introduction to Business

ECO 205: Principles of Economics

EQS 101: Introduction to Equestrian Studies

EQS 102: Equine Conformation and Selection

EQS 121: Fundamental Horsemanship I

EQS 122: Fundamental Horsemanship II

EQS 201: Equine Preventive Medicine

EQS 300: Reproduction and Growth

EQS 308: Ranch and Stable Management

EQS 318: Equine Nutrition

EQS 402: Equine Marketing

EQS 450: Internship

Six upper-division semester hours from BSA/ECO, suggested courses being BSA 304 and BSA 418.

#### **Riding Instructor Concentration**

A minimum of 45 semester hours is required, including:

EDC 302: Educational Psychology

EQS 101: Introduction to Equestrian Studies

EQS 102: Equine Conformation and Selection

EQS 121: Fundamental Horsemanship I

EQS 122: Fundamental Horsemanship II

EQS 201: Equine Preventive Medicine

EQS 231: Hunter Seat Equitation I

EQS 232: Hunter Seat Equitation II

EQS 321: Advanced Horse Training I

EQS 322: Advanced Horse Training II

EQS 401: Techniques of Teaching Riding

EQS 402: Equine Marketing

EQS 405: Advanced Techniques of Teaching Riding

EQS 450: Internship (3 semester hours)

PSY 312: Behavior Management

Recommended electives are EQS 325, EQS 326, EQS 421, and EQS 422.

#### **Therapeutic Riding Concentration**

A minimum of 59 semester hours is required, including:

EDC 330: Introduction to Teaching Exceptional Learners

EQS 100: Volunteer Experience in Therapeutic Riding

EQS 101: Introduction to Equestrian Studies

EOS 102: Equine Conformation and Selection

EQS 121: Fundamental Horsemanship I

EQS 122: Fundamental Horsemanship II

EQS 201: Equine Preventive Medicine

EQS 209: Principles of Therapeutic Riding

EQS 200. A 1 area 1. The area 1. D. Hard Lands

EQS 309: Advanced Therapeutic Riding Instructor Training

EQS 318: Equine Nutrition

EQS 401: Techniques of Teaching Riding

EQS 405: Advanced Techniques of Teaching Riding

EQS 410: Therapeutic Riding, Issues and Ethics

EQS 450: Internship

HHP 204: Foundations of Human Structure and Function

HHP 315: Motor Learning

Choose one of the following:

EQS 231/232: Fundamental Horsemanship III / Fundamental Horseman-

ship IV

or

EQS 251/252: Hunter Seat Equitation I / Hunter Seat Equitation II

In addition, a minor in psychology must be completed.

## **Equine Science Concentration**

A minimum of 45 semester hours is required, including:

EQS 100: Volunteer Experience in Therapeutic Riding

EQS 101: Instruction to Equestrian Studies

EQS 102: Equine Conformation and Selection

EQS 121: Fundamental Horsemanship I

EQS 122: Fundamental Horsemanship II

EQS 201: Equine Preventive Medicine

EQS 214: Equine Judging

EQS 300: Reproduction and Growth

EQS 308: Ranch and Stable Management

EQS 401: Techniques of Teaching

EQS 402: Equine Marketing

EQS 450: Internship (6 semester hours)

Choose one of the following series:

EQS 231/232: Hunter Seat Equitation I / Hunter Seat Equitation II

OR

EQS 251/252: Fundamental Horsemanship III / Fundamental Horseman-

ship IV

# **Equine Science with Pre-Vet Concentration**

A minimum of 60 semester hours is required, including:

Equestrian: 15 semester hours

EQS 102: Equine Conformation and Selection

EQS 121: Fundamental Horsemanship I

EQS 201: Equine Preventive Medicine

EQS 300: Reproduction and Growth

EQS 318: Equine Nutrition

Sciences: 45 semester hours

Biology (21 semester hours):

BIO 120: Principles of Biology

BIO 203: Genetics

BIO 321: Human Anatomy and Physiology I

BIO 350: Microbiology

BIO 452: Biochemistry I

Chemistry (16 semester hours):

CHM 101: General Chemistry I

CHM 102: General Chemistry II

CHM 251: Organic Chemistry I

CHM 252: Organic Chemistry II

Physics (8 semester hours):

Choose one of the following series:

PHS 101: Fundamental Physics I and PHS 102: Fundamental Physics II

or

PHS 201: General Physics I and PHS 202: General Physics II

Core Curriculum Requirements (3 semester hours):

Mathematics:

MAT 210: Probability and Statistics

Recommended Courses:

BIO 322: Human Anatomy and Physiology II

BIO 347: Animal Behavior

MAT 175: Calculus I

# **Minor in Equestrian Studies**

A minimum of 21 semester hours is required, including:

EQS 101: Introduction to Equestrian Studies

EQS 102: Equine Conformation and Selection

EQS 121: Fundamental Horsemanship I

EQS 122: Fundamental Horsemanship II

EQS 201: Equine Preventive Medicine

EQS 318: Equine Nutrition

Choose one of the following:

EQS 214: Equine Judging

EQS 231: Hunter Seat Equitation I

EQS 251: Fundamental Horsemanship III

EQS 300: Reproduction and Growth

EQS 308: Ranch and Stable Management

EQS 402: Equine Marketing

# **Equestrian Studies courses**

## **ACC 210**

# Foundations of Accounting

Semester: Fall and Spring

Semester Hours: 3

This course is designed to give students a basic understanding of the uses and limitations of accounting information, particularly from financial statements. Students will understand how to take information from the financial statements and make informed business decisions.

Prerequisite: BSA 101

# **BIO 120**

# Principles of Biology

Semester: Fall and Spring

Semester Hours: 4

An introductory survey course that covers cell structure and metabolism, patterns of inheritance, molecular genetics, evolutionary mechanisms, and diversity. The weekly laboratory sessions teach basic laboratory skills, experimental design, application of statistics, and communication of results via laboratory reports. This course is appropriate for both major and nonmajors. Three hours of lecture and one two-hour laboratory period per week.

## **BIO 203**

# Genetics

Semester: Fall

Semester Hours: 4

The course provides a detailed overview of the mechanisms of heredity. Topics include Mendelian, quantitative, and molecular genetics. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: BIO 120 and CHM 101

Corequisite: IDS 243

# **BIO 321**

# **Human Anatomy and Physiology I**

Semester: Fall Semester Hours: 4

A course requiring students to incorporate concepts from physics, chemistry, and biology to understand the interface between human structure and function and the regulatory mechanisms in play. Topics include tissue types, skeletal, muscular, nervous, respiratory, and reproductive anatomy and physiology. Three hours of lecture and one two-hour laboratory session per week. Human cadavers are used in the laboratory.

Prerequisite: BIO 120 and CHM 101 and CHM 102. CHM 251 and CHM 252 and PHS 102 or PHS 202 are highly recommended.

# **BIO 322**

# **Human Anatomy and Physiology II**

Semester: Spring Semester Hours: 4

In this continuation of BIO 321, topics include digestive, cardiovascular, renal, urinary acid-base balance, endocrine, and immune system anatomy and physiology. Three hours of lecture and one two-hour laboratory session per week. Human cadavers are used in the laboratory.

Prerequisite: BIO 321

## **BIO 347**

# **Animal Behavior**

Semester: Spring, Even years

Semester Hours: 3

In this continuation of BIO 321, topics include digestive, cardiovascular, renal, urinary acid-base balance, endocrine, and immune system anatomy and physiology. Three hours of lecture and one two-hour laboratory session per week. Human cadavers are used in the laboratory.

Prerequisite: BIO 306

# BIO 350

# Microbiology

Semester: Fall Semester Hours: 4

This course is an investigation of the structure, metabolism, and reproduction of microorganisms. The course will emphasize understanding microbiology as it pertains to human health, including normal flora, disease mechanisms, immunology and immunity, and a sampling of major microbial diseases. In the laboratory, students will detect, isolate, and identify both harmless and pathogenic microbes.

Prerequisite: BIO 203 and CHM 102, both passed with a grade of C- or higher

## **BIO 452**

# Biochemistry I

Semester: Spring Semester Hours: 5

Biochemistry focuses on the study of the molecules and chemical reactions of life, bringing together principles learned in biology and chemistry. After an introduction to the chemistry and structure of carbohydrates, lipids, and proteins, discussions of enzyme structure and kinetics set the stage for a detailed exploration of metabolism and its regulation. The laboratory component of this course involves a semester-long integrated project that requires independent student work. This project incorporates many different types of instrumentation, including low pressure chromatography, electrophoresis, UV-visible spectroscopy, electrochemistry, and ultrafiltration. Three lecture hours plus one laboratory lecture hour per week. Significant time working independently in the laboratory is required. Prerequisite: CHM 220 or CHM 252 with a grade of C- or higher; BIO

120 is strongly recommended. Junior or senior standing is required.

# **BSA 101**

# **Introduction to Business**

Semester: Fall and Spring Semester Hours: 3

A beginning business course designed to introduce students to the areas of business study, including historical foundations of America's free enterprise system, ethics and social responsibility in the business setting, entrepreneurship, the legal structures of business, marketing, and general management.

## **BSA 304**

# **Principles of Marketing**

Semester: Fall and Spring

Semester Hours: 3

This course studies the marketing process from product development through consumer purchase. The course includes examination of consumer buying behavior, marketing channels, physical distribution, pricing policies, and promotion along with their role in the marketing process. Prerequisite: BSA 101, ECO 205

# **BSA 418**

# Entrepreneurship I

Semester: Fall Semester Hours: 3

Students will learn the characteristics of successful entrepreneurs, how to seek and evaluate opportunities for new ventures, how to prepare a

complete business plan, and how to plan strategies and gather resources to create business opportunities.

Prerequisite: ACC 309, BSA 303, BSA 304, BSA 311

# **CHM 101**

## **General Chemistry I**

Semester: Fall

Semester Hours: 4

This course introduces students to the science of chemistry. The concepts of atoms, molecules, bonding, and energy successfully explain the properties of matter and how reactions happen. Goals of this course include introducing students to representative materials and reactions, to important models and theories of the science, and to the symbols and language of chemists. The laboratory will involve observations of elements, compounds and their reactions (including synthesis), and quantitative measurements of properties or amounts of matter. Three hours of lecture, one two-hour laboratory session, and one hour of recitation per week.

Corequisite: MAT 100 or placement into higher mathematics course

# **CHM 102**

# **General Chemistry II**

Semester: Spring Semester Hours: 4

This course will further develop the principles presented in CHM 101 with emphasis on the following core concepts: chemical kinetics, chemical equilibria, solution and acidbase chemistry, thermodynamics of reactions, and electrochemistry. Examples used in this course will point to the various branches of chemical studies (organic, physical, biological, inorganic, analytical, geological, materials, and nuclear). The knowledge and skills gained over the two semesters will be applied to the analysis of a contemporary topic or issue in chemistry. The laboratory experiments are designed to explore chemical principles and to expose students to more advanced chemical instrumentation in the department. Three hours of lecture and one two-hour laboratory session per week.

Prerequisite: CHM 101 with a grade of C- or higher

# CHM 251

# Organic Chemistry I

Semester: Fall

Semester Hours: 4

This course is an introduction to the chemistry of carbon-containing compounds, concentrating on the structures, properties, and reactions of some of the important families of organic compounds. Considerable emphasis is placed on reaction mechanisms and stereochemistry. The laboratory experiments introduce techniques for the isolation and preparation of compounds. Three hours of lecture and one three-hour laboratory session per week.

Prerequisite: CHM 102 with a grade of C- or higher

# CHM 252

## **Organic Chemistry II**

Semester: Spring Semester Hours: 4

This course, a continuation of CHM 251, concentrates on the chemistry of additional important families of organic compounds, emphasizing reaction mechanisms, synthesis, stereochemistry, and spectroscopy. The laboratory experiments include the synthesis and analysis of compounds with biological and industrial importance and qualitative analysis.

Prerequisite: CHM 251 with a grade of C- or higher. CHM 220 will not be accepted as a prerequisite for this course.

## ECO 205

# **Principles of Economics**

Semester: Fall and Spring

Semester Hours: 3

This course will introduce the principles of firm-level decision making, consumer choices and their rationale, differing forms of industry competition, and how market-clearing prices and quantities are determined in a

market environment. Additionally, the students will gain an understanding of how the major participants in the economy interact and what drives economic growth, interest rates, and inflation. The possible impacts of a variety of fiscal and monetary policy choices will be presented to assist the student in understanding how those policies will impact incomes, employment, and trade for a country. At the completion of the course, the student should have a basic understanding of both the microeconomic and macroeconomic environments and their impacts on businesses and the general population.

## **EDC 302**

## **Educational Psychology**

Semester: Fall and Spring Semester Hours: 3

This course is designed to aid the student in continuing to develop an understanding of human behavior, especially as that understanding applies to elementary and secondary classrooms. Emphasis will be on why and how human learning takes place and how that learning relates to schools and teaching situations where the needs of each student must be considered. The course also includes participation in and the analysis of interpersonal relations and communication skills. Students must complete EDC 302 before they can be admitted to the teacher education program. This course is cross listed with PSY 302.

Prerequisite: PSY 205 or PSY 206

## **EDC 330**

# **Introduction to Teaching Exceptional Learners**

Semester: Fall Semester Hours: 3

This course introduces students to the characteristics, legal requirements, programming, and service requirements for exceptional learners, including gifted and talented students. Categories of disabilities addressed will be those outlined within PL94-142. Emphasis will be given to education within the least restrictive environment.

Prerequisite: admission to teacher education program

# **EQS 100**

# Volunteer Experience in Therapeutic Riding

Semester: Fall Semester Hours: 3

All students interested in entering the therapeutic riding program must first participate in the volunteer experience. Students will volunteer in an established therapeutic riding program.

# **EQS 101**

# **Introduction to Equestrian Studies**

Semester: Fall Semester Hours: 3

The student focuses on the basic anatomy and physiology of the horse. Equine evolution, the study of various breeds, and genetics are also emphasized, along with an overview of the horse industry.

## **EOS 102**

# **Equine Conformation and Selection**

Semester: Spring Semester Hours: 3

This course focuses on equine structure and the evaluation of how structural anomalies relate to lameness. Students learn and practice selecting horses best suited for intended uses in terms of breed, structure, and temperament.

Prerequisite: EQS 101

# **EOS 121**

# Fundamental Horsemanship I

Semester: Fall Semester Hours: 3

This class introduces the basic theories of horsemanship, the centered seat, and balanced riding. While these theories apply equally to both

English and Western disciplines, only Western tack is used. Additionally, students develop strength, agility, and coordination, as well as maintain their assigned horse in a show barn atmosphere with emphasis on stall maintenance and safe feeding practices.

#### **EOS 122**

## Fundamental Horsemanship II

Semester: Spring Semester Hours: 3

This class is a continuation of EQS 121 and builds on those skills with further emphasis upon developing proficiency. A logical training progression is established within a variety of Western venues. The emphasis upon maintaining a healthy horse in a show barn atmosphere is continued. Prerequisite: EQS 121

## **EOS 201**

## **Equine Preventive Medicine**

Semester: Fall Semester Hours: 3

Students study common equine health practices including parasitology, diseases, pre-purchase examinations, lameness, first-aid measures, and the establishment of horse health programs.

Prerequisite: EQS 102

# **EQS 209**

# **Principles of Therapeutic Riding**

Semester: Spring Semester Hours: 3

In this introductory course to therapeutic riding, students will explore the basic principles of therapeutic riding; medical terminology; physical, cognitive, and sensory impairments; and the use of safety and adaptive equipment. Interaction with therapy students, their parents, and health professionals will be stressed. Students will have the opportunity to participate in a variety of hands-on experiences.

Prerequisite: EQS 100

# **EQS 214**

# **Equine Judging**

Semester: Fall Semester Hours: 3

Students learn and actively practice the evaluation of horses and riders in various types of competition, including classes in halter, Western pleasure, and hunter under saddle. There is a strong speech and critical-thinking component in this course as students learn to develop oral reasons for defending class placement.

Prerequisite: EQS 102

## **EQS 231**

# **Hunter Seat Equitation I**

Semester: Fall Semester Hours: 3

Through the development and assessment of rider and horse skill level, this course establishes a training program for starting a horse over fences. Show ring etiquette develops fundamentals for successful competition and deepens the student's understanding of the equine industry.

Prerequisite: EQS 122

# **EQS 232**

# **Hunter Seat Equitation II**

Semester: Spring Semester Hours: 3

This course is a continuation of EQS 231. By furthering the skills necessary to show a hunter over fences, students gain in strength, balance, and control.

Prerequisite: EQS 231

## **EOS 251**

## **Fundamental Horsemanship III**

Semester: Fall Semester Hours: 3

This course offers a continuation of the skills developed in EQS 231 and EQS 232 with emphasis on both equitation and training skills, including advanced lateral and collection exercises, extension and collection at all gaits with and without contact, spinning, and stopping. Students expand equitation skills through rigorous physical work with and without stirrups and through riding multiple horses. Attention is given to skills involved in riding and the presentation of the show horse. Students are exposed to show ring etiquette, terminology, and riding styles as they work on a variety of specific events including Western riding, trail, hunter under saddle, Western pleasure, equitation, horsemanship, reining, and showmanship. This course features horses ridden in Western tack, emphasizing Western riding strategies.

Prerequisite: EQS 122

# **EQS 252**

## Fundamental Horsemanship IV

Semester: Spring Semester Hours: 3

This course is a continuation of EQS 251 featuring English tack and English riding. Students not only ride, but evaluate other horse/rider combinations to develop an eye for equine talent as well as equitation skills.

Prerequisite: EQS 251

# **EQS 299**

# **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

# **EQS 300**

# Reproduction and Growth

Semester: Spring Semester Hours: 3

This course examines anatomy and physiology of reproduction in the horse, endocrinology, principles of artificial insemination, embryo transfer, genetics, breeding systems, application of the scientific method, and care and management of breeding stock. This course will be accepted as a biology elective, provided students have completed BIO 120, CHM 101, and CHM 102. This course is highly recommended for students pursuing veterinary school or graduate studies in animal science.

Prerequisite: EQS 201

# **EOS 308**

# Ranch and Stable Management

Semester: Fall Semester Hours: 3

This course will provide an overview of the business essentials of the equine enterprise. This information will be applied by the students in the ranch project. Students will tour area facilities and survey industry professionals to gain insight into the business practices of the equine industry. Prerequisite: EQS 201

# **Advanced Therapeutic Riding Instructor Training**

Semester: Fall Semester Hours: 3

This course covers all aspects of being a therapeutic riding instructor, including teaching to the appropriate therapeutic level of a student's physical and cognitive abilities, the precautions and contraindications to therapeutic riding, therapy student assessment and program development, and facility and therapy horse management. Students will organize and teach lessons, assign students to horses and volunteers, and maintain progress notes. This course will go through phase one of PATH certification.

Prerequisite: EQS 209

## **EQS 315**

# **Intermediate Equine Judging**

Semester: Fall Semester Hours: 3

Students engage in and practice the evaluation of horses and riders for competition on an advanced level, including classes in trail, Western riding, reining, hunter hack, and working hunter. Students continue developing oral reasoning and presentation skills for defending class placement.

Prerequisite: EQS 214

# **EQS 318**

## **Equine Nutrition**

Semester: Fall Semester Hours: 3

Through examination of the gastrointestinal system of the horse, the student will be presented with best practices in the management of dental arcade, the digestive system, and the nutrient content of horse feeds.

Prerequisite: EQS 201

## **EQS 321**

# Advanced Horse Training I

Semester: On Demand Semester Hours: 3

Students learn and practice advanced training procedures and the selection of proper horses for individual events, perfecting both the rider's and the horse's skills to an intermediate competitive level.

Prerequisite: junior standing, EQS 121, EQS 122, EQS 231, EQS 232, EQS 325, and EQS 326

# **EQS 322**

## Advanced Horse Training II

Semester: On Demand Semester Hours: 3

This course is a continuation of EQS 321 with a higher level of skill and expertise employed.

Prerequisite: junior standing and EQS 321

# **Basic Colt Training I**

Semester: Fall Semester Hours: 3

Through practical application, the student develops skills and techniques by following a logical progression of training for a two- or three-year-old colt in a stress-free atmosphere.

Prerequisite: sophomore standing and EQS 122

## **EQS 326**

## **Basic Colt Training II**

Semester: Spring Semester Hours: 3

This course, a continuation of EQS 325, will cover the assessment of a colt's capabilities and begin advanced training techniques.

Prerequisite: sophomore standing and EQS 325

# **EOS 343**

# Therapeutic Riding Professional Development

Semester: Fall and Spring

Semester Hours: 3

This class will encourage professional development in therapeutic riding. In this class the focus will be on the therapy horse and its humane training practices and will offer a more comprehensive look into running a program. The student will be involved in weekly training of the therapy horses and assist in therapy lessons.

Prerequisite: EQS 100

## **EQS 400**

# **Advanced Reproduction**

Semester: On Demand Semester Hours: 3

The student focuses on common breeding problems such as organizing and operating a routine teasing program, natural breeding, artificial insemination, and improving conception rates. Students engage in practical application in this course. Class is limited to six students. This course is highly recommended for students pursuing veterinary school or graduate studies in animal science.

Prerequisite: EQS 300

## **EQS 401**

# **Techniques of Teaching Riding**

Semester: Fall Semester Hours: 3

Students practice methods of teaching riding and engage in practical experience as a tutor or aide in teaching basic equitation. The student also learns and practices the scope and sequence of planning lessons and teaching student skills. There is a strong speech component in this course. Prerequisite: EQS 121, EQS 122, EQS 231, and EQS 232; EQS 325 and

EQS 326 also recommended

# **EQS 402**

# **Equine Marketing**

Semester: Spring Semester Hours: 3

This course features the promotion of the horse and individual as well as equine-related business ventures through the introduction and refinement of the student's performance in industry specific marketing skills. The skills covered in the course include photography and videography of the horse, still image and video editing, video reproduction and publishing, image branding, written and verbal skills for promotion, and advertisement creation for various channels from web-based marketing to print. Additionally, students will research current market trends for pricing and create and implement a marketing plan for a horse. This is a capstone class for equine business majors. Students must have ready access to equipment for both still and moving image capture and editing.

Prerequisite: junior standing

# **EOS 405**

# **Advanced Techniques of Teaching Riding**

Semester: Spring Semester Hours: 3

The student furthers his or her teaching techniques through experience as an equitation tutor or aide with an emphasis upon the development of riding activities such as clinics or riding camps. There is a strong speech component in this course.

Prerequisite: EQS 401

# **EQS 410**

## Therapeutic Riding, Issues, and Ethics

Semester: Spring Semester Hours: 3

Students will focus on the administration of and teaching in a therapeutic riding program, including organization, emergency procedures, safety regulations, risk management, documentation, and written policies and procedures. Students will learn to provide proper documentation for recognized legal business structures and organizations including those for corporations and 501(c)3s as well as the standards for PATH centers. Students with the required amount of instructional hours will be prepared to take the PATH national registered instructor examination during this course.

Prerequisite: EQS 309 and First aid and CPR certified

## **EOS 415**

## **Advanced Equine Judging**

Semester: Fall Semester Hours: 3

Students review the principles learned in EQS 214 and EQS 315 and broaden their knowledge of competition rules. They further develop oral and thinking skills for the presentation of reasons at the intercollegiate competitive level. There may be opportunities for intercollegiate judge competition.

Prerequisite: EQS 214 and EQS 315

#### **EOS 421**

## **Advanced Horse Training III**

Semester: On Demand Semester Hours: 3

For the furthering of training and riding skills, this course leads the student toward a more independent development of his or her own training program. Students are expected to develop, organize, and produce a training plan suited to their specific goals.

Prerequisite: senior standing

## **EQS 422**

# **Advanced Horse Training IV**

Semester: On Demand Semester Hours: 3

This course is a continuation of EQS 421.

Prerequisite: EQS 421

# EQS 450

# Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required.

Prerequisite: junior or senior standing

## **EQS 499**

# **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

## **HHP 204**

# Foundations of Human Structure and Function

Semester: Fall and Spring

Semester Hours: 4

Students examine the basic foundations and functions of the human body, including the skeletal, muscular, nervous, cardiovascular, digestive, and respiratory systems. Laboratory experiences focus on the nomenclature, structure, and function of these systems.

# **HHP 315**

# **Motor Learning**

Semester: Spring

Semester Hours: 2

This course focuses on the factors that influence the learning of motor skills. Content includes features of skill development, processes of perception, and components of action as these relate to the acquisition and teaching of goal-directed movement. Practical application of theory is a central part of the course.

## **MAT 175**

### Calculus I

Semester: Fall Semester Hours: 5

This course is a study of the functions of one real variable and includes a brief review of circular functions. The ideas of limit, continuity, and differentiation are explained and applied to physical problems. Topics include the use of approximations and problem solving. The use of graphing calculators is required.

Prerequisite: satisfactory score on a placement exam or MAT 110

## **MAT 210**

# **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

## **PHS 101**

# **Fundamental Physics I**

Semester: Fall, Alternate years

Semester Hours: 4

Students examine a survey of the laws and phenomena of classical physics, including motion, force, energy, momentum, waves, and thermodynamics. This course is suitable for non-science majors who have a strong background in high school algebra and who wish to have a more rigorous understanding of physics than provided in most courses for non-science majors. The course will satisfy the requirements of geology and biology majors. Students considering graduate work in these areas should take PHS 201 and PHS 202 instead. Three lecture periods and one two-hour laboratory per week.

## **PHS 102**

# **Fundamental Physics II**

Semester: Spring, Alternate years

Semester Hours: 4

Students examine a survey of the laws and phenomena of classical and modern physics, including light, electricity, magnetism, and atomic and nuclear physics. This course is suitable for non-science majors who have a strong background in high school algebra and who wish to have a more rigorous understanding of physics than provided in most courses for non-science majors. This course will satisfy the requirements of geology and biology majors. Students considering graduate work in these areas should take PHS 201 and PHS 202 instead. Three lecture periods and one two-hour laboratory per week.

Prerequisite: PHS 101

## PHS 201

# General Physics I

Semester: Fall Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including force and motion, energy and momentum, their conservation laws, and their oscillations. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Corequisite: MAT 175

## PHS 202

# **General Physics II**

Semester: Spring Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including mechanics, waves, light, electricity, and magnetism. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Prerequisite: PHS 201 Corequisite: MAT 176

## **PSY 312**

# **Behavior Management**

Semester: Fall Semester Hours: 3

Students review behavior management techniques and therapies. Principles of operant conditioning and classical conditioning are investigated in depth. The student will be able to use behavioral principles appropriately and understand the ethical issues involved.

Prerequisite: PSY 101

# Foreign Languages & Literature

The foreign languages and literature program uses the four basic language acquisition skills of reading, writing, listening, and speaking to learn at each successive level. In addition to being instrumental and vital to learning another language, honing these skills also advances English language development.

The program is integral to the liberal arts mission of the College. Students discover that one cannot categorize meaning into compartmentalized boxes. Language and the culture in which those words are imbedded help students comprehend economic systems, the fine arts, and history/political science.

The aim of the foreign languages and literature program is for the student to be able to read, write, and converse with increasing ability as he or she moves to the next course. The goal of this gradual improvement is to make the student an effective communicator in a native-speaking environment. Toward this end, Rocky Mountain College strives to make opportunities available for travel and study abroad.

Courses in Italian language and culture are offered on demand. French courses will be offered on demand. Opportunities to study other languages, such as Greek, are periodically available.

# Minor in Spanish

This program is currently under moratorium and is not accepting new students

A minimum of 20 semester hours is required, six of which must be upperdivision.

# Foreign Languages & Literature courses

## **ITN 131**

# Beginning Italian I

Semester: Fall Semester Hours: 4

This course provides an introduction to Italian speech, language, culture, and communication through listening, speaking, reading, and writing. The approach integrates culture and language with emphasis on vocabulary acquisition and basic grammatical structures. Classwork emphasizes participation, group work, and opportunities for hearing and speaking Italian.

## **SPN 131**

# Beginning Spanish I

Semester: Fall

Semester Hours: 4

This course provides an introduction to Spanish speech, language, culture, and communication through reading, writing, listening, and speaking. A

culture- and language-integrated approach with an emphasis on vocabulary acquisition and basic grammatical structures is used.

#### **SPN 132**

# **Beginning Spanish II**

Semester: Spring Semester Hours: 4

This course builds on the foundation established in SPN 131. Through the use of the four language skills of reading, writing, listening, and speaking, basic grammar skills, vocabulary acquisition, and cultural readings will increase. Greater emphasis is placed on oral and written expression. Prerequisite: SPN 131

# **SPN 211**

# Intermediate Spanish I

Semester: Fall Semester Hours: 3

This course utilizes the methodical review and practice of basic vocabulary and grammatical structures, combined with the integrated development of proficiency in the four language skills. Expansion of cultural knowledge and functional vocabulary will occur through intermediate-level reading and discussions. Emphasis is on intermediate-level grammar and reading proficiency.

Prerequisite: SPN 132

## **SPN 212**

# Intermediate Spanish II

Semester: On Demand Semester Hours: 3

A continuation of SPN 211 in which students continue to review, expand, and practice basic vocabulary and grammatical structures, while more advanced grammatical structures are introduced and practiced. Expansion of cultural knowledge and functional vocabulary continues through increasingly advanced intermediate-level readings and discussions. Emphasis is on intermediate-level grammar, reading, and communicating proficiency. Prerequisite: SPN 211

# **SPN 299**

# **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

# **SPN 311**

# The Art of Spanish Conversation and Composition

Semester: On Demand Semester Hours: 3

This course, conducted in Spanish, is an interactive communication course where students will work with the syntax and the syntactical analysis of spoken and written Spanish. Pronunciation, vocabulary, and fluency will be enhanced through textbook and simulated situations, as well as on-campus and off-campus excursions. These real-life situations and dialogue encounters will be used to encourage conversation and elicit discussion, and students will follow up on the situations by writing well-formulated and coherently arranged written works describing their experience. These essays will be marked, shared with the class, and then analyzed for correctness. This analytical exercise will be done individually as homework and then collectively as class discussions. In addition to readings, research, and discussion, students will make oral presentations in class or at special events.

Prerequisite: SPN 131, SPN 132, and SPN 211

### **SPN 321**

# **Cultures and Literature of Latin America**

Semester: On Demand Semester Hours: 3

This course provides an introduction to the richness and diversity of the different countries and cultures of Latin America through their writers. Forms of expression and of preserving knowledge used by ancient civilizations to contemporary writers will be explored. Carvings, ancient writings, short stories, and excerpts from novels and plays will be studied via both written works and film. Students will take part in classroom discussions as well as write analytical essays in Spanish.

Prerequisite: SPN 131, SPN 132, and SPN 211

# **SPN 322**

# Culture and Literature of Spain

Semester: On Demand Semester Hours: 3

This course provides an overview of the culture of Spain through representative literary works of peninsular authors. Works will be examined from the Middle Ages, the Siglo de Oro, and contemporary authors, including an introduction to literary genres. Poetry, short stories, and excerpts of longer works will be studied, via both written works and film. Students will take part in classroom discussions as well as write analytical essays in Spanish.

Prerequisite: SPN 131, SPN 132, and SPN 211

# SPN 450 Internship

Semester: On Demand Semester Hours: 1-12

Students are provided with an on-site, hands-on language experience where students are paired with schools, churches, businesses, government, and/or non-profit organizations in the Billings area, the state(s), or abroad. Contract is required. Contact and feedback will be maintained throughout the course. The student must arrange the internship in agreement with the instructor and the Office of Career Services.

Prerequisite: SPN 131, SPN 132, and SPN 211; junior or senior standing

## **SPN 499**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

# Geology

Thomas Kalakay, Associate Professor Derek Sjostrom, Associate Professor Emily Ward, Assistant Professor

The science of geology integrates physics, chemistry, mathematics, and biology in order to better understand the planet Earth. Students typically choose geology because of an interest in the natural world and a desire to work outdoors. Some geologists explore for energy, mineral, and water resources; some evaluate the potential hazards of earthquakes, floods, landslides, and volcanic eruptions; and others locate, contain, or remove pollutants. The geology program prepares students for professional careers in the geosciences and provides the background required for graduate studies. The program offers concentrations in geology and petroleum systems, as well as a minor in geology.

The geology program is broadly based in the traditional geologic disciplines with an emphasis on field studies in the Rocky Mountains. Students participate in numerous field trips, and many students work on indepen-

dent study/research projects with individual faculty. Students have access to state-of-the-art laboratories and analytical equipment within the geology department and through collaboration with other academic institutions.

# **Learning Outcomes**

# **Geology Concentration**

Students who graduate with a concentration in geology will be able to:

- Describe geologic relationships using qualitative and quantitative data;
- 2. Develop and test geologic hypotheses using designed data collection;
- Analyze data and use concepts to interpret the order and nature of geologic events;
- 4. Synthesize geologic data and communicate results in oral and written form:
- 5. Apply quantitative skills to solve geologic problems.

## **Petroleum Systems Concentration**

Students who graduate with a concentration in petroleum systems will be able to:

- Interpret and describe geologic relationships and rocks in the field and in lab;
- Develop geologic hypotheses and test these hypotheses through experimentation and/or designed data collection;
- Analyze geologic data and construct and comprehend geologic maps and reports;
- 4. Describe the genesis of petroleum and petroleum-bearing deposits;
- Analyze surface and subsurface data in order to characterize petroleum systems.

# **Geology Concentration**

A minimum of 60 semester hours is required, including:

Geology core courses:

CHM 101: General Chemistry I

GEO 101/104: Fundamentals of Geology

GEO 204: Earth Materials I

GEO 218: Evolution of the Earth

GEO 302: Stratigraphy and Sedimentology

GEO 305: Earth Materials II

GEO 343: Field Methods for Geoscientists

GEO 350: Applied Field Geology

GEO 411: Structural Geology and Tectonics

GEO 490: Geology Capstone Seminar: Regional Tectonics

Choose one of the following: PHS 101: Fundamental Physics I

PHS 201: General Physics I

Choose one of the following:

MAT 175: Calculus I

MAT 210: Probability and Statistics

12 semester hours from:

GEO 245: Geoscience Research Methods

GEO 310: Geomorphology

GEO 324: Petroleum Reservoir System

GEO 334: Oil and Gas Geology

GEO 345: Practical Geoscience Research I

GEO 349: Geomechanics

GEO 354: Sedimentary Basin Analysis

GEO 445: Practical Geoscience Research II

GEO 450: Internship

GEO 483: Thesis in Geology

ESC 321: Introduction to Geographic Information Systems

ESC 322: Remote Sensing

or other courses approved by the geology faculty

## **Petroleum Systems Concentration**

A minimum of 61 semester hours is required, including:

Geology Core Courses:

CHM 101: General Chemistry I

GEO 101/104: Fundamentals of Geology

GEO 204: Earth Materials I GEO 218: Evolution of the Earth

GEO 302: Stratigraphy and Sedimentology

GEO 305: Earth Materials II

GEO 343: Field Methods for Geoscientists

GEO 350: Applied Field Geology

GEO 411: Structural Geology and Tectonics

GEO 490: Geology Capstone Seminar: Regional Tectonics

Choose one of the following:

PHS 101: Fundamental Physics I

PHS 201: General Physics I

Choose one of the following:

MAT 175: Calculus I

MAT 210: Probability and Statistics

Petroleum systems courses (13 semester hours):

GEO 324: Petroleum Reservoir Systems

GEO 334: Oil and Gas Geology

GEO 349: Geomechanics

GEO 354: Sedimentary Basin Analysis

# **Geology Minor**

A minimum of 23 semester hours is required, including:

GEO 101/104: Fundamentals of Geology

GEO 204: Earth Materials I

GEO 218: Evolution of the Earth

GEO 302: Stratigraphy and Sedimentology

GEO 343: Field Methods for Geoscientists

Plus four semester hours of geology electives approved by the geology faculty (of which at least two semester hours must be upper-division).

# Geology courses

# **CHM 101**

# **General Chemistry I**

Semester: Fall Semester Hours: 4

This course introduces students to the science of chemistry. The concepts of atoms, molecules, bonding, and energy successfully explain the properties of matter and how reactions happen. Goals of this course include introducing students to representative materials and reactions, to important models and theories of the science, and to the symbols and language of chemists. The laboratory will involve observations of elements, compounds and their reactions (including synthesis), and quantitative measurements of properties or amounts of matter. Three hours of lecture, one two-hour laboratory session, and one hour of recitation per week.

Corequisite: MAT 100 or placement into higher mathematics course

## **ESC 321**

# **Introduction to Geographic Information Systems**

Semester: On Demand

Semester Hours: 4

This course introduces students to the theory and practical application of geographic information systems (GIS). Topics include fundamentals of cartography, GIS data types, data input, GIS database structure and management, analysis of spatially distributed data, and report preparations using GIS.

Prerequisite: MAT 100 and a previous science course

## **ESC 322**

# **Remote Sensing**

Semester: Spring Semester Hours: 4

This course is designed to introduce the principles of remote sensing to students who are new to the field but who have experience with GIS (particularly with ArcMap). The focus is on hands on application of remote sensing data and workflows to natural resource management, earth science, and environmental systems monitoring.

Prerequisite: ESC 321 or instructor approval

#### **GEO 101**

## **Fundamentals of Geology**

Semester: Fall and Spring

Semester Hours: 3

This course provides an introduction to the science of earth materials, earth systems, and earth history, including the study of minerals, rocks, volcanoes, earthquakes, rock deformation and metamorphism, weathering, and erosion within the modern paradigm of plate tectonics. Special emphasis is placed on interpreting the geologic landscape and history of the Rocky Mountains through an understanding of Earth processes. Three hours of lecture and one recommended two-hour laboratory per week, plus field trips. This course fulfills a natural lab science core curriculum requirement if taken concurrently with GEO 104.

## **GEO 104**

# **Fundamentals of Geology Laboratory**

Semester: Fall and Spring

Semester Hours: 1

Focus on description of the earth materials and earth systems within the framework of plate tectonic theory. Introduction to identification of minerals, rocks, geologic maps, and structures.

Corequisite: GEO 101 or GEO 218

## **GEO 204**

# **Earth Materials I**

Semester: Fall Semester Hours: 4

This course involves a detailed study of rocks and minerals and the environments in which they form. The course is very hands-on with emphasis placed on the identification of minerals and rocks in hand specimens and under the optical microscope. Three hours of lecture, one two-hour laboratory per week, and occasional all-afternoon field trips.

Prerequisite: GEO 101 and GEO 104

Corequisite: CHM 101

# **GEO 218**

# **Evolution of the Earth**

Semester: Spring Semester Hours: 3

A survey of the major geologic events that have shaped the Earth through time, techniques for telling time geologically, and the connections between the evolution of life and geologic processes and/or events will be covered in this course. Special attention will be given to the regional geologic and environmental history of Montana and the surrounding area. This course will fulfill the non-laboratory science core curriculum requirement for non-geology/environmental science majors. Additionally, this course will provide a temporal context for many geologic features and concepts for geology majors and minors. Three hours of lecture per week and several day- or weekend-long field trips to examine local geologic features will be required. This course fulfills a natural lab science core curriculum requirement if taken concurrently with GEO 104.

#### GEO 245

#### Geoscience Research Methods

Semester: Fall Semester Hours: 2

This is a sophomore-level course intended for geology majors that plan to conduct an undergraduate research project. Students will be exposed to the fundamentals of geoscience research. Topics will include research hypothesis generation, literature searches, scientific literature interpretation, data collection, and the basics of presenting findings in written and oral formats. Students must apply for acceptance to the course. Students who complete this course are eligible to enroll in GEO 345: Practical Geoscience Research I.

Prerequisite: sophomore standing, GEO 101, GEO 104, GEO 280, and permission of instructor

## **GEO 299**

# Independent Study

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater. A maximum of three credits will count toward the student's major requirements.

# **GEO 302**

# Stratigraphy and Sedimentology

Semester: Fall, Alternate years

Semester Hours: 4

This course provides an introduction to the properties, classification, depositional environments, and diagenesis of sediments and sedimentary rocks and their stratigraphic nomenclature and correlation. Field trips are required. Three hours of lecture and one two-hour laboratory per week.

Prerequisite: GEO 204 and GEO 343

# **GEO 305**

# **Earth Materials II**

Semester: Spring, Alternate years

Semester Hours: 4

In this course, students build on skills learned in GEO 204 with emphasis on origin and makeup of igneous and metamorphic rocks. This course covers recognition, description, and classification using hand specimen and optical microscopy. Textures, occurrences, and processes are emphasized in practical exercises. The course provides an introduction to geochemical data and field occurrences of igneous and metamorphic rocks. Three hours of lecture, one two-hour laboratory per week, and occasional all-afternoon field trips. The final project is a poster presentation involving a literature review and synthesis of a major igneous or metamorphic region (e.g., Yellowstone, Hawaii, Beartooth Mountain Range).

Prerequisite: GEO 204

# **GEO 310**

# Geomorphology

Semester: Fall, Alternate years

Semester Hours: 4

Students study landforms and the processes that create them. Topics include surface processes of erosion and deposition by rivers, glaciers, wind, waves, and mass wasting. Field trips are required. Three hours of lecture and one two-hour laboratory per week.

Prerequisite: GEO 305 and GEO 343

## **GEO 316**

# Geochemistry

Semester: Spring, Even years

Semester Hours: 4

Scientific literature and other resources will be used to illustrate the current ideas about the mechanisms that control water quality and chemistry in aqueous systems. Lecture topics will include hydrogeology, acid-base

and reduction-oxidation reactions in natural systems, the geochemistry of metals, stable isotope geochemistry, and case studies of contaminated sites in Montana and throughout the West. Laboratory exercises will include basic sample collection, measurement of major ion concentration, and geochemical modeling with several field exercises. Three hours of lecture and two hours of laboratory per week. This course is cross-listed with CHM 316 and ESC 316.

Prerequisite: CHM 101; GEO 101 is recommended

## **GEO 318**

# Geology of the National Parks and Monuments

Semester: Spring Semester Hours: 3

This class will introduce the geology of the national parks of the western United States. Preference will be given to the parks and monuments of Montana, Wyoming, and North and South Dakota given their proximity to the College. The lecture class will be structured such that each week a new feature of the geology of the selected park will be introduced. Students will choose a topic of interest to investigate for class presentations. Required multi-day field trip.

Prerequisite: GEO 204 and GEO 218 or permission of the instructor

#### **GEO 324**

## **Petroleum Reservoir Systems**

Semester: Fall, Alternating years

Semester Hours: 3

Students will explore the characteristics and genesis of petroleum reservoirs. Topics will include sandstone and carbonate depositional environments, reservoir modeling, porosity, fluid migration, and exploration and reservoir characterization techniques. Assignments will include field-based and laboratory-style activities using examples from the recent scientific literature and the northern Rockies/western Great Plains region. Several day-long field trips will be required throughout the term.

Prerequisite: GEO 204 and GEO 218

## **GEO 330**

# Paleoclimate and Global Change

Semester: Spring, Alternate years

Semester Hours: 3

This course is designed for geology majors, geology minors, upper-level environmental science majors, and other upper-level science majors with interest in the climate of the Earth throughout its history. Scientific literature and other resources will be used to illustrate the current ideas about the mechanisms that drive Earth's climate system on the plate tectonic timescale, glacial timescale, and short-term timescale. Topics will include Earth's climate system, paleoclimate proxies and paleothermometers, atmospheric chemistry and climate, controls and effects of oceanic circulation on climate, the effects of geologic features on climate (volcanoes, supercontinents, ice sheets, etc.), and the effects of biologic organisms on climate and vice versa. Three hours of lecture per week.

Prerequisite: GEO 101, CHM 101

## **GEO 334**

# Oil and Gas Geology

Semester: Fall Semester Hours: 4

This course provides an introduction to oil and gas geology, illustrating the various processes that take place from petroleum source to sink. Lectures will focus on the generation of oil and gas, the nature of source rocks and reservoirs, exploration of petroleum traps, as well as drilling and production. Special consideration will be given to regional oil and gas fields in Montana, Wyoming, and North Dakota. Exercises will include basic rock description (hand sample and thin section), as well as geologic map and seismic interpretation and structural analysis. Assignments will focus on weekly reading and laboratory assignments, as well as field trips. Students will be assessed via laboratory exercises, midterm and final exam, and final project presented in written and oral form.

Prerequisite: GEO 101, GEO 104, GEO 204, and GEO 218

#### **GEO 343**

## **Field Methods for Geoscientists**

Semester: Fall Semester Hours: 4

This practical course in basic field techniques focuses on the use of the fundamental tools of geologic field work including topographic and geologic maps, air photos, the Brunton compass, hand-held GPS, and Jacob's staff. Students draft cross-sections, geologic maps, and stratigraphic columns, and prepare geologic reports using proper scientific writing and data analysis techniques. This course should be taken during sophomore or junior year. One hour of lecture and a two-hour laboratory per week. This course does not serve as a substitute for GEO 350 or equivalent. Students should expect several mandatory field trips. Some will require camping and strenuous hiking in mountain settings.

Prerequisite: GEO 101, GEO 104, and MAT 110 or satisfactory score on a math placement exam

## **GEO 345**

## **Practical Geoscience Research I**

Semester: Spring Semester Hours: 2

This is a junior-level course for students that have completed GEO 245: Geoscience Research Methods and have initiated an undergraduate research project. Topics will include a continuation of the concepts introduced in GEO 245 tailored to the student's specific research project. Emphasis will be on identifying appropriate methods of data collection, manipulation, and presentation. Students will meet regularly as a group for discussion and literature review and one-on-one with a faculty mentor. Prerequisite: GEO 245

## **GEO 349**

# Geomechanics

Semester: Spring, Alternating years

Semester Hours: 3

This course is a non-laboratory course that will provide an introduction to evaluating rock strength and the mechanical criteria used to predict and analyze rock failure at a variety of scales. In this course, we will discuss the mechanical laws that help us quantify rock deformation under the influence of stress. Concepts such as force and stress will be discussed through the lens of elasticity theory. Through problem sets and field exercises, students will investigate stress-strain relationships, the distribution of stress within the crust, and the associated failure characteristics (e.g., joints, fractures, and faults). This analysis of brittle structures has important implications for reservoir evaluation and petroleum extraction. One required multi-day field trip.

Prerequisite: GEO 204, GEO 218, MAT 175 or MAT 210, PHS 101 or PHS 201, or consent of the instructor

## **GEO 350**

# **Applied Field Geology**

Semester: Summer, On demand

Semester Hours: 6

This course must be taken through another academic institution and approved by the student's RMC academic advisor prior to enrollment in the course. An approved course must have the following components: geologic mapping on topographic and aerial photograph bases, use of the geologic compass as a mapping and field surveying tool, coverage of a wide variety of rock types and geologic settings, and use of hand-held GPS. Students will also learn the preparation and interpretation of geologic maps and cross sections and the measurement and interpretation of stratigraphic sections. A special emphasis is placed on using appropriate methods to solve a variety of complex geologic problems. This course lasts five or six weeks. An additional field fee is required.

Prerequisite: GEO 302, GEO 305, GEO 343, GEO 411

## **GEO 354**

# **Sedimentary Basin Analysis**

Semester: Fall, Alternating years

Semester Hours: 3

A synthesis of sedimentology, stratigraphy, geophysics, and tectonics related to sedimentary basins is examined in this course. Emphasis will be on the genesis and architecture of modern and ancient examples of various basin settings and their relationship of petroleum generation and extraction. Topics will include a survey of deposystem types, the role of the Earth's crust in basin genesis, subsidence analysis, subsurface models, stratigraphic correlation, and basin models. Petroleum producing sedimentary basins of Montana, Wyoming, and the Dakotas will be studied in detail. Lectures and exercises will include interpretation of scientific literature, field trips, and computer modeling.

Prerequisite: GEO 204 and GEO 218

## **GEO 411**

## **Structural Geology and Tectonics**

Semester: Fall Semester Hours: 4

This course involves the study of rock deformation at all scales, from microscopic analysis of fault rocks to mountain building processes. Topics include the classification and characterization of structural elements such as faults, folds, foliations, and lineations. Emphasis is placed on methods of structural analysis including stereographic projection, construction of accurate cross sections, and kinematic analysis. Three hours of lecture, one two-hour laboratory per week, and occasional all-afternoon field trips. As a follow-up to the GEO 343 report, the final paper is a paper focused on synthesizing the structural and tectonic evolution of the northern Bighorn Basin.

Prerequisite: GEO 204, GEO 343, MAT 110 or satisfactory score on a math placement exam

# **GEO 445**

## **Practical Geoscience Research II**

Semester: Fall Semester Hours: 2

This is a senior-level course for students that have completed GEO 345 and are in the final stages of an undergraduate research project. Topics will include written and oral presentation skills and strategies and research grant proposal preparation. Students will meet regularly as a group for discussion and literature review and one-on-one with a faculty mentor. Additionally, students will meet with and serve as mentors for students in GEO 245 and GEO 345.

Prerequisite: GEO 345

# GEO 450 Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided experience either in industry or governmental work. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Pass/no pass grading. Contract is required. A maximum of 3 credits will count toward the student's major requirement.

Prerequisite: junior or senior standing and permission of instructor

# **GEO 483**

# Thesis in Geology

Semester: On Demand Semester Hours: 3

This course provides research in geology resulting in a formal written paper, oral presentation, and approval by faculty.

Prerequisite: junior or senior standing and permission of professor

#### GEO 490

## **Geology Capstone Seminar: Regional Tectonics**

Semester: Spring, Alternate years

Semester Hours: 4

This capstone course in the geology degree program combines literature reviews with local field research. The focus is on collection and synthesis of field data in order to solve tectonic problems. Field skills along with oral and/or written presentations are emphasized. All field trips are mandatory. These trips will involve hiking, camping, and other outdoor activities in mountainous terrain. The final paper covers the tectonic and stratigraphic evolution of the Western Cordillera.

Prerequisite: senior standing in geology or permission from instructor

# **GEO 499**

# **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater. A maximum of three credits will count toward the student's major requirements.

Prerequisite: junior or senior standing

## **MAT 175**

# Calculus I

Semester: Fall Semester Hours: 5

This course is a study of the functions of one real variable and includes a brief review of circular functions. The ideas of limit, continuity, and differentiation are explained and applied to physical problems. Topics include the use of approximations and problem solving. The use of graphing calculators is required.

Prerequisite: satisfactory score on a placement exam or MAT 110

# **MAT 210**

# **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

## PHS 101

# **Fundamental Physics I**

Semester: Fall, Alternate years

Semester Hours: 4

Students examine a survey of the laws and phenomena of classical physics, including motion, force, energy, momentum, waves, and thermodynamics. This course is suitable for non-science majors who have a strong background in high school algebra and who wish to have a more rigorous understanding of physics than provided in most courses for non-science majors. The course will satisfy the requirements of geology and biology majors. Students considering graduate work in these areas should take PHS 201 and PHS 202 instead. Three lecture periods and one two-hour laboratory per week.

# PHS 201

# General Physics I

Semester: Fall

Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including force and motion, energy and momentum, their conservation laws, and their oscillations. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Corequisite: MAT 175

# **Health and Human Performance**

Paul Roper, Professor Jeffrey Willardson, Associate Professor Amanda Botnen, Assistant Professor Nicholas Pertuit, Assistant Professor

The health and human performance program examines the many dimensions of health and human performance. The major goal of the program is to enable students to make informed health decisions. The program prepares students to become competent entry-level professionals, as well as advanced study candidates.

To achieve these outcomes, the student will analyze the structure and function of the human body, apply physiological and biomechanical concepts to human movement, examine the acquisition of motor skills, explore the multi-dimensional nature of the health and human performance discipline, examine ethical issues and culturally diverse values related to the discipline, achieve the specific physical skills required to be competent in their profession, acquire a lifelong quest for knowledge, and develop a commitment to act responsibly in one's profession and on behalf of one's community.

The health and human performance program offers varied opportunities for guided work experiences with schools, hospitals, sports medicine clinics, wellness centers, corporate fitness programs, and fitness facilities. These capstone opportunities allow students to express their multidisciplinary education by applying creative problem-solving and communication skills in professional settings.

# **Learning Outcomes**

## **Exercise Science**

Students who graduate with a concentration in exercise science will be able to:

- 1. Demonstrate the knowledge and skills needed for physical activity programming and lifestyle modification techniques;
- Demonstrate knowledge of history and broad content within exercise science and health topics and how that relates to health promotion;
- Demonstrate basic motor skills and patterns and apply a variety of concepts, theories, and methods common to human movement and health promotion;
- Apply the skills necessary to bridge the gap between theory and practice;
- Utilize statistical and measurement concepts to assess client performance and program effectiveness;
- Demonstrate professional and ethical decision-making skills and responsibility as it relates to health promotion and programming.

# **Sport Management**

Students who graduate with a concentration in sport management will be able to:

- 1. Understand the role of sports in society, how it influences our culture, and how sports have been influenced by culture;
- Demonstrate the ability and knowledge to be a leader in a sports-related work setting;
- Identify and address ethical issues related to sports management and administration:
- 4. Understand the concepts of finance an budget and be able to apply them to the sports economy;
- Use communication and technology skills effectively and appropriately within the sports-related environment.

## Major in Health and Human Performance

Two concentrations are offered under the health and human performance major:

Exercise Science

Sport Management

### **Exercise Science Concentraton**

A minimum of 51 semester hours is required, including:

HHP 161: Foundations of Human Structure and Function

HHP 171: Nutrition

HHP 212: Health and Wellness

HHP 223: Prevention and Care of Athletic Injuries

HHP 316: Motor Development and Learning

HHP 321: Biomechanics

HHP 347: Psychology of Physical Activity and Exercise

HHP 357: Physiology of Exercise

HHP 442: Measurement & Evaluation in Health Sciences

HHP 450: Internship (5 semester hours)

HHP 478: Therapeutic Exercise and Advanced Functional Training

HHP 490: Senior Seminar

Three semester hours chosen from PAC activities (in consultation with department faculty)

Choose one of the following:

HHP 324: Sport Performance and Recovery

HHP 477: Advanced Theories of Strength Training and Conditioning

\*May substitute BIO 321 Anatomy and Physiology for HHP 161: Foundations of Human Structure and Function.

\*First aid/ CPR certification required before graduation.

## **Sport Management Concentration**

A minimum of 38 semester hours is required, including:

ACC 210: Foundations of Accounting

BSA 101: Introduction to Business

BSA 303: Principles of Management

BSA 304: Principles of Marketing BSA 362: Professional Sales

BSA/HHP 450: Internship

COM 306: Organizational Communication

ECO 205: Principles of Economics

ENG 325: Professional Writing

HHP 245: Introduction to Sports Management

HHP 300: Current Issues and Practices in Coaching

HHP 412: Management of Health Enhancement and Sport Programs

HHP 424: Contemporary and Ethical Issues in Sports

# Major in Health and Human Performance K-12 Education

A minimum of 45 semester hours is required, including:

COM 102: Public Speaking

EDC 341: Methods and Materials: Teaching Health in the Elementary School

EDC 342: Methods and Materials: Teaching Physical Education in the Elementary School

PAC 108: Swimming

HHP 108: Professional Activities

HHP 171: Nutrition

HHP 212: Health and Wellness Theories and Application

HHP 223: Prevention and Care of Athletic Injuries

HHP 316: Motor Development and Learning

HHP 412: Management of Health Enhancement and Sport Programs

HHP 420: Methods and Materials: Teaching Secondary Health Enhance-

Choose one of the following:

BIO 321: Human Anatomy and Physiology

HHP 161: Foundations of Human Structure and Function

Choose two of the following:

HHP 321: Biomechanics

HHP 357: Physiology of Exercise

HHP 442: Measurement & Evaluation in Health Sciences

\*First aid/ CPR certification required before graduation

This option meets Montana's health certification requirements. In addition, students must complete the professional education program for K-12 education majors as described in the "Education" section of the catalog. Students seeking an endorsement in K-12 physical education must earn a minimum grade of "C" in all required HHP courses, including prerequi-

# **Minor in Athletic Training**

A minimum of 22 semester hours is required, including:

HHP 161: Foundations of Human Structure and Functions

HHP 212: Health and Wellness Theories and Application

HHP 223: Prevention and Care of Athletic Injuries

HHP 478: Therapeutic Exercise and Advanced Functional Training

\*First aid/ CPR certification required before graduation

Also required:

Complete 3 athletic training practicums

## **Minor in Coaching**

A minimum of 28 semester hours is required, including:

HHP 223: Prevention and Care of Athletic Injuries

HHP 300: Current Issues and Practices in Coaching

HHP 316: Motor Development and Learning

HHP 321: Biomechanics

HHP 357: Physiology of Exercise

HHP 348: Sports Psychology

HHP 412: Management of Health Enhancement and Sport Program

# Choose two of the following:

HHP 301: Officiating High School Sports

HHP 302: Basketball Coaching

HHP 303: Football Coaching

HHP 305: Track and Field Coaching

HHP 306: Volleyball Coaching

HHP 307: Baseball and Softball Coaching

HHP 308: Strength and Conditioning Coaching

HHP 311: Soccer Coaching

Many state education departments do not require a coach to be a certified teacher but do require that coaches meet qualification standards. This option prepares students to meet those qualification standards.

# **Minor in Exercise Science**

A minimum of 24 hours is required, including:

HHP 161: Foundations of Human Structure and Function

HHP 171: Nutrition

HHP 212: Health and Wellness Theories and Application

HHP 223: Prevention and Care of Athletic Injuries

Please choose two of the following courses:

HHP 316: Motor Development and Learning

HHP 321: Biomechanics

HHP 324: Sport Performance, Nutrition, and Recovery

HHP 347: Psychology of Physical Activity and Exercise

HHP 356 (4 cr): Physiology of Exercise

HHP 442: Measurement & Evaluation in Health Sciences

HHP 477: Advanced Theories of Strength Training and Conditioning

HHP 478: Therapeutic Exercise and Advanced Functional Training

## Pre-professional Athletic Training (3+2 program with MSU-B)

The 3+2 Athletic Training Program allows students to complete three years of course requirements at Rocky Mountain College and then transfer to MSU Billings (MSUB) and enroll in the two-year entry-level master's program in athletic training. After successful completion of the first year at MSUB, the student will be awarded a bachelor's degree from Rocky Mountain College. After completing the program at MSUB, the student will be awarded the Master of Athletic Training degree. Students entering this program at RMC must major in exercise science and minor in athletic training and must complete the pre-requisites for the master's program at MSUB.

# Required courses:

Exercise science:

HHP 171: Nutrition

HHP 212: Health and Wellness Theory and Application

HHP 223: Prevention and Care of Athletic Injuries

HHP 316: Motor Development and Learning

HHP 321: Biomechanics

HHP 347: Psychology of Physical Activity and Exercise

HHP 357: Physiology of Exercise

HHP 442: Measurement & Evaluation in Health Sciences

HHP 477: Advanced Theories in Strength Training and Conditioning

HHP 478: Therapeutic Exercise and Advanced Functional Training

# Choose one of the following:

HHP 181: Athletic Training Field Practicum

HHP 182: Athletic Training Field Practicum

HHP 281: Athletic Training Field Practicum

HHP 282: Athletic Training Field Practicum

HHP 381: Athletic Training Field Practicum

HHP 382: Athletic Training Field Practicum

HHP 481: Athletic Training Field Practicum

HHP 482: Athletic Training Field Practicum

## Also required:

BIO 321: Anatomy and Physiology 1

BIO 322: Anatomy and Physiology 2

PHA 247: Medical Terminology

First aid/ CPR certification

BIO 321: Human Anatomy and Physiology I requires the following courses as prerequisites: BIO 120 and CHM 101 and CHM 102.

\*The following courses are prerequisites for the graduate program:

PSY 101: General Psychology

MAT 210: Probability and Statistics

# Health and Human Performance courses

# PEH Activities

Semester: Fall and Spring

Semester Hours: 1

Select from a variety of activities. A specific activity may be taken twice for credit. Pass/no pass grading. No more than eight PE activity credits may count toward graduation. This rule does not apply to activities required in a HHP major.

PAC 101: Strength Conditioning for Football

PAC 102: Weight Conditioning for Football

PAC 103: Conditioning for Men's Basketball PAC 104: Conditioning for Women's Basketball

PAC 105: Strength Conditioning for Skiers

PAC 106: Conditioning for Soccer

PAC 107: Conditioning for Volleyball

<sup>\*</sup>First aid/ CPR certification required before graduation

PAC 108: Swimming

PAC 109: Step/Pilates/Water Aerobics PAC 110: Cardio Resistance Training

PAC 111: Karate

PAC 112: Team Activities PAC 113: Racquet Sports

PAC 114: Scuba

PAC 115: Strength Training for Women

PAC 116: Fitness for Life

PAC 117: Hiking/Photography Weekend in Yellowstone

PAC 118: Bicycle in the Beartooths PAC 119: Winter Break Ski Adventure PAC 120: Leave No Trace Camping PAC 121: Wilderness First Aid

PAC 122: Big Sky Ski Weekend

PAC 123: Red Lodge Ski Weekend PAC 124: Beginning Ski/Snowboarding

PAC 125: Hot Springs/Geysers in Yellowstone

PAC 126: Rock Climbing

PAC 127: Cross Country Ski Weekend

PAC 128: Ice Climbing PAC 129: Kayaking PAC 130: Fly Fishing PAC 131: Yoga

PAC 132: Beginning Tennis

PAC 133: Aikido

## **ACC 210**

# Foundations of Accounting

Semester: Fall and Spring

Semester Hours: 3

This course is designed to give students a basic understanding of the uses and limitations of accounting information, particularly from financial statements. Students will understand how to take information from the financial statements and make informed business decisions.

Prerequisite: BSA 101

# **BIO 321**

# Human Anatomy and Physiology I

Semester: Fall Semester Hours: 4

A course requiring students to incorporate concepts from physics, chemistry, and biology to understand the interface between human structure and function and the regulatory mechanisms in play. Topics include tissue types, skeletal, muscular, nervous, respiratory, and reproductive anatomy and physiology. Three hours of lecture and one two-hour laboratory session per week. Human cadavers are used in the laboratory.

Prerequisite: BIO 120 and CHM 101 and CHM 102. CHM 251 and CHM 252 and PHS 102 or PHS 202 are highly recommended.

# **BSA 101**

## **Introduction to Business**

Semester: Fall and Spring

Semester Hours: 3

A beginning business course designed to introduce students to the areas of business study, including historical foundations of America's free enterprise system, ethics and social responsibility in the business setting, entrepreneurship, the legal structures of business, marketing, and general management.

## **BSA 303**

# **Principles of Mangement**

Semester: Fall and Spring

Semester Hours: 3

Students examine the management functions and basic concepts and principles of management, including planning, organization, coordination, control, job design, and human resource management. Topics in human resource management include recruitment, selection, administration of personnel policies, and dismissals. This course is often required as a prerequisite for master's-level business programs.

Prerequisite: ACC 210, ECO 205

## **BSA 304**

# **Principles of Marketing**

Semester: Fall and Spring

Semester Hours: 3

This course studies the marketing process from product development through consumer purchase. The course includes examination of consumer buying behavior, marketing channels, physical distribution, pricing policies, and promotion along with their role in the marketing process.

Prerequisite: BSA 101, ECO 205

## **BSA 362**

# **Professional Sales**

Semester: Fall Semester Hours: 3

This course teaches the basic concepts required to become successful in the field of sales, focusing primarily on business-to-business selling. It includes such topics as understanding the sales cycle, how to make successful sales presentations, understanding the importance of relationships in the sales process, handling objections, and how to close.

Prerequisite: BSA 304

# BSA 450

# Internship

Semester: On Demand Semester Hours: 1-12

Guided work experience and study of a professional nature in an established business, government agency, or other institution. Contract is required. A minimum of three semester hours is required, but no more than three semester hours will count toward the major.

Prerequisite: ACC 309, BSA 303, BSA 311

# **COM 102**

# **Public Speaking**

Semester: Fall and Spring

Semester Hours: 3

This course examines key aspects of writing and delivering public speeches. Focal topics include audience analysis, speech organization, developing supporting materials, argumentation, and delivery. By the end of the course, students will have written and delivered informative, persuasive, and ceremonial speeches.

# **COM 306**

# **Organizational Communication**

Semester: Fall Semester Hours: 3

This course examines how communication occurs in large cooperative networks, especially in professional work settings. It focuses on the roles leadership, management, and conflict resolution play in larger organizations. By the end of the course, students will understand how the values and cultures of any organization emerge through communication.

Prerequisite: COM 102 or permission of instructor

## ECO 205

# **Principles of Economics**

Semester: Fall and Spring

Semester Hours: 3

This course will introduce the principles of firm-level decision making, consumer choices and their rationale, differing forms of industry competition, and how market-clearing prices and quantities are determined in a market environment. Additionally, the students will gain an understanding of how the major participants in the economy interact and what drives economic growth, interest rates, and inflation. The possible impacts of a variety of fiscal and monetary policy choices will be presented to assist the student in understanding how those policies will impact incomes,

employment, and trade for a country. At the completion of the course, the student should have a basic understanding of both the microeconomic and macroeconomic environments and their impacts on businesses and the general population.

**EDC 341** 

# Methods and Materials: Teaching Health in the Elementary School

Semester: Fall Semester Hours: 2

This course provides competency in the delivery and evaluation of planned learning programs for elementary school children. Content will include knowledge of the purpose and scope of a health curriculum, appropriate health topics, and lesson planning. Multimedia based learning will be examined.

Prerequisite: admission to the teacher education program

#### EDC 342

# Methods and Materials: Teaching Physical Education in the Elementary School

Semester: Spring Semester Hours: 2

This course provides competency in the delivery and evaluation of planned learning programs for elementary school children. Content will include knowledge of the physiological, psychological, and motor developmental needs of elementary-age children and the implication for curriculum development and implementation. This course includes experience working with children in an on-campus Saturday morning program.

Prerequisite: admission to teacher education program

## **ENG 325**

# **Professional Writing**

Semester: Fall Semester Hours: 3

This course teaches concepts, practices, and skills for communicating technical, scientific, or business-related information. Topics include understanding how people read, designing documents, incorporating graphics, writing about statistical results, rewriting, editing, and using the Internet. This course may be especially useful for non-English majors, providing them with the tools and techniques to communicate their messages effectively.

Prerequisite: ENG 119

# **HHP 100**

# **Varsity Sports**

Semester: Fall and Spring Semester Hours: 1

Students can elect to obtain credit for conditioning and participation in

varsity sports.

# **HHP 108**

# **Professional Activities**

Semester: Fall Semester Hours: 3

This course is designed to introduce and direct students toward a level of proficiency in team-sports activities, individual sport activities, and in lifetime and fitness activities.

Within each activity students will be assessed by their growth in skill level, rule knowledge, and strategic application. Activities include orienteering, ultimate frisbee, cooperative activities, American Indian and multi-cultural games, fitness testing, educational gymnastics, soccer, team handball, badminton, pickleball, and others.

## HHP 161

# Foundations of Human Structure and Function

Semester: Fall and Spring Semester Hours: 4

Students examine the basic foundations and functions of the human body, including the skeletal, muscular, nervous, cardiovascular, digestive, and

respiratory systems. Laboratory experiences focus on the nomenclature, structure, and function of these systems.

#### HHP 171

## Nutrition

Semester: Fall and Spring

Semester Hours: 4

This course focuses on the essential nutrients and their principal sources and functions; the assessment, analysis, and modification of dietary intake; the relationship between nutrition and fitness; and the stages of the life cycle. This is not a chemistry-based course.

#### **HHP 181**

## **Athletic Training Field Practicum**

Semester: Fall Semester Hours: 2

Students complete 100 clinical hours under the supervision of a certified

trainer

Corequisite: HHP 222

## **HHP 182**

## **Athletic Training Field Practicum**

Semester: Spring Semester Hours: 2

Students complete 100 clinical hours under the supervision of a certified

trainer

Corequisite: HHP 222

#### **HHP 212**

# **Health and Wellness Theories and Applications**

Semester: Fall and Spring

Semester Hours: 4

Topics covered in this course include community/environmental health, consumer issues, death and dying, healthy lifestyles, infectious diseases, medical ethics, psychological health, risk factor management, sexuality, and substance abuse.

# **HHP 223**

# **Beginning Athletic Training**

Semester: Fall and Spring

Semester Hours: 4

Students learn procedures and practices in prevention, immediate care, treatment, and rehabilitation of injuries and sudden illness. Topics include taping, bandaging, and conditioning for athletic competition.

## HHP 245

# **Introduction to Sports Management**

Semester: Fall, Even years

Semester Hours: 3

This course is an introduction to the field of sports management that includes business aspects, an overview of the governance of both collegiate and professional sports, the role of sports managers, and an evaluation of sports management as a career.

# **HHP 281**

## **Athletic Training Field Practicum**

Semester: Fall

Semester Hours: 2

Students complete 200 clinical hours under the supervision of a certified

trainer.

Corequisite: HHP 222

## HHP 282

# **Athletic Training Field Practicum**

Semester: Spring Semester Hours: 2

Students complete 200 clinical hours under the supervision of a certified trainer

Corequisite: HHP 222

## **HHP 299**

# **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **HHP 300**

## **Current Issues and Practices in Coaching**

Semester: Spring, Odd years

Semester Hours: 2

Topics covered in this course include philosophy, sport psychology and sociology, and team management skills. Course includes ACEP certification materials

## **HHP 301**

# **Officiating High School Sports**

Semester: Fall Semester Hours: 2

Students demonstrate knowledge and practical skills in officiating a minimum of three high school sports from the following: football, soccer, volleyball, basketball, softball, and wrestling. Upon successful completion of the course, students can be certified by the Montana Officials Association, which permits immediate employment as middle school, high school, or youth sports officials.

## **HHP 302**

# **Basketball Coaching**

Semester: Spring Semester Hours: 2

Coaching theories of basketball are examined, including fundamentals, techniques, strategies, practice sessions, utilization of personnel, and the ethics of coaching.

## **HHP 303**

# **Football Coaching**

Semester: Fall, Even years

Semester Hours: 2

Coaching theories of football are examined, including skills, systems of play, practice sessions, strategies, conditioning, personnel utilization, off-season programs, and the ethics of coaching.

# **HHP 305**

# Track and Field Coaching

Semester: On Demand Semester Hours: 2

Students examine the following topics: mechanical analysis of track and field events; conditioning and training methods; teaching, coaching, and officiating techniques including practical experience in these areas; and management of track and field meets.

## **HHP 306**

## Volleyball Coaching

Semester: Fall, Even years

Semester Hours: 2

This course covers mechanical analysis and study of coaching theories, including but not limited to, skills, strategies, and systems of play.

#### **HHP 307**

## **Baseball and Softball Coaching**

Semester: On Demand Semester Hours: 2

Theories of coaching baseball and softball are examined, including skills, strategies, practice sessions, conditioning, teaching, and coaching the young athlete.

## **HHP 308**

# **Strength and Conditioning Coaching**

Semester: Spring Semester Hours: 2

This course allows for experiential learning of current concepts in strength and conditioning. Additionally, it allows the opportunity to apply scientific knowledge of how to properly train athletes and clients for the primary goals of improving athletic performance and fitness. This course assists students in preparing for a profession in personal training and/or strength and conditioning.

## HHP 311

# **Soccer Coaching**

Semester: On Demand Semester Hours: 2

Theories of coaching soccer are examined, including skills, strategies, practice sessions, conditioning, teaching, and coaching the young athlete.

#### HHP 316

# **Motor Development and Learning**

Semester: Fall and Spring

Semester Hours: 4

This course focuses on the factors that influence the learning of motor skills. Content includes features of skill development, processes of perception, and components of action as these relate to the acquisition and teaching of goal-directed movement. Practical application of theory is a central part of the course.

# **HHP 321**

# **Biomechanics**

Semester: Fall Semester Hours: 4

This course focuses on the principles of human movement. Emphasis is placed on demonstrating the ability to analyze human motion in terms of improving human movement performance. Concepts of biological/mechanical aspects of musculoskeletal structures are also included. Prerequisite: BIO 321 or HHP 161

**HHP 324** 

# Sport Performance and Recovery

Semester: Spring Semester Hours: 3

The course provides a broad overview of physical performance enhancement. Ergogenic aids are anything believed to improve performance, and by the end of this course, students will be knowledgeable about ergogenic aids now in existence and feel comfortable determining their use in improving performance. The course provides an overview of: 1) what are ergogenic aids; 2) dietary supplements; 3) regulation of dietary supplements; 4) the merits of nutritional supplements; 5) general nutritional strategies to optimize performance and recovery; and 6) an overview of our current understanding of the ergogenics for performance enhancement. Students learn principles of pre- and post-exercise nutrition and nutrient timing, energy sources, and training regimes. Other topics include over-the-counter supplements, chemical ergogenic aids, and ethical issues.

Prerequisite: HHP 211 or permission of the instructor

#### **HHP 342**

# Methods and Materials: Teaching Physical Education in the Elementary School

Semester: Spring Semester Hours: 3

This course provides competency in the delivery and evaluation of planned learning programs for elementary school children. Content will include knowledge of the physiological, psychological, and motor developmental needs of elementary-age children and the implication for curriculum development and implementation. This course includes experience working with children in an on-campus Saturday morning program.

Prerequisite: admission to teacher education program or permission of instructor; this course is for PE majors only

# **HHP 347**

# **Psychology of Physical Activity and Exercise**

Semester: Fall and Spring

Semester Hours: 4

The purpose of this course is to promote understanding of psychological theory, research, and intervention strategies in psychology of physical activity and exercise. In studying both theory and practice, students are expected to develop their own views and ideas within the realm of their chosen field. The exchange and development of ideas is encouraged and at the same time grounded in the current knowledge base in this field. Students are expected to undertake extensive reviews within various health fields.

#### **HHP 348**

# **Sports Psychology**

Semester: Fall Semester Hours: 3

Sport psychology is the scientific study of people and their behavior in sport and is concerned with the psychological determinants of behavior in movement situations, as well as the psychological effects of sport engagement. This course will address the fundamental areas within sports psychology, including, but not be limited to, the following topics: motivation, attributions, imagery, goal setting, confidence, attentional focus, team cohesion, leadership, anxiety, and stress. Students taking this course will be expected to demonstrate understanding of, and the application of, the topic when coaching children and youth.

## **HHP 357**

# Physiology of Exercise

Semester: Fall and Spring

Smester Hours: 4

Students explore the effects of exercise on the cardiorespiratory and neuromuscular systems. Physiological aspects of various training methods are examined. Laboaratory experience is included.

# **HHP 381**

# **Athletic Training Field Practicum**

Semester: Fall

Semester Hours: 2

Students complete 200 clinical hours under the supervision of a certified

trainer.

Prerequisite: HHP 281 or HHP 282

Corequisite: HHP 322

## **HHP 382**

# **Athletic Training Field Practicum**

Semester: Spring Semester Hours: 2

Students complete 200 clinical hours under the supervision of a certified

trainer.

Prerequisite: HHP 281 or HHP 282

Corequisite: HHP 322

# **HHP 412**

# Management of Health Enhancement and Sport Programs

Semester: Spring Semester Hours: 3

Students explore the organization, supervision, and administration of various health enhancement and sport programs.

## **HHP 420**

# Methods and Materials: Teaching Secondary Health Enhancement

Semester: On Demand Semester Hours: 3

This course requires focused study and consultation with a public school physical education and health teacher or other acceptable professional. Hours will be arranged in consultation with the content area professor, the secondary education professor, the student, and the professional mentor. This course provides competence for delivery and evaluation of planned learning activities. Areas of concentration include emotional/mental health, healthy lifestyles, nutrition, weight control, community/environmental health, medical ethical issues, team and individual activities, lifetime sports, cooperative games, and fitness activities.

Prerequisite: admission to the teacher education program, senior standing, HHP 106, HHP 107, HHP 210, and HHP 211 and EDC 040

#### **HHP 424**

## **Contemporary and Ethical Issues in Sports**

Semester: Spring Semester Hours: 3

This capstone course covers issues of concern in sports today, such as substance abuse, gender issues, Title IX's impact on college sports, sportsmanship, standards of morality, questions of value, and rightness and wrongness.

Prerequisite: junior or senior standing

## **HHP 442**

# **Measurement & Evaluation in Health Sciences**

Semester: Fall Semester Hours: 4

This course is designed to introduce students to, and engage them in, the process of measurement and evaluation as applied to the fields of health enhancement and exercise science. The course introduces students to the application of statistics, tests and measurement, report compilation, and interpretation of data. Students examine various types of assessment and test instrument design.

# HHP 450

# Internship

Semester: On Demand Semester Hours: 1-12

This is a guided work experience in cooperation with an established health-related program. Forty-five hours of experience on the job are required for one hour of credit. Students in the exercise science option are required to earn eight credits in an off-campus program. The student must arrange the internship in agreement with the instructor and the Office of Career Services. Contract is required.

Prerequisite: junior or senior standing

## HHP 477

# **Advanced Theories of Strength Training and Conditioning**

Semester: Spring Semester Hours: 4

This course is designed to provide a comprehensive overview of strength and conditioning. Emphasis is placed on the exercise sciences (including anatomy, exercise physiology, and biomechanics) and nutrition, exercise technique, program design, organization and administration, and testing and evaluation. Additionally, this course is designed to prepare students for the nationally accredited Certified Strength and Conditioning Specialist (CSCS) certification exam, as well as other certification tests (CPT, ACSM, etc.)

Prerequisite: HHP 320 and HHP 356

### **HHP 478**

# Therapeutic Exercise and Advanced Functional Training

Semester: Spring, Odd years

Semester Hours: 4

This courses main purpose is to study the basic types of exercises applied in the treatment of disease and injury. This course is designed to explain the principles and apply the techniques of therapeutic exercise as they relate to athletic injury and disease. The advanced functional training portion will identify key movements required in athletics. This course will allow for someone to apply their knowledge in designing a program from the initial moment of injury throughout the healing process until someone can safely return to play.

Corequisite: HHP 161 and HHP 222

## **HHP 481**

# **Athletic Training Field Practicum**

Semester: Fall Semester Hours: 2

Students complete 200 clinical hours under the supervision of a certified

trainer

Prerequisite: HHP 281 or HHP 282

Corequisite: HHP 322

### **HHP 482**

## **Athletic Training Field Practicum**

Semester: Spring Semester Hours: 2

Students complete 200 clinical hours under the supervision of a certified

trainer.

Prerequisite: HHP 281 or HHP 282

Corequisite: HHP 322

## **HHP 490**

# **Senior Seminar**

Semester: Fall Semester Hours: 2

This course encourages senior students in health and physical education to develop job marketing and search skills, as well as prepare for graduate school or a professional career.

# **HHP 499**

# **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

# **PHA 247**

## **Medical Terminology**

Semester: On Demand Semester Hours: 2

Open to any student. This course assists those studying in the fields of medicine and health care. Through textbook readings and the use of Webrelated tools, the principles of medical terminology will be described and applied. The course offers a broad introduction to concepts underlying medical terminology. Medical examples will illustrate concepts and methods. This course does not meet core curriculum requirements.

## **PSY 101**

# **General Psychology**

Semester: Fall and Spring Semester Hours: 3

A survey of the field of psychology investigating such topics as learning, motivation, human development, personality, social psychology, and physiological psychology. In order to make inquiry into any academic

discipline, the student must first learn the language and methodology of that discipline; the field of psychology is no exception. Therefore, this course will include the study of major psychological theories, terminology, and investigative methods, as well as limited opportunity to apply those methods.

# **History & Political Science**

Timothy Lehman, Professor Matthew O'Gara, Associate Professor Jenifer Parks, Associate Professor

The program in history and political science prepares students for professional work in the disciplines and supports the liberal arts mission of the College. Whether serving the major or a core curriculum requirement, courses are characterized by attention to careful reading of texts, analysis of important issues of interpretation and meaning, and effective writing. Most classes are moderate in size, which allows ample opportunity for discussion and the development of critical thinking. These habits of mind are essential for success in professional life and prepare students for an active and engaged life as a citizen of our region, the nation, and the world.

The history and political science majors prepare students for graduate study or for careers in teaching and public service. In recent years, the program has sent students to law school, graduate study in history and political science, political consulting, and careers in government and public service.

# **Learning Outcomes**

## History

Students who graduate with a major in history will be able to:

- 1. Express historical literacy in a specified field;
- 2. Interpret primary documents:
- 3. Sort and weigh different historical interpretations;
- 4. Ask significant historical questions;
- 5. Demonstrate proficiency in the mechanics of historical research;
- 6. Demonstrate competence and clarity in writing.

# **History and Political Science**

Students who graduate with a major in history and political science will be able to:

- Analyze, interpret, and critically evaluate major political issues and/ or historical events;
- Demonstrate familiarity with the major theories and thinkers in the field;
- 3. Understand the intellectual importance of academic research;
- Frame research questions designed to produce independent and cogent analysis;
- Assess, use, and synthesize different kinds of evidence from a variety of academic sources;
- Understand the difference between opinions and substantiated scholarly claims;
- 7. Effectively utilize and appropriately cite academic sources;
- 8. Write papers essentially free of errors in grammar, mechanics, and spelling.

# Major in History

A minimum of 33 semester hours is required, including:

Choose two of the following: HST 103: History of Civilization I HST 104: History of Civilization II

HST 232: The World Since 1945

HST 303: Reformation, Absolutism, and Enlightenment Europe, 1500-

HST 304: The Age of Revolution Europe, 1789-1914

HST 313: Europe Since 1914 HST 324: History of Russia to 1861

HST 325: History of Russia and the Soviet Union Since 1861

HST 370: Medieval History

Choose two of the following: HST 211: American History I

HST 212: American History II HST 260: Montana and the West

HST 309: The United States in World Affairs HST 311: History of Western America HST 356: Native Resistance and Survival

HST 363: Recent America

HST 365: American Environmental History

One 400-level history seminar course

One 400-level history or political science seminar course

Fifteen elective semester hours from history chosen in consultation with program faculty

**Major in History & Political Science** 

A minimum of 33 semester hours is required, including:

POL 101: Introduction to Political Science

POL 321: History of Political and Social Thought

Choose one of the following:

HST 211: American History I

HST 212: American History II

HST 260: Montana and the West

HST 309: The United States in World Affairs

HST 311: History of Western America

HST 363: Recent America

HST 365: American Environmental History

Choose one of the following:

HST 103: History of Civilization I

HST 104: History of Civilization II

HST 232: The World Since 1945

HST 303: Reformation, Absolutism, and Enlightenment Europe, 1500-1789

HST 304: The Age of Revolution Europe, 1789-1914

HST 313: Europe Since 1914

HST 324: History of Russia to 1861

HST 325: History of Russia and the Soviet Union Since 1861

HST 356: Native Resistance and Survival

HST 370: Medieval Europe

Choose two of the following:

HST 490: Seminar

POL 405: Mass Movements and Global Terrorism

POL 422: Revolutions and Revolutionaries

POL 427: The Crisis of Modernity

POL 490: Seminar

Fifteen elective semester hours from political science or history are also required.

# **Major in History Education**

A minimum of 35 semester hours is required. In addition, students must complete the professional education program for secondary teaching as described in the "Education" section of the catalog.

Choose one of the following:

HST 103: History of Civilization I

HST 104: History of Civilization II

HST 232: The World Since 1945

HST 356: Native Resistance and Survival

Choose two of the following:

HST 303: Reformation, Absolutism, and Enlightenment Europe, 1500-

1789

HST 304: The Age of Revolution Europe, 1789-1914

HST 313: Europe Since 1914

HST 324: History of Russia to 1861

HST 325: History of Russia and the Soviet Union Since 1861

HST 370: Medieval History

Choose one of the following: HST 260: Montana and the West

HST 311: History of Western America

Choose two of the following:

HST 211: American History I

HST 212: American History II

HST 309: The United States in World Affairs

HST 363: Recent America

HST 365: American Environmental History

HST 422: Methods and Materials: Teaching History/Social Studies in the

Secondary School

One 400-level history seminar course

One 400-level history or political science course

Nine elective semester hours from history chosen in consultation with

program faculty

**Major in Social Studies Broadfield Education** 

This major serves those who desire to teach in smaller school districts. A minimum of 26 semester hours in history, 15 in political science, and 12 psychology are required. In addition, students must complete the professional education program for secondary teaching as described in the "Education" section of the catalog.

The following courses are required:

History:

HST/POL 490: Seminar

HST 422: Methods and Materials: Teaching History/Social Studies in the

Secondary School

Choose one:

HST 103: History of Civilization I

HST 104: History of Civilization II

Choose one:

HST 260: Montana and the West

HST 311: History of Western America

Choose one of the following:

HST 303: Reformation, Absolutism, and Enlightenment Europe, 1500-

1789

HST 304: The Age of Revolution Europe, 1789-1914

HST 313: Europe Since 1914

Choose two of the following:

HST 211: American History I

HST 212: American History II

HST 363: Recent America

HST 365: American Environmental History

Choose six semester hours of history electives.

Political Science:

POL 101: Introduction to Political Science

POL 203: American National, State, and Local Government

POL 321: History of Political and Social Thought

Choose six semester hours of upper-division political science electives.

Psychology:

PSY 101: General Psychology PSY 206: Human Development II

Choose six semester hours of upper-division psychology electives.

#### **Minor in History**

A minimum of 18 semester hours chosen in consultation with faculty in the program.

## **Minor in Political Science**

A minimum of 18 semester hours is required, including:

POL 101: Introduction to Political Science

POL 321: History of Political and Social Thought

Choose one of the following:

POL 405: Mass Movements and Global Terrorism

POL 422: Revolutions and Revolutionaries

POL 427: The Crisis of Modernity

POL 490: Seminar

Three elective courses from political science are also required.

# **Minor in History Education**

A minimum of 21 semester hours is required, including one course in world history, one course in European history, two courses in American history, one course in western regional history, HST/POL 490, and electives chosen in consultation with faculty in the program. In addition, students must complete the professional education program for secondary teaching as described in the "Education" section of the catalog.

# Minor in Political Science (Government) Education

A minimum of 21 semester hours is required, including POL 101, POL 203, POL 321, and 12 semester hours of electives. In addition, students must complete the professional education program for secondary teaching (grades 5-12) as described in the "Education" section of the catalog.

# **History & Political Science courses**

# **HST 103**

# History of Civilization I

Semester: Fall Semester Hours: 3

This course provides a survey of the origin and development of world culture, with an emphasis on basic ideas. The relevant geography of each area will be covered.

# **HST 104**

# **History of Civilization II**

Semester: Spring Semester Hours: 3

This course provides a survey of the origin and development of world culture, with emphasis on basic ideas. Relevant geography of each area will be covered.

## **HST 211**

# American History I

Semester: Fall

Semester Hours: 3

This course is an exploration of vital issues and ideas in American history from the contact of cultures through Reconstruction. Students will consider such issues as the formation of American identities, native responses to European colonization, slavery and race relations, the growth of democracy, and United States political culture from the Revolution through the Civil War.

## **HST 212**

## American History II

Semester: Spring Semester Hours: 3

This course is an exploration of vital issues and ideas in American history from the Gilded Age to the present. Students will consider such issues as industrialism, reform movements, and the role of America in the world.

## **HST 232**

## The World Since 1945

Semester: On Demand

Semester Hours: 3

This course explores the major developments in world society from the end of World War II to the present. Major themes of emphasis include the Cold War, decolonization, revolution, nation-building, civil war, social movements, political repression, genocide, terrorism, and globalization.

## **HST 260**

## Montana and the West

Semester: Spring, Alternate years

Semester Hours: 3

Students survey the history of Montana in its regional context, focusing on the 19th and 20th centuries.

## **HST 299**

# **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

# **HST 303**

## Reformation, Absolutism, and Enlightenment Europe, 1500-1789

Semester: Spring, Alternate Years

Semester Hours: 3

This course will trace the major political, economic, social, intellectual, and cultural developments in Europe from the late Middle Ages to the eve of the French Revolution.

## HST 304

# The Age of Revolution Europe, 1789-1914

Semester: Fall, Alternate years

Semester Hours: 3

This course provides a study of the French Revolution, the Napoleonic era, the movement toward national unification in Germany and Italy, and the impact of political democracy, capitalism, socialism, and imperialism on European culture.

# **HST 309**

# The United States in World Affairs

Semester: On Demand

Semester Hours: 3

This course studies United States foreign policy and diplomacy, including other American international activities, from 1917 to the present. This course is cross-listed with POL 309.

# HST 311

# **History of Western America**

Semester: Spring, Alternate years

Semester Hours: 3

The development of the American West from the first explorations to the 20th century is examined.

### **HST 313**

# **Europe Since 1914**

Semester: Spring, Alternate years

Semester Hours: 3

Students examine political, cultural, social, and economic developments in Europe from the beginning of World War I to the present. Themes under examination will include nationalism, industrialization, capitalism, liberalism, imperialism, socialism, secularization, and urbanization as well as the period's major wars and revolutions.

## **HST 317**

## Archaeology and History of the Holy Land

Semester: Summer Semester Hours: 6

This course is designed for students participating in the Bethsaida Excavation and tour of selected sites in Israel. Students will engage in activities including excavating at the site; attending poetry readings, laboratory, and evening lectures at the kibbutz; learning archaeological methodology; and learning about kibbutz living on the Galilee. Students are also expected to participate in all guided group tours of important sites and museums in Israel.

## **HST 324**

## History of Russia to 1861

Semester: Fall, Alternate years

Semester Hours: 3

Focusing upon the medieval origins of early East Slavic societies and the formation of the Muscovite state and Russian Empire, this course emphasizes the political, economic, social, and cultural components of pre-revolutionary Russia from the 10th through the 19th centuries. Special attention will be given to themes of state-building, ethnicity, empire-building, and the role of gender, class, religion, and ideology.

# **HST 325**

## History of Russia and the Soviet Union Since 1861

Semester: Spring, Alternate years

Semester Hours: 3

This course offers an in-depth exploration of Russian and Soviet political, social, and cultural history from the abolition of serfdom in 1861 to the present. Themes of emphasis include the rise of democratic and revolutionary movements in the late tsarist period, the Bolshevik Revolution of 1917, industrialization and collectivization, political repression, late Soviet society, Cold War relations, the collapse of the Soviet empire, and post-Soviet society and culture.

# HST 356

# Native Resistance and Survival

Semester: Fall, Alternate years

Semester Hours: 3

This course is an exploration of the variety of military, political, and cultural responses by indigenous people to colonialism, especially in response to settler societies such as those in the Americas, South Africa, Australia, or New Zealand. Topics will include violence, strategies of resistance and accommodation, the formation of racial identities, environmental degradation, and ongoing struggles for autonomy in a global context.

## **HST 358**

# **Topics in History**

Semester: On Demand Semester Hours: 3

This course is an exploration of selected historical ideas, issues, and events. Topics will vary according to instructor interest and student demand, but will focus on central historical texts, important interpretive issues, and emerging scholarship. If the topic is different, students may take this course more than once.

#### **HST 363**

## Recent America

Semester: Fall, Alternate years

Semester Hours: 3

This course is an exploration of major currents in American society since 1945, including war, reform, the rise of welfare, civil rights, Vietnam, feminism, and conservative reaction to these issues.

## **HST 365**

# **American Environmental History**

Semester: Fall, Alternate years

Semester Hours: 3

This course examines the interrelationship of human society and nature in American history. Topics will include ecology as it relates to European conquest of the Americas, Native American peoples, public lands policies, American national character, technological society, conservation, and the modern environmental movement.

## **HST 370**

# Medieval History

Semester: Fall, Alternate years

Semester Hours: 3

This course examines the history of Europe and the Mediterranean world during the Middle Ages (ca. 300-1500), beginning with the transformations of the Roman world in late antiquity and concluding with the origins of the early modern era. Special attention will be devoted to religious, social, and cultural topics, including the Roman papacy, monastic life, the crusades, the problem of heresy, the rise of persecutions, peasant society, and trends in late medieval spirituality.

#### **HST 422**

# Methods and Materials: Teaching History/Social Studies in the Secondary School

Semester: On Demand

Semester Hours: 2

This course requires focused study and consultation with a public school history or social studies teacher or other acceptable professional. Hours will be arranged in consultation with the content area professor, the secondary education professor, the student, and the professional mentor. Methods of teaching history/social studies content appropriate for grades 5-12 are explored. Appropriate use of technology and implications of current research in history education are discussed.

Prerequisite: EDC 040, admission to the teacher education program, senior standing

# **HST 450**

# Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required.

Prerequisite: junior or senior standing

## **HST 490**

# Seminar

Semester: Fall

Semester Hours: 3

This seminar explores such topics as the methods and materials of research, trends in historical research and writing, and a survey of historiography and the philosophy of history. A major research paper is required. This course is cross-listed with POL 490.

### **HST 492**

# Seminar in American History

Semester: Fall, Alternate years

Semester Hours: 3

Through readings and research, this course explores selected topics in American history. Topics may vary from year to year, but each seminar will engage an important topic in American history with attention to trends in historical research and a variety of historiographical approaches to the selected topic. Students will be guided through the research process and complete a major research project.

Prerequisite: junior or senior standing

#### **HST 493**

# Seminar in European History

Semester: Spring, Alternate years

Semester Hours: 3

Through readings and research, this course explores selected topics in European history. Topics may vary from year to year, but each seminar will engage an important topic in European history with attention to trends in historical research and a variety of historiographical approaches to the selected topic. Students will be guided through the research process and complete a major research project.

Prerequisite: junior or senior standing

## **HST 499**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

## **POL 101**

## **Introduction to Political Science**

Semester: Fall Semester Hours: 3

This course provides an examination of the basic concepts of political science in light of contemporary political events. Students approach such important concepts as freedom, power, democracy, authority, revolution, and dictatorship.

# **POL 203**

# American National, State, and Local Government

Semester: Spring Semester Hours: 3

This course provides an analysis of the American system of government on three levels. Students will examine the origins of our system of government, the nature and role of our Constitution with its functional and territorial distribution of powers, and the importance of government at the three levels.

# **POL 204**

# **Political Geography**

Semester: Fall, Even years

Semester Hours: 3

This course introduces students to the scholarly context, core ideas, terminology, major controversies, and complexities associated with taking a geographical perspective on political issues. In addition to introducing students to the "discipline" of political geography, the course is designed to help students develop tools to think critically about the mutually constitutive relationship between politics and places as well as the conflict-laden politics of human-environment relations. The readings, videos, music, and other materials used in the course are drawn from political geography, political science, the humanities, government and multi-lateral agencies, and substantive news and media outlets (e.g., Economist, National Geographic, and The World Bank).

The course focuses on five main topics:

- 1. The evolution of political geography as a field of inquiry
- 2. Places as domains of power (e.g., public places)
- 3. Changing relationships between territory, sovereignty, and identity
- 4. Globalization and environmental governance
- 5. Paradoxes and contradictions of post-9/11 geopolitics

#### POL 220

## **Political Leadership**

Semester: Spring, Alternate years

Semester Hours: 3

This course will survey various theories of leadership as applied to politics, as well as explore the biographies of the men and women who have shaped both local as well as global events. Theory is grounded to practical application, with an emphasis on the various styles, methods, and particular contexts within which individual leaders have come to power and how the exercise thereof has altered or reinforced their original goals and programs.

## **POL 225**

## Film and Politics

Semester: On Demand Semester Hours: 3

This course serves as an introduction to the study of politics and power relations through the modern medium of cinema. Films are treated as texts and cover a wide-ranging and diverse set of themes, such as electoral politics, race relations, education, censorship, political violence, capitalism, and gender issues.

Prerequisite: ENG 120

## **POL 299**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

## **POL 301**

# **International Relations**

Semester: On Demand Semester Hours: 3

Students examine an analysis of the way nations interact with one another and how the necessities of power and the desire to regulate the use of power in the international arena have influenced 20th-century world politics. Prerequisite: a lower-division history course

## **POL 309**

# The United States in World Affairs

Semester: On Demand Semester Hours: 3

This course studies United States foreign policy and diplomacy, including other American international activities, from 1917 to the present. This course is cross-listed with HST 309.

## **POL 313**

# **Environmental Politics**

Semester: Spring Semester Hours: 3

This course examines political problems associated with the human impact on the natural environment: pollution, natural resources, public lands, land use, energy, cultural/social justice, and population.

## **POL 318**

# Visions of Utopia

Semester: On Demand Semester Hours: 3

This course is an exploration of the persistent, yet elusive, quest for the ideal system of governance. The course explores how "perfect" systems have been visualized in theory, attempted in practice, and often lamented in retrospect. Readings are drawn from a variety of historical examples, dating back to the ancient world, and include several utopian and dystopian novels that illuminate the inherent conflict between necessary order and perfect freedom.

## **POL 321**

# History of Political and Social Thought

Semester: On Demand Semester Hours: 3

The development of political and social ideas from ancient Greece to the

present is examined. Prerequisite: POL 101

## **POL 327**

## Race and Class in America

Semester: On Demand Semester Hours: 3

Despite substantial efforts to provide economic opportunity for all Americans, a large and ethnically diverse underclass remains. In an effort to explain this phenomenon, this course directly confronts American perceptions on wealth, poverty, and race in order to more fully understand the confluence and contradictions among them. Course materials will include historical accounts, personal narratives, and sociopolitical analyses that explore concepts such as whiteness and blackness and explain the cultural and structural factors that limit life chances and prevent many from claiming their share of the elusive "American Dream."

## **POL 343**

# **Bross Peace Seminar**

Semester: Spring Semester Hours: 3

The Drs. John R. and Helen H. Bross Peace Seminar develops a theme that stems from the mission statement of the Rocky Mountain College Institute for Peace Studies, which explores alternatives to violence in the behavior of individuals, groups, and nations. This upper-division course is interdisciplinary, inter-generational, and team taught. We have presenters from Rocky Mountain College and Montana State University Billings, with international guest speakers and guest speakers from the professional and business communities. Enrollment is limited to 20 students and 20 auditors to allow for active discussion and exchange.

Prerequisite: junior standing

## POL 405

# Mass Movements and Global Terrorism

Semester: Spring Semester Hours: 3

An advanced seminar that focuses upon the sociocultural causes of violent mass movements. Terrorism is more properly understood as a specific type of political violence, and thus the course will seek to explain and understand the dynamic power struggles that underlie the phenomenon. Ultimately, strategies of counterterrorism and the prospect for peaceful reconciliation will be considered.

Prerequisite: POL 327 or permission of instructor

## POL 412

# **Constitutional Law**

Semester: Fall, Alternate years

Semester Hours: 3

A case-method approach to the landmark decisions of the Supreme Court, with an emphasis on the doctrine of judicial review and the role of the Court in interpreting the Constitution and shaping American legal culture.

The course will focus on the exercise and limitations of federal power in the areas of the economy, civil rights, and individual liberties, as well as the Constitutional basis on which statutes and other regulatory provisions are adjudicated. Special attention will be given to Constitutional clauses related to free speech, due process, and equal protection under the law. Prerequisite: POL 203 or permission of instructor

#### POL 422

## **Revolutions and Revolutionaries**

Semester: On Demand Semester Hours: 3

An advanced seminar that seeks to answer one of the most important questions in the field: why men rebel. Relying heavily on primary sources, readings will include works of political theory, political biography, and narrative accounts of various historical examples of revolution as well as several profiles of the men and women engaged in both violent and non-violent rebellion.

Prerequisite: POL 327 or permission of instructor

# **POL 427**

# The Crisis of Modernity

Semester: On Demand Semester Hours: 3

The dawn of the scientific revolution is much heralded as a turning point in world history, at which time man was emancipated from earlier forms of traditional rule. However, the divorce between tradition and the modern world is wrought with challenges and contradictions, such as the often dichotomous relationships between religion and secularism, science and faith, and technology and nature. A primary goal of this course is to question whether mankind is headed in the right direction or if modernity has resulted in a net-negative for the human condition.

Prerequisite: POL 327 or permission of instructor

# POL 450

## Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required.

Prerequisite: junior or senior standing

## **POL 483**

# Research Assistantship

Semester: On Demand Semester Hours: 1-3

As an advanced research course designed primarily for students considering further study at the graduate level, this is an opportunity for students to work individually and in close consultation with a member of the faculty, based on the supervising advisor's particular research agenda. Principal tasks include data collection, literature review, preliminary analysis, and/or other duties stipulated in an initial course contract.

Prerequisite: junior or senior standing

## **POL 490**

## Seminar

Semester: Fall

Semester Hours: 3

This seminar explores such topics as the methods and materials of research, trends in historical research and writing, and a survey of historiography and the philosophy of history. A major research paper is required. This course is cross-listed with HST 490.

Prerequisite: POL 321 or permission of instructor

## **POL 499**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

## **PSY 101**

## General Psychology

Semester: Fall and Spring Semester Hours: 3

A survey of the field of psychology investigating such topics as learning, motivation, human development, personality, social psychology, and physiological psychology. In order to make inquiry into any academic discipline, the student must first learn the language and methodology of that discipline; the field of psychology is no exception. Therefore, this course will include the study of major psychological theories, terminology, and investigative methods, as well as limited opportunity to apply those methods.

#### **PSY 206**

# **Human Development II**

Semester: Spring Semester Hours: 3

Students examine a study of human development from adolescence through the lifespan, which makes use of recent research studies in physical, cognitive, personality, and social development. The student will demonstrate a basic understanding of the physical, cognitive, and psychosocial changes that occur as people move through the stages of adulthood.

# **Honors Program**

Matthew O'Gara, Associate Professor

The honors program enhances the education of some of our finest students within an eight-semester-hour curriculum that allows them to work intensively with a single professor in the production of a project relevant to their career or graduate education interests. The projects vary widely in scope. Some students elect creative works in music, drama, or spatial arts. Others may do specialized research on historical or literary topics. Students in the sciences may wish to complete original research. Often, topics will be interdisciplinary. In all cases, students' projects are begun and completed with the approval and close support of the Honors Committee, their divisions, and their readers, as explained in the sequence below.

Successful honors students find that participation in this program not only brings them closer to professionals in their chosen fields, but also grants them substantial credentials in their applications to graduate schools or employment opportunities.

The honors program at Rocky Mountain College is open to students who, at completion of the second semester of their sophomore year, have achieved a GPA of 3.40 or better or are recommended by a faculty member. Interested students may also petition the Honors Committee for admittance to the program.

Honors students enjoy reserved carrels in the library, freedom from academic overload fees (students are exempt from overload fees due to enrollment in their honors courses; any extra credits students take beyond the 19 non-honors credits would normally be subject to the overload fee), and an increase in scholarship assistance as they pursue projects during their senior year (honors students enrolled in HON 490 are eligible for a \$300 scholarship each semester they are enrolled in HON 490).

## Spring Semester, Junior Year

Approved entrants participate in HON 309: Honors Proposal Development. Students will spend the semester selecting and developing topics related to their major field of study and will produce a research proposal to be presented to the Honors Committee for approval. Only well-developed proposals will be approved for academic support and possible funding by the Committee. Students who successfully defend their proposals then move forward with their projects, taking two semesters of HON 490 during their senior year.

# Fall Semester, Senior Year

Honors students commence work on their projects in HON 490: Senior Honors Thesis.

# Spring Semester, Senior Year

Honors students register for a second semester of HON 490: Senior Honors Thesis, climaxing in the defense and presentation of the completed project.

# **Honors Program courses**

## **HON 309**

# **Honors Proposal Development**

Semester: Spring, Junior Year

Semester Hours: 2

The goal of this course is to produce a research proposal of the highest academic caliber. Students will spend the semester selecting and developing relevant topics, learning the methodology of research design, formulating analytical research questions, and gathering scholarly research related to their chosen course of study. At the end of the semester the proposal is presented to the Honors Committee for approval, and only proposals approved by the Committee will receive academic support. Proposals not approved may be resubmitted, at the discretion of the Committee, with appropriate modifications.

## HON 490

# **Senior Honors Thesis**

Semester: Fall and Spring

Semester Hours: 6; 3 credits per semester

Students undertake senior theses approved by the Honors Committee and their divisions. Students sign a contract with their faculty readers (mentors) outlining their objectives, timelines, and final project. Students are expected to finish a rough draft of their projects by midterm of their second semester. Copies of the completed paper or a description of the project are due to the first (and second) reader and the director of the honors program by 4:00 p.m. on April 1 (November 1 for those planning to graduate in December). Students defend their theses mid-April (or mid-November) and present them to the College community during the yearend Undergraduate Research Symposium.

Prerequisite: HON 309

# **Individualized Program of Study (IPS)**

An individualized program of study allows students to design a program that is not regularly offered by Rocky Mountain College. A student determines, with the help of faculty advisors, a program of study tailored to meet individual needs and interests. An IPS can be developed for either a major or a minor. All other graduation requirements must be completed, including all core curriculum requirements.

An IPS must be a pre-planned program of study; therefore, IPS proposals should be submitted to the Curriculum Committee by the end of the sophomore year.

Proposals offered after the sophomore year require approval of submission to the Committee by the academic vice president.

IPS proposals are reviewed by the Curriculum Committee for approval. Applications should include the educational rationale behind the program along with a list of all courses to be applied toward the program. The application should also include requirements of similar programs from at least two other accredited institutions. All IPS majors and minors must meet the minimum criteria listed in the requirements for a baccalaureate degree. Proposals are evaluated on the basis of whether or not an IPS provides a coherent program of study, whether the proposed program is similar in breadth and depth to programs at other institutions, whether such a program can better meet the needs of the student, and whether or not the student can offer evidence of the ability to plan and carry out such an individualized program. To be eligible for consideration, the student must be available for regular on-campus contact with the major advisor. Contact the Office of Student Records for further guidance on the preparation of an IPS proposal.

# **Interdisciplinary Studies**

# **Interdisciplinary Studies courses**

# **IDS 010**

# RMC Exit Assessment Exam

Semester: Fall, Spring, and Summer

Semester Hours: 0

IDS 010 is an online proficiency exam used to assess core curriculum outcomes. It is a critical component of the college assessment system. Results of this exam play an important role in evaluating the quality of an RMC education and guiding curricular improvement. Students are enrolled in the course automatically upon submission of a graduation application. The course is graded as pass/no pass. A passing grade is issued on completion of the exam.

## **IDS 101**

## **Campus Compass**

Semester: Fall Semester Hours: 1

This course introduces the freshman student to college life and academics. Topics include note taking, study techniques, test taking, time management, personal growth, and more. The course meets twice a week for the first six weeks of the semester.

## **IDS 115**

# Indispensable Qualities of Leadership

Semester: Fall Semester Hours: 3

This course is the study of the art of leadership and how leadership skills can be developed. We will study leaders throughout history, from Sun Tzu (of over 2,000 years ago) to the latest leadership examples. This course will utilize reading, classroom discussions, group participation efforts, and two films in the attempt to dissect the idea of leadership. This course will also look at "personal leadership" characteristics that will enable the student to achieve success at Rocky Mountain College and in society.

# **IDS 120**

## College Study Skills/Developmental Reading

Semester: Fall and Spring

Semester Hours: 2

Sponsored by Services for Academic Success (SAS), this course introduces major learning strategies that lead to academic success. Key topics include note-taking systems, scheduling methods, memory principles, academic resources, and test-taking strategies. Students are provided with class-related assignments that encourage study skills mastery. In addition, students are provided individualized reading programs based on their present reading skills.

## **IDS 160**

# **Discovering Careers in Health Sciences**

Semester: Spring Semester Hours: 1

This seminar course is designed to expose new students to the breadth of health-related careers available to them with a degree from RMC, with plenty of time to tailor their undergraduate education to their chosen career path. Guest speakers with various backgrounds (MD, PT, PA, DMV, etc.) will speak each week, answer any questions students may have, and provide valuable networking contacts.

Prerequisite: freshman standing

# **IDS 180**

## Arabic I

Semester: Fall Semester Hours: 3

This course provides an introduction to Arabic language through mastering the alphabet system. It emphasizes the four language skills – reading, writing, listening, and speaking. It presents basic vocabulary acquisition, and it is an exploration of the Arab world culture.

## **IDS 180**

## Arabic II

Semester: Fall Semester Hours: 3

This course continues the focus on improving the proficiency of the four language skills and establishes intensive grammatical structure. Cultural exposure expands and functional vocabulary acquisition increases. Communication and interaction techniques develop through encouraging group encounters and expressive discussions.

# **IDS 220**

## College Newspaper

Semester: On Demand Semester Hours: 1-3

Requires permission of the faculty advisor. Pass/no pass grading.

# **IDS 243**

# Scientific Writing and Analysis

Semester: Fall and Spring

Semester Hours: 2

Students will write clear and concise scientific papers and reports. Writing assignments will focus on grammatical requirements for formal scientific writing; abstracts; outlines and organization including paper, paragraph, and sentence structure; paraphrasing and citation usage; and methods of data presentation. A portion of the course will be devoted to data analysis, drafting of tables, and preparation of graphs. IDS 243 is required for biology and chemistry majors and minors.

Prerequisite: ENG 120 and declared major or minor in a natural science or permission of instructor

# **IDS 276**

# **Irish Protest**

Semester: Spring Semester Hours: 1

The contentious political culture of Ireland has transitioned multiple times throughout the last 300 years. Governmental, non-governmental, religious, and local groups have emerged in the debate about governmental power in Ireland and Northern Ireland. This course will trace the current developments in Irish politics through a history of the IRA, Sinn Fein, Ulster Unionist, and Irish Nationalist party. The protest rhetoric in these social movements has framed the political identity of the citizens of these two countries. This course will track the progression of current developments in Irish politics by examining communication attributes of the various organizations that have engaged in the political protests. We will travel to Dublin, Belfast, Derry, Galway, and Dingle to gain diverse political and religious perspectives in the respective countries. Introductory material will be presented prior to departure so students have a historical

and political context in which to understand the political protest and the cultural tours.

**IDS 278** 

# The Rhetoric of Irish Protest

Semester: Summer Semester Hours: 1

This credit is earned by the students during the 12-day trip to Ireland in the May session. The contentious political culture of Ireland has transitioned multiple times throughout the last 300 years. Governmental, non-governmental, religious, and local groups have emerged in the debate about governmental power in Ireland and Northern Ireland. This course will trace the current developments in Irish politics through a history of the IRA. Sinn Fein, Ulster Unionist, and Irish Nationalist party. The protest rhetoric in these social movements has framed the political identity of the citizens of these two countries. This course will track the progression of current developments in Irish politics by examining communication attributes of the various organizations that have engaged in the political protests. We will travel to Dublin, Belfast, Derry, Galway, and Dingle to gain diverse political and religious perspectives in the respective countries. Introductory material will be presented prior to departure so students have a historical and political context in which to understand the political protest and the cultural tours.

Prerequisite: IDS 276

# **IDS 304**

# Negotiations

Semester: Fall Semester Hours: 3

Negotiation is the art and science of securing agreements between two or more interdependent parties. The purpose of this course is to understand the theory and processes of negotiation as it is practiced in a variety of settings. The course highlights the components of an effective negotiation and teach students to analyze their own behavior in negotiations. The course has a strong experiential component, providing students with an opportunity to develop their skills by participating in negotiations and integrating their experiences with the principles presented in the assigned readings and lectures.

# IDS 305 Mediation

Semester: Spring Semester Hours: 3

Mediation is an interdisciplinary field. Mediators come from all disciplines and walks of life. A potential mediator ought to possess the patience of Job, the hide of a rhinoceros, and the wisdom of Solomon. Mediation is an alternative to a decision rendered by a judge, arbitrator, or other decision-maker. Mediators help the parties in a dispute to engage in constructive and creative communication, which will allow them to explore the issues and reach a mutually acceptable resolution of their dispute. The goal of the course is to provide those basic skills necessary to further pursue mediation, either as a profession or as another arrow in the student's quiver of practical and life skills.

## IDS 422

# Methods And Materials: Teaching Natural Science In The Secondary School

Semester: Fall Semester Hours: 2

This course emphasizes the teaching of biology or chemistry at the secondary 5-12 level. Methods of teaching these subjects, including incorporation of active hands-on experiences, reviewing texts for content appropriate to various grade levels, and the use of technology in the classroom, constitute major parts of the course. Particular attention will be paid to thinking, reading, listening, writing, and speaking instruction. Teaching diverse and at-risk student populations will also be discussed. This course is the capstone course for the biology or chemistry education major.

Prerequisite: EDC 040, admission to the teacher education program, senior standing

## **IDS 443**

## Literature of Leadership

Semester: On Demand Semester Hours: 3

This course reviews current literature regarding leadership. Different leadership theories are explored in the context of current literature.

## **IDS 483**

# **Organizational Leadership**

Semester: Spring, Even years

Semester Hours: 3

This course operates on a format of open discussion, risk-taking, initiative, honest self-assessment, experiential exercises, and observation of real-life leadership practice. It will challenge students to craft their own perspectives strengthened through critical examination of case studies, workshops, readings, and local public leaders who will share their own leadership perspectives.

# **Mathematics**

Ulrich Hoensch, Professor Debra Wiens, Professor Robyn Cummings, Associate Professor Brandon Rupinski, Assistant Professor

Mathematics is one of the most intellectually challenging and academically pure subjects. Mathematical thought is a creative process of the mind that uses only logical deduction and established results that, in turn, have been derived from a few unarguable assumptions (axioms). Mathematical modeling is the process of critically investigating a given object (e.g., the functioning of a biological system) and of choosing or creating mathematical structures that explain the observed behavior and allow for prediction and manipulation of this object.

The mathematics program at Rocky Mountain College emphasizes both the pure and applied aspects of mathematics. At its core, its curriculum is designed to provide students with a solid foundation in the art of providing mathematically sound arguments and with a thorough knowledge of the most important modern mathematical tools and methods. In addition, the mathematics program offers elective courses that give students the opportunity to branch out and pursue their own interests. Many elective courses emphasize connections to other fields (such as computer science, engineering, finance, and the natural sciences).

All mathematics prerequisite courses must be completed with a grade of at least "C-".

## **Learning Outcomes**

Students who graduate with a major in mathematics will be able to:

- 1. Establish mathematical results using a variety of proof techniques;
- Exhibit knowledge of relevant definitions, techniques, and mathematical results;
- 3. Perform symbolic manipulation of high-level mathematical objects;
- 4. Solve problems involving high-level mathematical objects;
- 5. Solve computational problems algorithmically;
- Use advanced mathematical techniques to solve problems in realworld situations.

# **Major in Mathematics**

A minimum of 42 semester hours is required, including:

MAT 175: Calculus I MAT 176: Calculus II

MAT 212: How to Read and Write Proofs

MAT 275: Calculus III

MAT 276: Introduction to Mathematica

MAT 311: Linear Algebra

MAT 313: Differential Equations

MAT 317: Abstract Algebra I

MAT 318: Abstract Algebra II

MAT 481: Introduction to Real Analysis I

MAT 482: Introduction to Real Analysis II

Plus two electives numbered 219 or above.

## **Major in Mathematics Education**

A minimum of 41 semester hours is required, including:

MAT 175: Calculus I

MAT 176: Calculus II

MAT 212: How to Read and Write Proofs

MAT 220: Elementary Number Theory

MAT 275: Calculus III

MAT 276: Introduction to Mathematica

MAT 306: History and Philosophy of Mathematics

MAT 310: Mathematical Statistics

MAT 312: Modern Geometric Theories

MAT 317: Abstract Algebra I

MAT 318: Abstract Algebra II

MAT 422: Methods and Materials: Teaching Mathematics in the Secondary School

MAT 481: Introduction to Real Analysis I

In addition, students must complete the professional education program for secondary teaching (grades 5-12) as described in the "Education" section of the catalog.

Note: If a student majors in both mathematics and mathematics education, he or she must complete the requirements of both majors but does not need to take additional credits within the mathematics department. Majoring in both mathematics and mathematics education requires a minimum of 46 semester hours.

# **Minor in Mathematics**

A minimum of 21 semester hours is required, including:

MAT 175: Calculus I

MAT 176: Calculus II

MAT 275: Calculus III

Choose three of the following:

MAT 212: How to Read and Write Proofs

MAT 256: Discrete Structures and Computability

MAT 310: Mathematical Statistics

MAT 311: Linear Algebra

MAT 313: Differential Equations

MAT 317: Abstract Algebra

MAT 481: Introduction to Real Analysis I

## **Minor in Mathematics Education**

A minimum of 29 semester hours is required, including:

MAT 175: Calculus I

MAT 176: Calculus II

MAT 212: How to Read and Write Proofs

MAT 220: Elementary Number Theory

MAT 310: Mathematical Statistics

MAT 312: Modern Geometric Theories

MAT 317: Abstract Algebra I

MAT 422: Methods and Materials: Teaching Mathematics in the Second-

ary School

Electives

In addition, students must complete the professional education program for secondary teaching (grades 5-12) as described in the "Education" section of the catalog.

# **Mathematics courses**

## **MAT 090**

# Elementary Algebra

Semester: Fall and Spring

Semester Hours: 3

This course is designed to prepare students for college algebra. Elementary algebra topics are covered, which include solving equations and inequalities, simplifying algebraic expressions, simplifying expressions involving integers and rational numbers, and graphing equations. This course will not satisfy the mathematics core curriculum requirements and will not count toward the 124 credits required for graduation.

### **MAT 100**

# College Algebra

Semester: Fall and Spring

Semester Hours: 3

This is a basic course in intermediate and advanced algebra.

Prerequisite: satisfactory score on a placement exam

## **MAT 103**

# **Mathematics for Elementary School Teachers I**

Semester: Fall Semester Hours: 3

This course is a survey of various mathematical topics normally taught in grades K-8, specifically numeration systems, number theory, patterns and relationships, and fractions. This course is intended for elementary education students only. Students must earn a grade of "C-" or better to fulfill requirements for the elementary education program.

Prerequisite: MAT 100 or satisfactory score on a placement exam

### **MAT 104**

# **Mathematics for Elementary School Teachers II**

Semester: Spring Semester Hours: 3

This course is a survey of various mathematical topics normally taught in grades K-8, specifically probability and statistics, geometric basic concepts and structures, measurement, and coordinate geometry. This course is intended for elementary education students only. Students must earn a grade of "C-" or better to fulfill requirements for the elementary education program.

Prerequisite: MAT 103 with a grade of C- or better

# **MAT 110**

## Precalculus

Semester: Fall and Spring

Semester Hours: 3

A standard pre-calculus course emphasizing the function concept. Special attention is paid to trigonometric, exponential, and logarithmic functions. Prerequisite: MAT 100 or satisfactory score on a placement exam

## **MAT 13**

# **Trigonometry and Applied Calculus**

Semester: Spring Semester Hours: 3

This course is available to aeronautical science majors and aviation management majors only. This course introduces applied trigonometry, vectors, and basic differential and integral calculus to model and solve real-world problems.

Prerequisite: MAT 100 or satisfactory score on a placement exam

## **MAT 152**

## To Infinity and Beyond

Semester: On Demand

Semester Hours: 3

This course is an exploration of a variety of modern mathematical topics. Topics will illustrate mathematics as a way of representing and understanding patterns and structures as an art, as a tool in other disciplines,

and as a historical force. Topics may include infinity, chaos, fractals, symmetry, networks, and others.

Prerequisite: MAT 100 or the equivalent

## MAT 175 Calculus I

Semester: Fall Semester Hours: 5

This course is a study of the functions of one real variable and includes a brief review of circular functions. The ideas of limit, continuity, and differentiation are explained and applied to physical problems. Topics include the use of approximations and problem solving. The use of graphing calculators is required.

Prerequisite: satisfactory score on a placement exam or MAT 110

# **MAT 176**

# Calculus II

Semester: Spring Semester Hours: 5

Continuing the study of the functions of one real variable, the idea of integration is applied to physical problems. This course is an introduction to sequences and series. The use of graphing calculators is required.

Prerequisite: MAT 175

## **MAT 210**

# **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

## **MAT 212**

## How to Read and Write Proofs

Semester: Spring, Alternate years

Semester Hours: 3

Students are introduced to the different methods of mathematical proofs. Emphasis is placed on critical reading of proofs and the ability to correct errors as well as on writing correct proofs. This course is designed as a precursor to advanced mathematics courses and should be taken during the freshman or sophomore year.

Prerequisite: MAT 175

## **MAT 220**

# **Elementary Number Theory**

Semester: Fall, Alternate years

Semester Hours: 3

Topics in this course include axiomatic development of the positive integers, construction of the real number system, and study of equations with integral solutions. Divisibility properties, prime numbers, and the analysis of congruencies will be studied.

Prerequisite: MAT 175 and MAT 212

# **MAT 256**

## **Discrete Structures and Computability**

Semester: On Demand Semester Hours: 3

The mathematical and theoretical underpinnings of computer science will be explored. Students will be introduced to Boolean algebra and elementary logic and their application to computer implementation and algorithm development. This course explores the historical development of computer science from its roots in mathematical models including early models of computation, such as Turing machines and other finite state machines. Prerequisite: CSC 131 or CSC 143 and either MAT 110 or MAT 175

### **MAT 275**

#### Calculus III

Semester: Fall Semester Hours: 3

Vector functions of one or more real variables, scalar functions of several variables, multiple integration, and surface theory via vectors are among the topics studied. Increasing emphasis on modeling of physical problems and the analysis of geometrical problems in higher dimensional space.

Prerequisite: MAT 176

# **MAT 276**

## **Introduction to Mathematica**

Semester: Fall Semester Hours: 2

This course provides an introduction to the basic structures and components of computer algebra systems (CAS). Lists, functions, graphics, and programming in Mathematica will be covered.

Prerequisite: MAT 176 Corequisite: MAT 275

# **MAT 299**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows interested students to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor in mathematics or mathematics education and have a cumulative GPA of 3.00 or greater.

## **MAT 306**

# History and Philosophy of Mathematics

Semester: Fall, Alternate years

Semester Hours: 3

This course provides a survey of mathematicians of historical note, including their motivations and studies. Students will also examine classical problems and how they were solved. Unsolved problems in mathematics will be discussed.

Prerequisite: MAT 175

## **MAT 310**

# **Mathematical Statistics**

Semester: Spring, Alternate years

Semester Hours: 3

This course is a calculus-based introduction to statistical methods and theory. The course covers basic probability rules; random variables and probability distributions; limit theorems; sampling distributions; point and interval estimation methods; hypothesis testing, including t- and chi-square tests; the simple linear regression model; and analysis of variance. Prerequisite: MAT 275

# **MAT 311**

## Linear Algebra

Semester: Spring, Alternate years

Semester Hours: 3

This course introduces students to the basic structures of linear algebra, which include the following: matrices, determinants, vectors and vector spaces, inner product spaces, eigenvalues, and eigenvectors. Applications and computational aspects of these topics will be presented.

Prerequisite: MAT 175 Corequisite: MAT 176

# **MAT 312**

# **Modern Geometric Theories**

Semester: Spring, Alternate years

Semester Hours: 3

This course provides a study of Euclidean and non-Euclidean geometries.

Prerequisite: MAT 175 and MAT 212

## **MAT 313**

# **Differential Equations**

Semester: Fall, Alternate years

Semester Hours: 3

This course examines analytic, numerical, and geometric techniques for solving first-order differential equations; bifurcations of first-order autonomous differential equations; second-order differential equations, with emphasis on the harmonic oscillator; Laplace transforms; eigenvalue/eigenvector and geometric methods for linear systems with constant coefficients; equilibrium point analysis of nonlinear systems; and analysis of limit cycles. Applications from biology, physics, and economics are presented.

Prerequisite: MAT 311

# **MAT 316**

## **Complex Variables**

Semester: Spring, Alternate years

Semester Hours: 3

This is a basic undergraduate course in complex variables. Topics will include analytic functions, Cauchy's integral formula, the residue calculus, and conformal mapping.

Prerequisite: MAT 275

## **MAT 317**

# Abstract Algebra I

Semester: Fall, Alternate years

Semester Hours: 3

This course provides an introduction to algebraic structures via group theory. Students explore a careful development of the concept of a group and elementary properties of groups. Emphasis is placed on creating mathematical proofs. Some applications to physical problems are included.

Prerequisite: MAT 275 and MAT 212

## **MAT 318**

# Abstract Algebra II

Semester: Spring, Alternate years

Semester Hours: 3

This course is an extension of MAT 317 with ring, ideal, and field theory introduced and examined. Some Galois theory may be covered.

Prerequisite: MAT 317

# MAT 319 Graph Theory

Semester: Fall, Odd years

Semester Hours: 3

Topics covered in this course include paths, Euler and Hamiltonian problems, planar graphs, trees, directed and undirected graphs, networks, and connectedness. Applications to various disciplines will be included. Computational algorithms will be developed as appropriate.

Prerequisite: MAT 212 or permission from instructor

## **MAT 325**

## **Combinatorics**

Semester: Spring, Alternate years

Semester Hours: 3

This basic course in enumerative combinatorics emphasizes developing combinatorical reasoning skills and applying these to solve problems in various areas of math and computer science. Topics covered will include basic counting principles, generating functions, recurrence relations, the principle of inclusion/exclusion, estimation, and modeling.

## **MAT 422**

# Methods and Materials: Teaching Mathematics in the Secondary

Semester: On Demand Semester Hours: 2

This course requires focused study and consultation with a public school mathematics teacher or other acceptable professional. Hours will be ar-

ranged in consultation with the content area professor, the secondary education professor, the student, and the professional mentor. Methods of teaching mathematical content appropriate for grades 5-12 are explored. Appropriate use of technology and implications of current research in mathematics education are discussed. Current NCTM curriculum standards are used as the foundation of the course.

Prerequisite: EDC 040, admission to the teacher education program, senior standing

# MAT 450

# Internship

Semester: On Demand Semester Hours: 1-12

An internship in mathematics arranged between a member of the mathematics faculty and the student. The internship will not count as part of the minimum number of credits required in the major. The requirements will be based on the number of credits. Contract is required.

Prerequisite: junior or senior standing, a cumulative GPA of at least 2.00, and a major GPA of at least 2.25

#### **MAT 481**

# **Introduction to Real Analysis I**

Semester: Fall, Alternate years

Semester Hours: 3

A proof-based course designed to establish the results in the calculus sequence from the axioms of the real-number system. Main topics include definitions and results related to limits, continuity, the intermediate value theorem, the derivative and differentiation rules, Riemann integral and Riemann-integrability, convergence of sequences and series, uniform convergence of function sequences, and power series.

Prerequisite: MAT 176 and MAT 212

## **MAT 482**

## Introduction to Real Analysis II

Semester: Spring, Alternate years

Semester Hours: 3

This course is a continuation of MAT 481. Topics include the Riemann-Stieltjes integral, uniform convergence, infinite series, functions of several real variables, compactness and metric space topology, and the implicit function theorem.

Prerequisite: MAT 481

# **MAT 490**

# **Senior Seminar**

Semester: Spring, Even years

Semester Hours: 2

Selected topics in mathematics are explored. Prerequisite: permission from instructor

# **MAT 499**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows interested students to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor in mathematics or mathematics education and have a cumulative GPA of 3.00 or greater. Prerequisite: junior or senior standing

# **Military Science**

Army ROTC prepares students with the leadership skills and abilities through an applied model of training and mentorship to face the challenges of an ever-changing environment. Students who accept the challenge to become an Army officer may be eligible for a four year scholarship to include: 100 percent tuition & fees (minus aviation), \$1,200 per year book allowance, and a tax -free stipend based on academic status (\$300/

month – freshman, \$350/month – sophomore, \$450/month – junior, \$500/month – senior).

Army ROTC courses are categorized as a basic course (freshman and sophomore courses) or advance course (junior and senior courses). Any student may take a basic course and physical fitness classes without military obligation or prerequisites. Advance course classes are limited to qualified contracted students (see cadre for details). Typically, ROTC students take one three-credit class (2 to 3 hours per week), one work-shop/leadership laboratory per week, and one overnight field exercise per semester in addition to their other classes. ROTC students also participate in physical fitness training (3 hours per week). The program provides opportunities to attend confidence-building courses during the summer such as the air assault or airborne schools, mountain warfare, and summer internships. The program works with its Army ROTC host battalion at Montana State University.

ROTC (military science) is neither a major nor a minor. All cadets who seek a commission must graduate with one of Rocky Mountain College's recognized majors. Cadets also plan and conduct other military events and participate in various leadership experiences each semester.

## **ROTC Curriculum**

A maximum of 12 semester hours from the advanced courses in the military science curriculum may be applied as electives toward the student's degree. There are various other military science courses that may be available but are not part of the required ROTC curriculum. These include MLS 404 and MLS 405.

## **Basic Course**

The ROTC program is divided between the basic course and the advance course. The basic course consists of freshman and sophomore classes. Any student may take any basic course and the physical conditioning classes without prerequisite or military obligation. The basic course classes are:

MLS 101: Introduction to Military Leadership Skills MLS 102: Basic Leadership Skills and Concepts

MLS 201: Leadership Development and Life Skills

MLS 202: Leadership Management and Team Building

The physical conditioning class is:

MLS 106: Army Physical Conditioning and Training (co-requisite taken every semester with basic and advanced courses.)

# **Advance Course**

Only qualified, contracted ROTC cadets may take advance course classes:

MLS 301: Small Unit Tactics and Operations

MLS 302: Applied Leadership and Tactics Training

MLS 303: Warrior Forge

MLS 401: The Army Officer: Roles and Responsibilities

After the successful completion of ROTC requirements and graduation, cadets are commissioned as 2nd lieutenants in the U.S. Army. Cadets have the option of going into active duty, the Army Reserves, or the National Guard. Stipulations do apply.

# **Military Science courses**

## **MLS 10**

# **Introduction to Military Leadership Skills**

Semester: Fall, Spring, and Summer

Semester Hours: 2

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. A laboratory component is required, which includes physical fitness training and other outdoor skills.

Corequisite: MLS 106

## **MLS 102**

# **Basic Leadership Skills and Concepts**

Semester: Fall, Spring, and Summer

Semester Hours: 2

Establishes a foundation of basic leadership fundamentals, such as problem solving, communications, military briefings, effective writing, goal setting, and techniques for improving listening and speaking skills, in addition to an introduction to counseling. This course 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. A laboratory component is required, which includes physical fitness training and other outdoor skills.

Corequisite: MLS 106

## **MLS 106**

## **Army Physical Conditioning and Training**

Semester: Fall, Spring, and Summer

Semester Hours: 1

This course develops confidence and discipline in mind and body through a regimented and challenging physical conditioning course. It is 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.

Corequisite: enrollment in another MLS course

## **MLS 201**

# Leadership Development and Life Skills

Semester: Fall, Spring, and Summer

Semester Hours: 3

Students develop an understanding of how to build teams, influence, and communicate, along with the processes for effective decision-making, creative problem-solving, and fundamentals of planning. Students identify successful leadership characteristics through observation of others and self through experiential learning exercises. A laboratory component is required, which includes physical fitness training and other outdoor skills. Corequisite: MLS 106

# **MLS 202**

# Leadership Management and Team Building

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides an advanced look at leadership principles and the application and practice of those principles. The course examines building successful teams, various methods for influencing action, effective communication, and achieving goals. Additionally, the course stresses the importance of timing decisions, creativity in the problem-solving process, and obtaining team buy-in through immediate feedback. A laboratory component is required, which includes physical fitness training and other outdoor skills.

Corequisite: MLS 106

## **MLS 203**

# Ranger Challenge - Practicum

Semester: Fall

Semester Hours: 1

This course 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. Development of leadership and the ability to function effectively in small unit operations is also explored. A laboratory component is required, which includes physical fitness training and other outdoor skills.

Prerequisite: consent of instructor

Corequisite: MLS 101/201/301/401

## **MLS 204**

# **Leadership Training Course - Practicum**

Semester: Summer Semester Hours: 3

This course provides a forum for the development of military leadership fundamentals. The Leadership Training Course is four weeks of intense classroom and field training held in the summer at Fort Knox, Ky. This course is an accelerated version of the two years of leadership development training cadets receive in the basic course of ROTC. By transforming through this rigorous training, students will qualify for enrollment in the Army ROTC advanced course on campus – provided the student has two years of college remaining (undergraduate or graduate).

Prerequisite: consent of instructor

## **MLS 301**

## **Small Unit Tactics and Operation**

Semester: Fall Semester Hours: 3

This course 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 the cadet in preparing for Warrior Forge. Students conduct a self-assessment of their leadership style, develop personal fitness regimens, and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem-solving techniques. Students receive direct feedback on their leadership abilities. This course is restricted to contracted military science students. A laboratory component is required, which includes physical fitness training and other outdoor skills.

Prerequisite: MLS 101, MLS 102, MIL 201, MLS 202, or MLS 204

Corequisite: MLS 106

# **MLS 302**

# **Applied Leadership and Tactics Training**

Semester: Spring Semester Hours: 3

This course provides a forum to execute and evaluate the leadership skills and abilities developed in practical exercises, tactical scenarios, and mentorship. Students evaluate the tactical, technical, and administrative skills and duties common to all branches of the Army. This course explores the development of leadership behaviors and the ability to function effectively in small unit operations. It also examines the role communications, values, and ethics play in the leadership role. Topics include ethical decision-making, consideration of others, spirituality in the military, and case studies of effective leaders. The course will explore the leader's role in planning, directing, and coordinating the efforts of individuals and small groups in tactical missions. A laboratory component is required, which includes physical fitness training, and other outdoor skills.

Prerequisite: MLS 301 Corequisite: MLS 106

# MLS 303 Warrior Forge

Semester: Summer Semester Hours: 3

This course provides an environment to evaluate and enhance students' leadership abilities in a controlled and challenging environment. This serves as the U.S. Army Cadet Command's flagship training and assessment exercise held at Ft. Lewis, Washington, each summer. Every Army ROTC cadet wishing to be commissioned must successfully complete Warrior Forge. After graduation, most attendees will go back to their college/university to finish their degrees and then be commissioned.

Prerequisite: MLS 302

## **MLS 401**

# The Army Officer: Roles and Responsibilities

Semester: Fall Semester Hours: 3

Students develop 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, along with the application of leadership principles and techniques involved in leading young men and women in today's Army. This course is restricted to contracted military science students.

Prerequisite: permission of instructor

Corequisite: MLS 106

## **MLS 402**

## Officership: Ethics and Justice in the Army

Semester: Spring Semester Hours: 3

This course focuses on case study analysis of military law and practical exercises on 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. Students must also demonstrate an understanding of the ethical components of the Uniform Code of Military Justice and civil rights legislation. This course examines the military justice system and Army law administrations, along with the dynamics of leading in complex situations. This course is preparation for the transition from college student to commissioned officer in the Army. A laboratory component is required, which includes physical fitness training and other outdoor skills.

Corequisite: MLS 106

# **MLS 404**

# **Advanced Leadership Practicum**

Semester: Fall, Spring, and Summer

Semester Hours: 1-3

This course provides a study in military tactics, leadership, and organizational behavior and is closely supervised by military officers in order to provide one-on-one developmental counseling and mentorship. Enrollment is restricted to contracted military science students.

Prerequisite: consent of instructor

## MLS 405

# **Leadership Special Topic**

Semester: Fall, Spring, and Summer

Semester Hours: 1-4

This is a course of study not required in any curriculum, but for which

there is a particular one-time need. Prerequisite: consent of instructor

# Music

Steven Hart, Professor Jennifer Bratz, Assistant Professor James Bungert, Assistant Professor Carolyn Coefield, Instructor

The music program at Rocky Mountain College offers degrees in music education and music performance with concentrations in vocal, instrumental, and piano studies, all fully integrated in the liberal arts tradition. Students receive comprehensive training in music theory, history, ear training, pedagogy, and piano study along with instruction in solo and ensemble performance. The music program strives to develop disciplined musicians, teachers, and performers through coaching in private lessons and in the classroom. The music education degree, taken in conjunction with the fulfillment of state education requirements, qualifies graduates to teach choral and instrumental music in K-12 grades. The performance curriculum prepares students for graduate study or entrepreneurial activity in performance or private teaching.

Rocky Mountain College offers all students the opportunity to participate in musical activities available within the department. Students in all majors are encouraged to participate in ensembles and private voice or instrumental instruction. The music minor is available to students in other disciplines looking to continue their previous musical instruction or expand their musical knowledge.

# **Learning Outcomes**

## **Music Performance**

Students who graduate with a major in music performance will be able to:

- 1. Perform solo repertoire at a high artistic level;
- 2. Perform ensemble literature at a high artistic level;
- 3. Demonstrate a comprehensive knowledge of musical notation and lan-
- 4. Demonstrate aural perception skills to distinguish tonal and temporal relationships;
- 5. Demonstrate proficiency on piano in technique and musicality including scales, chord progressions, transposition, harmonization, and solo and accompanying repertoire;
- Demonstrate an understanding of the elements of music including melody, harmony, rhythm, tempo, dynamics, form, and style;
- Analyze music aurally and visually in terms of musical elements;
- 8. Identify music stylistically and place it in a historical context.

# **Instrumental Concentration**

A minimum of 59 semester hours is required, including:

MUS 020: Recital Attendance (6 semesters)

MUS 030: Junior Recital

MUS 040: Senior Recital

MUS 111: Theory I

MUS 112: Theory II

MUS 141: Musicianship I

MUS 142: Musicianship II

MUS 201: Music Through the Centuries I

MUS 202: Music Through the Centuries II

MUS 211: Theory III

MUS 212: Theory IV

MUS 241: Musicianship III

MUS 242: Musicianship IV

MUS 311: Counterpoint

MUS 325: Instrumental Methods I MUS 326: Instrumental Methods II

MUS 361: Form and Analysis

MUS 402: Conducting

Twelve semester hours of applied study on a primary instrument (four semester hours of MUS 251/MUS 252 and eight semester hours of MUS 351/MUS 352), two semester hours of either MUS 396 (in an instrumental chamber group) or MUS 376 (in a professional or community group as approved by the music faculty), and eight semester hours of ensemble participation with at least six semester hours in concert band.

## **Piano Concentration**

A minimum of 57 semester hours is required, including:

MUS 020: Recital Attendance (6 semesters)

MUS 030: Junior Recital

MUS 040: Senior Recital

MUS 111: Theory I

MUS 112: Theory II MUS 141: Musicianship I

MUS 142: Musicianship II

MUS 201: Music Through the Centuries I

MUS 202: Music Through the Centuries II

MUS 211: Theory III

MUS 212: Theory IV

MUS 241: Musicianship III

MUS 242: Musicianship IV MUS 311: Counterpoint

MUS 320: Pedagogy and Literature of Piano

MUS 321: Accompanying I

MUS 322: Accompanying II

MUS 361: Form and Analysis

MUS 402: Conducting

Twelve semester hours of applied study in piano (four semester hours of MUS 251/MUS 252 and eight semester hours of MUS 351/MUS 352) and eight semester hours of ensemble participation in either concert choir or concert band.

## **Vocal Concentration**

A minimum of 59 semester hours is required including:

MUS 020: Recital Attendance (6 semesters)

MUS 030: Junior Recital

MUS 040: Senior Recital

MUS 111: Theory I

MUS 112: Theory II

MUS 141: Musicianship I

MUS 142: Musicianship II

MUS 201: Music Through the Centuries I

MUS 202: Music Through the Centuries II

MUS 211: Theory III

MUS 212: Theory IV

MUS 241: Musicianship III

MUS 242: Musicianship IV

MUS 311: Counterpoint

MUS 319: Pedagogy of Voice MUS 361: Form and Analysis

MUS 364: Diction I

MUS 365: Diction II

MUS 402: Conducting

Twelve semester hours of applied study in voice (four semester hours of MUS 251/MUS 252 and eight semester hours of MUS 351/MUS 352), one semester hour of either MUS 395 (in a vocal chamber group) or MUS 375 (in a professional or community group as approved by the music faculty), and eight semester hours of ensemble participation with at least six semester hours in concert choir.

# Major in K-12 Vocal and Instrumental Music Education

A minimum of 60 semester hours is required, including:

MUS 020: Recital Attendance (6 semesters)

MUS 030: Junior Recital

MUS 040: Senior Recital

MUS 111: Theory I

MUS 112: Theory II

MUS 140: Introduction to Music of the World's Peoples

MUS 141: Musicianship I

MUS 142: Musicianship II

MUS 153: Beginning Group Guitar

MUS 201: Music Through the Centuries I

MUS 202: Music Through the Centuries II

MUS 211: Theory III

MUS 212: Theory IV

MUS 241: Musicianship III

MUS 242: Musicianship IV

MUS 402: Conducting

Eight semesters in applied study, six of which must be on voice or a single instrument, and eight semester hours in ensemble participation.

Courses in Music Education:

MUS 319: Pedagogy of Voice

MUS 325: Instrumental Methods I

MUS 326: Instrumental Methods II

MUS 344: Methods and Materials: Teaching General Music in the Elementary School

MUS 415: Methods and Materials: Teaching Music in the Secondary School

Music education majors must complete the professional education program for K-12 teaching as described in the "Education" section of the catalog.

## **Minor in Music**

A minimum of 25 semester hours is required (with six semester hours in upper-division courses), including:

MUS 020: Recital Attendance (3 semesters)

MUS 111: Theory I MUS 112: Theory II MUS 141: Musicianship I MUS 142: Musicianship II

MUS 201: Music Through the Centuries I MUS 202: Music Through the Centuries II

Four semester hours of applied study in voice or a principal instrument, four semester hours of participation in concert band or concert choir (or a combination of the two), and an upper-division music elective.

## Piano Proficiency Requirement

Music education and performance majors must pass a piano proficiency exam as a graduation requirement. Elements of the exam include, but are not limited to, major and minor scales, chord progressions, score reading, transposition, harmonization, accompanying voice and instrumental repertoire, accompanying choral literature, and playing solo repertoire. A piano placement exam will be given to each music major to determine placement within either the class piano sequence or private instruction as appropriate to the student and at the instructor's discretion. The proficiency exam is given after the four-semester class piano sequence or as appropriate for students in private lessons.

# **Primary Instrument or Voice Study**

All music majors are required be enrolled in private lessons during each semester of study. A minimum of eight semester hours of MUS 251, MUS 252, MUS 351, or MUS 352 are required, of which, six semester hours must be completed on a primary instrument or voice and registered for under the same section number, regardless of course number. Music minors are required to complete four semester hours of private lessons and are not required to have a primary instrument or voice.

## **Performance Requirements**

All music majors must participate in at least one performing ensemble in each semester of enrollment. No more than eight semester hours of ensemble credit may be applied to the major. Music education majors must complete a minimum of two semester hours in the concert choir and a minimum of two semester hours in the concert band. Music performance majors must perform a junior and senior recital on their primary instruments or voice after passing a recital hearing for the music faculty. This recital hearing should be done no less than four weeks before the intended recital date. Half recitals will be comprised of 30 minutes of music (actual playing time, not the length of the event) and full recitals will be comprised of 50 minutes of music. Music education majors will complete a half junior and a half senior recital. Music performance majors with a vocal, instrumental, or piano concentration will complete a half junior recital and a full senior recital.

## Juries

Music majors and minors will be required to perform an end-of-semester jury in each semester of enrollment in either MUS 251, MUS 252, MUS 351, or MUS 352, unless a junior or senior recital is given in that semester.

## **Upper-Division Qualification**

Admission to upper-division applied lessons and courses requires the passing of an upper-division qualification on the music major's respective instrument or voice at the end of the sophomore year. This is done during the week of final exams. Each degree and concentration has its own requirements for achieving upper-division standing.

#### **Recital Attendance**

Music majors and minors are required to attend all music department recitals in each semester of enrollment. Included are student junior and senior recitals, faculty recitals, departmental recitals, and guest recitals and lectures. Attendance is monitored through MUS 020, which must be passed successfully a total of six semesters/times by all music majors.

# Music courses

## **MUS 020**

## Recital Attendance

Semester: Fall and Spring Semester Hours: 0

Music majors and minors are required to attend all departmental recitals throughout their program of study. Music majors and minors enrolled in MUS 111, MUS 112, MUS 201, and MUS 202 co-enroll in MUS 020. Written reviews are required.

## **MUS 030**

## **Junior Recital**

Semester: Fall and Spring Semester Hours: 0 Junior recital.

# **MUS 040**

## **Senior Recital**

Semester: Fall and Spring Semester Hours: 0 Senior recital.

# **MUS 101**

## **Introduction to Music**

Semester: On Demand Semester Hours: 3

This course provides a historical overview of the way music has developed in Western culture. It is designed for non-music majors and begins with the elements and principles of music, including notation, rhythm, melody, harmony, color, texture, and form. Students will develop listening skills and study selected pieces of music from a variety of periods in history to learn how they relate to the culture in which they were created. This course is not applicable to music major requirements, but it may be used to satisfy core curriculum requirements.

# **MUS 111**

# Theory I

Semester: Fall Semester Hours: 3

This course examines the fundamental elements of music – melodic, rhythmic, and harmonic - through hearing, playing, and writing of theoretical material. Music majors and minors must concurrently enroll in MUS 141. Music majors must concurrently enroll in the appropriate piano course as outlined in the "Piano Study" section.

## **MUS 112**

# Theory II

Semester: Spring Semester Hours: 3

This course examines the fundamental elements of music – melodic, rhythmic, and harmonic – through hearing, playing, and writing of theoretical material. Aural perception of scales, intervals, and rhythmic patterns is developed further.

Prerequisite: MUS 111

Corequisite: MUS 142, if the prerequisites for that course have been met

# **MUS 131**

# Class Piano I

Semester: Fall Semester Hours: 1

This course is designed for the student with little to no previous piano experience. It introduces the keyboard, music reading in treble and bass clef, and basic rhythm, theory, and technique. Students play easy repertoire pieces, harmonization, transposition, scales, and chord progressions. This course is designed for music majors to facilitate the piano proficiency exam and is open to non-majors, space permitting.

## **MUS 132**

## Class Piano II

Semester: Spring Semester Hours: 1

This course is a continuation of MUS 131. Prerequisite: MUS 131 or consent of the instructor

## **MUS 140**

# Introduction to Music of the World's Peoples

Semester: Spring Semester Hours: 3

This course is an introduction to music from non-Western civilizations, including music from Montana, and is designed for both the non-music major and music education major. Students study how people make music in other cultures and how the product often becomes a basis of culture. In addition, students will develop listening skills and study selected pieces of music from a variety of geographic areas. This course is a requirement for music education majors, music minors, and can be used to satisfy core curriculum requirements.

## **MUS 141**

# Musicianship I

Semester: Fall Semester Hours: 1

Students develop skills in comprehensive musicianship through a variety of exercises in listening, dictation, sight-singing, and keyboard. Music majors and minors must concurrently enroll in MUS 111.

## **MUS 142**

# Musicianship II

Semester: Spring Semester Hours: 1

Students develop skills in comprehensive musicianship through a variety of exercises in listening, dictation, sight-singing, and keyboard.

Prerequisite: MUS 111 and MUS 141

## **MUS 153**

## **Beginning Group Guitar**

Semester: Fall and Spring

Semester Hours: 1

Group guitar is designed to acquaint the student with the basic knowledge of fretted guitar performance. Emphasis is placed on learning to tune and care for the instrument and acquiring the basic skills necessary to accompany folk songs and children's songs.

## MIIS 201

# Music Through the Centuries I

Semester: Fall Semester Hours: 3

This course provides a study of Western music history and literature from the medieval world through the cultural milieu of the Renaissance and Baroque eras.

## **MUS 202**

# **Music Through the Centuries II**

Semester: Spring Semester Hours: 3

This course provides a study of Western music history and literature from the Rococo through contemporary compositional trends.

#### MUS 204

## **History of Jazz**

Semester: On Demand Semester Hours: 3

Students examine the evolution of jazz from its roots to contemporary trends. This course may be taken either at the lower-division or the upper-division level, but not both.

## **MUS 205**

# **History of Rock**

Semester: On Demand Semester Hours: 3

Students study rock and roll from its roots in blues through its social and musical evolution to the present day. Period context, performer personality, and extensive recorded examples constitute the course content. This course may be taken either at the lower-division or the upper-division level, but not both.

# **MUS 211**

# Theory III

Semester: Fall Semester Hours: 3

Students are trained in more advanced melodic, harmonic, and rhythmic aspects of music through hearing, playing, and writing. Further ear training and sight-singing of scales, harmonies, and intricacies are developed. Prerequisite: MUS 112

# **MUS 212**

# Theory IV

Semester: Spring Semester Hours: 3

Students are trained in more advanced melodic, harmonic, and rhythmic aspects of music through hearing, playing, and writing. Further ear training and sight-singing of scales, harmonies, and intricacies are developed. Prerequisite: MUS 211

## **MUS 215**

# Creativity

Semester: Fall Semester Hours: 3

This course approaches creativity as a skill to develop, not as a magical gift bestowed on a few select people. The last three weeks of the course will be devoted to a large-scale project in an area chosen by the student at the time of registration. Two important elements of the course involve a specific style of journaling and a weekly artist's date. Through the activities in this course, students will bring a higher degree of creativity to their daily lives. This course may be taken either at the lower-division level or at the upper-division level, but not both. This course is cross-listed with ART 215.

# **MUS 218**

# Jazz Theory and Improvisation

Semester: Fall, Odd years

Semester Hours: 2

A performance-oriented course providing a basic understanding of jazz harmony, improvisation, and performance practice. Work in the course includes transcription and small ensemble playing. Open to all instrumentalists with prior experience on keyboard, woodwind, brass, strings, guitar, or pitched percussion (xylophone and vibraphone).

## **MUS 231**

# Class Piano III

Semester: Fall Semester Hours: 1

This course is a continuation of MUS 132. Prerequisite: MUS 132 or consent of the instructor

## **MUS 232**

## Class Piano IV

Semester: Spring Semester Hours: 1

This course is a continuation of MUS 231. The piano proficiency exam is

administered at the end of this course.

Prerequisite: MUS 232 or consent of the instructor

## **MUS 241**

# Musicianship III

Semester: Fall Semester Hours: 1

Students develop skills in comprehensive musicianship through a variety of exercises in listening, dictation, sight-singing, and keyboard.

## **MUS 242**

## Musicianship IV

Semester: Spring Semester Hours: 1

Students develop skills in comprehensive musicianship through a variety of exercises in listening, dictation, sight-singing, and keyboard.

## **MUS 251**

# **Applied Music**

Semester: Fall and Spring

Semester Hours: 1

Private vocal and instrumental lessons are offered for music majors, music minors, and non-music majors. In the area of instrumental music, instruction is offered on wind instruments, strings, percussion, and keyboards. Majors and minors register for 200-level lessons prior to completion of upper-division qualification. Non-music majors register at the 200-level. Students who enroll in MUS 351 receive 13 half-hour lessons. Specific lesson requirements for each major are listed in the descriptions of the major.

# **MUS 252**

# **Applied Music**

Semester: Fall and Spring

Semester Hours: 2

Private vocal and instrumental lessons are offered for music majors, music minors, and non-music majors. In the area of instrumental music, instruction is offered on wind instruments, strings, percussion, and keyboards. Majors and minors register for 200-level lessons prior to completion of upper-division qualification. Non-music majors register at the 200-level. Students who enroll in MUS 352 receive 13 one-hour lessons or 26 half-hour lessons. Specific lesson requirements for each major are listed in the descriptions of the major.

# **MUS 271**

## **Concert Choir**

Semester: Fall and Spring

Semester Hours: 1

The Rocky Mountain College Concert Choir is dedicated to the study and performance of choral literature. Repertoire will be selected from the history of Western choral music as well as contemporary literature and music from a global perspective. Although there is no prerequisite, students are expected to have had prior high school or collegiate experience in performing ensembles. Six semesters of concert band or concert choir will fulfill one three-credit fine arts core curriculum requirement.

## **MUS 283**

#### Concert Band

Semester: Fall and Spring

Semester Hours: 1

The Rocky Mountain College Concert Band is dedicated to the study and performance of wind ensemble literature. Repertoire will be selected from the traditions of Western instrumental music and include music composed from a global perspective. In addition, the ensemble will perform at a limited number of athletic events as a pep band. Students should have prior performing experience at the high school- or college-level on their instrument. Those who have not played in a high school or collegiate ensemble will need to complete an audition to enroll in the course. Six semesters of concert band or concert choir will fulfill one three-credit fine arts core curriculum requirement.

Prerequisite: prior performing experience on the student's instrument

## **MUS 286**

## Jazz Ensemble

Semester: Fall and Spring

Semester Hours: 1

The jazz ensemble is dedicated to the study and performance of jazz literature and jazz improvisation. Repertoire will be selected from the global history of jazz. Although there is no prerequisite, students are expected to have had prior high school or collegiate experience in performing ensembles. Membership is by permission of professor.

# **MUS 293**

# **Symphony Orchestra**

Semester: Fall and Spring

Semester Hours: 1

Students participate in the Billings Symphony Orchestra under College supervision. Admission is only by audition and by contract with the Symphony. Auditions are typically held in the early spring before the concert season begins in the autumn.

## **MUS 295**

# **Chamber Ensemble**

Semester: Fall and Spring

Semester Hours: 1

Selected groups such as brass, woodwind, string, vocal, instrumental, piano, percussion, or other mixed combinations form with the intention of performing a specific musical genre.

## **MUS 299**

# **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

# **MUS 304**

# **History of Jazz**

Semester: On Demand

Semester Hours: 3

For music majors. Students examine the evolution of jazz from its roots to contemporary trends. This course may be taken either at the lower-division or the upper-division level, but not both.

# **MUS 305**

# **History of Rock**

Semester: On Demand

Semester Hours: 3

For music majors. Students study rock and roll from its roots in blues through its social and musical evolution to the present day. Period context, performer personality, and extensive recorded examples constitute

the course content. This course may be taken either at the lower-division or the upper-division level, but not both.

# **MUS 311**

# Counterpoint

Semester: On Demand Semester Hours: 3

This course emphasizes the reading and writing of polyphony, based on

16th-century contrapuntal techniques.

Prerequisite: MUS 212

# MUS 315

Creativity
Semester: Fall

Semester Hours: 3

This course approaches creativity as a skill to develop, not as a magical gift bestowed on a few select people. The last three weeks of the course will be devoted to a large-scale project in an area chosen by the student at the time of registration. Two important elements of the course involve a specific style of journaling and a weekly artist's date. Through the activities in this course, students will bring a higher degree of creativity to their daily lives. This course may be taken either at the lower-division or the upper-division level, but not both. This course is cross-listed with ART 315.

## **MUS 319**

# **Pedagogy of Voice**

Semester: Spring, Odd years

Semester Hours: 3

This course covers the use of the singing voice, basic principles of singing, physiology of breathing, tone production, resonance, diction, application of basic principles to the singing voice, pronunciation, articulation, intonation, attack of tone, legato and sostenuto, flexibility, and dynamics.

## **MUS 320**

# Pedagogy and Literature of Piano

Semester: On Demand Semester Hours: 2

This course examines methods and materials for beginning to intermediate piano students and studies the practical aspects of teaching private lessons. Surveys of keyboard literature repertoire at the intermediate and advanced level and examinations of style, genre, and performance practice is included.

## **MUS 321**

# Accompanying I

Semester: On Demand Semester Hours: 2

This course offers study techniques for improving sight-reading skills at the keyboard with practical work in solo, duet, instrumental, ensemble, and choral literature. Students will learn score reading and transposition techniques as well as how to work with instrumentalists, vocalists, and ensembles. This course requires instructor consent and may be taken multiple times.

# **MUS 322**

# Accompanying II

Semester: Spring

Semester Hours: 2

This course is an overall study of the art of accompanying with an emphasis on working with vocalists, instrumentalists, ensembles, and repertoire. Requires weekly rehearsals and lessons with student vocalists and/or instrumentalists to be critiqued and coached by instructor.

Prerequisite: MUS 321

### **MUS 325**

# Instrumental Methods I

Semester: Fall, Even years

Semester Hours: 3

This course provides a comprehensive approach to the performance and pedagogy of brass and percussion instruments for music education majors in preparation for teaching elementary and secondary instrumental music. Trumpet, horn, trombone, baritone, euphonium, tuba, bass drum, snare drum, xylophone, marimba, cymbals, and drum set are some instruments covered in this course. Emphasis is on tone production, development of technical proficiency, understanding pedagogical principals, and basic instrument care and maintenance.

Prerequisite: MUS 112, permission of instructor

## **MUS 326**

## **Instrumental Methods II**

Semester: Spring, Odd years

Semester Hours: 3

This course provides a comprehensive approach to the performance and pedagogy of string and woodwind instruments for music education majors in preparation for teaching elementary and secondary instrumental music. Flute, piccolo, oboe, bassoon, clarinet, saxophone, violin, viola, cello, and string bass are some of the instruments covered in this course. Emphasis is placed on tone production, development of technical proficiency, the understanding of pedagogical principals, and basic instrument care and maintenance.

Prerequisite: MUS 112, permission of instructor

#### MUS 344

# Methods and Materials: Teaching General Music in the Elementary School

Semester: Fall Semester Hours: 3

This course provides a study of trends in philosophy, curriculum and program development, traditional instructional materials, Orff/Kodaly, and other innovative teaching techniques for elementary school and early childhood general music. This course is cross-listed with EDC 344.

Prerequisite: K-12 music education major status and admission to the teacher education program

# **MUS 351**

# **Applied Music**

Semester: Fall and Spring

Semester Hours: 1

Private vocal and instrumental lessons are offered for music majors, music minors, and non-music majors. In the area of instrumental music, instruction is offered on wind instruments, strings, percussion, and keyboards. Majors and minors register for 200-level lessons prior to completion of upper-division qualification. Non-music majors register at the 200-level. Students who enroll in MUS 351 receive 13 half-hour lessons. Specific lesson requirements for each major are listed in the descriptions of the major.

Prerequisite: upper-division standing in music

# **MUS 352**

## **Applied Music**

Semester: Fall and Spring

Semester Hours: 2

Private vocal and instrumental lessons are offered for music majors, music minors, and non-music majors. In the area of instrumental music, instruction is offered on wind instruments, strings, percussion, and keyboards. Majors and minors register for 200-level lessons prior to completion of upper-division qualification. Non-music majors register at the 200-level. Students who enroll in MUS 352 receive 13 one-hour lessons or 26 half-hour lessons. Specific lesson requirements for each major are listed in the descriptions of the major.

Prerequisite: upper-division standing in music

#### **MUS 361**

#### Form and Analysis

Semester: On Demand Semester Hours: 3

This course is an analysis of melodic structures and homophonic forms of the common practice period including binary, ternary, rondo, and sonataallegro forms; analysis of contrapuntal forms of canon, motet, and fugue; and study of musical forms in the 20th century.

Prerequisite: MUS 212

#### **MUS 362**

## **Orchestration and Arranging**

Semester: On Demand Semester Hours: 3

This course examines orchestration, transcription, and arranging for a variety of ensembles including full band and orchestra. The entire process is explored, including praration of parts for performance.

#### MUS 364 Diction I

Semester: Fall, Odd years

Semester Hours: 2

This course is the study of fundamental principles of pronunciation and basic phonetic and structural understanding of the Italian and English languages. It is accompanied by an introduction to IPA, the International Phonetic Alphabet. Participants will be expected to sing and perform relevant classical repertoire in these languages.

## MUS 365

Diction II

Semester: Spring, Even years

Semester Hours: 2

This course is the study of fundamental principles of pronunciation and basic phonetic and structural understanding of the French and German languages. Participants will be expected to sing and perform relevant classical repertoire in these languages.

Prerequisite: MUS 364

#### **MUS 371**

#### **Concert Choir**

Semester: Fall and Spring

Semester Hours: 1

The Rocky Mountain College Concert Choir is dedicated to the study and performance of choral literature. Repertoire will be selected from the history of Western choral music as well as contemporary literature and music from a global perspective. Although there is no prerequisite, students are expected to have had prior high school or collegiate experience in performing ensembles. Six semesters of concert band or concert choir will fulfill one three-credit fine arts core curriculum requirement.

Prerequisite: upper-division standing in music

#### **MUS 375**

## **Opera Workshop**

Semester: On Demand

Semester Hours: 1

Students are involved with the production of chamber opera and opera scenes or participate in a professional production of an opera as approved by the music faculty.

## **MUS 383**

#### **Concert Band**

Semester: Fall and Spring

Semester Hours: 1

The Rocky Mountain College Concert Band is dedicated to the study and performance of wind ensemble literature. Repertoire will be selected from the traditions of Western instrumental music and include music composed from a global perspective. In addition, the ensemble will perform at a limited number of athletic events as a pep band. Students should have prior

performing experience at the high school- or college-level on their instrument. Those who have not played in a high school or collegiate ensemble will need to complete an audition to enroll in the course. Six semesters of concert band or concert choir will fulfill one three-credit fine arts core curriculum requirement.

Prerequisite: prior performing experience on the student's instrument, upper-division standing in music

#### **MUS 386**

#### Jazz Ensemble

Semester: Fall and Spring

Semester Hours: 1

The jazz ensemble is dedicated to the study and performance of jazz literature and jazz improvisation. Repertoire will be selected from the global history of jazz. Although there is no prerequisite, students are expected to have had prior high school or collegiate experience in performing ensembles. Membership is by permission of professor.

Prerequisite: upper-division standing in music

#### **MUS 393**

## **Symphony Orchestra**

Semester: Fall and Spring

Semester Hours: 1

Students participate in the Billings Symphony Orchestra under College supervision. Admission is only by audition and by contract with the Symphony. Auditions are typically held in the early spring before the concert season begins in the autumn.

#### **MUS 395**

#### **Chamber Ensemble**

Semester: Fall and Spring

Semester Hours: 1

Selected groups such as brass, woodwind, string, vocal, instrumental, piano, percussion, or other mixed combinations form with the intention of performing a specific musical genre.

Prerequisite: upper-division standing in music

## **MUS 402**

#### Conducting

Semester: Fall, Odd years

Semester Hours: 3

This course provides an introduction to the fundamentals of baton technique; choral, orchestral, and symphonic score reading; and choral and instrumental rehearsal and conducting techniques.

Prerequisite: MUS 212

#### **MUS 406**

#### **Choral Literature**

Semester: On Demand Semester Hours: 3

This course examines selected sacred and secular works of the choral repertoires. Emphasis is placed upon the practical realization of the works studied.

Prerequisite: MUS 212

#### **MUS 415**

## Methods and Materials: Teaching Music in the Secondary School

Semester: Spring, Even years

Semester Hours: 3

This course is designed to prepare teachers to develop innovative secondary music programs and explores the philosophy, methodology, and materials for teaching band, orchestra, choir, and general music at the secondary level. This is a seminar-style course that covers a variety of topics, including conducting, classroom management, professionalism, rehearsal preparation, budgets, literature, marching band, jazz ensemble, concert choir, show choir, general music, and other aspects of running a music program. This class is designed to be one of the final classes taken in the music education curriculum.

Prerequisite: MUS 212, MUS 325, MUS 326, MUS 402, and EDC/MUS 291E or EDC/MUS 291S

### **MUS 450** Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. A contract is required. Prerequisite: junior or senior standing

**MUS 499** 

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

## **Organizational Leadership**

Clete Knaub, Associate Professor

This interdisciplinary minor covers a range of leadership concepts, including self-management, which includes values, ethics, and attitudes; problem-solving; decision-making; creative-thinking skills; management of others, which includes creative and collaborative management; delegation; management of change; communication and feedback; team management, which includes the development and growth of group dynamics; and the critical competency of leading by serving, which includes empathy, persuasion, foresight, humility, and the ethical use of power and influence.

## Minor in Organizational Leadership

A minimum of 30 semester hours is required, including:

COM 250: Small Group Communication ECO 205: Principles of Economics

ENG 325: Professional Writing

IDS 483: Organizational Leadership

Choose one of the following: IDS 115: Qualities of a Leader POL 220: Political Leadership

Choose one of the following:

AVS 405: Air Transportation Management BSA 303: Principles of Management

BSA 401: Production and Operations Management

BSA 421: Strategic Management

Choose one of the following: BSA 412: Business Ethics

PHR 303: Ethics

PHR 340: Christian Ethics

Choose one of the following: PSY 101: General Psychology SOC 101: Introduction to Sociology

## **Organizational Leadership courses**

#### ACC 210

#### Foundations of Accounting

Semester: Fall and Spring

Semester Hours: 3

This course is designed to give students a basic understanding of the uses and limitations of accounting information, particularly from financial statements. Students will understand how to take information from the financial statements and make informed business decisions.

Prerequisite: BSA 101

## **AVS 405**

## **Air Transportation Management**

Semester: Fall Semester Hours: 3

This course provides a comprehensive experience for the aviation student by examining the air transportation industry. Areas of concentration include airline operation, maintenance, marketing, and economic factors affecting the industry. The class uses a simulation program where students create an airline and then compete with other students.

Prerequisite: BSA 303

#### **BSA 101**

#### **Introduction to Business**

Semester: Fall and Spring Semester Hours: 3

A beginning business course designed to introduce students to the areas of business study, including historical foundations of America's free enterprise system, ethics and social responsibility in the business setting, entrepreneurship, the legal structures of business, marketing, and general management.

## **BSA 303**

## **Principles of Management**

Semester: Fall and Spring

Semester Hours: 3

Students examine the management functions and basic concepts and principles of management, including planning, organization, coordination, control, job design, and human resource management. Topics in human resource management include recruitment, selection, administration of personnel policies, and dismissals. This course is often required as a prerequisite for master's-level business programs.

Prerequisite: ACC 210, ECO 205

## **Production and Operations Management**

Semester: Fall and Spring

Semester Hours: 3

An introduction to various aspects of production, resource, and operations management, which focuses on production methodologies, scheduling, inventory control, quality control, and project management. Performance evaluation and resource planning are also emphasized. This course is often required as a prerequisite for master's-level business programs.

Prerequisite: BSA 303, ACC 309

## **BSA 412**

#### **Business Ethics**

Semester: Fall, Alternate years

Semester Hours: 3

A study of the ethical problems that evolve in the modern business world, including a brief history of ethics and the practical ethical problems associated with running a business. Knowledge of ethical concepts as they apply to business management is explored through case studies and student class presentations. Emphasis is on the role of management as it affects stockholders, employees, customers, and competitors. Issues such as product safety, plant closures, advertising, doing business in other countries, and the overall role of business and society are discussed.

Prerequisite: ACC 309, BSA 303, BSA 304, BSA 311

#### **BSA 421**

#### Strategic Management

Semester: Spring Semester Hours: 3

The primary goal of this course is to prepare students to think like general managers. Through discussions, supplementary readings, and case studies, we will explore the strategies that cause some businesses to fail and others to succeed. This course provides a capstone experience for the business management major.

Prerequisite: BSA 401

## **COM 250**

## **Small Group Communication**

Semester: Spring Semester Hours: 3

This course explores how and why people come together in groups, how groups develop norms for acceptable behavior, and how individuals can help groups work efficiently and effectively. Because employers seek competent communicators, this course is designed to provide students an opportunity to develop communication skills that can be applied in both personal and professional contexts.

#### **ECO 205**

#### **Principles of Economics**

Semester: Fall and Spring

Semester Hours: 3

This course will introduce the principles of firm-level decision making, consumer choices and their rationale, differing forms of industry competition, and how market-clearing prices and quantities are determined in a market environment. Additionally, the students will gain an understanding of how the major participants in the economy interact and what drives economic growth, interest rates, and inflation. The possible impacts of a variety of fiscal and monetary policy choices will be presented to assist the student in understanding how those policies will impact incomes, employment, and trade for a country. At the completion of the course, the student should have a basic understanding of both the microeconomic and macroeconomic environments and their impacts on businesses and the general population.

## **ENG 325**

## **Professional Writing**

Semester: Fall Semester Hours: 3

This course teaches concepts, practices, and skills for communicating technical, scientific, or business-related information. Topics include understanding how people read, designing documents, incorporating graphics, writing about statistical results, rewriting, editing, and using the Internet. This course may be especially useful for non-English majors, providing them with the tools and techniques to communicate their messages effectively.

## Prerequisite: ENG 119

## **IDS 115**

#### Qualities of a Leader

Semester: Fall Semester Hours: 3

This course is the study of the art of leadership and how leadership skills can be developed. We will study leaders throughout history, from Sun Tzu (of over 2,000 years ago) to the latest leadership examples. This course will utilize reading, classroom discussions, group participation efforts, and two films in the attempt to dissect the idea of leadership. This course will also look at "personal leadership" characteristics that will enable the student to achieve success at Rocky Mountain College and in society.

#### **IDS 483**

## **Organizational Leadership**

Semester: Spring, Even years

Semester Hours: 3

This course operates on a format of open discussion, risk-taking, initiative, honest self-assessment, experiential exercises, and observation of real-life leadership practice. It will challenge students to craft their own perspectives strengthened through critical examination of case studies, workshops, readings, and local public leaders who will share their own leadership perspectives.

#### **PHR 303**

#### **Ethics**

Semester: Spring, Alternate years

Semester Hours: 3

A study relating ethics, as traditionally conceived in philosophy, to one or more current philosophical works in ethics. This course will provide students with a solid background in ethics, from Plato to Nietzsche. A discussion of a contemporary work in ethics will introduce students to topics that may be covered in depth in later seminars.

#### **PHR 340**

#### **Christian Ethics**

Semester: Spring, Alternate years

Semester Hours: 3

How can a Christian make moral decisions? We will study the biblical basis for ethics and several modern Christian ethicists to understand how they move from the beliefs of Christianity to recommendations for specific ethical action.

#### **POL 220**

### **Political Leadership**

Semester: Spring, Alternate years

Semester Hours: 3

This course will survey various theories of leadership as applied to politics, as well as explore the biographies of the men and women who have shaped both local and global events. Theory is grounded to practical application, with an emphasis on the various styles, methods, and particular contexts within which individual leaders have come to power, and how the exercise thereof has altered or reinforced their original goals and programs.

### **PSY 101**

## General Psychology

Semester: Fall and Spring

Semester Hours: 3

A survey of the field of psychology investigating such topics as learning, motivation, human development, personality, social psychology, and physiological psychology. In order to make inquiry into any academic discipline, the student must first learn the language and methodology of that discipline; the field of psychology is no exception. Therefore, this course will include the study of major psychological theories, terminology, and investigative methods, as well as limited opportunity to apply those methods.

#### **SOC 101**

#### Introduction to Sociology

Semester: Fall

Semester Hours: 3

Students examine the nature of the sociological perspective, macro- and micro-sociological theory, and sociological methodology and research. Society's social organization, social structure, social interaction, socialization, social institutions, deviance and social control, social stratification, ethnic and racial minorities, gender, the family, education, religion, and other topics from a sociological perspective are also explored.

## **Philosophy & Religious Studies**

Aaron Rosen, Professor David Strong, Professor Elizabeth McNamer, Assistant Professor

What is the meaning of life? How should we think about ethics, or even reality itself? Philosophy and religion tackle these and other fundamental questions in related and sometimes different ways. Both disciplines lie at the core of the humanities, and thus a liberal arts education. Philosophy, for example, often examines unstated assumptions underlying cultural practices and scholarly disciplines, from politics to physics. Religion, for its part, can be studied from a number of different angles, from sociology to psychology.

This combined program will not only provide students with an understanding of key issues in philosophy and religious studies, it will help them reflect deeply on their values, beliefs, and cultural identities. Graduates will go on to a range of careers, from working in museums to running non-profits. Many majors choose to pursue further study, whether in graduate school, seminary, or law school. We encourage capable students to double major with related fields such as English, Sociology, Politics, or Environmental Studies.

## **Learning Outcomes**

Students who graduate with a major in philosophy and religious studies will be able to:

- 1. Demonstrate competence in critical thinking and analysis of argu-
- 2. Articulate an understanding of the forces shaping culture and history;
- 3. Demonstrate skill in questioning, reflecting, and arriving at possible conclusions:
- Analyze the ethical dimension of human action;
- 5. Develop in a self-critical way philosophical insights and positions supported by relevant experience and sound reasoning;
- Confront, evaluate, and refine personal beliefs in historical context;
- 7. Apply skills in speaking and writing to communicate complex ideas.

## Planning Your Philosophy & Religious Studies Major and Minor

Entering first-year students interested in philosophy and religion, the classics, or world literature are encouraged to take PHR 120: Classic Texts in Western Thought, in the fall semester. Another excellent point of entry into the department is PHR 101: Approaches to Religious Studies (fall) or PHR 100: Introduction to Philosophy and Religious Thought (spring). There are also several possibilities for students who want to build up a strong grounding in scholarly approaches to the Bible, such as PHR 279: The Bible in the Modern Imagination; PHR 210: Introduction to the Bible; and PHR 220: Jesus. As you progress in the department, there are offerings which run the gamut from environmental ethics to religion and visual culture.

The philosophy and religious studies major is flexible by design and welcomes those students who know right away that they wish to major in the subject or discover an interest only once they take a class with us, sometimes later in their college career. Graduates will go on to a wide range of careers, from working in museums to running nonprofits. Many majors choose to pursue further study, whether in graduate school, seminary, or law school. We encourage capable students to double major with related fields such as English, Sociology, Politics, or Environmental Studies. PHR faculty offer advice tailored to each individual student.

#### Major in Philosophy & Religious Studies

- 24 credit hours required
- Required courses: four upper-division courses (12 credits). At least one course on religion and one course on philosophy.

### Minor in Philosophy & Religious Studies

- 12 credit hours required
- Required courses: two upper-division courses (6 credits). At least one course on religion and one course on philosophy.

#### **PHR 100**

#### Introduction to Philosophy and Religious Thought

Semester: Fall and Spring

Semester Hours: 3

This course attempts to address the question "Does thinking about the meaning of one's life help us live better?" by studying a particular issue and some thought-provoking responses to it. The particular issue and texts will vary from year to year. Not open to juniors and seniors without instructor's permission.

#### **PHR 120**

## **Classic Texts in Western Thought**

Semester: Fall Semester Hours: 3

This course covers intensive readings in primary texts crucial to the Western tradition. Students will read from such authors as Homer, the Biblical prophets, the Greek dramatists, Plato, Aristotle, Augustine, Dante, Shakespeare, Hobbes, Freud, and Nietzsche.

#### PHR 205

#### Logic

Semester: On Demand Semester Hours: 3

An introductory course in the principles and methods used to distinguish correct from incorrect reasoning. This course aims to help students think and read critically and to write argumentative papers. Both inductive and deductive logic will be studied.

#### **PHR 210**

#### **Genres of Biblical Literature**

Semester: Fall and Spring

Semester Hours: 3

This course provides an investigation of one specific genre of Biblical literature. Past topics have included Biblical narrative, the Gospels, the Psalms, and Paul.

## PHR 211

#### **Ancient Philosophy**

Semester: Fall, Alternate years

Semester Hours: 3

This course introduces students to great primary philosophical texts of the Western tradition, such as Plato's Republic, and provides them with an overview of philosophy during this early period of its development.

#### **PHR 212**

## **Modern Philosophy**

Semester: On Demand Semester Hours: 3

Students examine major thinkers, ideas, and movements in philosophy from the Renaissance through the 19th century. This course is a continuation of PHR 211 on Ancient philosophy and will similarly focus on the study of primary texts from Descartes, Hume, Kant, and others, while offering context through secondary sources. Students who wish to take PHR 212 at a higher level, with additional readings and extra writing assignments may do so under the title PHR 312.

## **PHR 218**

#### **Topics in Catholicism**

Semester: Spring Semester Hours: 3

This course explores the central principles of the Catholic religion. From year to year the course focuses on a different aspect of Catholicism. Topics covered might include the creation of basic beliefs in the first three centuries, issues in modern Catholic thinking, Catholics and the Bible, a history of the Church, or great figures in Catholicism.

#### **PHR 220**

#### Jesus

Semester: On Demand Semester Hours: 3

Students will look at biblical sources as well as modern literary and theological interpretations to answer the question "Who was, or is, Jesus?" Issues to be addressed include: the quest for the "historical Jesus;" classical and contemporary Christology; and biblical hermeneutics.

#### **PHR 236**

#### **Religions of The World**

Semester: On Demand Semester Hours: 3

This course examines the central religious principles and ideas of major non-Christian religions. From year to year, the focus may be on different religions or areas of the world.

#### **PHR 299**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **PHR 303**

#### **Ethics**

Semester: Spring, Alternate years

Semester Hours: 3

A study relating ethics, as traditionally conceived in philosophy, to one or more current philosophical works in ethics. This course will provide students with a solid background in ethics, from Plato to Nietzsche. A discussion of a contemporary work in ethics will introduce students to topics that may be covered in depth in later seminars.

#### **PHR 304**

#### **Environmental Ethics**

Semester: Spring, Alternate years

Semester Hours: 3

This course will address issues such as whether natural beings and the natural world have rights or whether only humans have rights. Students will determine what is ethically appropriate for humans in their relationship with the environment as well as what environmental ethics must take account of to be consequential in the world today.

#### PHR 310

## Issues in Biblical Scholarship

Semester: Fall, Every three years

Semester Hours: 3

This course provides an introduction to a current problem in Biblical study and scholarship. Examples of topics are apocalyptic literature; narrative studies; Biblical hermeneutics, text, and history; and Biblical theology. Where PHR 210 concentrates on the Biblical texts themselves, PHR 310 introduces students to the way contemporary scholars study the Bible.

#### PHR 312

## **Modern Philosophy**

Semester: On Demand Semester Hours: 3

This course covers the same key thinkers, ideas, and movements in philosophy as PHR 212, but allows capable students to undertake additional readings and extra writing assignments for upper-division credit.

#### **PHR 317**

## Archaeology and Philosophy of the Holy Land

Semester: Summer Semester Hours: 6

This course is designed for students participating in the Bethsaida Excavation and tour of selected sites in Israel. Students will engage in activities including excavating at the site; attending poetry readings, laboratory, and

evening lectures at the kibbutz; learning archaeological methodology; and learning about kibbutz living on the Galilee. Students are also expected to participate in all guided group tours of important sites and museums in Israel.

#### **PHR 320**

## Major Modern Religious Thinkers

Semester: Spring, Every 2 years

Semester Hours: 3

This course will alternate in different years between examining Modern Jewish Thought and Modern Christian Thought. The focus will be upon major thinkers from the 19th through the 21st centuries. Modern Jewish thinkers will include: Cohen, Soloveitchik, Benjamin, Buber, Rosenzweig, Strauss, Heschel, Levinas, Derrida, and Butler. Modern Christian thinkers will include: Kierkegaard, Schleiermacher, Barth, Bonhoeffer, Tillich, Milbank, Williams, Hauerwas, Volf, and Pope Francis.

#### **PHR 321**

## **Major Philosophical Figures**

Semester: On Demand Semester Hours: 3

This course provides a study of the writings and, in some cases, the life of a major philosophical thinker in the Western tradition.

#### **PHR 330**

#### Religion and Film

Semester: Spring, Every 2 years

Semester Hours: 3

Film is an illuminating way to study – and *watch* – religion. We will study 'sword and sandal' biblical epics, from *Ben Hur* and *The Ten Commandments* to *The Passion of the Christ* and *Noah*. We will also look at films that take on ethical dilemmas, as in *Doubt*, and existential themes, as in *The Seventh Seal*. As we will see, some theorists even argue that watching film is itself a theological experience.

## **PHR 340**

#### **Christian Ethics**

Semester: On Demand

Semester Hours: 3

How can a Christian make moral decisions? We will study potential biblical foundations for ethics and several modern Christian ethicists to understand how they move from the beliefs of Christianity to recommendations for specific ethical actions.

#### **PHR 362**

## **Christian Theology**

Semester: On Demand Semester Hours: 3

What does it mean to believe in God? When we talk about God are we talking about anything more than ourselves and our ideals and aspirations? This course investigates classical and modern Christian answers to this basic question.

## PHR 370

#### **Spiritual Journeys**

Semester: Spring, Every 2 years

Semester Hours: 3

Many great works of literature feature people taking tremendous journeys, both physically and spiritually. We will set the stage by reading the Book of Exodus, which formed the spiritual identity of the People Israel, continuing our literary trek with Dante's travels from Hell to Heaven, and later Captain Ahab's pursuit of the white whale in *Moby Dick*. We will pay special attention to modern American religious visions, from Jack Kerouac's euphoric *On the Road* to Cormac McCarthy's dystopia in *The Road*. This course is cross-listed with ENG 370.

#### **PHR 375**

### 20th Century Philosophy

Semester: Spring, Alternate years

Semester Hours: 3

The 20th century is characterized by a plurality of philosophical styles such as postmodernism, phenomenology, existentialism, hermeneutics, deconstruction, analytic philosophy, pragmatism, and systematic philosophy. This course involves intensive study and critical evaluation of one or two of these styles.

#### **PHR 378**

## Philosophy of Technology and Modern Culture

Semester: Spring, Alternate years

Semester Hours: 3

It is often a difficult task to understand one's own culture and age. Recent philosophical work offers profound insights into our age and places these insights within a much wider context.

#### **PHR 421**

## Philosophy of Religion

Semester: Fall, Every three years

Semester Hours: 3

This course provides an investigation of some of the crucial philosophical ideas about religion. Students will study such issues as the idea of God, the arguments for and against the existence of God, the idea of revelation, and the problem of religious language.

## PHR 450 Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established institution. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required. Prerequisite: junior or senior standing

#### **PHR 460**

## **Problems in Religious Thought**

Semester: Fall, Every 2 years

Semester Hours: 3

This course will alternate in different years between examining one of two topics: Tragedy or Beauty. Both topics will be treated from an interdisciplinary perspective, utilizing theological, philosophical, and literary approaches. We will study writers including Sophocles, Shakespeare, Coleridge, Beckett, von Balthasar, Maritain, Eco, Steiner, and Eagelton.

## **PHR 483**

## **Senior Project**

Semester: On Demand Semester Hours: 1-3

Students complete a senior project in consultation with a faculty member.

#### **PHR 490**

#### Seminar

Semester: On Demand Semester Hours: 2-3

Intensive study of a selected area or figure in philosophy or religion is explored.

### PHR 499

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

## **Physical Education & Health**

Paul Roper, Professor Jeffrey Willardson, Associate Professor Amanda Botnen, Assistant Professor Nicholas Pertuit, Assistant Professor

For course listings, see the "Health and Human Performance" section of the catalog.

## **Physician Assistant Studies**

Dwight Harley, Associate Professor Jeffrey Lakier, Associate Professor Jennifer Beverly, Assistant Professor Carrie Hall, Assistant Professor Heather Heggem, Assistant Professor, Director of PA Program Heath Hines, Assistant Professor Patti States, Assistant Professor

#### **Learning Outcomes**

When RMC physician assistant students graduate, they will be able to:

## Medical Knowledge

- Understand etiologies, risk factors, underlying pathologic process, and epidemiology for medical conditions;
- 2. Identify signs and symptoms of medical conditions;
- 3. Select and interpret appropriate diagnostic or lab studies;
- Manage general medical and surgical conditions to include: understanding the indications, contraindications, side effects, interactions, and adverse reactions of pharmacologic agents and other relevant treatment modalities;
- Identify the appropriate site of care for presenting conditions, including identifying emergent cases and those requiring referral or admission;
- 6. Identify appropriate interventions for prevention of conditions;
- Identify the appropriate methods to detect conditions in an asymptomatic individual:
- Differentiate between the normal and the abnormal in anatomic, physiological, laboratory findings, and other diagnostic data;
- Appropriately use history, physical findings, and diagnostic studies to formulate a differential diagnosis;
- 10. Provide appropriate care to patients with chronic conditions.

## **Interpersonal and Communications Skills**

- Create and sustain a therapeutic and ethically sound relationship with patients;
- 2. Use effective listening, nonverbal, explanatory, questioning, and writing skills to elicit and provide information;
- 3. Appropriately adapt communication style and messages to the context of the individual patient interaction;
- 4. Work effectively with physicians and other health care professionals as a member or leader of a health care team or other professional group;
- 5. Apply an understanding of human behavior;
- 6. Demonstrate emotional resilience and stability, adaptability, flexibility, and tolerance of ambiguity and anxiety;
- Accurately and adequately document and record information regarding the care process for medical, legal, quality, and financial purposes.

#### **Patient Care**

- Work effectively with physicians and other health care professionals to provide patient-centered care;
- Demonstrate caring and respectful behaviors when interacting with patients and their families;
- 3. Gather essential and accurate information about their patients;

- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment;
- 5. Develop and carry out patient management plans;
- 6. Counsel and educate patients and their families;
- Competently perform medical and surgical procedures considered essential in the area of practice;
- 8. Provide health care services and education aimed at preventing health problems or maintaining health.

#### **Professionalism**

- 1. Understand the legal and regulatory requirements, as well as the appropriate role of the physician assistant;
- Demonstrate professional relationships with physician supervisors and other health care providers;
- 3. Demonstrate respect, compassion, and integrity;
- 4. Demonstrate responsiveness to the needs of patients and society;
- 5. Demonstrate accountability to patients, society, and the profession;
- Demonstrate a commitment to excellence and ongoing professional development;
- 7. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices;
- 8. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities;
- 9. Demonstrate self-reflection, critical curiosity, and initiative.

(Taken directly from the PA competencies as noted at: http://www.nccpa.net/Upload/PDFs/Definition%20of%20PA%20Competencies.pdf)

#### National PA Certification (PANCE) Results

Only graduates from ARC-PA accredited PA programs are eligible to sit for the PANCE (Physician Assistant National Certifying Examination) and become licensed to practice. The PANCE is the entry-level exam that PAs must pass to become nationally certified. Over the past five years, the program's average pass rate for first-time PANCE testing is 98%. Pass rates for program graduates (by year) are as follows:

Graduating Class	RMC first-testing passing rates	National first- testing pass rates
2014	100%	95%
2013	97%	94%
2012	93%	93%
2011	100%	91%
2010	100%	94%
2009	91%	92%
2008	100%	94%
2007	100%	93%
2006	86%	92%
2005	94%	91%
2004	100%	90%
2003	90%	89%
2002	83%	90%
2001	95%	92%
2000	86%	92%
1999	100%	91%
1998	100%	95%

The physician assistant (PA) is a licensed primary healthcare provider who practices medicine under the supervision of a physician. The concept of the physician assistant was developed from the basic premise that many tasks performed by physicians can be carried out with equal competence by other specially trained health professionals.

The Rocky Mountain College Master of Physician Assistant Studies Program is an ARC-PA (Accreditation Review Commission on Education for the Physician Assistant) accredited program. The program is an integrated, full-time, 26-month program consisting of both campus-based didactic instruction and clinical experiential learning. It is an intensely challenging curriculum, both intellectually and physically; thus, it requires stamina as well as personal and financial sacrifice.

The program matriculates one class per year and the coursework begins in early July. The first 14 months of the program include the fundamental behavioral, basic biomedical, and clinical sciences required for the professional course of study, as well as courses designed to better prepare the students for expanded health care roles that meet the developing needs of today's society. A total of 61 semester hours of credit are presented using a combination of lecture, demonstration, discussion, and laboratory formats requiring a significant time commitment. Students must successfully complete all components of the didactic phase prior to advancing to the clinical instruction phase.

The final 12 months of the program constitute the major period of clinical education, with an emphasis on primary care. The clinical instruction includes eight six-week practice rotations in various specialties. Students must be willing and able to relocate at their own expense to places distant from Billings, Montana, during the clinical phase of their education.

Employment while enrolled is strongly discouraged.

The mission of the Rocky Mountain College Master of Physician Assistant Studies Program is to educate primary care providers who embody a combination of academic talents of evidence-based medicine, clinical skills, and professionalism while providing compassionate health care services, particularly to those in rural and underserved areas of this region. Our graduates distinguish themselves through an emphasis on patient safety and quality improvement.

The liberal arts tradition and objectives of lifelong learning, critical thinking, communication skills, recognition of other cultures, and exploration of ethical issues are valuable and necessary parts of the physician assistant academic process and profession.

#### **Graduation Requirements**

Students enrolled in the professional phase of the physician assistant program must satisfactorily complete all of the following requirements in order to successfully graduate and be awarded the Master of Physician Assistant Studies (MPAS) degree:

- All didactic phase coursework specified in the program of study (outlined below) with a minimum grade of "C" in each course;
- A minimum cumulative program GPA of 3.00 for the entire didactic phase of the program of study;
- An overall professional behavior evaluation rating of "acceptable/satisfactory" (or better) on each of the faculty evaluations of student professionalism, prepared at the end of each semester of the didactic phase of the program of study;
- The minimum passing grade on all three components (knowledge, patient assessment, and clinical skills) of the first year comprehensive student evaluation performed at the end of the didactic phase of the professional program of study;
- The minimum passing grade ("B") in each of the individual clinical rotations specified in the program of study;
- The minimum passing grade on each preceptor evaluation of student performance prepared near the conclusion of each clinical rotation;

- The minimum passing grade on each end-of-rotation written examination:
- The minimum passing grade on each of the three components (knowledge, patient assessment, and clinical skills) of the final summative student evaluation performed near the end of the program;
- A cumulative program GPA of 3.00 or higher;
- Satisfactory completion of PHA 636 and PHA 638.

#### **Program of Study**

Master of Physician Assistant Studies

A minimum of 61 sequential semester hours is required in the didactic phase, to include the following:

First summer term (7 semester hours)

Course #	<u>Title</u> <u>C</u>	redits
PHA508	Biostatistics	1
PHA538	Clinical Human Anatomy and Physiology	4
PHA575	Genetics & Molecular Basis of Health & Disea	ise 2

#### Fall semester (18 semester hours)

Course #	<u>Title</u>	Credits
PHA501	Introduction to Clinical Medicine	1
PHA505	Evidence-Based Medicine: Research,	
	Communications and Applications	3
PHA509	Professional and Medical Practice Issues	1
PHA518	Allergy and Immunology	2
PHA520	Physical Assessment	3
PHA522	Hematology	2
PHA533	Infectious Disease	2
PHA543	Endocrinology	2
PHA547	Ophthalmology	2

#### Spring semester (18 semester hours)

Course #	<u>Title</u>	Credits
PHA509	Professional and Medical Practice Issues	1
PHA523	Pulmonology	2
PHA524	Cardiology	2
PHA527	Nephrology	2
PHA531	Behavioral Dynamics	2
PHA535	Gastroenterology	1
PHA539	Neurology	2
PHA546	Pediatrics	2
PHA549	Oncology	1
PHA550	Introduction to Clinical Practice	2
PHA557	Otorhinolaryngology	1

#### Summer semester (18 semester hours)

Course #	<u>Title</u>	Credits
PHA509	Professional and Medical Practice Issues	1
PHA551	Urology	2
PHA556	Surgery	2
PHA561	Obstetrics and Gynecology	2
PHA562	Orthopedics	2
PHA572	Dermatology	1
PHA574	Rheumatology	1
PHA610	Emergency Medicine	3
PHA621	Problem Based Clinical Correlation	2
PHA641	Geriatrics	2

*Note:* All courses listed for the master of physician assistant studies degree are restricted to those students admitted to the professional phase of the physician assistant program only.

## **Physician Assistant Studies courses**

#### PHA 247

#### **Medical Terminology**

Semester: On Demand Semester Hours: 2

Open to any student. This course assists those studying in the fields of medicine and health care. Through textbook readings and the use of Webrelated tools, the principles of medical terminology will be described and applied. The course offers a broad introduction to concepts underlying medical terminology. Medical examples will illustrate concepts and methods. This course does not meet core curriculum requirements.

#### PHA 501

#### **Introduction to Clinical Medicine**

Semester: Fall Semester Hours: 1

This course will introduce the PA student to general concepts of the study of clinical medicine. Terminology and evidence-based medicine will be reviewed.

#### **PHA 505**

## Evidence-Based Medicine: Research, Communications, and Applica-

Semester: Fall Semester Hours: 3

A critical component of health care practice is the ability to recognize needs for information and possessing the skills/ability to locate, evaluate, and use the needed information effectively. This course is designed to enable students with the competencies needed to become independent, lifelong learners able to make informed decisions based on critical reasoning and evaluation of medical and scientific literature and to communicate their knowledge in written and verbal forms. The effects of public health information literacy on health care delivery and the role of primary care providers in promoting patient health information literacy are also explored. Students are introduced to the principles of clinical research design and epidemiology, including literature search, methodology, data collection, data management, and reporting of results and conclusions.

#### **PHA 508**

#### **Biostatistics**

Semester: Summer Semester Hours: 1

This course is designed to acquaint the student with the basics of biostatistics and emphasizes how an understanding of these areas is important in clinical medicine. An understanding of biostatistics is important not only for analyzing the results of research but also for understanding and reducing errors. This course centers on basic techniques of investigating the association of variables and significance of results in a clinical and epidemiological setting.

#### PHA 509

#### **Professional and Medical Practice Issues**

Semester: Fall, Spring, and Summer, Summer

Semester Hours: 1

This course, which is taken in each of the three full didactic semesters, examines a professional's obligations and a patient's rights in regard to ethical and social issues in medicine. Thorny dilemmas, such as the role of using humans in research studies, decisions not to treat or to resuscitate, inherent conflicts in genetics and reproductive technologies, as well as professional concerns about paternalism, patient rights, and confidentiality are examined. Students learn to think critically, drawing upon their own experience, to develop an understanding of how to handle ethical dilemmas while practicing primary care medicine. Preparation includes understanding how to interpret medical literature and how to ethically apply research. Additionally, students learn the history of the PA profession and become culturally and socially aware of how professional credentialing, the regulation of caregiver's clinical responsibilities, and ethical/legal

considerations influence their interaction with patients, as well as their place in the profession.

#### PHA 518

## Allergy/Immunology

Semester: Fall Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of allergy and immunology.

#### **PHA 520**

#### **Physical Assessment**

Semester: Fall Semester Hours: 3

This course prepares students to master the art of taking medical histories and performing physical examinations. The focus is on recognition of "normal" and the significance of "abnormal" findings. A systems approach is used and the material is taught using a lecture, demonstration, and laboratory practicum format. A laboratory session is scheduled weekly to incorporate/practice skills presented in the lectures.

#### PHA 522

#### Hematology

Semester: Fall Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of hematology.

#### **PHA 523**

#### Pulmonology

Semester: Spring Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of pulmonology.

#### **PHA 524**

## Cardiology

Semester: Spring Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of cardiology.

#### **PHA 527**

### Nephrology

Semester: Spring Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of nephrology.

## **PHA 531**

#### **Behavioral Dynamics**

Semester: Spring Semester Hours: 2

The recognition and management of common psychosocial problems is a critical skill to develop as a primary care provider. The fundamental role of interviewing and history taking will be emphasized as students are introduced to several techniques that will facilitate communicating and developing rapport with the patient. Treatment will be discussed from a bio-psychosocial perspective with reference to psychotherapies, psychopharmacology, and environmental intervention. The role that psychosocial dynamics play in all areas of medicine will be of major focus and case studies are used to emphasize the delicate interplay. Psychiatric topics covered will include anxiety disorders, mood disorders, psychoses,

organic conditions, substance use disorders, personality disorders, eating disorders, and psychiatric emergencies and crises. Additionally, there is an introduction to the concepts of death, dying, and bereavement.

#### PHA 533

#### **Infectious Disease**

Semester: Fall

Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of infectious disease.

#### **PHA 535**

#### Gastroenterology

Semester: Spring Semester Hours: 1

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of gastroenterology.

#### **PHA 538**

#### Clinical Human Anatomy and Physiology

Semester: Summer Semester Hours: 4

This course is designed to teach students the essentials of gross anatomy and physiology pertaining to clinical practice. Cadavers and cadaveric specimens will play a fundamental role as we relate lecture/discussions to laboratory study. Students will learn to relate anatomical structures in the human body, skeletons, and models to imaging studies. The surface anatomy component introduces the student to the clinical setting and describes the visible and palpable anatomy that forms the basis of physical examination. Through laboratory workshops, students will learn to visualize how their interaction with the body's surface interplays with internal anatomy. Additionally, a thorough review of concepts of physiology as they pertain to health and disease will be provided with a focus placed on each major organ system. Both portions of this course are designed as a focused review and an approach to ensure physician assistant students entering the clinical medicine courses have a firm grasp of anatomical and physiological concepts and begin to apply physiological reasoning to clinical situations.

#### PHA 539

#### Neurology

Semester: Spring Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of neurology.

## PHA 543

#### **Endocrinology**

Semester: Fall Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of endocrinology.

### PHA 546

## **Pediatrics**

Semester: Spring Semester Hours: 2

The course will examine infant and child health and development, focusing on major common pediatric illnesses and their signs, symptoms, and management relative to the primary health care provider. The problemoriented medical record is presented, i.e., the pediatric history and physical examination. Specific problems of the newborn and older child will be presented for discussion in such areas as immunity and allergy, pharmacotherapy, medical emergencies, preventive health care, and the psycho-

social and developmental disabilities specific to pediatrics. Students will learn to perform and demonstrate an infant exam. Specific strategies for physical examination of the pediatric patient will be learned and practiced on live patients in a skills lab.

#### **PHA 547**

## Ophthalmology

Semester: Fall

Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of ophthalmology.

#### **PHA 549**

## Oncology

Semester: Spring Semester Hours: 1

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of oncology.

#### **PHA 550**

#### **Introduction to Clinical Practice**

Semester: Spring Semester Hours: 2

This course introduces the student to the diverse practices of medicine, including rehabilitative medicine, occupational medicine, and environmental medicine. It also introduces the student to the administrative functions associated with medical practice, such as various forms of medical documentation, patient charts, CPT/ICD-9 coding, and third-party billing. Students will use their examination and history taking skills on standardized patient models in the campus physical assessment labs and then apply the administrative functions to the patient model scenarios. In addition, they will shadow volunteer medical providers or allied health professionals in the medical community throughout the semester.

## **PHA 551**

#### Urology

Semester: Summer Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of urology.

#### PHA 556

#### Surgery

Semester: Summer Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of surgery.

## **PHA 557**

## Otorhinolaryngology

Semester: Spring Semester Hours: 1

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of otorhinolaryngology.

#### **PHA 561**

## Obstetrics/Gynecology

Semester: Summer Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of obstetrics/gynecology.

#### PHA 562

#### **Orthopedics**

Semester: Summer Semester Hours: 2

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of orthopedics.

#### PHA 572

## Dermatology

Semester: Summer Semester Hours: 1

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of dermatology.

#### PHA 574

## Rheumatology

Semester: Summer Semester Hours: 1

This course introduces the student to the pathophysiology, pathology, clinical medicine, diagnostic and therapeutic modalities, and preventive medicine aspects in the practice of rheumatology.

#### PHA 575

#### Genetic & Molecular Basis of Health & Disease

Semester: Summer Semester Hours: 2

The focus of this course is to gain an understanding of the biochemical, molecular, and genetic basis for health and disease with an emphasis on clinical applications. The purpose of this course is to provide students with a knowledge base that can be applied throughout their study of medicine.

## **PHA 610**

#### **Emergency Medicine**

Semester: Summer Semester Hours: 3

The course will present a systematic approach to the evaluation, recognition, and management of medical and surgical emergencies that might be frequently encountered by the primary care physician assistant. Using a formal lecture/discussion format, the course will focus on etiology, evaluation, emergency treatment, and stabilization of more common emergency injuries and disease presentations. The focus of the course is in providing students the necessary skill set to function in rural, underserved areas where the physician assistant might be responsible for identification of significant life threats, emergency treatment, and stabilization for evacuation to a higher level of care. The curriculum includes instruction and certification in the American Heart Association's Basic Cardiac Life Support (BCLS), Advanced Cardiac Life Support (ACLS), and Pediatric Advanced Life Support (PALS) courses. Advanced training is provided in trauma assessment and stabilization, which includes instruction and practical performance laboratory for all critical skills identified in the American College of Surgeon's Advanced Trauma Life Support (ATLS) course.

## PHA 621

## **Problem-Based Clinical Correlation**

Semester: Summer Semester Hours: 2

This course is designed to assist students in becoming critical thinkers who can apply the concepts of medical decision making and problem solving. The course utilizes a problem-based learning (PBL) approach to teach students to critically evaluate and apply the clinical information they derive through medical history, physical examination, diagnostic testing, and pertinent medical literature to the real-life resolution and management of health care problems.

#### **PHA 636**

#### Patient Safety - Unifying Themes

Semester: Summer Semester Hours: 3

Students will employ the Institute of Healthcare Improvement Open School modules on leadership, patient safety, and quality improvement. Building upon concepts and discussions begun during the didactic year regarding evidence-based medicine, ethics, and professionalism, the student will leave the program with a focus on enhancing patient safety through communication, data gathering, and quality improvement techniques.

#### **PHA 638**

#### **Case Study and Community Education Project**

Semester: Summer Semester Hours: 3

Students will apply skills learned from PHA 505 and PHA 509 to choose a case study developed and researched during the clinical rotations. The course will conclude with an oral presentation to second-year peers and the faculty of a literature supported case study and a written 3-5 page paper. Case study development will be mentored by the Director of Clinical Education and supported by the core faculty. Presentations will be delivered the week of graduation.

#### PHA 641 Geriatrics

Semester: Summer Semester Hours: 2

This course provides an introduction to gerontology with an emphasis on the normal biological, sociological, behavioral, and environmental changes that occur with age. Consequences of aging from the perspective of primary health care providers will be presented. Principles and methods of multidimensional assessment relative to the recognition and management of medical disease and mental illness with an emphasis on maximizing functional independence is discussed. The skills of history taking and physical assessment in the geriatric population with hands-on experience in nursing homes will be taught. Students will understand the end of life issues and ethics in palliative care with review of the model of advanced care planning. Hospice care and advanced directives will be presented.

#### PHA 651

#### **Clinical Rotations I\***

Semester: Fall Semester Hours: 12

Students complete clinical rotations as assigned by the physician assistant program.

## PHA 652

#### Clinical Rotations II\*

Semester: Spring Semester Hours: 12

Students complete clinical rotations as assigned by the physician assistant program.

#### PHA 653

## Clinical Rotations III\*

Semester: Summer Semester Hours: 12

Students complete clinical rotations as assigned by the physician assistant program.

Clinical Rotations\*These rotations will include the following:

### Family Practice Rotation

This core rotation of six weeks is structured to provide an understanding of various medical disorders and their complications experienced by patients of all age groups. Within this setting, the emphasis is on the accurate collection, assessment, and presentation of patient data for physician

review, indications for laboratory and imaging diagnostics, and the education of patients regarding health risk behaviors and therapeutic regimens.

#### **Emergency Medicine Rotation**

This core rotation of six weeks is designed to provide an in-depth exposure to the illnesses and injuries sustained by children and adults that necessitate emergency care. The educational experiences emphasize the focusing of interview and examination skills and the performance of techniques and procedures essential to the proper management of life-threatening illnesses and injuries. Ventilatory assistance, cardiopulmonary resuscitation, fluid and electrolyte replacement, and acid-base balance are stressed.

#### General Internal Medicine Rotation

This core rotation of six weeks is designed to provide clinical practice experience with the various acute and chronic medical disorders/complications that necessitate hospitalization and further evaluation for adult patients, with special emphasis on geriatric patients and the care provided in both acute and long-term care facilities.

## **General Pediatrics Rotation**

This core rotation of six weeks is structured to provide the student with an in-depth exposure to the assessment and management of children and adolescents. Included will be a focus on the newborn physical, well-child care, and those acute processes unique to the pediatric patient.

#### Obstetrics/Gynecology (Women's Health) Rotation

This core rotation of six weeks provides exposure to the spectrum of problems and issues associated with women's health care as well as routine prenatal, intrapartum, and postpartum obstetrical care. Learning experiences will also include family planning and birth control, recognition and treatment of sexually transmitted infections, cancer detection, and evaluation of common gynecological problems.

#### **General Surgery Rotation**

This core rotation of six weeks provides an orientation to patients of various ages with surgically manageable diseases. The emphasis of the learning experiences are on the pre-operative evaluation and preparation of patients for surgery, assistance during the intra-operative period to develop an understanding of team member roles and operative procedures, and post-operative patient management and care of surgical wounds and complications.

#### Psychiatry Rotation

This core rotation of six weeks is designed to provide an understanding of the behavioral components of health, disease, and disability. Exposure to patients with a variety of emotional illnesses and disabilities are used to develop informed history taking and mental status examination skills, the ability to recognize and categorize psychiatric disturbances, and techniques for early intervention and psychiatric referral.

#### Elective Rotation

This rotation of six weeks is designed to give students an opportunity to explore professional options as physician assistants and may include additional clinical practice in any of the core rotations, any medical or surgical subspecialty, or experiential learning in academic medicine.

Syllabi have been developed for common elective rotations. A student who desires to complete an elective rotation that is not included among those previously developed needs to have prior approval by the program director. An appropriate syllabus will be developed and must be approved by the Program Curriculum Committee before the rotation begins.

## **Physics**

Toby Anderson, Professor

The concepts and principles of physics form the foundation on which all other sciences are built. Developments in the field of physics have also influenced thinking in philosophy, politics, and art, among other areas.

Physics courses at Rocky Mountain College cover the major ideas of both classical and modern physics. Students can gain the understanding required for majors in other sciences, including biology, chemistry, environmental science, and geology. Physics courses are also necessary for students planning careers ranging from aviation and engineering to the health sciences. Other physics courses provide an option for non-science majors to satisfy core curriculum requirements while learning to better appreciate the physical universe around them and also to be better-informed members of a technologically complex society living on an environmentally challenged planet.

Physics courses provide students the opportunity to learn and practice rigorous, quantitative, and mathematical analyses as well as careful and precise verbal discussions. Courses are offered on a wide range of mathematical levels. Some levels require a proficiency in calculus; other levels require little mathematics, but all levels expect students to have, or develop, some ability at quantitative thinking.

## **Minor in Physics**

A minimum of 18 semester hours is required, including:

PHS 201: General Physics I PHS 202: General Physics III PHS 300: Physics Lab Projects

Of these 18 semester hours, at least six must be upper division.

## **Physics courses**

#### **PHS 101**

#### **Fundamental Physics I**

Semester: Fall, Alternate years

Semester Hours: 4

Students examine a survey of the laws and phenomena of classical physics, including motion, force, energy, momentum, waves, and thermodynamics. This course is suitable for non-science majors who have a strong background in high school algebra and who wish to have a more rigorous understanding of physics than provided in most courses for non-science majors. The course will satisfy the requirements of geology and biology majors. Students considering graduate work in these areas should take PHS 201 and PHS 202 instead. Three lecture periods and one two-hour laboratory per week.

#### **PHS 102**

## **Fundamental Physics II**

Semester: Spring, Alternate years

Semester Hours: 4

Students examine a survey of the laws and phenomena of classical and modern physics, including light, electricity, magnetism, and atomic and nuclear physics. This course is suitable for non-science majors who have a strong background in high school algebra and who wish to have a more rigorous understanding of physics than provided in most courses for non-science majors. This course will satisfy the requirements of geology and biology majors. Students considering graduate work in these areas should take PHS 201 and PHS 202 instead. Three lecture periods and one two-hour laboratory per week.

Prerequisite: PHS 101

#### PHS 105

#### **Principles of Physics**

Semester: On Demand Semester Hours: 4

A survey of the laws and phenomena of classical physics, including motion, force, energy, momentum, waves, thermodynamics, and their application to aviation topics such as weight and balance, aerodynamics, aircraft maneuvering, g forces, braking, acceleration, and propellors. This course is algebra-based and is intended for aviation majors. Other admitted with permission of instructor when space allows. Course includes a laboratory.

Prerequisite: proficiency in high school algebra and trigonometry or MAT 110 or MAT 131

#### **PHS 201**

## General Physics I

Semester: Fall Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including force and motion, energy and momentum, their conservation laws, and their oscillations. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Corequisite: MAT 175

#### PHS 202

#### **General Physics II**

Semester: Spring Semester Hours: 4

This course is a calculus-based introduction to the laws and phenomena of classical physics, including mechanics, waves, light, electricity, and magnetism. This sequence is required for chemistry majors and engineering students and is recommended for mathematics, biology, and geology students. Three lecture periods and one two-hour laboratory per week.

Prerequisite: PHS 201 Corequisite: MAT 176

#### **PHS 225**

## **Modern Physics**

Semester: Fall, Odd years Semester Hours: 3

This course covers selected concepts from early 20th century physics. Topics covered include special relativity, photoelectric effect, Compton scattering, and the wave nature of particles.

Prerequisite: PHS 202 or permission from the instructor

### PHS 299

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **PHS 300**

## **Physics Lab Projects**

Semester: On Demand Semester Hours: 1-2

This course builds on students' experience in introductory labs with more complex and sophisticated experiments selected by students in consultation with the instructor. Emphasis will be on experimental design, analysis, and presentation of results. The course will be available every semester on a directed independent study basis. Students may work alone or in teams of two or three students.

Prerequisite: permission of professor

**PHS 320** 

**Relativity Theory** 

Semester: Fall, Alternate years

Semester Hours: 2

Students are introduced to Einstein's theory of relativity with emphasis on

the special theory. Prerequisite: PHS 201

**PHS 321** 

**Quantum Theory** 

Semester: Spring, Alternate years

Semester Hours: 3

Students are introduced to quantum mechanics, including the historical evolution of the theory. Emphasis will be on the wave mechanical formulation of the theory and Schrödinger's equation. Topics such as quantum tunneling and atoms will be analyzed. The impact of quantum theory on the scientific worldview will be considered.

Prerequisite: PHS 202 and PHS 225

**PHS 343** 

**Classical and Modern Optics** 

Semester: Spring, Odd years

Semester Hours: 3

This course covers concepts in geometrical and modern optics. Topics covered include reflection, refraction, dispersion, image formation, dif-

fraction, superposition, interference, and polarization. Prerequisite: PHS 202 or permission from the instructor

**PHS 347** 

**Introduction to Health Physics** 

Semester: Fall, Even years

Semester Hours: 3

This course is an introduction to radiation physics and the biological effects of radiation exposure. Topics covered include atomic and nuclear structure, radioactivity, interaction of radiation with matter, radiation dosimetry, and the biological effects of radiation.

Prerequisite: PHS 202 or permission from the instructor

**PHS 499** 

**Independent Study** 

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

**Political Science** 

Matthew O'Gara, Associate Professor

For course listings, see the "History and Political Science" section of the catalog.

**Pre-Law Minor** 

Matthew O'Gara, Associate Professor

Students planning to attend law school after completing a degree at Rocky Mountain College are encouraged to supplement their major by taking on a secondary pre-law minor. Along with the completion of all requirements for their major, pre-law students take core courses in government, law, and logic and choose among electives encompassing analytical reasoning, advanced writing, rhetoric, and ethics.

Required courses are intended to foster critical-thinking skills, develop advanced writing abilities, and acquire an understanding of the human condition as it relates to the issues of legal and social justice. Students in the program will also receive assistance with LSAT test preparation and the law school application process.

Minor in Pre-Law

A minimum of 20 semester hours is required, including:

Core Courses:

POL 203: American Government POL 412: Constitutional Law

Analytical Reasoning (select one of the following):

MAT 152: To Infinity and Beyond

PHR 205: Logic

Advanced Writing (select one of the following):

ENG 319: Creative Non-Fiction Writing

ENG 325: Professional Writing

ENG 359: History of Grammar and English

Rhetoric (select one of the following):

COM 240: Rhetoric of Western Thought COM 306: Organizational Communication

Ethics (select one of the following):

PHR 303: Ethics

PHR 340: Christian Ethics

Electives (select one of the following):

AVS 312: Aviation Law BSA 331: Business Law IDS 205: Negotiations IDS 305: Mediation

POL 321: History of Political and Social Thought

PSY 201/SOC 201: Social Psychology

SOC 321: Criminology

or other relevant special topics course with permission of faculty

## **Pre-Law Minor courses**

**AVS 312** 

**Aviation Law** 

Semester: Fall Semester Hours: 3

This course provides a forum for understanding the statutes, regulations, and case law governing aviation. Topics of study include administrative law, FAA enforcement, aviation medical issues, business organizations, airline liability, aircraft accidents, aircraft transactions, and airline labor

Prerequisite: sophomore standing

**BSA 331** 

**Business Law** 

Semester: Fall Semester Hours: 3

A course that explores the legal principles relating to business transactions: contracts, sales, commercial paper, intellectual property, and ecommerce. A study of the legal environment of business is emphasized. This course is often required as a prerequisite for master's level business programs.

Prerequisite: ACC 210, ECO 205

**COM 240** 

**Rhetoric of Western Thought** 

Semester: Spring Semester Hours: 3

This course investigates the evolution of rhetorical theories from ancient Greece to contemporary models of communication. It focuses on the ap-

plication of theories to communication events in order to explicate how communication shapes culture.

Corequisite: COM 102

#### **COM 306**

#### **Organizational Communication**

Semester: Fall Semester Hours: 3

This course examines how communication occurs in large cooperative networks, especially in professional work settings. It focuses on the roles leadership, management, and conflict resolution play in larger organizations. By the end of the course, students will understand how the values and cultures of any organization emerge through communication.

Prerequisite: COM 102 or permission of instructor

#### **ENG 319**

#### **Creative Non-Fiction Writing**

Semester: Fall Semester Hours: 3

Students study examples of creative non-fiction and practice writing their own. They also gain experience incorporating research into their prose.

Prerequisite: ENG 119

#### **ENG 325**

## **Professional Writing**

Semester: Fall Semester Hours: 3

This course teaches concepts, practices, and skills for communicating technical, scientific, or business-related information. Topics include understanding how people read, designing documents, incorporating graphics, writing about statistical results, rewriting, editing, and using the Internet. This course may be especially useful for non-English majors, providing them with the tools and techniques to communicate their messages effectively.

Prerequisite: ENG 119

## **ENG 359**

## History and Grammar of English

Semester: Fall, Alternate years

Semester Hours: 3

Students are introduced to the linguistic and theoretic approaches to the study of English, including phonology and morphology. Students pursue an in-depth study of syntax, focusing on the grammar of words, phrases, clauses, and sentences. Students also review the history of English from proto-Germanic to the development of regional dialects, cultural variations, and "global" English.

#### **IDS 304**

## Negotiations

Semester: Fall Semester Hours: 3

Negotiation is the art and science of securing agreements between two or more interdependent parties. The purpose of this course is to understand the theory and processes of negotiation as it is practiced in a variety of settings. The course highlights the components of an effective negotiation and teach students to analyze their own behavior in negotiations. The course has a strong experiential component, providing students with an opportunity to develop their skills by participating in negotiations and integrating their experiences with the principles presented in the assigned readings and lectures.

#### **IDS 305**

### Mediation

Semester: Spring

Mediation is an interdisciplinary field. Mediators come from all disciplines and walks of life. A potential mediator ought to possess the patience of Job, the hide of a rhinoceros, and the wisdom of Solomon. Mediation

is an alternative to a decision rendered by a judge, arbitrator, or other decision-maker. Mediators help the parties in a dispute to engage in constructive and creative communication, which will allow them to explore the issues and reach a mutually acceptable resolution of their dispute. The goal of the course is to provide those basic skills necessary to further pursue mediation, either as a profession or as another arrow in the student's quiver of practical and life skills.

#### **MAT 152**

## To Infinity and Beyond

Semester: On Demand Semester Hours: 3

Exploration of a variety of modern mathematical topics. Topics will illustrate mathematics as a way of representing and understanding patterns and structures, as an art, as a tool in other disciplines, and as a historical force. Topics may include infinity, chaos, fractals, symmetry, networks, and others

Prerequisite: MAT 100 or the equivalent

## **PHR 205**

#### Logic

Semester: On Demand Semester Hours: 3

An introductory course in the principles and methods used to distinguish correct from incorrect reasoning. This course aims to help students think and read critically and to write argumentative papers. Both inductive and deductive logic will be studied.

#### **PHR 303**

#### **Ethics**

Semester: Spring, Alternate years

Semester Hours: 3

A study relating ethics, as traditionally conceived in philosophy, to one or more current philosophical works in ethics. This course will provide students with a solid background in ethics, from Plato to Nietzsche. A discussion of a contemporary work in ethics will introduce students to topics that may be covered in depth in later seminars.

#### **PHR 340**

#### **Christian Ethics**

Semester: Spring, Alternate years

Semester Hours: 3

How can a Christian make moral decisions? We will study the biblical basis for ethics and several modern Christian ethicists to understand how they move from the beliefs of Christianity to recommendations for specific ethical action.

#### **POL 203**

#### American Government

Semester: Spring Semester Hours: 3

This course provides an analysis of the American system of government on three levels. Students will examine the origins of our system of government, the nature and role of our Constitution with its functional and territorial distribution of powers, and the importance of government at the three levels.

#### **POL 321**

## History of Political and Social Thought

Semester: On Demand Semester Hours: 3

The development of political and social ideas from ancient Greece to the present is examined.

Prerequisite: POL 101

#### POL 412

#### Constitutional Law

Semester: Fall, Alternate years

Semester Hours: 3

A case-method approach to the landmark decisions of the Supreme Court, with an emphasis on the doctrine of judicial review and the role of the Court in interpreting the Constitution and shaping American legal culture. The course will focus on the exercise and limitations of federal power in the areas of the economy, civil rights, and individual liberties, as well as the Constitutional basis on which statutes and other regulatory provisions are adjudicated. Special attention will be given to Constitutional clauses related to free speech, due process, and equal protection under the law.

#### **PSY 201**

## Social Psychology

Semester: Spring Semester Hours: 3

Students study the behavior of individuals as it is controlled, influenced, or limited by the sociocultural environment, social interaction, and basic interrelations of the individual, society, and culture. This course is designed to enable students to see themselves as both shaping and being shaped by their culture. Attention is also focused on inclusion and diversity. This course is cross-listed with SOC 201.

Prerequisite: PSY 101

#### **SOC 201**

## Social Psychology

Semester: Spring Semester Hours: 3

Students study the behavior of individuals as it is controlled, influenced, or limited by the sociocultural environment, social interaction, and basic interrelations of the individual, society, and culture. This course is designed to enable students to see themselves as both shaping and being shaped by their culture. Attention is also focused on inclusion and diversity. This course is cross-listed with PSY 201.

Prerequisite: PSY 101

## SOC 321

#### Criminology

Semester: Spring, Alternate years

Semester Hours: 3

This course focuses on the nature and extent of crime and delinquency, including a historical survey of explanatory theories focusing on the economic, social, and psychological causes of criminal behavior and current methods of treatment, policy, and prevention.

Prerequisite: SOC 101

## **Psychology**

Linda DeRosier, Professor Barbara Vail, Professor

Psychology reflects the study of human behavior. Whether describing, explaining, or predicting this behavior, students come to see that people are the focus of the field. They struggle to comprehend what it means to be caught in the human condition and discover that they can make choices and take responsibility for those choices. They develop empathy with themselves, each other, and the diverse populations who live on this planet.

The program in psychology at Rocky Mountain College educates students in the basic principles, language, and theories of the science of psychology. Students learn to think critically, evaluating the evidence and reasoning upon which explanations of human behavior are based. They collect data, design and conduct studies, interpret and apply research, and discover what that research means in the real world of people. When analysis is completed, they learn to communicate their findings both orally and in writing. Such work prepares them for graduate work in psychology.

Whether using statistics to support experimental research, literary analysis to help explicate a psychological passage in a novel, or cultural history to broaden awareness of their field, students use the liberal arts as grounding for disciplinary knowledge.

#### **Learning Outcomes**

#### Psychology

Students who graduate with a major in psychology will be able to:

- 1. Describe basic psychological theories including personality, learning, cognitive, biological/physiological, social, and psychopathological:
- Apply the processes of scientific inquiry to questions concerning human behavior;
- 3. Outline human development in terms of physiological, social, and environmental influences throughout the lifespan;
- 4. Explain the theories and factors that contribute to psychological dysfunction of individuals and families;
- Perform well as an intern as evaluated by the field mentor and faculty supervisor;
- 6. Use the APA format appropriately;
- 7. Use the DSM-5 appropriately;

\*Also, all psychology students are required to complete an internship. Students should be able to perform well in these internships as evaluated by their internship supervisors.

#### **Psychology Education**

Students who graduate with a major in psychology education will be able to:

- Describe basic psychological theories including personality, learning, cognitive, biological/physiological, social, and psychopathological;
- Apply the processes of scientific inquiry to questions concerning human behavior;
- 3. Outline human development in terms of physiological, social, and environmental influences throughout the lifespan;
- 4. Explain the theories and factors that contribute to psychological dysfunction of individuals and families;
- Perform well as a student teacher as evaluated by mentoring teacher and faculty supervisor;
- 6. Use the APA format appropriately;
- 7. Use the DSM-5 appropriately;
- 8. Use behavioral statistics (chi square, Mann Whitney, correlation, t test, and ANOVA) appropriately.

#### Major in Psychology

A minimum of 30 semester hours is required, including:

MAT 210: Probability and Statistics

PSY 101: General Psychology

PSY 305: Abnormal Psychology

PSY 312: Behavior Management PSY 410: Experimental Psychology

PSY 431: Psychological Testing and Assessment

PSY 450: Internship

PSY 483: Psychological Counseling

Choose one of the following:

PSY 205: Human Development I PSY 206: Human Development II

Six semester hours of electives are also required. A course in biology and a course in chemistry are recommended.

#### **Major in Psychology Education**

A minimum of 30 semester hours is required, including:

PSY 101: General Psychology PSY 205: Human Development I

PSY 206: Human Development II PSY 302: Educational Psychology PSY 305: Abnormal Psychology PSY 312: Behavior Management

PSY 410: Experimental Psychology

PSY 420: Methods and Materials Teaching Psychology in the Secondary

School

PSY 431: Psychological Testing and Assessment

PSY 450: Internship

PSY 483: Psychological Counseling

In addition, students must complete all of the requirements of the professional education program for secondary teaching (grades 5-12) as described in the "Education" section of the catalog.

## Minor in Psychology

A minimum of 21 semester hours is required, including:

PSY 101: General Psychology PSY 410: Experimental Psychology

Choose one of the following: PSY 205: Human Development I PSY 206: Human Development II

Twelve semester hours of psychology electives are also required.

## **Minor in Psychology Education**

A minimum of 23 semester hours is required, including:

PSY 101: General Psychology PSY 205: Human Development I PSY 206: Human Development II PSY 302: Educational Psychology PSY 410: Experimental Psychology

PSY 420: Methods and Materials: Teaching Psychology in the Secondary

School Electives

PSY 312 and PSY 431 are recommended. In addition, students must complete all of the requirements of the professional education program for secondary teaching (grades 5-12) as described in the "Education" section of the catalog.

## **Psychology courses**

#### **MAT 210**

## **Probability and Statistics**

Semester: Fall, Spring, and Summer

Semester Hours: 3

This course provides a non-calculus-based study of discrete probability theory and its statistical applications. Distribution theory and its applications in hypothesis testing and setting confidence intervals are discussed. Prerequisite: MAT 100 or satisfactory score on a placement exam

#### **PSY 101**

#### **General Psychology**

Semester: Fall and Spring

Semester Hours: 3

A survey of the field of psychology investigating such topics as learning, motivation, human development, personality, social psychology, and physiological psychology. In order to make inquiry into any academic discipline, the student must first learn the language and methodology of that discipline; the field of psychology is no exception. Therefore, this course will include the study of major psychological theories, terminology, and investigative methods, as well as limited opportunity to apply those methods.

#### **PSY 201**

#### Social Psychology

Semester: Spring Semester Hours: 3

Students study the behavior of individuals as it is controlled, influenced, or limited by the sociocultural environment, social interaction, and basic interrelations of the individual, society, and culture. This course is designed to enable students to see themselves as both shaping and being shaped by their culture. Attention is also focused on inclusion and diversity. This course is cross-listed with SOC 201.

Prerequisite: PSY 101

#### **PSY 205**

#### **Human Development I**

Semester: Fall Semester Hours: 3

Students examine a study of human growth from conception to puberty. Physical, cognitive, personality, and social development will be investigated from theoretical and practical perspectives. The student will explore stages of human development through adolescence, be able to apply the major developmental theories, and make better choices as a parent or teacher.

#### **PSY 206**

#### **Human Development II**

Semester: Spring Semester Hours: 3

Students examine a study of human development from adolescence through the lifespan, which makes use of recent research studies in physical, cognitive, personality, and social development. The student will demonstrate a basic understanding of the physical, cognitive, and psychosocial changes that occur as people move through the stages of adulthood.

## **PSY 212**

## **Family Dynamics**

Semester: Fall Semester Hours: 3

This course is a study of the main theories of family systems, family patterns, and family-of-origin work. Material studied will be taken from required texts, articles obtained at the library, and class activities. The course will require some knowledge of the therapy models utilized in psychotherapy.

Prerequisite: PSY 101

#### **PSY 299**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **PSY 302**

## **Educational Psychology**

Semester: Fall Semester Hours: 3

This course is designed to aid the student in continuing to develop an understanding of human behavior, especially as that understanding applies to elementary and secondary classrooms. Emphasis will be on why and how human learning takes place and how that learning relates to schools and teaching situations where the needs of each student must be considered. The course also includes participation in, and the analysis of, interpersonal relations and communication skills. This course is cross listed with EDC 302.

Prerequisite: PSY 205 or PSY 206

#### **PSY 305**

### **Abnormal Psychology**

Semester: Spring Semester Hours: 3

This course reviews the history of mental illness from a western perspective and surveys the types of research used in the field. The symptoms, causes, and treatment of the major mental disorders are investigated from a variety of theoretical perspectives.

Prerequisite: PSY 101

#### **PSY 312**

#### **Behavior Management**

Semester: Fall Semester Hours: 3

Students review behavior management techniques and therapies. Principles of operant conditioning and classical conditioning are investigated in depth. The student will be able to use behavioral principles appropriately and understand the ethical issues involved.

Prerequisite: PSY 101

#### **PSY 315**

#### Community Problems/Contemporary Issues in Psychology

Semester: Fall, Alternate Years

Semester Hours: 3

This course provides students with the opportunity to research common issues facing mental health practitioners in today's society. Students will read conflicting arguments on each issue, write a paper from each perspective, and explore their own biases in regard to a series of issues.

Prerequisite: PSY 101

#### **PSY 320**

#### Cognitive Psychology

Semester: Spring Semester Hours: 3

This course will familiarize the student with basic issues and recent advances in the study of the cognitive bases of behavior. Students will be introduced to the scientific study of attention, knowledge representation, memory, problem solving, decision making, learning and expertise, reasoning, and language. Students will learn to understand and critically evaluate theory and research in cognitive psychology, apply recent developments in cognitive psychology to their own work and way of thinking about how the brain processes information, and understand sources of individual differences and diversity in cognitive abilities and processes.

#### **PSY 342**

## Psychology and the Soul

Semester: Spring Semester Hours: 3

This course, delivered online, with some face-to-face sessions, is designed as an introduction of faith and psychology concepts and theories through the development of current philosophers and psychologists. The focus is to explore concepts, theories, and research that support the reunification of faith and psychological understanding of thought and behavior. Attention will be given to methods of spiritual and psychosocial review of life development and methods of interviewing. Among authors work to be explored are Frattaroli, Schumacher, Wilber, Vaughan, and Kabat-Zin. Prerequisite: PSY 101 or PSY 205 or PSY 206

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## **PSY 360**

#### History of Psychology

Semester: Spring, Alternate years

Semester Hours: 3

This course provides a detailed study of the important foundation of the science and art of psychology. Students will understand the history of the major fields of clinical psychology, psychometrics, physiological psychology, sensation perception, learning, and motivation.

Prerequisite: PSY 101 and junior standing

#### **PSY 408**

#### **Directed Research in Psychology**

Semester: Fall and Spring, As needed

Semester Hours: 3

Directed research provides opportunities for advanced students to become familiar with and participate in ongoing research projects under the direction of a faculty member. The student will first read background literature on the content area to be investigated and the experimental methodologies to be used. Procedures involved in conducting psychological research, first learned in PSY 410, will be put to practice. Potential activities include the design of research and the defining of conceptual variables and the gathering, analyzing, and interpretation of data. Finally, students will prepare a paper describing the project, using APA style, and are encouraged to submit poster proposals to the Association for Psychological Science for the annual convention.

Prerequisite: PSY 410 and permission of instructor

#### **PSY 410**

## **Experimental Psychology**

Semester: Fall Semester Hours: 3

This course is designed to acquaint the student with various methods used in psychological research. The student will learn to evaluate the quality of research, will design and execute various types of research, and will be able to document research using APA guidelines.

Prerequisite: PSY 101 and MAT 210

#### **PSY 420**

## Methods and Materials: Teaching Psychology in the Secondary School

Semester: On Demand Semester Hours: 2

This course requires focused study and consultation with a public school psychology teacher or other acceptable professional. Hours will be arranged in consultation with the content area professor, the secondary education professor, the student, and the professional mentor. This course deals with teaching high school psychology. Particular attention is focused on diverse and at-risk student populations. Methods of teaching psychology, reviewing psychology texts for content appropriate to various grade levels, and the use of technology in the classroom constitute majors parts of the course. Attention is also given to the performance of research in the field of psychology.

Prerequisite: EDC 040, admission to the teacher education program, and senior standing

#### **PSY 431**

## **Psychological Testing and Assessment**

Semester: Spring Semester Hours: 3

This course provides an introduction to the theory and practice of testing and clinical assessment procedures. Emphasis will be on the development and standardization of current psychological tests. The student will become acquainted with the strengths and weaknesses of the major tests in use today.

Prerequisite: PSY 101 and MAT 210

## PSY 450 Internship

Semester: Fall and Spring Semester Hours: 1-12

An applied course in which interviewing techniques, listening skills, observation and assessment procedures, and counseling skills will be reviewed and practiced at a local agency. Observation of the student and feedback on developing skills will be shared throughout the training program. Pass/no pass grading. Contract is required.

Prerequisite: PSY 305 and PSY 483

#### **PSY 483**

## **Psychological Counseling**

Semester: Fall Semester Hours: 3

Students examine the theories and techniques used in the field of counseling. The course includes the discussion of psychopathologies, cultural diversity, privacy issues, counselor ethics, professionalism, and personality characteristics of both counselor and client as well as the effects of these issues on the counseling process.

Prerequisite: PSY 101 plus six additional semester hours in psychology

#### **PSY 490**

#### Seminar in Physiological Psychology

Semester: Spring, Alternate years

Semester Hours: 3

This course provides a study of the anatomical, biochemical, and physiological aspects of human psychology. Students will have a detailed knowledge of the anatomy of the human brain and nervous system and will understand the biochemical principles that relate to the human nervous system and the physiology involved in phenomena such as sleep, memory, schizophrenia, and depression.

Prerequisite: PSY 101, one course in biology or one course in chemistry

#### **PSY 499**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

## Sociology

Julie Beicken, Assistant Professor

The goal of the sociology major is to develop students' sociocultural imaginations to understand how, and to what extent, individuals' behavior is influenced by others in their society and those who share their culture. The objective is to have students apply the many theories in this paradigm to various social phenomena, such as conformity, deviance, family, stratification, prehistory, evolution, social welfare, cultures other than their own, and their own culture.

## **Learning Outcomes**

Students who graduate with a major in sociology will:

- 1. Develop their sociocultural imaginations, that is, the ability to conceive the connections between individuals' behavior and the larger group(s) to which they belong:
- 2. Develop their sociocultural eye, that is, the ability to perceive and measure the connections between individuals' behavior and the larger group(s) to which they belong;
- 3. Understand the metatheoretical assumptions of the broad range of social science paradigms and develop the ability to perform an analysis of these theories;
- 4. Recognize the variety of social and cultural traditions in our world.

## Major in Sociology

A minimum of 30 semester hours is required, including:

SOC 101: Introduction to Sociology SOC 324: Sociocultural Theory

SOC 408: Introduction to Social Research

SOC 477: Sociocultural Analysis of Subcultures: Cults/Sects

Choose one of the following: SOC 321: Criminology

SOC 353: Introduction to Social Work

Fifteen credits in elective courses are also required.

#### Minor in Sociology

A minimum of 18 semester hours is required, with at least nine at the upper-division level, or six semester hours at the upper-division level if SOC 324: Sociocultural Theory is completed.

## Sociology courses

#### **SOC 101**

### Introduction to Sociology

Semester: Fall Semester Hours: 3

Students examine the nature of the sociological perspective, macro- and micro-sociological theory, and sociological methodology and research. Society's social organization, social structure, social interaction, socialization, social institutions, deviance and social control, social stratification, ethnic and racial minorities, gender, the family, education, religion, and other topics from a sociological perspective are also explored.

#### **SOC 201**

## Social Psychology

Semester: Fall Semester Hours: 3

Students study the behavior of individuals as it is controlled, influenced, or limited by the sociocultural environment, social interaction, and basic interrelations of the individual, society, and culture. This course is designed to enable students to see themselves as both shaping and being shaped by their culture. Attention is also focused on inclusion and diversity. This course is cross listed with PSY 201.

Prerequisite: PSY 101

#### **SOC 225**

#### Sociology of Public Health

Semester: Spring Semester Hours: 3

This course considers public health from a sociological perspective, situating the historical and present health management challenges facing the United States population in context. It will consider the emergence of 'public health' as an area of popular and political interest, the reasons for health disparities across the population, and the rise and fall of various health concerns. It will address the main public health problems of the present moment, including HIV/AIDS, diabetes, obesity, heart disease, cancer, and communicable diseases. It will also focus on the sociological impetuses for various public health movements, such as the anti-vaccination trend that the U.S. is currently experiencing. Overall, the course will expose students to the complex relationship between health, healthcare, and social forces.

#### **SOC 262**

#### **Life and Death Decisions**

Semester: Fall, Alternate years

Semester Hours: 3

This course addresses the ethical dilemmas at the heart of beginning and ending life from a sociological perspective, considering the importance of social worth in assessing the value of life.

## **SOC 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **SOC 310**

#### **Social Stratification**

Semester: Fall, Alternate years

Semester Hours: 3

Students examine the causes and consequences of the differential distribution of power, property, and prestige within social groups. Consideration is given to conservative as well as radical sociological perspectives on social stratification.

Prerequisite: SOC 101 or SOC 242 or permission of the instructor

### SOC 321 Criminology

Semester: Spring, Alternate years

Semester Hours: 3

This course focuses on the nature and extent of crime and delinquency, including a historical survey of explanatory theories focusing on the economic, social, and psychological causes of criminal behavior and current methods of treatment, policy, and prevention.

Prerequisite: SOC 101

#### **SOC 324**

#### Sociocultural Theory

Semester: Fall, Alternate years

Semester Hours: 3

A study of the historical development of the fields of anthropology and sociology with an emphasis on the contributions of both classical and modern social theorists in the development of key concepts in the study of social and cultural behavior.

Prerequisite: SOC 101 or SOC 242 or permission of the instructor

## **SOC 342**

#### **Deviance**

Semester: Spring Semester Hours: 3

This course investigates deviant (normative and statistical) social behavior. A variety of psychological, economic, sociological, and anthropological theories are used to analyze the causes, consequences, and social responses to behaviors such as sexual violence, suicide, mental illness, illegal drug use, homosexuality, and heterosexual deviance.

Prerequisite: SOC 101 and SOC 242 or permission of the instructor

## **SOC 343**

## **Punishment and Society**

Semester: Fall, Alternate years

Semester Hours: 3

This course examines the complexities of punishment in the United States from colonial times to the present. It considers the types of behavior we punish, why we punish, how we punish, and whom we punish. Through a detailed analysis of the criminal justice system, the course evaluates the approaches of the United States to crime prevention, incarceration, and dealing with terrorism. We look at the history of punishment, study the birth of the modern prison, and consider various theories of criminology and the social nature of explanations of punishment. We then explore the massive growth of the prison population in the U.S. at the end of the twentieth century.

Prerequisite: SOC 101 or permission of the instructor

#### **SOC 353**

## **Introduction to Social Work**

Semester: Spring, Alternate years

Semester Hours: 3

This course will provide the student with a general understanding of the professional field of social work and social work practice. The roles and functions of the professional social worker, as well as intervention strategies, will be addressed. The course will also acquaint students with important historical developments in, and the evolution of, social work as a profession. Students will learn from a variety of social workers from many different fields of social work.

#### SOC 365

#### Sociology of Gender and the Family

Semester: Fall, Alternate years

Semester Hours: 3

This course considers the family as a social institution in American society, paying particular attention to the relationship between the construction of gender and family formation. It will consider the family in historical perspective as well as modern incarnations of the family once seen as deviant. Particular attention will be paid to the relationship between family and health outcomes.

Prerequisite: SOC 101 or permission of the instructor

#### **SOC 408**

## **Introduction to Social Research**

Semester: Fall, Alternate years

Semester Hours: 3

Students will complete the tasks necessary for conducting sociological research prior to the collection of data. Students will write a research proposal to include the development of a research question (hypothesis), a literature review of existing research on this topic, identification of a population for study, choice of two research methodologies for data collection, choice of analytical tools, and a statement of expected results. After successful completion of this course students will be prepared for SOC 409: Practicing Social Research.

Prerequisite: SOC 324

## SOC 450

#### Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required.

Prerequisite: junior or senior standing

## **SOC 477**

### Sociocultural Analysis of Subcultures: Cults/Sects

Semester: Spring, Alternate years

Semester Hours: 3

This course uses sociology to examine a variety of historical and contemporary nontraditional groups in American society, such as the Oneida, People's Temple, Heaven's Gate, and Scientology. Students are expected to write a research paper using social science principles to examine a group or subculture not covered in class.

Prerequisite: one lower-division and one upper-division course in a related social science field: psychology, economics, or political science, or permission of the instructor; SOC 324 is recommended

## **SOC 490**

#### Seminar

Semester: Spring Semester Hours: 3

This course enables an in-depth analysis of sociological concepts to majors. Students will engage in a large-scale research paper incorporating the application of research methods studied in Introduction to Social Research.

Prerequisite: SOC 324 or permission of the instructor

## SOC 499

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

#### **Theatre Arts**

Jayme Green, Assistant Professor

Rocky Mountain College's theatre arts program provides students with a liberal arts-based theatre education. It the goal of the program that students will develop a lifelong passion for this collaborative art form. The program encourages all students on campus to participate in theatre production. By its very nature, theatre is multi-disciplinary.

The theatre arts program provides both majors and non-majors with experience as performers, technicians, and designers. When building performance skills, students explore the creative process using their imagination, movement, and voice. According to their interests, students may also explore directing or stage management. Studies in technical design may include scenery, lighting, costumes, or sound. Upon graduation, students will have worked in all major genres and be prepared for a future in theatre.

Theatre arts offers two areas of concentration for the major (performance or technical) and a minor. Either concentration encompasses intensive professional training while preparing students for graduate school or employment in theatre.

## **Learning Outcomes**

#### Performance

Students who graduate with a concentration in theatre arts – performance will:

- Explore themselves and their production role through the creative process:
- 2. Work comfortably within a variety of styles and periods;
- 3. Use the senses, imagination, movement, emotion, concentration, and voice to build character (as either an actor or director);
- Learn the necessary skills for placement in graduate school or the job market.

#### **Technical**

Students who graduate with a concentration in theatre arts – technical will:

- Explore themselves and their production role through the creative process;
- 2. Work comfortably within a variety of styles and periods;
- 3. Use stage management, lighting design, set design, makeup design, sound design, and/or costume design to help implement the concept for a play;
- Learn the necessary skills for placement in graduate school or the job market.

#### **Performance Concentration**

A minimum of 39 semester hours is required, including:

THR 132: Acting I: Beginning Acting

THR 232: Acting II: Characterization

THR 240: Voice and Diction

THR 335: Acting III: Shakespearean

THR 349: Directing I

THR 432: Audition Preparation

THR 433: Theatre History I: Beginnings through Neoclassicism

THR 434: Theatre History II: Neoclassicism to the Present

THR 435: Acting IV: Period Acting Styles

THR 483: Senior Project

Three semester hours required:

THR 291: Theatre Practicum

or

THR 391: Theatre Practicum

Choose two of the following:

THR 135: Stage Makeup

THR 230: Movement for Theatre

THR 247: Puppetry

THR 347: Musical Theatre

THR 180, 280, 380, 480: Special Topics

THR 440: Performance/Design

#### **Technical Concentration**

A minimum of 42 semester hours is required, including:

THR 131: Technical Production

THR 235: Drafting for the Stage

THR 336: Rendering for the Stage

THR 349: Directing I

THR 433: Theatre History I: Beginnings through Neoclassicism

THR 434: Theatre History II: Neoclassicism to the Present

THR 483: Senior Project

Four semesters of one of the following, with at least one semester of THR

THR 291: Theatre Practicum

THR 391: Advanced Theatre Practicum

Choose two of the following:

THR 310: Lighting Design

THR 315: Scene Design

THR 320: Costuming for the Stage

Choose nine semester hours from the following:

THR 135: Stage Makeup

THR 245: Scene Painting

THR 318: Properties Construction and Design

THR 391: Advanced Theatre Practicum

THR 180, 280, 380, 480: Special Topics

THR 440: Performance/Design

## **Minor in Theatre Arts**

A minimum of 19 semester hours is required, including:

THR 101: Introduction to Theatre

THR 131: Technical Production

THR 132: Acting I: Beginning Acting

THR 135: Stage Makeup

THR 291: Theatre Practicum

THR 433: Theatre History I: Beginnings Through Neo-Classicism

THR 434: Theatre History II: Romanticism to the Present

## Theatre Arts courses

#### **THR 101**

## Introduction to Theatre

Semester: Fall and Spring

Semester Hours: 3

This course provides a survey of the unique world of live theatre. Students will examine theatre as an art, exploring its various components: the actor, the playwright, the designer, the director, the dramatic structure, and the history of theatre.

### **THR 131**

## **Technical Production**

Semester: Spring Semester Hours: 3

Students examine a practical approach to the fundamentals of technical theatre. The course includes becoming familiar with tools, equipment, and the technology used in stage construction. Construction projects are required.

#### **THR 132**

## **Acting I: Beginning Acting**

Semester: Fall and Spring Semester Hours: 3

The student receives the fundamental skills and techniques for an in-depth exploration of the acting process. Through monologue and scene work, improvisations and exercises, students will learn to communicate effectively with others on- and off-stage. Areas of concentration include the development of self-awareness, vocal production, physical flexibility, and emotional exploration.

#### **THR 135**

#### Stage Makeup

Semester: Fall Semester Hours: 3

Students receive practical training in the design and application of theatrical makeup. Class projects will include standard, corrective, animal, fantasy, monster, and other makeups.

#### **THR 230**

#### **Movement for Theatre**

Semester: On Demand Semester Hours: 3

In this course, the focus is on the principles, practices, and exercises in body technique and stage movement. The student learns concentration, centering, balance, agility, and movement skills through various techniques.

#### **THR 232**

#### **Acting II: Characterization**

Semester: Spring, Alternate years

Semester Hours: 3

This course builds upon the principles developed in THR 132. It stretches the actor's range by exploring methods of creating a character. Scene analysis is examined to discover the essence of the character, clarifying motivation and intention. Selected scenes from realistic texts by Chekhov, Ibsen, Strindberg, and Shaw will be incorporated.

Prerequisite: THR 132

#### **THR 235**

## **Drafting for the Stage**

Semester: On Demand Semester Hours: 3

This course is a study of the drafting skills and techniques required for technicians and designers. Time will be spent in the study of hand-drafting as well as computer-aided drafting.

## **THR 240**

#### Voice and Diction

Semester: Spring, Alternate years

Semester Hours: 3

Fundamental concepts of vocal production are examined in this course. Students take an in-depth look at the vocal mechanism and its importance to the live stage performance. The course prepares the student to effectively produce audible, intelligible speech. Each student will become proficient utilizing "standard stage" speech.

### **THR 245**

## **Scene Painting**

Semester: Spring, Alternate odd years

Semester Hours: 3

This course provides an overview of various painting techniques used in a theatrical setting. These may include, but are not limited to, woodgraining, marble, brick, and stenciling. A fee for materials will be charged.

#### **THR 247**

#### Puppetry

Semester: On Demand Semester Hours: 3

The course examines the use of puppets in educational, recreational, therapeutic, and religious settings. Design, construction, and manipulation of various kinds of puppets will be covered. Students will be given opportunities to develop performance skills through theatrical processes. While the course will focus on fundamentals, students will be encouraged to pursue their special puppetry interests and needs.

#### THR 291

#### **Theatre Practicum**

Semester: Fall and Spring

Semester Hours: 1

Students participate in theatre productions under the supervision of the theatre faculty. Credit may be given for lighting, set construction, house management, costuming, publicity, and more. Grades are on a pass/no pass basis only.

#### **THR 299**

#### **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

#### **THR 310**

## **Lighting Design**

Semester: On Demand

Semester Hours: 3

This course provides a study of the principles, technology, and aesthetics of designing stage lighting. Practical application is emphasized.

## **THR 315**

### Scene Design

Semester: On Demand

Semester Hours: 3

This course examines the principles and aesthetics of generating practical, working designs for the modern stage. Requirements include models and research presentations.

#### **THR 318**

## **Properties Construction and Design**

Semester: On Demand, Every 3rd Fall

Semester Hours: 3

This course will be a hands-on exploration of different tools and techniques used to build props for the stage. Students will work through the process of prop-making from design to construction. The course will conclude with one project that is portfolio ready.

#### **THR 320**

## **Costuming for The Stage**

Semester: On Demand

Semester Hours: 3

This course will investigate the role of costumes in theatrical production. Topics include costume history, color theory, and light/fabric relationships. Practical designs and construction projects will be completed.

#### **THR 335**

## Acting III: Shakespearean Techniques

Semester: Fall, Alternate years

Semester Hours: 3

Students will explore and apply the techniques necessary for the preparation and performance of Shakespeare. The focus of the work is on thor-

ough script and verse analysis, interpretation, voice, and movement. Acting monologues and several scenes are required.

Prerequisite: THR 232

## **THR 336**

## Rendering for The Stage

Semester: On Demand Semester Hours: 3

A study of the media and techniques used to present a theatrical design. Practical application in rendering scenic, lighting, and costume design.

#### **THR 347**

#### **Musical Theatre**

Semester: On Demand Semester Hours: 3

This course provides an introduction to musical theatre. Study includes such topics as musical conventions, historical perspectives, actability of musical numbers, and staging of numbers. The course will culminate in an evening performance of prepared audition numbers.

#### **THR 349**

## Directing I

Semester: Spring, Alternate years

Semester Hours: 3

This course examines and develops the skills necessary in stage directing, from play selecting to the final performance. Students will analyze, develop, and direct a one-act play presented for the public. This performance must incorporate informed criticisms. The following is a list of suggested classes the student should take prior to enrolling in this class: THR 131, THR 132, THR 230, THR 232, THR 240, and THR 291.

#### **THR 391**

## **Advanced Theatre Practicum**

Semester: Fall and Spring

Semester Hours: 3

Students participate in theatre productions under the supervision of the theatre faculty. Credit may be given for lighting, set construction, house management, costuming, and publicity. Each project will be given a letter grade.

Prerequisite: permission of professor

#### **THR 432**

## **Audition Preparation**

Semester: On Demand Semester Hours: 3

Cold readings, prepared auditions, and the interview will be scrutinized. Upon completion of this course, students will be equipped to present diversified auditions. Effective résumés and photographs will be examined. Prerequisite: THR 132

## **THR 433**

#### Theatre History I: Beginnings to Neoclassicism

Semester: Spring, Alternate years

Semester Hours: 3

This course provides a chronological study of the history of theatre from its origins to the 1850s. Critical theories, representative plays, and the physical conditions that contributed to the mainstream of theatrical history will be covered.

#### THP /3/

## Theatre History II: Neoclassicism to The Present

Semester: Spring, Alternate years

Semester Hours: 3

This course provides a chronological study of the history of theatre from Darwinism through modern drama. Critical theories, representative plays, physical conditions, theatrical conventions, and cultural and social movements, which affect the mainstream of theatrical history, will be covered.

#### **THR 435**

#### **Acting IV: Period Acting Styles**

Semester: Spring, Alternate years

Semester Hours: 3

Students examine and perform fundamental styles of movement and expression dictated by specific historical periods.

Prerequisite: THR 335

#### **THR 440**

## Performance/Design

Semester: On Demand Semester Hours: 1-3

Performance concentration: Students prepare and perform a major role in a Rocky Mountain College production. Each role must be approved and supervised by faculty. A daily rehearsal and performance journal along with a major character analysis paper are required. The paper will address the role being undertaken and how it fits into the thematic structure of the piece, as well as how the actor applies the arc of the character in performance. Credit is dependent on role. This course is repeatable to a maximum of three credits.

Design concentration: Students will prepare a design for a major element in a Rocky Mountain College production. A daily journal during the building process and technical rehearsals is needed. A critical paper is required, addressing struggles and successes within the process. Credit is dependent on development and creation of the design.

## **THR 450**

## Internship

Semester: On Demand Semester Hours: 1-12

This course is a guided work experience in an already established place of business. The student must arrange the internship in agreement with the instructor and the Office of Career Services. The internship should relate to the student's major or minor area of study. Contract is required.

Prerequisite: junior or senior standing

## **THR 471**

#### Shakespeare

Semester: Spring, Alternate years

Semester Hours: 3

Students are provided with an advanced examination of representative Shakespearean plays. Emphasis is placed equally on script analysis and the acting process.

## **THR 483**

#### **Senior Project**

Semester: On Demand Semester Hours: 3

A course designed for the senior as a culmination of study in his/her area of concentration. Theatre faculty must approve the project by the end of the student's junior year. Each project will be closely supervised by faculty. Requirements for this course can be met in one of four ways:

- Acting: A student will act a major role in a full-length play. Journals and analysis are required.
- Directing: A student will direct a full-length play during Rocky Mountain College's main season. Journals and analysis are required.
- Play writing: A student will write a play and arrange for a public reading of that play. Journals and analysis are required.
- Technical: A student must complete a design for lights, costumes, and/ or sets for a Rocky Mountain College or Billings Studio Theatre production. A technical student may also stage manage a major production. Journals and analysis are required.

Students will meet individually on a regular basis with their faculty supervisor throughout the duration of the project. Performance students will be required to turn in character analysis, play analysis, and/or research paperwork. Technical students will be required to turn in all design (or management) paperwork. Deadlines for the appropriate paperwork will

be determined at the beginning of the semester during which the senior project will be competed. Following completion of the senior project, students will meet with all theatre faculty to discuss the production, journal, analysis work, and upcoming goals.

Prerequisite: To be eligible for THR 438, a performance major must have auditioned for every RMC production during the semesters they were a declared major and on RMC's campus. A technical major must have participated in the build and run of every RMC production during the semesters they were a declared major and on RMC's campus.

## **THR 490**

#### Seminar

Semester: On Demand Semester Hours: 1-3

Selected topics in theatre are explored.

## **THR 499**

## **Independent Study**

Semester: On Demand Semester Hours: 1-3

This course allows a superior student to devise and pursue independent study in an area agreed upon in consultation with, and supervised by, a faculty member. Students should be either a major or minor and have a cumulative GPA of 3.00 or greater.

Prerequisite: junior or senior standing

President, Robert Wilmouth, MD

Executive Assistant to the President, Tracy Davidson, BA

Academic Vice President, Dr. Stephen A. Germic, BA, PhD Associate Academic Vice President, Dr. Jennifer R. Bratz, BM, MM, DMA

Associate Academic Vice President, Dr. Derek J. Sjostrom, BS, MS, PhD Administrative Assistant, Linda Eliason, BA

**Academic Support** 

Sarah Whittle, AA, BA, MA

**Student Records** 

Registrar, Erik Willborg, BS, MAcc Assistant Registrar, Kyle Pratt, BA

Student Records Specialist, Carolyn Rosen, BA, MS, PhD

Administrative Assistant to the Registrar, Marlene Arney

**Services for Academic Success** 

Director, Services for Academic Success (SAS), Mary Reiter, BS, MS

Academic Specialist, Robert Ketchum, BS

Academic Specialist, Robyn Cummings, BS, MEd

Academic Specialist/Disabilities Services Coordinator, Terri Haun, BA,

Administrative Assistant/Academic Specialist, Jamie Lane, BS, MS Administrative Assistant/Academic Advisor, Taisha Rocha, BA

Aviation

Director of Aviation, Daniel G. Hargrove, BS, MS

Flight Simulator and Safety Program Manager, open

Computer Testing Administrator, Diane Cochran, BS

Computer Testing Administrator, Laurie Sticka

Director of Flight Operations, Matthew Prinkki, BS

Assistant Director of Flight Operations, Richard Robbins

Office Manager, Flight Operations, Amy Blitz

Director of Maintenance, James Robbins

A&P Mechanic/IA, Trevor Smith

A&P Mechanic, James Powell

**Equestrian** 

Director of Equestrian Studies/Assistant Professor of Equestrian Studies, Scott Neuman, BA

Library

Director of Library, Bobbi Otte, BA, MLS

Assistant Director of Library, open

Library Associate, Bethany Schatzke, BA

Library Assistant, Alice Cachat-O'Reilly, BA, MLS

**International Programs** 

Director of International Programs, Amber West Martin, BA, MEd

**Institutional Research** 

Institutional Research Analyst, Erica Wall, BA

**Physician Assistant Program** 

Director of the Physician Assistant Program, Heather Heggem, BA, MPAS, PA-C

Medical Director, David Shenton, BS, MD

Office Manager/Program Review Coordinator for Physician Assistant Program, Sharon Klem

Associate Director/Academic Coordinator, Michael Hines, BS

Director of Clinical Education, Carrie Hall, BS, MPAS, PA-C

Assistant to Director of Clinical Education, Amy Kintz

Admission Counselor for Graduate Programs, Calley Thompson, BS

**Educational Leadership Program** 

Director of Educational Leadership and Distance Elementary Education, Stephanie "Stevie" Schmitz, BS, MS, EdD

Assistant Director of Educational Leadership and Distance Elementary Education, Christine Unquera, BS

**Academic Computing** 

Director of Information Technology, Dan Wolters, BS, MS

Linux System Administrator, Andrew Niemantsverdriet, BS

Director of Administrative Computing, Kellee Pierce, AA

Application Specialist/Programmer, Dave Gulbrandson, BA Retention

Retention Officer/Advising Specialist, Robyn Cummings, BS, MEd

Chief Financial Officer, Melodie Charette, BA, MBA Business Office

Director of Accounting/Tax Manager, Kathy McKibbin, BS, CPA

Accounts Receivable Representative, Dianne Capron

Senior Accountant, Becky Berge, BS, CPA, CMA

Accountant, Shainne Barber, BS

Accounting Clerk II, Vicki Montgomery

Cashier/Accounting Cleark I, Alesha DeLeon, BA

**Human Resources** 

Director of Human Resources, Marcella Buster, BS, MS

Human Resources Administrator, Tracy Czudak, BS

Vice President/Dean for Student Life, Brad Nason, BS, MS

Director of Leadership, Engagement, and Achievement Program

(LEAP), Steven Peterman, BS, MS

Office Manager for Student Life, Teresa Rowen, BA

Student Life

Director of Intramurals/Outdoor Recreation, Tim Lohrenz, BA, MEd

Counselor, Cynthia Hutchinson, BA, MS, Licensed Clinical Professional Counselor

Director of Career Services, Lisa Wallace, BS, MPA

Community Services Coordinator, Jill Washburn, BS

College Chaplain/Director of Campus Ministries and Church Relations,

Kimberly Woeste, BA, MDiv, MTS

Housing and Residence Life

Director of Residence Life, Shavdean Save, BS, MS

Assistant Residence Hall Director, Jacob Mackenzie

Assistant Residence Hall Direcotr, Madelyn Johnston, BA

Area Coordinator, Samantha O'Neil, BS

Area Coordinator, Samantha Kohl, BA

Campus Safety Coordinator, Amberlyn Tanzosh, BSW

Coordinator of Student Activities, Tracy Mouser

**Central Operations** 

Director of Central Operations, Leon Bruner, BA

Central Operations Clerk, Daisy Eddy

**Fortin Education Center** 

Operations Director Fortin Center, Gail Nutting

Coordinator of Conferences and Camps, Deb Faw, BS

Administrative Assistant, Fortin Center/Conferences and Camps, Rhonda Duvall

**Facility Services** 

Director of Campus Facilities, Planning and Administration, open

Office and Staff Assistant, Jill Port

Engineer, William Defferding

Assistant Engineer, Zane Rudolph, AAS

Assistant Plant Engineer, William Craven III

Head Groundskeeper, William Greenwalt, AA Assistant Groundskeeper-Irrigation, John Lott

Assistant Groundskeeper-Horticulture, Joseph Levens

Assistant Groundskeeper-Mechanic, Rober Streck

Carpenter, Michael Largo

Custodial Supervisor, Joanne Bohlman

Custodian/Maintenance, Julie Lott, Laurie Thompson

Custodial Staff, David Giles, Stephanie Giles, Kristin Leitner, Lori Look, Don Louis, Thomas Sanchez, Earl Tate

PT Custodial Staff, Roger Grooms, Carl Kershner, Marty Wallace

# Vice President for Advancement, Kelly Edwards, BS. MA

Administrative Assistant, Pam Erickson

Director of Annual Giving, Della Gardner, BA

Director of Major Gifts, Peter Bolenbaugh, BA

Director of Alumni Relations, Daniel Parod, BS

Annual Fund Coordinator, Martha Thompson

Database Manager, Dawn Moltzan, BS

#### Media

Director of Communications, Andrew Keating, BA, MBA, MFA Editor and Media Specialist, Jenny McPhail, BS

## Vice President for Enrollment Management (Interim), MJ Huebner, BS, MA

Admissions & Financial Aid Office Manager, KaitlinAlbrecht **Admissions** 

Dean of Enrollment Services, Austin Mapston, BA, MS

Assistant Director of Admissions/Transfer Coordinator, Shannon Ryan, BS

Senior Admission Counselor, Kelsey Brown, BS, MS

Senior Admission Counselor, Richard Greene, BA, MA

Admission Counselor, Tori Bertsch, BS

Admission Counselor, Cody Halverson, BS

Admission Counselor, Braedon Niemi, BA

Information and Application Manager, Scott Kunz, BA, BS

Events Coordinator & Parent Relations, Megan Cabe, BS

#### **Financial Aid**

Director of Financial Assistance, Jessica Francischetti, BA Financial Assistance Counselor I, Coleen Schultz

#### Athletic Director, Bruce Parker, BS

Associate Director of Athletics, Jeff Malby, BS

Business Manager of the Department of Athletics, Carie Keller

Assistant to Athletic Director, Denver Cobb, BS, MA

Assistant to Athletic Director, Kyle Erickson, BA

Head Varsity Men's Basketball Coach, Bill Dreikosen, BA, MEd

Assistant Men's Basketball Coach, Denver Cobb, BS, MA

Assistant Men's Basketball Coach, Len Wilkins

Assistant Men's Basketball Coach II, James Bulluck, BS

Head Varsity Women's Basketball Coach, Wes Keller, BS

Assistant Women's Basketball Coach, Kyle Erickson, BA

Assistant Women's Basketball Coach, Richard Hash

Cheerleading Coach, Kelsey Daer, BS

Head Varsity Cross Country/Track Coach, Michael McLean, BS

Assistant Cross Country & Distance Track Coach, Eayoall Akilu

Head Varsity Football Coach, Jason Petrino, BA, MA

Assistant Football Coach/Offensive Coordinator, Christopher Stutzeim, BA, MA

Director of Golf Operations, Randy Northrop, BA

Head Coach Golf, Aaron Pohle, BS

Head Varsity Men's and Women's Skiing Coach, Jerry Wolf, BA

Director of Soccer Operations, Richard Duffy, BUS, MM

Assistant Coach I (Men's Soccer), Jared Dickerson, BA

Assistant Coach I (Women's Soccer), Kevin Luse

Head Varsity Women's Volleyball Coach, Laurie Kelly, BS

Assistant Volleyball Coach, Yang Yang, BS

Assistant Volleyball Coach II, Sarah Irigoin, BS

Athletic Trainer, Ted Wells

## **Division Structure**

Dr. Stephen A. Germic, Academic Vice President Dr. Jennifer R. Bratz, Associate Academic Vice President Dr. Derek J. Sjostrom, Associate Academic Vice President

## **Arts and Humanities**

Dr. Timothy Lehman, Division Chair

Δr

Communication Studies

English

Foreign Languages and Literature

History and Political Science

Interdisciplinary Studies (IDS)

Music

Philosophy and Religious Thought

Sociology

Theatre Arts

#### **Mathematics and Science**

Dr. Ulrich Hoensch, Division Chair

Biology

Chemistry/Biochemistry

Computer Science

Environmental Science and Studies

Geology

Mathematics

Physics

#### **Professional Studies**

B. Scott Severance, Division Chair

## **Bachelor's Programs**

Aviation

**Business Administration and Accounting** 

Education

**Equestrian Studies** 

Health and Human Performance

Library

Psychology

#### Master's Programs

Accountancy

Educational Leadership

Physician Assistant

## **Faculty**

- **Ann Adair,** Associate Professor of Business (2012). BS, MS, Colorado State University. PhD, Texas A&M University.
- **Daniel Albrecht,** Professor of Biology (2002). BA, St. Olaf College. MS, University of North Dakota. PhD, University of New Mexico.
- **Toby S. Anderson**, Professor of Physics (2006). BS, Belmont University. MS, PhD, Vanderbilt University.
- **Angela Andrikopoulos,** Instructor of Music. DMA, University of Hartford: Hartt School.
- James A. Baken, Professor of Art (1990). BA, Montana State University-Bozeman. MFA, University of New Orleans.
- **John Barbaro**, Professor of Chemistry (2004). BA, The Catholic University of America. PhD, Texas A&M University.
- **Holly A. Basta,** Assistant Professor of Biology (2014). BS, Montana State University-Bozeman. PhD, University of Wisconsin-Madison.
- **Julie Beicken**, Assistant Professor of Sociology (2015). BA, Oberlin College. MS, PhD, University of Texas at Austin
- Karen J. Beiser, Associate Professor of Business Administration/Economics (2007). BS, Western Michigan University. MBA, St. Ambrose University. PhD, Capella University.
- **Aaron Benner,** Instructor of Computer Science (2000). BS, Montana State University-Bozeman.
- Jennifer R. Beverly, Assistant Professor of Physician Assistant Studies (2013). BS, Rocky Mountain College. MPAS, Kirksville College of Osteopathic Medicine. PA-C.
- Julie Blakeslee, Instructor of Education. BA, Rocky Mountain College. MA, Montana State University.
- **Peter Bolenbaugh,** Instructor of Mathematics (2016). BA, University of Montana.
- **Amanda R. Botnen,** Assistant Professor of Health and Human Performance (2010). BA, St. Olaf College. MS, Montana State University-Billings.
- **Craig Botnen**, Instructor of Physical Education and Health. MEd, Lindenwood University.
- Scott Brady, Instructor of Health and Human Performance. BS, BSN, Montana State University.
- Jennifer R. Bratz, Associate Academic Vice President/Assistant Professor of Music (2008). BM, MM, PhD, Indiana University. DMA University of Colorado.
- **Christi M. Brown,** Associate Professor of Equestrian Studies (2003). BS, Rocky Mountain College. MS, University of St. Mary.
- Parker Brown, Instructor of Music.
- James O. Bungert, Assistant Professor of Music (2014). BM, University of Wisconsin. MA, University of Iowa. PhD, University of Wisconsin-Madison.
- **Thomas Burke,** Instructor of Music. MEd, Montana State University Billings.
- **Carolyn Coefield,** Instructor of Voice (1997). BA, Rocky Mountain College, MM, Portland State University.
- **David W. Crisp,** Instructor of English (2000). BA, Austin State University. MA, Texas A&M University.
- **Robyn M. Cummings,** Associate Professor of Mathematics/Academic Specialist for SAS (1994). BS, MEd, North Dakota State University.
- Linda DeRosier, Professor of Psychology (1987). BS, Pikeville College. MA, Eastern Kentucky University. PhD, University of Kentucky. MEd, Harvard University.
- **Bill Dreikosen,** Instructor of Physical Education and Health. MEd, Montana State University Billings.
- **Jacqueline J. Dundas,** Associate Professor of English (1998). BA, Rocky Mountain College. MEd, Montana State University-Billings.
- John Dutton, Instructor of Music. MM, Northwestern University. Robin Earles, Instructor of Art. BFA, MFA, California State University. Hollis S. Edwards, Assistant Professor of Equestrian Studies (2013).

- BA, University of Montana.
- Shelley M. Ellis, Professor of Secondary Education (2001). BA, University of Montana. MEd, EdD, Montana State University-Bozeman.
- Jolane K. Flanigan, Assistant Professor Communication Studies (2011).
  BA, MA, The University of Montana; Ph.D., University of Massachusetts.
- **Ivy Fortmeyer,** Assistant Professor of Chemistry (2016). BA, Columbia University. MA, PhD, Princeton University.
- Jon Gauer, Instructor of Music. BM, MM University of North Texas.
- **Stephen A. Germic,** Academic Vice President/Professor of English (2007). BA Albion College. PhD, Wayne State University.
- Jayme C. Green, Assistant Professor of Theatre Arts (2015). BA, Rocky Mountain College.
- **Hayden Hadley,** Instructor of Equestrian Studies. BS, Rocky Mountain College.
- Carrie A. Hall, Assistant Professor of Physician Assistant Studies (2013). BS, MPAS, Rocky Mountain College. PA-C.
- **Anthony L. Hammond**, Instructor of Music (2008). BA, BM, University of Montana. MM, Sam Houston State University.
- **Daniel G. Hargrove,** Director of Aviation/Professor of Aviation (2003). BS, U.S. Air Force Academy. MS, Montana State University-Bozeman.
- **Dwight Harley,** Associate Professor of Physician Assistant Studies. BS, Medical College of Georgia. BS, MS, Georgia College.
- Steven R. Hart, Professor of Music (2000). BM, Western Michigan University. MM, University of South Dakota. PhD, University of Colorado.
- **Heather L. Heggem**, Director of Physician Assistant Program/Assistant Professor (2010). BS, MPAS, Rocky Mountain College, PA-C.
- Michael "Heath" H. Hines, Associate Director/Academic Coordinator/ Assistant Professor of Physician Assistant Studies (2014). BS, Rocky Mountain College.
- Ulrich A. Hoensch, Professor of Mathematics (2003). MSc, Technical University Darmstadt, Germany. PhD, Michigan State University.
- Melissa E. Holmes, Assistant Professor of Computer Science (2013).BS, Montana Tech. MS, University of Montana. EdD, University of Montana (ABD).
- **Jennifer Hudson,** Instructor of Mathematics.
- **Craig Huisenga,** Instructor of Theatre Arts. BFA, Pacific Luthern University.
- Cristi H. Hunnes, Professor of Chemistry (1995). BA, Carleton College. PhD, University of Illinois at Urbana-Champaign.
- **Cynthia Hutchinson**, Instructor of Psychology. MS, Montana State University Billings. MSW, Walla Walla University.
- Ethan Hutson, Instructor of Health and Human Performance.
- Linda Jamieson, Instructor of Education. MA, Lesley University.
- **Thomas J. Kalakay,** Professor of Geology (2004). BSc, Montana State University-Bozeman. MSc, PhD, University of Wyoming.
- Tammy Kantorowicz, Instructor of Aviation.
- **Andrew Keating,** Instructor of English (2015). BA, Wagner College, MBA, Johnson & Wales University. MFA, University of Baltimore.
- Laurie Kelly, Instructor of Health and Human Performance. BS, Bemidiji State University.
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