MESA STATE COLLEGE

GRAND JUNCTION, COLORADO

2008-2009

CATALOG

MESA STATE COLLEGE

No Place So Close Can Take You So Far

2008-2009 Academic Calendar

Summer Semester 2008

May 19 ..... First day of classes for First (4-week) Session
May 26 ..... Memorial Day observance – NO CLASSES
June 12 ..... Final exams and last day of May session
June 16 ..... First day of classes for Second (4-week) and 7-week Sessions
July 4 ..... Independence Day Holiday – NO CLASSES
July 10 ..... Final exams and last day of June (4-week) Session
July 14 ..... First day of classes for Third (3-week) Session
July 31 ..... Final examinations for Third (3-week) and 7-week Sessions
July 31 ..... Summer Sessions end

Fall Semester 2008

Aug. 4 ..... Residency petitions due to Tuition Classifications Officer (Admissions Office)
Aug. 18 ..... First day of classes
Sept. 2 ..... Last day to add or drop a full semester class
Sept. 2 ..... Fall census – date after which credit hours are counted in COF attempted hours
Sept. 8 ..... Late Start session begins
Sept. 15 ..... Deadline for filing Intent to Graduate Form with Registrar's Office for spring and summer graduates
Oct. 13-14 ..... Fall Break – NO CLASSES
Oct. 15 ..... Second module classes begins
Oct. 15 ..... Last day to withdraw from full semester classes with a grade of "W"
Oct. 27 ..... Priority registration for spring 2009 begins
Nov. 26-28 ..... Thanksgiving Holiday – NO CLASSES
Dec. 5 ..... Last day of classes
Dec. 8-11 ..... Final examinations
Dec. 11 ..... Fall semester ends

Spring Semester 2009 (including January Term)

Jan. 2 ..... Residency petitions due to Tuition Classifications Officer (Admissions Office)
Jan. 2-16 ..... January Term
Jan. 19 ..... Martin Luther King, Jr. Day – NO CLASSES
Jan. 20 ..... First day of classes
Feb. 3 ..... Last day to add or drop a full semester class
Feb. 3 ..... Spring census – date after which credit hours are counted in COF attempted hours
Feb. 9 ..... Late Start session begins
Feb. 16 ..... Deadline for filing Intent to Graduate Form with Registrar's Office for fall graduates
Mar. 9-13 ..... Spring Break – NO CLASSES
Mar. 18 ..... Last day to withdraw from full semester classes with a grade of "W"
Mar. 23 ..... Second module classes begin
Mar. 30 ..... Priority registration for summer and fall 2009 begins
May 8 ..... Last day of classes
May 11-14 ..... Final examinations
May 14 ..... Spring semester ends
May 16 ..... Commencement

Mesa State College

2008-2009 Catalog

Produced by the Office of Academic Affairs at Mesa State College in Grand Junction, Colorado.

1100 North Avenue, Grand Junction, Colorado 81501-3122
970-248-1020 / 800-982-MESA / mesastate.edu

Mesa State College is accredited by The Higher Learning Commission
and a member of the North Central Association.

General Policy Statement

Mesa State College is a comprehensive coeducational institution operated under the governance of the Board of Trustees of Mesa State College. The programs, policies, statements, and procedures contained in this catalog are subject to change by the College without prior notice. Mesa State College reserves the right to, at any time, withdraw courses or modify the rules, calendar, curriculum, graduation procedures, and any other requirements affecting students. While the information contained in this catalog is current and correct insofar as possible at the time of printing, students are advised to check with appropriate College officials and current program sheets for up-to-date information.

This catalog is intended for the guidance of students and faculty but does not constitute a guarantee that all courses listed will actually be offered during any particular academic year. Mesa State College reserves the right to withdraw or add courses prior to the beginning of any semester or summer term. In some programs, certain courses may be offered on an alternate-year basis or as determined by apparent demand. All program offerings are contingent upon adequate appropriations by the Colorado General Assembly.

Mesa State College is committed to providing admission or access to, or treatment or employment in, its educational endeavors, consonant with applicable laws and without regard to race, creed, color, religion, sex, disability, age, national origin or Vietnam era veteran status.

Inquiries may be made to the Affirmative Action Officer, Human Resources Office, Lowell Heiny Hall, Room 237.

Mesa State College is a Drug-Free Workplace. All employees and students of the College agree to abide by the requirements in the Federal Drug-Free Workplace Act and the policies stated in the brochure entitled *Drug-Free Schools, Campuses and Workplaces, State Colleges in Colorado, Drug Use and Alcohol Abuse Prevention Program.* All employees and students are provided copies.

As required by the Campus Security Act, Mesa State College publishes campus safety policies and statistics annually. Copies of the annual report are available through the Office of Public Safety's website at mesastate.edu/services/publicsafety/crimereport.htm.

FERPA Policy Statement

The Family Educational Rights and Privacy Act (FERPA) provides students who are enrolled in an institution of postsecondary education the right to inspect, review, and challenge their educational records. Mesa State College has the responsibility of maintaining and protecting the confidentiality of students' official educational records. Mesa State College also supervises the access to and/or release of educational records of its students.

FERPA covers enrolled and former students, including those who are deceased. Students who are not accepted to Mesa State College, or if accepted, do not attend, have no rights under FERPA. In addition, the College will not release personally identifiable records of students to any individual, agency or organization without the prior written consent of the student, except as provided by FERPA. For further information related to FERPA, see the Registration section of this catalog.

How to Use This Catalog

This catalog is designed to assist all types of students—those considering college for the first time, those thinking of transferring from a community college or four-year institution, and those already attending Mesa State College—in choosing the program of study that best fits their aspirations and goals. In this catalog you'll find admissions guidelines, financial aid information, and academic requirements so that you can make an educated decision about your future. In addition, the catalog describes aspects of student life at MSC and opportunities you'll find for personal growth outside the classroom.

If you're thinking about applying to Mesa State, follow these steps:

Step 1: Turn to page 13 for information on admission, registration, tuition, expenses, and financial aid.

Step 2: Review the matrix beginning on page 10 to find programs of study that fall within your area of interest.

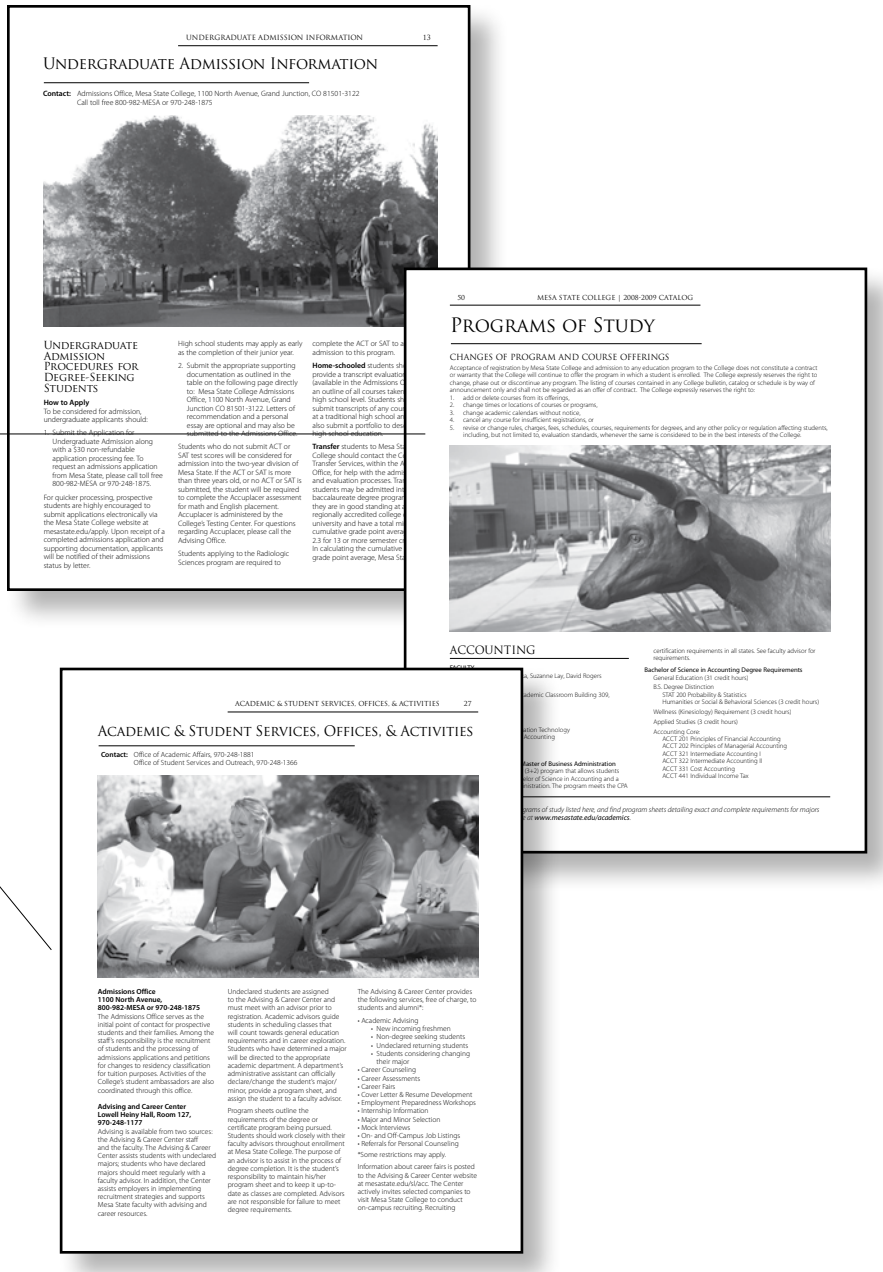
Step 3: Turn to Programs of Study section, beginning on page 50, for each program that interests you. There you'll learn about the program's course of study and special features, such as internships or clinical experiences.

Step 4: Look up descriptions for some of the courses listed in the program. Courses are listed alphanumerically by course prefix beginning on page 107. Courses that fulfill the MSC general education degree requirements are listed on page 46.

Step 5: Finally, once you've reviewed the programs offered, go to page 27 to learn about student academic support, activities and services at Mesa State.

If you're already a student at Mesa State, you can use this catalog for the following:

- Choose a major (follow Steps 1, 2, and 3 above.) Once you've declared a major contact the appropriate department to meet with your faculty advisor. If undeclared, contact the Advising and Career Center to meet with a staff advisor and discuss options.
- Keep track of your academic progress (review the requirements for your program of study.)
- Review courses, both required and elective (courses are listed alphanumerically by course prefix, beginning on page 107.)
- Review degree requirements and general education courses beginning on page 45.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UNDERGRADUATE ADMISSION INFORMATION

Contact: Admissions Office, Mesa State College, 1100 North Avenue, Grand Junction, CO 81501-3122
Call toll free 800-982-MESA or 970-248-1875

UNDERGRADUATE ADMISSION PROCEDURES FOR DEGREE-SEEKING STUDENTS

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ACADEMIC & STUDENT SERVICES, OFFICES, & ACTIVITIES

Contact: Office of Academic Affairs, 970-248-1881
Office of Student Services and Outreach, 970-248-1366

To learn more about career opportunities and programs of study available at Mesa State College, you also may want to view the Guide to Programs of Study *booklet, program sheets that detail degree requirements and provide suggested course sequencing, and the Two-Year Course Planning Calendar/Matrix.*

All are available online at ***mesastate.edu/academics.***

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Welcome to Mesa State College

Overview of Mesa State College
The founding of Grand Junction Junior College in 1925, with 39 students enrolled in seven classes, marked the beginning of post-secondary education on Colorado's Western Slope. As Mesa Junior College, the number of students grew to 270 by fall 1937; headcount increased to 1,300 by 1963. Over that period, the range of community college programs expanded, and an area vocational school was added in 1967. By 1974, the college had evolved into a baccalaureate-granting institution, leading enrollment to triple in 16 years and reach 3,891 in fall 1979.

In 1994, the Colorado legislature authorized Mesa State to offer selected graduate degrees in response to regional needs. With the addition of graduate programs, Mesa State College became the only four-year institution in Colorado to offer a full-range of undergraduate programming that spans technical certificates, associate degrees (both academic and vocational), and baccalaureate degrees to master's degrees. Most recently, Mesa State formally created a two-year, open admission division in 2005: Western Colorado Community College.

The role and mission of the College was reenacted in 2003 by the Colorado General Assembly (Colorado Revised Statutes 23-53-101):

There is hereby established a College at Grand Junction, to be known as Mesa State College, which shall be a general baccalaureate and specialized graduate institution with moderately selective admissions. Mesa State College shall offer liberal arts and sciences programs and a limited number of professional, technical, and graduate programs. Mesa State College shall also maintain a community college role and mission, including vocational and technical programs. Mesa State College shall receive resident credit for two-year course offerings in its commission-approved service area. Mesa State College shall also serve as a regional education provider.

With the College's designation by the legislature in 2003 as a regional education provider, Mesa State was assigned the responsibility of meeting the educational needs for 14 Western Slope counties: Delta, Eagle, Garfield, Grand, Jackson, Mesa, Moffat, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Miguel and Summit.

The Mesa State College community aspires to provide an environment which promotes a wellness lifestyle free of addictive behaviors. It shall be a goal of Mesa State College to maintain a healthy campus atmosphere conducive to learning and personal safety.

Mesa State College is a democratic center of learning dedicated to the improvement of human capability. The College extends its services to anyone regardless of age, race, color, national origin, religion, sex, disability, veteran status, or sexual orientation. Committed first to instruction, as well as service and research, the College seeks to improve the unique talents and sense of social responsibility of each student.

By promoting the acquisition of skills as well as the discovery and application of knowledge, the College develops the intellectual, ethical, and aesthetic sensibilities that enable a student to pursue a rewarding career and assume a responsible and productive role in society. The College seeks to liberate persons from narrow interests and prejudices, to help them observe reality precisely, to judge opinions and events critically, to think logically, and to communicate effectively. The College offers programs of value in areas of civic and cultural life, research, and recreation, and desires to play a constructive role in improving the quality of human life and the environment.

Accreditation
Mesa State College is accredited by The Higher Learning Commission and a member of the North Central Association:
higherlearningcommission.org or
30 North LaSalle Street, Suite 2400
Chicago, IL 60602-2504;
800-621-7440; 312-263-0456

Accreditation by this agency places credits earned at Mesa State College on a par with those earned at other similarly accredited institutions throughout the United States. Various programs at Mesa State College are approved by appropriate state and national agencies:

- Kinesiology: Athletic Training Education Program: Commission on Accreditation of Athletic Training Education;
- Music: National Association of Schools of Music;
- Nursing: Colorado Board of Nursing and Commission on Collegiate Nursing Education;
- Radiologic Technology: The Joint Review Committee on Education in Radiologic Technology;
- Teacher Education: National Council for Accreditation of Teacher Education. Mesa State is also approved by the Colorado Department of Higher Education and the Colorado Department of Education to prepare teachers.

The College is designated as Baccalaureate-Arts and Sciences as part of the Carnegie classification of higher education institutions.

Montrose Campus
Located at the Buell Higher Education Campus in Montrose, the campus offers students the opportunity to complete an associate degree, or work toward their baccalaureate degree by completing the general education component. A limited selection of upper division coursework is offered via distance technology. The Montrose Campus offers coursework primarily in the afternoons and evenings to meet the needs of both traditional and working students. In addition to the classrooms and office, the campus houses two computer labs and a telecommunications classroom. The campus office is open from 8:00 a.m. to 5:00 p.m., Monday through Friday; phone 970-249-7009. All student services are available at the office (admission, assessment, financial, and business). Academic advising services are available by appointment.

Tilman M. Bishop Campus
The Tilman M. Bishop Campus of Mesa State College is the result of a partnership of the College, Mesa County Valley School District 51, and area businesses. The applied technology programs at the Bishop Campus serve the technical education needs of both college and area high school students, primarily those in District 51.

Students at the Bishop Campus—the main site of Western Colorado Community College, Mesa State's two-year division—can earn two-year associate degrees or technical certificates. High school students earn elective credits and, in many of the programs, can earn college credits while still in high school. Among the services available at the Bishop campus are college admission, class scheduling, academic and interest assessments, resume preparation, job interviewing skills, and placement in internships and jobs. For more information call 970-255-2600 or toll free, 888-455-2617.

Diversity Statement
Following is the statement of philosophy on diversity which has been adopted by the faculty at Mesa State College:

"Mesa State College is a community of scholars in the liberal arts tradition. As faculty we believe that all people, regardless of age, race, color, national origin, religion, sex, disability, veteran status, or sexual orientation, have something worthwhile to contribute and that these contributions benefit us all. Therefore, we intend that within our academic community all cultural differences will be treated with equal respect and tolerance. We desire that our students have the opportunity to appreciate the diversity of our modern world, and we encourage them to partake of the resources available within our community. As faculty we pledge ourselves to provide as many divergent cultural experiences for our students as the resources of the college and the needs of our disciplines allow."

"To further tolerance and appreciation of our society's diversity, Mesa State requires that all graduates fulfill General Education requirements. In doing so we honor the validity of a liberal education. We hope that the experience will help our students understand how to appreciate the true diversity of the world. Because diversity promotes multiple opinions, techniques, viewpoints and approaches, it is not the individual courses within the General Education program which we believe will further the above-stated goals, but the whole experience of the program itself."

Student Bill of Rights
The Colorado General Assembly implemented the Student Bill of Rights to assure that students enrolled in public institutions of higher education have the following rights:

1. A quality general education experience that develops competencies in reading, writing, mathematics, technology and critical thinking through an integrated arts and science experience;
2. Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the commission;
3. A student can sign a two-year or four-year graduation agreement that formalizes a plan for the student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;
4. Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;
5. Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;
6. Students, upon successful completion of core general education courses, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;

7. Students have a right to know if courses from one or more public higher education institutions satisfy the students' graduation requirements;
8. A student's credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferable.

Degrees and Programs of Study

Mesa State College offers programs leading to awards in four levels - technical certificates, associate degrees, baccalaureate degrees, and at the graduate level, the master's degree. The matrix at the end of this section provides an overview of the offerings at each level.

General requirements for each degree and certificate program are listed in the graduation requirements and the programs of study sections of this catalog. While these general requirements are as correct and current as possible at the time of publication, some changes may occur as programs are updated. Students seeking a specific degree or certificate must obtain a program sheet from the appropriate academic department detailing specific and current requirements for the award being sought and are responsible for meeting them.

Master's degrees offered by Mesa State College are:

- Master of Arts (M.A.) in Education
- Master of Business Administration (M.B.A.)

Baccalaureate degrees offered are:

- Bachelor of Arts (B.A.)
- Bachelor of Applied Science (B.A.S.)
- Bachelor of Business Administration (B.B.A.)
- Bachelor of Fine Arts (B.F.A.)
- Bachelor of Science (B.S.) and
- Bachelor of Science in Nursing (B.S.N.).

These are programs of study that generally consist of 120 or more credit hours and provide extensive preparation in a specific major.

Concentrations are available within many of the baccalaureate degrees.

Pre-Health Science Preparation: Admission to the study of dentistry, medicine, optometry, physical therapy, and veterinary medicine usually requires the completion of a baccalaureate degree, often in biological sciences. Students planning to enter one of these health fields should declare a major in one of the sciences after consultation with a faculty advisor.

Associate degrees are awarded in two broad areas:

- Associate of Arts or Associate of Science (A.A., A.S.) degrees are available in a number of emphases at Mesa State College. Students enrolling in these degrees may be preparing for immediate employment upon graduation or they may expect the two-year degree to be the first phase toward a baccalaureate degree. All A.A. and A.S. degrees include the statewide common core of general education curriculum and, when completed successfully, meet the lower-division general education requirements of most baccalaureate degree programs.

Students planning careers in engineering, forestry, medical technology, or pharmacy are encouraged to complete either an Associate of Arts or Associate of Science program in one of the science emphasis areas at Mesa State, followed by two additional years of study at another institution for the baccalaureate degree.

- Associate of Applied Science (A.A.S.) degrees are offered in a variety of technical and vocational programs. A.A.S. programs average two years in length.

Technical certificates are normally chosen by students whose immediate plans are a career in a technical area. While the length may vary, these programs are usually about one-year long and are designed to train for specific skills required for employment.

Non-credit continuing education courses toward personal, civic, vocational, and professional self-improvement are offered through the College's Community Education Center.

PROGRAMS OF STUDY		LEVEL OF AWARD				
		Technical Certificate	Associate	Baccalaureate	Graduate	Minor
Accounting	Concentrations: Public Accounting; Information Technology			B.S.		M
Administrative Office Technology	Emphases: Accounting Technician; Administrative Professional; Legal Assistant; Medical Administrative Assistant	T.C.	A.A.S.			
Anthropology						M
Archaeology						M
Art	Concentrations: Art History; Studio Art; Visual Arts Administration			B.F.A.		M
	K-12 Education Licensure (see Teacher Education below)			B.F.A.		
Athletic Training				B.S.		
Biological Sciences	Biology			B.S.		M
	Secondary Education Licensure (see Teacher Education below)			B.S.		
Business Administration	Concentrations: Economics; Energy Management; Entrepreneurship; Human Resource Management; Finance; Management; Marketing; Travel, Tourism, & Recreation			B.B.A.		M
Business Administration				B.A.S.		
Business Administration					M.B.A.	
Classical Studies						M
Computer Information Systems				B.S.		
Computer Information Systems				B.A.S.		
Computer Science				B.S.		M
Construction Management				B.S.		
Construction Technology	Emphases: Craft; Supervision	T.C.	A.A.S.			
Criminal Justice			A.A.S.	B.A.		M
Culinary Arts		T.C.	A.A.S.			
Dance						M
Economics						M
Education *(see also Teacher Education on page 12)*	Cognates: English for Speakers of Other Languages; Educational Leadership				M.A.	
Electric Lineworker		T.C.				
Emergency Medical Technician	Emphases: Basic; Paramedic	T.C.	A.A.S.			
Engineering	Mechanical Engineering delivered in partnership with the University of Colorado at Boulder; degree awarded by University of Colorado at Boulder					
English	Concentrations: Literature; Technical & Professional Writing; Writing			B.A.		M
	Secondary Education Licensure (see Teacher Education below)			B.A.		

PROGRAMS OF STUDY		LEVEL OF AWARD				
		Technical Certificate	Associate	Baccalaureate	Graduate	Minor
Environmental Science and Technology	Concentrations: Environmental Restoration & Waste Management; Environmental Science			B.S.		M
	Secondary Education Licensure (see Teacher Education below)			B.S.		
Forensics						M
Geographic Information Science & Technology		T.C.				M
Graphic Design	Concentrations: Animation; Print			B.F.A.		M
History	History			B.A.		M
	Secondary Education Licensure (see Teacher Education below)			B.A.		
International Studies						M
Kinesiology	Concentrations: Adapted Physical Education; Exercise Science			B.A.		M
	K-12 Education Licensure (see Teacher Education below)			B.A.		
Liberal Arts	Emphases: Administrative Office Technology; Business Administration; Computer Information Systems; Early Childhood Education; Humanities; Social Science		A.A.			
Liberal Arts	Emphases: Biology; Computer Science; Electronic Engineering Technology; Manufacturing Technology; Mathematics; Geology; Physics		A.S.			
Liberal Arts	Concentrations: English; Mathematics; Social Science;			B.A.		
	Elementary Education Licensure (see Teacher Education below)			B.A.		
Managerial Informatics						M
Manufacturing Supervision		T.C.				
Manufacturing Technology	Emphases: Computer-aided Design Technology; Machining Technology; Welding	T.C.	A.A.S.			
Mass Communication	Concentrations: Broadcasting; News/Editorial; Print Media; Public Relations/Advertising			B.A.		M
Mathematics	Concentrations: Mathematics; Statistics			B.S.		M
	Secondary Education Licensure (see Teacher Education below)			B.S.		
Music	Concentrations: Elective Studies in Business, Liberal Arts; Performance			B.A.		M
	K-12 Education Licensure (see Teacher Education below)			B.A.		
Nurse Aide		T.C.				
Nursing		P.N.	A.A.S.	B.S.N.		
Peace Officer Standards and Training (POST)			T.C.			

PROGRAMS OF STUDY		LEVEL OF AWARD				
		Technical Certificate	Associate	Baccalaureate	Graduate	Minor
Personal Training						M
Philosophy						M
Physical Sciences	Concentrations: Chemistry; Environmental Geology; Geology; Physics			B.S.		M
	Secondary Education Licensure (see Teacher Education below)			B.S.		
Political Science				B.A.		M
Process Systems Technology			A.A.S.			
Psychology	Concentrations: Counseling Psychology; Psychology			B.A.		M
Public Administration/ Public Safety				B.A.S.		
Radiologic Technology			A.A.S.	B.A.S.		
Real Estate Broker		T.C.				
Social Science				B.A.		
Sociology	Concentrations: Anthropology; Human Services; Sociology			B.A.		M
Spanish	Concentrations: Applied Professional Spanish; Literature & Language			B.A.		M
	Secondary Education Licensure (see Teacher Education below)					
Speech						M
Sport Management			A.S.	B.S.		M
Statistics						M
Teacher Education: Students must complete degree requirements in one of the following programs of study in addition to required coursework through the Center for Teacher Education for initial licensure:						
Elementary Education: Liberal Arts (B.A.)						
Secondary Education: Biology (B.S.); English (B.A.); Environmental Science & Technology (B.S.); History (B.A.); Mathematics (B.S.); Physical Sciences - Geology (B.S.); Spanish (B.A.)						
K-12 Education: Art (B.F.A.); Kinesiology (B.A.); Music (B.A.)						
Post-Baccalaureate Licensure: Requires education coursework in addition to leveling courses						
Technology Integration	Emphases: Certified Electronics Technician; Network/ Telecommunication Technician; Process Maintenance Technician	T.C.	A.A.S.			
Theatre	Concentrations: Acting/Directing; Dance; Design/Technical; Music Theatre			B.A.		M
Transportation Services	Emphases: Automotive Technology; Diesel Technology	T.C.	A.A.S.			
Travel and Tourism						M
Visual Communications	Emphasis: Animation Technology	T.C.	A.A.S.			
Watershed Science						M

Learn more about programs of study available at Mesa State College at ***mesastate.edu/academics.***

Undergraduate Admission Information

Contact: Admissions Office, Mesa State College, 1100 North Avenue, Grand Junction, CO 81501-3122
Call toll free 800-982-MESA or 970-248-1875

Undergraduate Admission Procedures for Degree-Seeking Students

How to Apply
To be considered for admission, undergraduate applicants should:

1. Submit the Application for Undergraduate Admission along with a $30 non-refundable application processing fee. To request an admissions application from Mesa State, please call toll free 800-982-MESA or 970-248-1875.

For quicker processing, prospective students are highly encouraged to submit applications electronically via the Mesa State College website at mesastate.edu/apply. Upon receipt of a completed admissions application and supporting documentation, applicants will be notified of their admissions status by letter.

High school students may apply as early as the completion of their junior year.

2. Submit the appropriate supporting documentation as outlined in the table on the following page directly to: Mesa State College Admissions Office, 1100 North Avenue, Grand Junction CO 81501-3122. Letters of recommendation and a personal essay are optional and may also be submitted to the Admissions Office.

Students who do not submit ACT or SAT test scores will be considered for admission into the two-year division of Mesa State. If the ACT or SAT is more than three years old, or no ACT or SAT is submitted, the student will be required to complete the Accuplacer assessment for math and English placement. Accuplacer is administered by the College's Testing Center. For questions regarding Accuplacer, please call the Advising Office.

Students applying to the Radiologic Sciences program are required to complete the ACT or SAT to apply for admission to this program.

Home-schooled students should provide a transcript evaluation form (available in the Admissions Office) or an outline of all courses taken at the high school level. Students should submit transcripts of any courses taken at a traditional high school and may also submit a portfolio to describe their high school education.

Transfer students to Mesa State College should contact the Center for Transfer Services, within the Admissions Office, for help with the admissions and evaluation processes. Transfer students may be admitted into most baccalaureate degree programs if they are in good standing at another regionally accredited college or university and have a total minimum cumulative grade point average (GPA) of 2.3 for 13 or more semester credit hours. In calculating the cumulative admission grade point average, Mesa State College

Admission of First-time Freshmen and Transfer Students to Mesa State College

STUDENT DEGREE INTENT	STUDENT CATEGORY								
	First-time Freshman		Transfer Students						
			12 or Fewer Credit Hours			13-29 Credit Hours		30+ Credit Hours	
	Official High School Transcripts, including GED [1]	Standardized Test Scores (ACT or SAT)	High School Transcripts	Official College Transcripts	Standardized Test Scores (ACT or SAT)	High School Transcripts	Official College Transcripts	Official College Transcripts	Transfer GPA
Four-Year Degree-Seeking	Required; sent directly to college by high school counselor High School grads >= Spring 2008 must meet HEAR requirements	Required; sent directly to college by testing organization [6]	Required; sent directly to college by high school counselor. High School grads >= Spring 2008 must meet HEAR requirements	Required; sent directly to college from previously attended institution(s)	Required; sent directly to college by testing organization [6]	Required; sent directly to college by high school counselor. High School grads >= Spring 2008 must meet HEAR requirements	Required; sent directly to college from previously attended institution(s)	Required; sent directly to college from previously attended institution(s)	2.30
Two-Year Degree-Seeking (AA, AS)	Required; sent directly to college by high school counselor	Recommended; sent directly to college by testing organization [3]	Required; sent directly to college by high school counselor	Required; sent directly to college from previously attended institution(s)	Recommended; sent directly to college by testing organization [3]	Not required	Required; sent directly to college from previously attended institution(s)	Required; sent directly to college from previously attended institution(s)	2.00 [4]
Two-Year Degree-Seeking (AAS)	Required; sent directly to college by high school counselor	Recommended; sent directly to college by testing organization [3]	Required; sent directly to college by high school counselor	Required; sent directly to college from previously attended institution(s)	Recommended; sent directly to college by testing organization [3]	Not required	Required; sent directly to college from previously attended institution(s)	Required; sent directly to college from previously attended institution(s)	No minimum
Certificate-Seeking	Required; sent directly to college by high school counselor	Not required	Required	Required; sent directly to college from previously attended institution(s)	Not required	Not required	Required; sent directly to college from previously attended institution(s)	Required; sent directly to college from previously attended institution(s)	No minimum
Non-Degree-Seeking	None [2]	Not required [5]	None [2]	Not required	Not required	Not required	Not required	Not required	No minimum

[1] Preliminary transcript will be accepted until final transcript is submitted; also applies to home-schooled students.

[2] Must become degree-seeking by no later than completion of 30 credit hours and complete high school diploma or GED.

[3] May be required for admission to selected programs; will be required for placement in general education courses.

[4] Students who left their previous institution(s) and were not in good academic standing must earn a minimum 2.00 GPA during their first semester.

[5] Placement tests or prerequisites may be required.

[6] 85 or higher index is required.

Note: In addition to requirements shown above, some academic programs have additional admission requirements. Admission to Mesa State College does not guarantee admission to those programs.

will compute a transfer GPA based on prior college transcript(s). If the student has attended more than one prior institution, the GPA of each is combined for a total cumulative admission GPA.

Transfer students who are on probation or suspension from another college or university, or have a cumulative grade point average of less than 2.3, will not be admitted into a baccalaureate degree program but may enroll in Western Colorado Community College. Transfer students who are on probation or suspension from another college may be placed on probation at Mesa State College.

An evaluation of transfer courses is made once the student's application file is complete. Credit evaluations are completed in the Registrar's Office, with the assistance of department heads.

Returning students (any student who has previously attended Mesa State College and has been out for at least one semester, summer and January terms excluded) must complete a Returning Student Application form. The form may be obtained at the Mesa State College Registrar's Office or the college's website. If the student has attended another institution since last attending Mesa State College, official transcripts of all work must be sent directly to Mesa State College Registrar's Office from each institution attended. See "Catalog Under Which a Student Graduates" section to determine the catalog to be followed for graduation.

Students wishing to return after being on suspension must submit a Returning Student Application to the Registrar's Office at Mesa State College to be considered for re-admission. See the Academic Suspension section.

Admission Decisions

Students who are academically prepared may be admitted to either the College's four- or two-year division, according to the student's degree intent. Admission to the College's four-year division, however, does not guarantee acceptance of a student into a specific course or academic program (i.e., admission to the College does not imply entry into any program which has selective admission standards).

Some students may be required to enroll in special courses for correction of academic or other deficiencies before further consideration is given.

Applicants applying for enrollment in Western Colorado Community College, Mesa State's two-year division, are automatically admitted through the community college's open admission policy. Students may later request transfer into a baccalaureate degree program after successfully completing a minimum of 13 semester credit hours and a cumulative grade point average of 2.3 or better or after earning an associate degree.

Any transfer student admitted to Mesa State College on probationary status must earn a minimum 2.00 GPA the first semester or be placed on academic suspension and will not be eligible to return to Mesa State College as stated under the academic suspension guidelines.

Admission to Specific Undergraduate Programs

Some baccalaureate, associate, and certificate programs may have specific entrance requirements in addition to general college admittance. Admission to Mesa State College does not guarantee admission into an academic program. More information is available in this catalog in the Academic Program section. Prospective students should check with the department head of the specific academic program for special requirements.

Admission to MSC/University of Colorado at Boulder Mechanical Engineering Partnership Program

Students who are applying to the MSC/CU-Boulder Mechanical Engineering Partnership Program are required to:

Rank in the top 10% or GPA 3.7
AND
SAT Critical Reading 590 or
ACT English 26
AND
SAT Math 670 or ACT MATH 30

They must also maintain a 2.0 for any college courses taken in high school.

Students who plan to transfer into the partnership program must complete a required sequence of courses with a minimum 2.9 GPA (see Mechanical Engineering in the programs of study section of this catalog). These criteria may be revised. Students should contact the Department of Physical and Environmental Sciences and visit mesastate.edu/engineering for more details.

Acceptance of Credits from Other Institutions

It is the policy of Mesa State College to accept academic credits from:

1. All public colleges and universities in the state of Colorado, provided they are currently regionally accredited. This applies regardless of the institution's accreditation status at the time the credit was earned.
2. Private and out-of-state colleges and universities, provided the institution is currently regionally accredited and was accredited or was a candidate for accreditation at the time the credit was earned.
3. Regionally accredited two-year community or junior colleges.
4. Regionally accredited institutions that award "S" or "P" grades, if the granting institution states that such grade is equal to a grade of "C" or better.

   Regional accrediting bodies are:

   - Middle States Association of Colleges and Schools
   - New England Association of Schools and Colleges
   - Northwestern Association of Schools and Colleges
   - North Central Association of Schools and Colleges
   - Southern Association of Schools and Colleges
   - Western Association of Schools and Colleges

Only courses with a grade of "C" or better are eligible to be applied toward a degree or certificate.

Mesa State College reserves the right to evaluate, on a course-by-course basis, any credits earned 15 years or

more prior to enrollment. Initially, only courses used to fulfill general education requirements will be accepted in transfer. Other courses will be transferred upon acceptance by the department head within the major.

Advanced Placement and International Baccalaureate Credits

Advanced Placement (AP) or International Baccalaureate (IB) transfer credit may be obtained by students who have successfully completed AP or IB courses and tests while in high school. Information about specific AP courses, credit and requirements is available online at mesastate.edu/enrollman/AP%20handout.pdf.

Additional information about IB and AP is available in the General Academic Policy section of this catalog under Non-Traditional Credit. To receive credit, an official copy of the AP or IB transcripts must be sent directly from the testing agency to the MSC Registrar's Office.

International Students

To be considered for admission, students who are not U.S. citizens or resident aliens must complete and submit the following to the Mesa State College Admissions Office, 1100 North Avenue, Grand Junction CO 81501-3122 prior to May 1 for fall semester and by September 1 prior to spring semester:

1. International Student Application form with $30 non-refundable application fee;
2. Copy of ACT or SAT scores and proof of English proficiency;
3. Official secondary school transcript (transcripts not issued in English must be accompanied by exact English translations);
4. Transcripts from all other colleges or universities attended. (See Transfer Students section);
5. Affidavit of financial support and an official bank statement showing proof of funds;
6. Evidence of medical insurance (Students who do not have proof of medical insurance will be required to purchase Mesa State College student health and accident insurance.)
7. For registration purposes, all international students are required to comply with the Colorado law on measles, mumps and rubella. A Mesa State College official form must be completed and returned to the Admissions Office.

Prospective international students who are seeking admission to Mesa State College and whose primary language is not English, must provide documented evidence of ability to read, write, speak, and understand the English language. This requirement may be fulfilled in one of the following ways:

1. Submission of scores of Test of English as a Foreign Language (TOEFL) with a minimum average of 51 (internet based) or 525 (paper based) or 190 (computer based).
2. Submission of scores of International English Language Testing System (IELTS) with a minimum of Band 6.
3. Submission of results of Michigan Test of English Language with a minimum score of 80.
4. An international student who has been enrolled as a full-time student at another college or university in the United States may request consideration of fulfillment of this requirement on an individual basis.
5. Other evidence will be considered on an individual basis.

Before admission is granted, an international student must provide proof of financial ability to meet cost of tuition, fees, books, living accommodations, health insurance and incidental expenses for at least one full year.

Costs, additional information, and forms may be obtained from the International Counselor.

International transfer students must provide the appropriate transcript of courses (or grade reports, exam results, degree awards, depending on the standard of the particular country) before transfer credit can be determined. Original documents must be presented. Documents that cannot be replaced will be returned to the student once evaluation is complete. Documents in English are preferred but those in other languages will be accepted when accompanied by an official, verified translation. In most cases, course descriptions or syllabi are required to determine content of individual courses.

Undergraduate Admission Procedures for Non-Degree Seeking Students

Students who do not wish to pursue a degree or certificate at Mesa State College may apply as non-degree seeking rather than being formally admitted to the College. This includes those students who wish to enroll in Mesa State College courses while away from their "home" institution, such as during summer and January terms. Policies and guidelines include:

1. Applicants must complete the Mesa State College Application for Undergraduate Admission, checking the non-degree seeking student box, and submit it along with a non-refundable $30.00 application fee.
2. Students who do not wish to pursue a degree or certificate are not required to submit high school or college transcripts or test scores.
3. Non-degree seeking students are not eligible for financial aid or scholarships and will not be assigned an advisor.
4. Non-degree seeking students must consistently earn a minimum semester grade point average of 2.00 while enrolled at Mesa State College.
5. Non-degree seeking students who earn 30 semester hours at Mesa State must apply for admission to Mesa State College as a degree seeking student.
6. Degree seeking students will have priority over non-degree seeking students regarding registration.
7. Non-degree seeking students are advised that courses taken during non-degree seeking status are counted against the state's current allowance of 145 semester credit hours through the College Opportunity Fund (COF).

Non-degree seeking students have not been formally admitted to Mesa

State College and are not guaranteed admission should they later make formal application as degree seeking.

Once non-degree seeking students apply formally for degree seeking status at Mesa State College, the admission policies in effect at the time of formal application will be used to determine admissibility into the college and general and/or specific academic programs. This includes satisfying all requirements for admission as summarized in the admissions table found earlier in this section.

Immunization Policy for Measles, Mumps, and Rubella

Colorado State Immunization Law states that after July 1, 1992 all college students (now including those students over twenty) born since January 1, 1957 must have two (2) measles, two (2) mumps, and two (2) rubella doses. If the student received a second measles dose prior to July 1, 1992, the second mumps and rubella are not required.

Written evidence of titers (blood tests) showing immunity to measles, mumps, and rubella is acceptable. If the student completes an exemption form and an outbreak occurs, the student will be subject to exclusion from school.

Selective Service

Any male student born on or after January 1, 1960 wishing to attend classes at Mesa State College must attest to his registration or exemption from registration with the Selective Service. This testimony must be done prior to initial registration.

Veterans

Programs offered by Mesa State College, with certain exceptions, are approved by the Community College and Occupational Education System for the education and training of those veterans and dependents of veterans eligible under applicable public laws. A veteran or dependent planning a course of training in a special program not described in the College catalog or identified as approved for veteran's benefits should check with the VA certifying official before enrolling in such a program, if benefit assistance is desired.

Veterans and dependents who plan to apply for VA benefits while attending Mesa State College should contact the Registrar's Office as soon as the decision to enroll is made. Application for benefit assistance must be made at least two months prior to initial registration if the advance benefit check is to be received on the first day of class. Without this advance application, the student must make other financial arrangements and be prepared to finance tuition and fees, books, supplies, and living expenses for at least two months. Ten weeks is the minimal processing time required for the Veterans Administration to establish an applicant's file. Further information may be obtained from the VA certifying official in the Registrar's Office.

Credit may be granted for experience and training gained during active duty in the armed forces. Students must submit appropriate discharge papers, transcripts, and certificates of completion to the Registrar's Office. All credit granted will be lower division credit.

Concurrently Enrolled High School Students

Currently enrolled high school juniors and seniors may register for college-level classes that are not replicated through the school district curriculum as provided for through the Postsecondary Enrollment Options Act (PSEO). Through Mesa State's High School Concurrent Enrollment Program, high school students may access college-level courses either on a Mesa State campus or in local high schools who participate in MSC's Early Scholars Program. Students enrolling through Colorado's Fast Track Program must have completed all high school graduation requirements.

Early Scholars Program
To participate in the Early Scholars Program, students must be of junior or senior standing and be currently enrolled in high school (public, private, or home-school) and meet all of the following in order to be considered:

1. 3.0 or higher cumulative grade point average;
2. Grades of "B" or higher in at least two courses in the academic area to be taken;
3. ACT reading score of 19 or higher;
4. ACT English score of 19 or higher; or SAT Verbal score of 470 or higher; and
5. ACT Math score of 19 or higher; or SAT Math score of 470 or higher.

Note: Students must take the Accuplacer placement assessment if the above tests have not been taken. Accuplacer may be scheduled by contacting the College's Testing Center at 970-255-2750. Accuplacer also is available on-line at a cost of $15 per section.

In some cases, the school district or the Department of Education will pay the tuition of the student to attend Mesa State College (summer school excluded). Students (or parents or legal guardian if student is a minor) are always responsible for payment of any and all fees, books, and supplies as well as payment of tuition not covered by the school district or the Department of Education. Students must give notice to the high school 60 days before the beginning of the semester they wish to enroll and have all information submitted to the Mesa State College Admissions Office.

Application Process
All students wishing to enroll concurrently at Mesa State College must be enrolled in high school (or, if home-schooled, be at the senior or junior level). The application process is as follows:

First-time Applicants
Qualified students must complete and submit the Early Scholars Application Form, the Student and Parent/Guardian Responsibility and Consent Form and the Registration Form along with all the following documents:

- high school transcripts (or, if home schooled, a grade report meeting such criteria);
- scores from the tests as previously outlined above;
- $30 non-refundable application fee (first-time applicants only); and

- proof of two measles, mumps & rubella vaccinations (not required for students enrolled in classes taken in their high school).

Please note: Applications cannot be processed until appropriate test scores have been submitted.

Returning Applicants
Students previously enrolled concurrently need only complete the Registration Form and the Student and Parent/Guardian Responsibility and Consent Form each semester. Updated transcripts and test scores as outlined above must also be submitted.

All concurrently enrolled students must adhere to the following guidelines:

- Upon course registration, students (or parents or legal guardian if student is a minor) incur a financial obligation to MSC.
- Students must maintain a grade of "C" or better in each class to continue in the Early Scholars Program;
- Normally, high school students are limited to a maximum of four classes per semester (science lectures and the corresponding labs are considered one class); however, school districts are obligated to reimburse for no more than two courses per semester. Fast Track students may take a maximum of 15 credit hours per semester.
- Concurrently enrolled students are ineligible to enroll in "Activity" courses. These are identified in the course descriptions as "KINA" classes. They also are not eligible for college activities or sports, and/or federal or state-funded financial aid including institutional scholarships.
- Concurrently enrolled students must apply for their College Opportunity Fund (COF) voucher by accessing cofweb.cslp.org/cofapp. This only needs to be done once. Colorado law requires a student to enter their State of Colorado driver's license or State of Colorado identification card information when applying for COF. Credits taken while a student is concurrently enrolled will count against a student's 145 COF credit hour maximum.

Mesa State College does not guarantee that the approved classes will be available upon registration. Before registering for a specific course, students must fulfill the prerequisites listed in the current Mesa State College catalog. For questions related to student admission into the Early Scholars Program, contact the Admissions Office at 970-248-1458.

Colorado Public Higher Education Admission Requirements

Effective with students who graduate from high school in spring 2008 and later, the admissions policy of the Colorado Department of Higher Education (CDHE) requires the completion of a precollegiate curriculum for admission to a four-year Colorado public college or university. The initial phase of the Higher Education Admission Requirements (HEAR) will be implemented in 2008, with a second phase to follow in 2010.

Beginning in 2008, transfer applicants with fewer than 30 college-level semester credit hours and students transferring within the same institution must also demonstrate academic preparation comparable to HEAR to meet the transfer standard if they graduate from high school in spring 2008 or later. Such preparation can be demonstrated by completing the pre-collegiate curriculum in high school and/or by successfully completing (with a grade of C- or higher) a college-level course in each core area (English, mathematics, natural sciences, and social sciences) where the high school unit requirements have not been fulfilled.

Details are available from the CDHE website at: highered.colorado.gov/academics/admissions/.

Mesa State Baccalaureate Admission Requirements

First-year students who are admitted to Mesa State College's four-year division must meet a minimum index score of 85. Students with an index of 75-84 may be offered provisional admission, provided that they enroll according to the following: 1) enroll for no more than 12 credit hours per semester; 2) be advised before registering; 3) satisfy all remedial requirements in the first 24 credit hours; and 4) register only in lower division courses. Once the student completes 24 credit hours with 2.0 GPA or higher, the student then may declare a major in a baccalaureate program. If unsuccessful, the student will be placed on academic probation, consistent with the college's current policy, and advised to enroll in a program in the community college division. Students with an index below 75 will be admitted automatically to Western Colorado Community College.

Residency Status for Tuition Purposes

A student's tuition classification is governed by state law. For further information regarding tuition classification, please see the Expenses section of this catalog, or contact the Tuition Classification Officer located in the Admissions Office at 970-248-1458.

Confirmation of Attendance

Admitted students (first-time freshmen and first-time transfers) will receive a packet of information regarding the student's "next steps." The packet highlights important dates, housing information, payment information, student orientation dates, important phone numbers and many other necessary details about enrolling at Mesa State College. Contained within this packet is an Enrollment Reply Card and tuition confirmation information.

As soon as a student knows that they will be enrolling at Mesa State College, he/she should submit the Enrollment Reply Card stating their intent to enroll. If an admitted student plans to attend a different college, he/she can use the Enrollment Reply Card to notify Mesa State. The Enrollment Reply Card also requests a $50 deposit, which will be applied directly towards a student's tuition. The deposit will be refunded if the student also has withdrawn from all courses for which they registered prior to the end of the add/drop period.

Undergraduate Admission Assessment and Counseling Tests

ACT or SAT

Scores from either the ACT or the SAT are required of all degree-seeking students attending Mesa State College, except in certain cases as detailed below. Test scores must be on file in the Admissions Office before official acceptance is granted. Certificate seeking students are not required to have ACT or SAT scores on file or to have taken the alternative assessment test (see Alternative Admission Assessment section below). A student's attainment of a certain ACT composite score, or SAT combined score is one of several criteria considered for admission. Certain programs, including Radiologic Sciences, may require a minimum ACT or SAT score. For specific requirements, contact the appropriate academic department head.

ACT and SAT test results also are used by the student and advisor as the basis for planning a course of study and as an aid in academic placement. Supplemental academic assistance is provided on a limited basis for those whose test scores indicate weaknesses or deficiencies in certain areas such as English and mathematics. ACT and SAT scores also may be used for scholarship consideration and institutional research.

The only exemptions to this admission requirement are for:

1. Students who are 23 years of age or older when they apply for admission to a two-year program;
2. Students enrolled only in no-credit desired/audit classes;
3. Students who have already earned an associate or baccalaureate degree at another regionally accredited institution;
4. Students who are transferring from other regionally accredited colleges or universities with 30 or more semester hours of credit. This does not apply to applicants to the Nursing and Radiologic Sciences programs and any other programs that may require a specified ACT or SAT score as an entrance requirement.

Prospective students are encouraged to take the ACT or SAT during their high school junior or senior year. Transfer students (unless exempt) are required to have their ACT or SAT scores on file in the Admissions Office prior to registration. ACT or SAT scores from a previous college or university are acceptable.

A special residual ACT test is scheduled prior to registration each semester for applicants seeking admission to Mesa State College but did not take the ACT on one of the national test dates. A prepaid, non-refundable testing fee of $80 is due no later than one week prior to the examination date and will be collected by the Testing Center. Test results are reported directly to the Admissions Office. ACT residual scores are used for admission to Mesa State College, are not transferable to any other institution, and are not NCAA approved for athletes. Test results will be available to the student's advisor during registration. Contact the Academic Advising Center for further details.

Assessment and Evaluation After Enrollment

Students are required to participate in testing and other programs necessary for evaluation and assessment purposes. Please see the Learning Progress Evaluation section in this catalog.

Acceleration of College Study

It is possible for students to satisfy requirements for baccalaureate degrees in less than the traditional four years (eight regular academic year semesters). Ways of accomplishing this include: enrolling in college classes while a junior or senior in high school; exceeding the normal course load at Mesa State College or elsewhere; challenging by examination courses in which competence has previously been attained; earning credit by testing through the College Level Examination Program (CLEP), DANTES and/or Advanced Placement; obtaining credit for work experience (competency credit). Additional information may be obtained from the Advising & Career Center, faculty advisors, or the Registrar's Office.

New Student Orientation

All new degree-seeking instate freshmen are required to attend a Student Orientation program in order to register for their first semester courses. Although not required, new degree-seeking transfer students are strongly encouraged to attend as well. Information regarding Student Orientation will be mailed to students upon notification of acceptance and also can be found on the Mesa State website at: mesastate.edu/so.

For proper academic advising and course placement, new students with low ACT or SAT scores must be assessed with a second instrument prior to a Student Orientation session. The instrument is called ACCUPLACER, and the student's ACT or SAT cut scores determine whether they need to take it. To schedule an assessment, or to determine if the student needs to take it, please contact the Testing Center, 970-255-2750.

Students must be admitted prior to attending Student Orientation. For more information, call 970-248-1875.

New students to Mesa State are strongly encouraged to participate in one of the Welcome Week programs offered at the beginning of fall and spring semesters to introduce new students to the campus, fellow classmates, and the College's programs and facilities. Parents of graduating high school students are encouraged to attend the Welcome Week program.

New students are also strongly encouraged to enroll in the College's Freshman Year Initiative (FYI) program or SUPP 101-Introduction to Higher Education to maximize their potential for success in college. For more information, see the College-Wide Academic Offerings section of this catalog, visit mesastate.edu/fyi or call 970-248-1458.

Financial Aid Information

Contact: Office of Financial Aid, Mesa State College, Lowell Heiny Hall Room 117, 1100 North Avenue, Grand Junction, CO 81501-3122 • Call toll free 800-982-MESA or 970-248-1396.

Overview

Financial aid at Mesa State College consists of a balanced program of self help, scholarships, and grants-in-aid awarded for outstanding academic achievement or outstanding performance in special skill areas including vocational skills, athletics, drama, music, etc. Mesa State College also participates in federal and state programs of grants, loans, and student employment, the awarding of which is based primarily on need as determined by a needs analysis system approved by the federal government. The application used to determine need is the Free Application for Federal Student Aid.

Financial aid awards that are based on the needs analysis system consider family resources as the primary source of funding for education, with federal and state sources considered secondary and supplemental. Because prospective students always apply for more financial aid than there is money available, the following priority order is used:

1. As stated in federal law, a parent is primarily responsible for payment of educational expenses of a dependent child. Thus, parents of students attending college are expected to make every effort to assist the student financially.
2. The student, as the benefactor of the educational experience, is the next most responsible person for payment of educational expenses.
3. The third level of responsibility is from outside sources such as communities, clubs, corporations, etc.
4. The last resort is federal and state financial aid programs. There has never been enough funding to assist all needy students. Therefore, students should make every effort to obtain assistance at one of the three levels listed above.

Accurate and timely information from the student and parents to the Financial Aid office is the responsibility of the student. Failure on the part of the student to supply accurate information on the application may result in reduction or total loss of aid.

Tuition Payment Plan

Mesa State College provides a payment program designed to meet the specific needs of students and parents. Semester charges for tuition, fees and institutional room and board can be paid in monthly installments, beginning in July (for fall) and in December (for spring). There is a non-refundable application fee, due at the time of enrollment. Contact the Business Office for more information.

Scholarships

Scholarships represent an effort by the state of Colorado and Mesa State College to recognize resident and non-resident students for outstanding achievement in academic and talent areas. Although need is not a factor in determining recipients, students who are awarded a scholarship are also encouraged to submit a financial aid application. While there is not a separate academic scholarship application, students may choose to submit an optional essay.

After a student has been admitted to Mesa State College, they will automatically be reviewed for academic scholarship awarding. For more detailed information on academic scholarships, please call the Admissions Office at 970-248-1875 or the Financial Aid Office at 970-248-1396. For detailed information regarding talent scholarships, please contact the appropriate academic department.

Colorado Student Aid Programs

Available to full-time, half-time and part-time students with priority given to full-time students.

1. **Colorado Grants**—Grants are awarded to Colorado resident students on the basis of documented financial need. Financial aid packages which include Colorado Grants may not exceed the documented financial need of the student.
2. **Colorado Work-Study**—The Work-Study program is designed to provide employment on campus for students with documented need and who meet the residency requirement for tuition purposes.
3. **Colorado Leveraging Education Assistance Partnership (CLEAP)**—This is a program wherein a portion of the grant to a student is provided by the state of Colorado and the other portion by the federal government. Awards are made only to Colorado resident students with need.
4. **Supplemental Leveraging Educational Assistance Partnership** This is a program wherein a portion of the grant to a student is provided by the State of Colorado and the other portion by the Federal government. Awards are primarily for Colorado residents seeking a teaching degree. Priority is given to students with documented need and who are completing their internship.

MSC Foundation Programs

The Mesa State College Foundation is a non-profit organization governed by a Board of Directors. The board is comprised of talented and successful business and community leaders who recognize the College's pivotal role in the future of our state and wish to aid deserving students at Mesa State College. This group, which functions independently of the College, raises funds for scholarships, student loans, and a variety of programs that enhance opportunities provided by the College. In addition, the foundation serves as a receiving and distribution agency for many established scholarships available to the students at Mesa State College.

Private Scholarships—In addition to institutional scholarships, many scholarships and awards have been established for students of the College by individuals and organizations who recognize the importance of Mesa State to the community and have a connection to the College. The

amounts of the awards vary, but all are designed to apply toward tuition and fees. Contact the Financial Aid Office for additional information.

Federal Student Aid Programs

1. **Federal Pell Grant Program**—This is a grant program available to needy students enrolling in an eligible institution of post-secondary education. The Pell Grant Program is the base program for financial aid at Mesa State College.
2. **Federal Academic Competitiveness Grant Program**—This is a grant program available to needy, Pell Grant eligible, freshman and sophomore students who have completed a designated program of study in high school. Students must be U.S. citizens and maintain a 3.0 minimum GPA.
3. **Federal SMART Grant Program**—This is a grant program available to needy, Pell Grant eligible, junior and senior students with specific academic majors. Students must be U.S. citizens and maintain a 3.0 minimum GPA.
4. **College Based Programs**—Mesa State College participates in many other federal student-aid programs. These include the (1) Federal Perkins Loan Program, (2) Federal Supplemental Educational Opportunity Grant Program, (3) Federal Work Study Program.
5. **Federal Family Education Loan Program**—This is a loan program consisting of the Federal subsidized and unsubsidized Stafford Loan Program and the Federal Parent Loan for Undergraduate Students (PLUS). Details concerning these programs may be obtained from the Financial Aid Office.
6. **Federal Teach Grant**—This is a grant awarded to students in exchange for teaching service. Details concerning this program may be obtained from the Financial Aid Office.

General Guidelines

Financial need for educational expenses is an essential requirement to qualify for assistance from most programs. Students who must have financial aid in order to secure a college education are encouraged to contact the Financial Aid Office for necessary information and application forms. Both full-time and less than full-time students will receive consideration.

Since financial need is the primary requirement for determining eligibility for assistance under any of the federal student aid programs, Mesa State College requires that the student applicant submit the proper application to the federal processor as soon as possible after January 1. FAFSA on the Web is available at www.fafsa.ed.gov. A paper application is available from high school counselors or may be obtained by writing the Financial Aid Office at Mesa State College.

Stafford Student Loans are initiated with the FAFSA application but require an additional Master Promissory Note. The MPN is available in electronic form from the Financial Aid page of the Mesa State College website at mesastate.edu.

Students must maintain satisfactory academic progress as noted with the award Notification to remain eligible for financial aid.

Western Undergraduate Exchange (WUE)

Western Undergraduate Exchange (WUE) is a program which, if awarded, allows students from 14 western states to attend Mesa State College at a reduced tuition rate. Students who are residents from the states of Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming are considered for the award; however, acceptance into this program is not automatic. There is no separate application for WUE; eligibility is determined from information obtained in a student's admission packet. To be considered for this award, students must be admitted to the College as a new freshman or transfer degree-seeking student in a certificate, associate, or baccalaureate program and provide a copy of their current state driver's license. If awarded, students will receive an award letter outlining the following requirements:

- register in a minimum of 12 credit hours each consecutive fall and spring semester;
- maintain a minimum 2.0 cumulative Mesa State College GPA each academic year, excluding the summer session; and
- complete the WUE reapplication process through the Admissions Office prior to each fall semester. A reapplication letter will be sent to each eligible continuing WUE student in June of each year.

WUE is not available to students during the summer session. Time accrued while receiving the WUE award will not contribute toward the length of time required for establishing Colorado residency status. For more information, contact the Admissions Office at 970-248-1458.

Mountains and Plains (MP)

Mountains and Plains is a program which, if awarded, allows students to attend Mesa State College at a reduced tuition rate. Students from Iowa, Kansas, Missouri, Nebraska, Oklahoma, and Texas are considered for the award; however, acceptance into this program is not automatic. To be considered for this award, students must be admitted to the College as a new freshman or transfer degree-seeking student in a certificate, associate, or baccalaureate program and provide a copy of their current state driver's license. If awarded, students will receive an award letter outlining the following requirements:

- register in a minimum of 12 credit hours each consecutive fall and spring semester;
- maintain a minimum 2.0 cumulative Mesa State College GPA each academic year, excluding summer session; and
- complete the MP reapplication process through the Admissions Office prior to each fall semester. A reapplication letter will be sent to each eligible continuing MP student each June.

MP is not available to students during the summer session. Time accrued while receiving the MP award will not contribute toward the length of time required for establishing Colorado residency status. For more information, contact the Admissions Office at 970-248-1458.

Expenses at Mesa State College

Mesa State College reserves the right to adjust any and all charges, including tuition, fees, and room and board, at any time deemed necessary by the Board of Trustees.

Determination of Residency Status for Tuition Purposes
Tuition classification is governed by state law (Colorado Revised Statutes, Sections 23-7-101 to 104 and 23-7-105) and by judicial decisions that apply to all public institutions of higher education in Colorado. Mesa State College does not have discretion to make exceptions to the rules that are defined by state law. Although an individual may be considered a state resident for voting and other legal purposes after being in the state for a short period of time, the tuition law specifies additional requirements for classification as "in-state" for tuition purposes. A detailed informational brochure regarding tuition classification is available in the Admissions Office, Registrar's Office, and via the MSC website in PDF downloadable format at mesastate.edu (click on Prospective Students, Admissions, Admission Forms, and choose Tuition Classification Information in the drop-down box).

Initial tuition classification is determined from information a student supplies on an application for admissions to Mesa State College. Failure to answer all questions may lead to an initial classification of out-of-state. A student's residency status will be stated within their admissions letter. New students who feel their classification is incorrect should contact the Admissions Office immediately. Continuing Mesa State students who believe they have subsequently met requirements for in-state status must submit the Petition for In-State Tuition Classification with supporting documentation; a change in classification is not automatic. Petitions and supporting documentation must be submitted to the Admissions Office, Attention Tuition Classification Officer. Students must comply with the following published deadlines for submission of a Petition for In-State Tuition Classification; petitions submitted after a deadline will not be considered for the given term.

Emancipation
According to Colorado statute, physical presence and intent to be a permanent resident of Colorado must be established for 12 months prior to the first day of class for the qualifying term. The domicile of a student's parent determines residency for any student who has not yet reached the age of 23, unless the student can establish that he/she is emancipated. Students under the age of 23 who wish to be considered without parental information must submit a Petition for In-State Tuition Classification for review. Emancipation for students under the age of 23 may be established if a student is married, financially independent, or is a single parent. If a student can prove emancipation, then the student must complete the Petition for In-State Tuition Classification and attach their supporting documentation when requested.

Should circumstances change affecting a student's tuition status after a petition is approved, notification of such change must be provided to the Tuition Classification Officer in writing within 15 days after such change.

Residency Appeals
Students who do not agree with the decision of the Tuition Classification Officer after review of their residency status may appeal the decision. Appeals must be made in writing and directed to the Tuition Classification Officer no later than 15 days from the date the denial decision letter was mailed to the student. The decision of the Residency Appeals Committee is the final determination. For further residency-related questions, contact the Tuition Classification Officer in the Admissions Office at 970-248-1458.

Petition Deadlines for Residency Status

SEMESTER	SUBMIT YOUR PETITION QUALIFYING CUT-OFF DATE*	NO EARLIER THAN…	BUT NO LATER THAN PETITION DEADLINE OF…**
Fall 2008 Semester	1st day of class	June 23, 2008	August 4, 2008
Spring 2009 Semester	1st day of class	November 14, 2008	January 5, 2009
Summer 2009 session	1st day of class	March 16, 2009	2 weeks prior to 1st day of class
Fall 2009 Semester	1st day of class	June 29, 2009	August 3, 2009

* Qualifying Cut-off Date: The date by which the 12-month physical presence period must have expired in order to possibly be classified in-state for the specified term. The 12-month period begins after a student has completed their move to the State of Colorado and has severed ties to their previous state of legal domicile, not merely when a student arrives in Colorado.

** Petition Deadline: The Tuition Classification Officer, located in the Admissions Office, must receive fully completed petitions by this date in order to be considered for the semester in question. Petitions received after this date will not be considered for the semester in question. Because a 12-month physical domicile must be proven, petitions will not be reviewed prior to the "No Earlier Than" date listed above.

Tuition and Fees

The State of Colorado allocates money for Colorado in-state undergraduates to help offset the total tuition of their college education. The state's share of in-state tuition—paid from the College Opportunity Fund (COF)—is available for students once the student signs up for a COF voucher account and authorizes their Mesa State College registration. The funds for the COF voucher will be sent directly to the institution. Students are then responsible only for their remaining share of total tuition.

Most in-state undergraduates qualify for participation in the program. Qualifications and the amount of the voucher are subject to actions by the Colorado General Assembly. Additional details are available in Mesa State's current course schedule and on its website at mesastate.edu.

To create a COF voucher account, a student must register at cofweb.cslp.org/cofapp/ and provide a limited amount of information. Note that the process of creating a voucher account is separate from applying for admission to Mesa State and can be completed at any time prior to enrolling. Qualifying students who do not establish an account into which the voucher can be deposited are responsible for both the state's and the student's share of tuition.

Tuition and fees for the 2008-2009 academic year are current as of the time that this catalog was printed. Students should check the College's website for the most current rates and information. Note that summer term pre-registration is held at the same time as pre-registration for fall term and follows a separate policy regarding refunds.

Tuition and Fee Schedule

The tuition rates and student fees shown below are for academic year 2008-2009; all rates are subject to change by the College's Board of Trustees. Rates can be found online at mesastate.edu/enrollman/finaid/tuition.htm.

Examples:

A. Undergraduate who is full-time, in-state, COF-eligible
(Note: 12 credit hours is full-time for financial aid purposes)

	Per Semester
Total tuition for 12 credit hours each term	$2,957.40
Less COF (state's share of tuition)	-$1,104.00
Equals student's share of tuition	$1,853.40
Plus general purpose student fees	$170.12
Equals total due from student	$2,023.52

B. Undergraduate who is full-time, out-of-state, non-COF-eligible
(Note: 12 credit hours is full-time for financial aid purposes)

	Per Semester
Total tuition for 12 credit hours each term (= student's share of tuition)	$5,613.48
Plus general purpose student fees	$170.12
Equals total due from student	$5,783.60

C. Undergraduate who is part-time, in-state, COF-eligible

Tuition per credit hour	$246.45
Less COF per credit hour (state's share of tuition)	-$92.00
Equals student's share of tuition	$154.45
Plus general purpose student fees*	$13.76
Equals total due from student per credit hour	$168.21

D. Undergraduate who is part-time, out-of-state, non-COF-eligible

Tuition per credit hour (= student's share of tuition)	$467.79
Plus general purpose student fees*	$13.76
Equals total due from student per credit hour	$481.55

E. Graduate student who is in-state

Tuition per credit hour	$182.21
Plus general purpose student fees*	$13.76
Equals total due from student per credit hour	$195.97

F. Graduate student who is out-of-state

Tuition per credit hour	$546.80
Plus general purpose student fees*	$13.76
Equals total due from student per credit hour	$560.56

***General purpose student fees are per credit hour. There is an additional $5.00 fee per semester, per student for student activities.** Refer to the Mesa State College Student Handbook for a complete breakdown of the general purpose student fees.

A one-time matriculation fee of $125.00 will be assessed. This fee takes the place of add/drop fees, transcript fees, graduation fees, etc. A surcharge equal to the appropriate credit hour tuition rate will be assessed per semester for each credit hour over 16.

Student Liability for Tuition and Fees
Upon registration students (or parents or legal guardian if student is a minor) incur a financial obligation to Mesa State College. Anyone who registers for one or more classes is expected to pay the full amount of tuition and fees, unless they officially withdraw by the specified deadlines listed in the Course Schedule. All charges are due and payable on the first day of class. A 1% service charge will be assessed each month on all outstanding balances. No student will be allowed to register for classes, graduate or receive transcripts until their account is paid in full.

Students are liable for additional late fees and/or collection costs, including attorney fees and other charges necessary for the collection of any overdue financial obligation incurred by the student.

Student financial information is available on the Mesa State College website. If you have any questions, contact the Business Office at 970-248-1567.

Other Fees and Expenses

Books and Supplies
Required textbooks and supplies are sold at the college bookstore, located in the Campbell College Center. Other items sold at the bookstore include general books, art supplies, basic school supplies, calculators, imprinted clothing, magazines, software and gift items.

The approximate cost of textbooks for a single semester is $500-$600 but varies with the program of study. Supply costs vary depending upon student preference and course requirements.

Textbooks may be returned within seven calendar days of purchase, provided the cash register receipt is shown as proof of purchase and the books have not been defaced. Extended return dates at the beginning of fall and spring semesters are posted in the bookstore and on the website.

The bookstore sponsors a book buy-back program that is conducted during the final examination week of fall and spring semesters only. Used books may be available for some classes.

Application, Evaluation, and Other Fees

Non-refundable fees:	
Undergraduate Application and Evaluation Fee	$30.00
Graduate Application and Evaluation Fee	$50.00
Matriculation Fee	$125.00
Housing Application Fee	$25.00
Other fees:	
Room Reservation deposit/damage deposit	$125.00
Tuition Confirmation deposit	$50.00
Parking Permits:	
Reserved	$250.00
Residence Hall	$100.00
Commuter	$90.00
Motorcycle	$30.00
Pay Lots	$1/hour

Permits are valid for a full academic year.

Course-Specific Fees
When private and special instructional services are required, additional charges will be incurred by the student. Fees vary with the nature of the instruction. Private instruction in applied music is available from instructors approved by the college. Cost of this instruction is regular per credit hour tuition plus a specified amount for one thirty-minute lesson each week. Other special instructional services and courses that may require students to pay extra fees include labs, program-specific fees, courses with transportation fees for field trips, locker and towel facilities and kinesiology classes such as bowling, skiing and golf.

Student Health Insurance
Student health insurance (major medical) is available each semester. Students must complete an enrollment form and submit it with payment to the Business Office by the established deadline each semester. Additional coverage is available for spouse and children. Rates are established by insurance provider and vary based on coverage selected. Inquire at the Business Office in Lowell Heiny Hall.

Personal Computer Recommendation
Mesa State College recognizes the importance of computers as educational tools to be used in the pursuit of higher education. Students are strongly encouraged, to the extent possible, to have a personal computer for their use while attending Mesa State.

Students who will be purchasing a personal computer should consider the following specifications. By doing so, students will be able to complete most course work in the privacy of their own room/home.

Suggested specifications: Computer that runs Microsoft Windows; with modem and CD-ROM drive; and good letter quality printer.

Software: Students may be required to purchase specific software for specific courses. In some cases, students will purchase software along with the textbook used for the class at a nominal cost. Students should not purchase software until advised by instructors.

Students majoring in Mass Communication (Broadcasting, News/Editorial, Print Media, Public Relations/Advertising) or Graphic Design mainly use Apple Macintosh. Majors are encouraged to consult with the appropriate department before purchasing a computer.

Refunds of Tuition and Fees
Refunds are prorated based on withdrawal dates and vary each semester. Please see current course schedule for more information.

Student Financial Planning
If students need assistance with payment arrangements, financial planning and financial management, please contact the Student Financial Counselor at 970-248-1873, Lowell Heiny Hall, Room 112.

Matriculation Fee for New Undergraduate, Transfer, and Graduate Students
First-time students to Mesa State College will be assessed a one-time, $125 matriculation fee in addition to the published tuition and fees for the courses unless they are accepted as non-degree seeking at Mesa State College. This fee covers add/drop, career placement, credential (resume) services, graduation (petition), Maverick card, transcripts, and orientation.

Student Housing and Meal Plans

On-campus living offers many advantages and choices. The location makes class attendance and activity participation very convenient for Mesa State students. In addition, living on campus relieves the students of many time-consuming responsibilities that enable them to devote more energy to their studies, recreational activities, and making new friends. The many choices that we offer within our housing help create different opportunities and experiences for you, the student.

Each residence hall and apartment complex is staffed with a resident director and resident assistants who are trained to help students. These staff members aid residents in adjusting to college life, explaining policies, answering questions, and anything else associated with college life. The Housing Office is available to help students make arrangements for residency and meal plans, answer questions, receive suggestions, and assist students with any housing-related concerns or interests.

Housing Choices

There are several choices of on-campus housing available:

1. Three traditional residence halls which require a meal plan (most rooms are designed for double occupancy, although there are a limited number of single rooms). Within these halls we have one all female hall, one all male hall and one co-ed hall;
2. A suite style residence hall with four people per suite that share one bathroom. This hall requires a meal plan;
3. A suite style residence hall that houses 6-8 people in a mixture of single, super single and double bedrooms – along with sharing two bathrooms and a living area. This hall requires a meal plan;
4. Apartment complex, available for sophomores, juniors, and seniors. This gives you the true apartment feel, while being on campus and close to everything at Mesa State.

Student Housing and Dining Contract

Students who wish to apply for accommodations on campus are required to submit a $150 deposit (for the current 2008-2009 academic year) with their signed contract and completed housing application. On-campus housing is not guaranteed, as availability is limited to 1290 students. The deposit includes a $25 non-refundable application fee. Housing assignments will be made by early May.

The Student Housing and Dining Contract is a legal agreement between the student and Mesa State College regarding residency and meal plans on campus. The contract is in effect for the entire academic year. These services, however, are billed and payable by semester. The schedule for room and meal plan refunds is outlined in the contract. Both parties assume the rights and responsibilities outlined in the Student Housing and Dining Contract and all supporting documents upon acceptance of the contract by Mesa State College.

Housing Requirement

Freshman and sophomore students who are under 21 years of age and not residing with their parents in Mesa County are required to live on campus. However, space is limited and priority is based on the date the complete housing application and deposit are received in the Housing Office. A student may qualify for exemption from the on-campus requirement for definite reasons expressed in writing and approved by the Department of

Housing and Residence Life. Reasons include:

1. Married; or
2. 21 years of age or older; or
3. A part-time student (enrolled for less than 12 hours per semester); or
4. Residing at the permanent address of his/her parents or step-parents within Mesa County; or
5. Of junior class standing as of the beginning of the semester; or
6. Not of junior standing, but has resided in the Mesa State College residence halls for four semesters; or
7. Medically excused (with written documentation from a medical doctor); or
8. Placed on a waiting list due to limited space on campus.

Questions concerning housing on campus should be directed to the Housing Office at 970-248-1536 or email housing@mesastate.edu.

Off-campus Housing

The college has no jurisdiction over off-campus housing but attempts to assist students in locating housing. The Housing Office posts weekly updates of "Almost Home" listings. "Almost Home" is a Grand Junction community service for listing rental properties and roommate exchange. The listings are posted at www.catholicoutreach.org. Properties are not religiously affiliated.

Campus Dining

Campus Dining Services offers food service to students at Mesa State College which includes a choice of two meal plans:

Plan A, unlimited meals between 6:45 a.m. and 7:00 p.m., or

Plan B, unlimited meals between 10:30 a.m. and 7:00 p.m.

Multiple entrees are served with unlimited seconds. Only two meals are served on Saturday and Sunday (brunch and dinner). Both meal plans have full access to brunch and dinner 10:30 a.m. to 1:30 p.m. and 5:00 p.m. to 7:00 p.m. Meals are planned with special needs in mind also, such as for the weight-conscious or vegetarian.

Students living in the residence halls may select the meal plan of their choice but are required to choose one. Students living in the apartments and/or not living in the residence halls may, if they wish, purchase meal plans and/or Mav money. Meals are served seven days per week during the academic year with limited meals during short breaks. Commuter students are welcome to purchase any of the resident student meal plans, or try one of our commuter plans. Call 970-248-1742 for more information on dining services.

Room and Board Charges

All rates are per semester, per student

Pinon, Rait, & Tolman Residence Halls:
Double room (per student) $1,891.74*
Single room (per student) $2,576.77*

Monument Residence Hall:
Double suite (per student) $1989.76*

Grand Mesa Residence Hall:
Double room (per student) $2,458.41*
Single room (per student) $2,722.99*
Super Single (per student) $2,988.65*

Walnut Ridge Apartments:
Double room (per student) $2,087.77*
Single room (per student) $2,740.13*

* A $40 per semester charge will be added to all residents' accounts for a non-refundable housing activity fee.

Meal Plans

All rates are per semester

Meal plans are available to all students and mandatory for those living in a residence hall. Each meal plan includes $175.00 in Maverick Money.

Plan A – Unlimited, 6:45 a.m. - 7 p.m.
$1,785.81

Plan B – Unlimited, 10:30 a.m. - 7 p.m.
$1,676.14

Contact Information

Mail: Housing and Residence Life
Mesa State College
1100 North Avenue
Grand Junction, CO 81501
Phone: 970-248-1536
Fax: 970-248-1979
Email: housing@mesastate.edu
Web: mesastate.edu/housing

Academic & Student Services, Offices, & Activities

Contact: Office of Academic Affairs, 970-248-1881
Office of Student Services and Outreach, 970-248-1366

Admissions Office
1100 North Avenue,
800-982-MESA or 970-248-1875
The Admissions Office serves as the initial point of contact for prospective students and their families. Among the staff's responsibility is the recruitment of students and the processing of admissions applications and petitions for changes to residency classification for tuition purposes. Activities of the College's student ambassadors are also coordinated through this office.

Advising and Career Center
Lowell Heiny Hall, Room 127,
970-248-1177
Advising is available from two sources: the Advising & Career Center staff and the faculty. The Advising & Career Center assists students with undeclared majors; students who have declared majors should meet regularly with a faculty advisor. In addition, the Center assists employers in implementing recruitment strategies and supports Mesa State faculty with advising and career resources.

Undeclared students are assigned to the Advising & Career Center and must meet with an advisor prior to registration. Academic advisors guide students in scheduling classes that will count towards general education requirements and in career exploration. Students who have determined a major will be directed to the appropriate academic department. A department's administrative assistant can officially declare/change the student's major/minor, provide a program sheet, and assign the student to a faculty advisor.

Program sheets outline the requirements of the degree or certificate program being pursued. Students should work closely with their faculty advisors throughout enrollment at Mesa State College. The purpose of an advisor is to assist in the process of degree completion. It is the student's responsibility to maintain his/her program sheet and to keep it up-to-date as classes are completed. Advisors are not responsible for failure to meet degree requirements.

The Advising & Career Center provides the following services, free of charge, to students and alumni*:

- Academic Advising
  - New incoming freshmen
  - Non-degree seeking students
  - Undeclared returning students
  - Students considering changing their major
- Career Counseling
- Career Assessments
- Career Fairs
- Cover Letter & Resume Development
- Employment Preparedness Workshops
- Internship Information
- Major and Minor Selection
- Mock Interviews
- On- and Off-Campus Job Listings
- Referrals for Personal Counseling

*Some restrictions may apply.

Information about career fairs is posted to the Advising & Career Center website at mesastate.edu/sl/acc. The Center actively invites selected companies to visit Mesa State College to conduct on-campus recruiting. Recruiting

information will be advertised with posters, flyers, e-mails, and class announcements.

Behavioral Clinical Services (BCS)
2004 N. 12th Street, Suite 47,
970-241-6500

Counseling Services
Counseling services are contracted by Behavioral Clinical Services (BCS). All students paying student fees are eligible for free counseling sessions each academic year. Referrals can be made through any office on campus and/or students may contact BCS directly for an appointment. All sessions are confidential. Students dealing with personal problems affecting their academic life are encouraged to talk with a professional counselor.

Alcohol/Drug Education
(Minor in Possession Group)
This program is designed for alcohol and drug abuse intervention and prevention. The College, which is an active participant in the Mesa County Prevention Policy Board, supports the concepts of proactive prevention and intervention as part of the College's overall policy of maintaining a safe and healthy campus. The Minor in Possession Group classes will consist of understanding the effects of binge drinking, drinking and driving, and the use of marijuana, methamphetamine, club drugs (GHB, ecstasy), and tobacco.

Clubs, Organizations, and Activities
College Center, 970-248-1758
Many student clubs and organizations exist at Mesa State College. Student clubs include professional and academic clubs as well as social clubs. Currently Mesa State College has over 50 active clubs on campus including club sports, religious clubs, and support groups, which allow students to meet other students who share similar interests. A list of current active clubs and organizations can be viewed on the Mesa State College website, are listed in the Student Handbook, or are available at the College Center Information Desk.

There are also a number of student fee-funded organizations that are administered by Mesa State students including the following:

- Associated Student Government (ASG): ASG is the representative body and official voice of the students. The ASG operates through the General Assembly, a legislative body composed of students elected by the student body. Students involved in ASG have an opportunity to gain leadership skills by representing student opinions to the Mesa State administration and the College's Board of Trustees, and they are responsible for reviewing and administering student fee requests.
- Cultural Diversity Board (CDB): This student organization offers leadership experiences for students and organizes programs to educate students regarding multicultural concerns and issues. Member groups include the Black Student Alliance (BSA), Gay-Straight Alliance (GSA), *Ho'olokahi* Polynesian Club, International Student Association (ISA), *La Raza*, and the Native American Student Council (NASC).
- Fine Arts Organizations: All Mesa State students are encouraged to audition to join a musical group, participate in theatre, or be part of a dance performance. Performances in the arts are highly regarded at

Mesa State and are well attended by students and the community.

- Programming Activities Council (PAC): PAC is responsible for organizing entertainment activities including concerts, films, speakers, and dances. Events have included musicians, comedians, hypnotists, and speakers.
- Media Organizations: These organizations include the student newspaper *The Criterion*, the student radio station KMSA 91.3 FM, and the literary and art publication *Literary Review*. Each of these groups is professionally advised by faculty members and utilizes the latest equipment employed in their fields.
- Outdoor Program: This student group organizes trips and classes including whitewater rafting, rock climbing, and skiing. The rental center, located in the College Center, rents mountain bikes, canoes, kayaks, cross-country skis, backpacks, and other gear.

Educational Access Services
Houston Hall, Room 100,
970-248-1856
Support services for students with documented disabilities are available through Educational Access Services, a division of Academic Services. Several services are available, depending upon the documented disability. Services can include, but are not limited to, volunteer note takers, testing accommodations, and textbooks in alternate formats. Prospective students are encouraged to contact the Coordinator of Educational Access Services to discuss accommodations. Students must initiate a request for accommodations by contacting the EAS office. A new request must be made each semester.

Emergency Contact Services
Lowell Heiny Hall, Room 107,
970-248-1366
The Office of the Vice President for Student Services and Outreach, located in LHH 109, is the referral point for emergencies encountered by students. Issues such as messaging for emergencies while a student is in class are determined on a case-by-case basis. It is important to note that the office cannot guarantee a contact with any student due to their highly mobile behavior, but a good faith effort will be made. This service is not for non-emergency situations.

Financial Aid Office
Lowell Heiny Hall, Room 117,
970-248-1396
The Financial Aid Office works with students to meet educational expenses through various monetary resources. Depending on a student's qualifications, aid is available in the form of scholarships and grants that do not need to be repaid. Additionally, students can apply for loans that are need- or non-need-based as well as work-study employment.

Financial Planning Office
Lowell Heiny Hall, Room 112,
970-248-1873
If students need assistance with payment arrangements, financial planning and financial management, contact the Student Financial Counselor.

Health Center
1060 Orchard Avenue, Suite O,
970-256-6345
Good health, both physical and emotional, is an important factor in successful college work. It is the goal of the Mesa State College Student Health Center to provide competent, accessible medical care. Similar to the family physician, the Student Health Center provides a source of basic medical assistance for the student who is away from home.

Outpatient health services are provided for registered fee-paying students who have a valid student I.D. card regardless of the number of credit hours carried or insurance status. Students are required to pay a $15.00 co-pay for all services received at the Student Health Center. The primary services provided are: first aid, dispensing of simple medications, assessment and referral to specialty physicians and dentists, providing counsel for personal health problems, simple physicals, and limited lab tests for a nominal fee.

Services include a full-time registered nurse with a part-time physician and practitioner providing a complement of health care, Monday-Friday. The physician/practitioner provides students with an initial health assessment and evaluation, treats minor illnesses, and refers students for hospitalization or specialized treatment as needed. A registered nurse is available to answer questions and provide medical information.

The Student Health Center is a contracted service with an off-campus provider. It is located within easy walking distance of the college at 1060 Orchard Avenue, Suite O.

For emergency illnesses or accidents that occur after the Center's hours, or on weekends, students can access the Med-X Urgent Care Clinic, also located in Suite O. Immediate emergency help should be obtained by dialing 911.

Intercollegiate Athletics
Saunders Fieldhouse,
970-248-1503
Intercollegiate athletics provides students with equitable opportunities to enhance their education, represent the College, and participate in athletics while developing skills and understanding. All undergraduate students are encouraged to participate in intercollegiate athletics as determined by their interests and capabilities.

Participation in the program, however, is secondary to the academic expectations of students. To this end, it is the responsibility of those administering the program to schedule the length of playing seasons, the frequency of practice sessions, and the number of contests so that they shall not unreasonably conflict with students obligations to attend class regularly, to study, to develop their intellectual, moral, and social faculties, and to graduate from the college as educated men and women. The men's program at Mesa State includes baseball, basketball, football, wrestling, soccer, and tennis. Basketball, cross-country, golf, soccer, softball, swimming and diving, tennis, track and field, and volleyball are available to women.

John U. Tomlinson Library
970-248-1862
Tomlinson Library supports the educational mission of the College by providing a diverse collection of materials for use by students and faculty.

The library collection contains over 300,000 items, including books, periodicals, nonprint materials, maps, newspapers, audio and visual media, software, and other items. More than 70 online databases are available through the library's website. The library is a selected depository for federal government documents and also contains special collections in the areas of western Colorado history and other subjects.

Services provided by the library include reference and information desk assistance, email and on-line reference, group study rooms, photocopy and microform machines, and library instruction to classes.

Access to the collection is through the on-line catalog, which is composed of the holdings of the Tomlinson Library, and includes holdings in other libraries throughout Colorado and the United States. Should materials not be available locally, the Interlibrary Loan Department and Prospector Program obtain needed materials for students and faculty from other libraries. Library and informational resources are available via the Web at mesastate.edu/msclibrary.

Little Mavericks Learning Center
1340 College Place, 970-248-1318
Childcare is available for children of Mesa State College students. The age limit is 1 year and walking up to 5 years. For further information, contact the Center Director.

MAVcard Student I.D.
College Center, Room 102,
970-248-1059
The Mesa State MAVcard is your key to campus services at Mesa State College. The MAVcard can be used at Tomlinson Library, the Student Recreation Center, the Dining Hall, Bookcliff Café, the MSC Bookstore, Outdoor Program, and for access to residence halls and athletic events. The MAVcard can be enhanced by linking to a free Wells Fargo® checking account, allowing free ATM usage, direct deposit, with access to an on-campus customer service branch.

Mentoring Assistance,
Student Services Office, Lowell Heiny Hall, Room 107, 970-248-1441

The Student Services office provides mentoring assistance for students who are struggling with a variety of issues. Students, or faculty on behalf of a student, may come to the mentoring office for assistance. Mentoring assistance will be provided for as long as it is needed.

National Student Exchange Program
970-248-1613
Mesa State College is a member of the National Student Exchange Program. NSE is a consortium of over 190 colleges and universities in the United States and its territories. Mesa State students may be able to participate in this program at in-state tuition rates and receive full credit for course work completed while on exchange. For further information, contact the Admissions Office.

Parking Services
College Center, 970-248-1919
Students and College staff members who wish to park on campus may purchase parking permits for designated areas. A parking permit does not guarantee a parking space, but allows on-campus parking when such space is available.

Campus Recreation Services
Student Recreation Center, 970-248-1592
Campus Recreation Services is established to provide varied programs and services that will contribute to the health and well-being of the students of Mesa State College. The program educates participants in the responsible use of leisure time by providing an atmosphere that fosters the development of lifelong patterns of recreational activities and opportunities for participation in such activities regardless of age, sex, race, or motor ability. To do so, facilities and resources are designed to provide appropriate environments for participants through the following:

- Offering structured competitive and social opportunities in a variety of individual and team sports (Intramural Sports Program and Club Sports). Intramural sports include flag football, softball, volleyball, basketball, indoor and outdoor soccer, ultimate Frisbee, disc golf, badminton, tennis, racquetball, and dodgeball. Club sports include cycling, rodeo, rugby, hockey, women's water polo, men's volleyball, men's soccer, and men's swimming.
- Providing access to recreation facilities, equipment, and activities for convenient, informal participation (Open Recreation Program). These facilities include a multi-sport gymnasium, cardio machines, weight training circuit machines, free weights, indoor track, racquetball courts, climbing wall, and swimming pool.
- Offering structured and non-structured opportunities for improving and maintaining physical fitness (Fitness/Wellness Program). These opportunities include aerobics classes, yoga, fitness assessments, exercise program prescription, massage therapy, and personal training.
- Offering students significant opportunities for career development, including the acquisition of leadership, management, and technical skills in all areas of Campus Recreation Services (Student Employment Program).

Registrar's Office
Lowell Heiny Hall, Room 121, 970-248-1555
The Registrar's Office provides a variety of services that include registering students into classes, maintaining academic records, and certifying degree requirements for graduation. The office is responsible for processing applications for readmission to Mesa State, as well as forms to add/drop a class, holds on registration, change of address, non-release of directory information protected by federal law, and enrollment verification for loan or insurance purposes. The office also prepares Mesa State transcripts and evaluates transcripts from other institutions to determine the number of credits that will apply toward a particular degree.

Testing Center
Bishop Campus, 2508 Blichmann Avenue, 970-255-2750
The Testing Center services include, but are not limited to, examinations required for admission to graduate and professional schools, examinations for proficiency and certification in nursing and teaching, and the credit by examination program. Assessment of academic skills in college level English and mathematics are provided through the center for potential students as well as those who already have been admitted.

Transfer Services
Admissions Office, 970-248-1232
The Center for Transfer Services, within the Admissions Office, offers assistance to students transferring into Mesa State from other institutions. Services include preliminary transcript evaluation, education planning, transition to academic departments, and resolution of transfer problems. Transfer Services staff is available by appointment and for walk-ins. As part of the Admissions Office, the Center works closely with the Registrar's Office to provide students with information about their transfer credits and how those credits may be applied.

Tutorial Services
Houston Hall, Room 110, 970-248-1392
The Tutorial Learning Center (TLC) provides free walk-in tutoring for a variety of courses and subjects, including writing. Students who would like to improve their writing skills, work through math, science, or other technical concepts, review material for any subject, or get one-on-one assistance and support from other successful students, are all encouraged to come to the TLC. Qualified peer tutors, recommended by faculty, are trained to help students with their academic endeavors. The primary goals of peer tutors are to help students become more independent with their learning and to create opportunities for student success. Peer tutors accomplish these goals with individuals and small groups by: 1) Offering study tips; 2) Giving feedback on student assignments; 3) Reviewing concepts, types of problems, and rules; 4) Offering encouragement; 5) Helping students follow an instructor's directions and use their textbooks, syllabi, and materials more effectively; 6) Introducing students to myriad self-help and campus resources available to them; and 7) Reinforcing what students already know and understand.

Registration Policies and Procedures

Contact: Office of the Registrar, Lowell Heiny Hall Room 121, Mesa State College, 1100 North Avenue, Grand Junction, CO 81501-3122. Call 970-248-1555.

Overview

Once admitted to Mesa State College, a student meets with an academic advisor (see Academic Advising section). Not all courses available in this catalog are offered every semester or every year. Course schedule offerings for each semester, including registration instructions, are available through the Mesa State College website at mesastate.edu and in the Registrar's Office. Students may register via MAVzone or in person at the Registrar's Office.

Student Liability for Tuition & Fees

For all students, the act of registration automatically confirms attendance and the student will incur a financial obligation to the College. A registered student is responsible for paying his/her tuition and fees, regardless of whether or not he/she attend classes, unless the student officially withdraws from the College through the Registrar's Office or drops all courses via the web prior to the deadlines published in the semester course schedule. It is the student's responsibility to make a copy of the schedule reflecting any courses dropped via the web.

Attendance

Students are expected to attend all sessions of each course in which they are enrolled. Failure to do so may result in a lowered grade or exclusion from class at the discretion of the instructor. At any time during a semester, a student who fails to attend regularly may be dropped from class rolls. An instructor may initiate a drop or withdrawal for a student who fails to attend classes regularly. ("Drops" are up to 15% of class elapsed; "withdrawals" are up to the mid-point of the class.)

Attendance during the first two class periods is required. Any instructor has the option of dropping any student who fails to attend the first two class meetings so that other students may enroll. Not all instructors will exercise this option; therefore, a student should not assume that non-attendance will result in an automatic drop from a class.

It is the responsibility of the student to arrange in advance with instructors for making up missed classwork, assignments or tests incurred because of a student's participation in required field trips, intercollegiate sports, or other trips. The coach, instructor, or other official whose activities require students to be absent from classes should give each participating student an "official" roster and schedule of events for the semester or other appropriate time span which may result in classes being missed. The student is responsible for contacting the instructor of each of his/her classes affected at least 24 hours in advance of each class that will be missed.

Absences due to serious illness or strictly unavoidable circumstances may be excused if the instructor in charge of the course is satisfied as to the

cause. In the case of an emergency, the student may contact the Office of the Vice President for Student Services and Outreach, and that office will contact the student's instructors to inform them of the emergency.

Being excused for an absence in no way relieves the student of responsibility for completing all work associated with the course to the satisfaction of the instructor. Being late to a class or leaving a class early is disruptive and is not acceptable except in extreme circumstances or with prior approval of the instructor. Prior approval is also required of the instructor if a student wishes to bring a guest (or a child) to class.

Students who receive financial aid and cease attending all classes without formally withdrawing may need to repay a portion of their financial aid.

Add/Drops—Schedule Adjustments

Students may make adjustments to their schedules according to specified deadlines and procedures as announced in each semester's published course schedule. Students dropping all of their courses should refer to the Withdrawal section of this catalog.

Withdrawal Procedures

Withdrawal from Individual Classes
Students may withdraw from individual classes (full semester duration, modular, and summer) via MAVzone prior to the start of the session (semester or modular). Once the session has begun, a withdrawal is permitted up to the mid-point of those classes. See the calendar in the current course schedule for details. After the session has begun, a Change of Schedule form, properly completed and with the instructor's signature, is required and must be submitted to the Registrar's Office by the deadlines published in the semester course schedule. Forms are available in the Registrar's Office. Students who officially withdraw from a course prior to the date of mid-semester (see semester course schedule for specific date) will receive a "W." Students who withdraw after the deadline will automatically receive a grade of "F" except for cases with extenuating, non-academic reasons.

In addition to regular withdrawal from class(es) by the student, an instructor may initiate a withdrawal from his or her class for failure to attend class, failure to turn in assignments over an extended period of time, or for disciplinary reasons. In such cases, the instructor must observe regular withdrawal deadlines.

Total Withdrawal from the College
Students who desire to withdraw totally from Mesa State College are advised to notify their faculty advisor or the Advising and Career Center prior to obtaining the appropriate paperwork from the Registrar's Office.

Prior to the first day of the semester, students may totally withdraw from Mesa State by dropping all classes via MAVzone. If a student desires to totally withdraw after the semester has begun, he/she must report to the Registrar's Office. See the calendar in the current course schedule for details. The necessary withdrawal papers must be filled out by the student and officially signed by the appropriate staff. Grades of "W" will be given if done so before the deadline and if all withdrawal procedures have been satisfied for courses in which the student has not already received a grade (including F). Students totally withdrawing after the deadline will receive grades of "F." Exceptions to the withdrawal deadline are possible and are considered only by written appeal in the case of true, documented emergencies. The Appeals Committee will review completed, documented requests. Appeal forms are available in the Registrar's Office.

Family Educational Rights & Privacy Act

General Policy
The Family Educational Rights and Privacy Act (FERPA) provides students who are enrolled in an institution of postsecondary education the right to inspect, review, and challenge their educational records. Mesa State College has the responsibility of maintaining and protecting the confidentiality of students' official educational records. Mesa State College also supervises the access to and/or release of educational records of its students. FERPA covers enrolled and former students, including deceased students. Students who are not accepted to Mesa State College, or if accepted, do not attend, have no rights under FERPA. In addition, the College will not release personally identifiable records of students to any individual, agency or organization without the prior written consent of the student, except as provided by FERPA.

Directory Information
Mesa State College may, without the consent of the student, release to persons outside the institution information designated as Directory Information in accordance with the provisions of FERPA. Directory Information shall include information in an educational record which would not generally be considered harmful or an invasion of privacy if released, including but not limited to:

1. Student name, address, telephone #
2. Date and place of birth
3. Major fields of study
4. Participation in officially recognized activities and sports
5. Weight and height of athletic team members
6. Photographs
7. Dates of attendance to include enrollment status (i.e., full time or part time)
8. Degrees and awards received
9. Most recent educational institution attended
10. E-mail address

Note: At any time, a student may request to the Registrar's Office that Directory Information not be released to other parties without written permission. This request will be honored until the student requests in writing that Directory Information be disclosed.

Access to Student Educational Records
FERPA provides current students, former students, and parents of students who claim the student as a dependent (according to Internal Revenue Code of 1954, Section 152) for income tax purposes on their most current federal tax return the right to inspect, review, and challenge their educational records.

Students are permitted to inspect and review their educational records within a maximum of 45 days after the request is received. Students may not review financial information received from their parents or guardians; confidential letters and recommendations placed in their files prior to January 1, 1975; academic records containing information regarding other students; administrative, disciplinary, law enforcement, student health records, and/or records which are maintained in the sole possession of the maker.

While students who have a financial hold or past due account (all holds included) have a right to inspect their academic records, no transcript will be released to the student or other party until holds are reconciled. Bankruptcy, however, removes any financial obligations the student has to Mesa State College. Please contact the Registrar's Office with questions regarding this policy.

No-Credit Desired/ Audit Courses

A student who desires to attend certain undergraduate classes regularly, but does not wish to receive grades or credit, should register for "no-credit desired" in these classes.

Tuition charges for classes taken under the "no-credit desired" category are the same as for classes taken for credit, but are not eligible for the COF voucher.

The deadline for a student to change from "no-credit desired/audit," to credit is the same as the deadline to add a class. The last day for a student to change from credit to "no-credit desired/audit" is the same as the deadline to drop a class.

Senior Passport to Education Program

Mesa State College provides individualized support, including academic and scheduling decisions, for persons 60 years and older. For more information, contact the Registrar's Office.

Classes for Credit
Persons 60 years or older who wish to enroll for credit must submit required admission and registration materials to the Admissions Office. The same deadlines, costs, etc., as for other students will apply.

Classes for No Credit
Persons 60 years of age or older who do not wish to earn college credit may attend undergraduate resident instruction classes on a space-available, instructor-approved basis at Mesa State College without paying tuition or fees. This policy does not apply to laboratory, self-supporting, and certain other courses for which special charges normally are assessed.

Interested persons should obtain a registration form from the Registrar's Office. The registration form must be signed by the instructor granting approval and returned to the Registrar's Office. No Mesa State College records of participation will be maintained.

General Undergraduate Academic Policies

Student Load and Limitations

The normal student load is 15 semester hours (some disciplines require a higher number). The minimum load required for a student to be recognized as a full-time student is 12 semester hours. If students register for fewer than 12 semester hours, they are classified as part-time students.

Students receiving scholarships and/or financial aid are generally expected to complete 12 hours of credit courses each semester. In order to receive full Veteran's Administration financial benefits, veterans must be enrolled in 12 or more semester hours each semester of attendance, for the entire semester.

It is recommended that students in good academic standing limit their academic load to 18 semester hours or fewer. Students should consult with their advisors before attempting an overload of more than 18 semester hours in a regular semester or more than nine semester hours in a summer term. Students earning a cumulative Mesa State College grade point average of 2.00 or lower will be limited to 15 credit hours per semester.

Classification Status

A student is classified based on the number of semester hours successfully completed as follows:

0 - 30 Freshman
31-60 Sophomore
61-90 Junior
91+ Senior

Grading System

Grades at Mesa State College are as follows:

A = Excellent to superior;
B = Good to excellent;
C = Satisfactory;
D = Passing but not satisfactory;
F = Fail;
I = Incomplete;
IP = In progress;
W = Withdraw;
NC = No credit;
P = Pass.

Incomplete ("I") grades are temporary grades given to a student only in an emergency case and at the discretion of the instructor.

At the end of the semester following the one in which an "I" is given, the "I" becomes the grade that is submitted by the instructor to the Registrar's Office. If the instructor does not submit a grade by the deadline for that semester, the grade becomes an "F." A grade of "I" given spring semester must be addressed by the end of the following fall term.

Extension of the time to complete work may be made in exceptional circumstances at the discretion of the instructor. A student with an "I" grade, however, may not change the "I" by enrolling in the same course another semester.

Academic Standards

The scholastic standing of a student at Mesa State College is computed on the basis of all courses attempted at Mesa State College (unless academic renewal has been approved; see next page). Grades awarded from any other institution will not be utilized in the grade point average (GPA) calculation.

Mesa State College uses the four point system in computing the grade point average of its students. Under this system, a student receives four quality points for each semester hour of A; three points for each semester hour of B; two points for each semester hour of C; one point for each semester hour of D; and no quality points for an F. An example follows:

3 Semester Hours of A =	12 points
3 Semester Hours of B =	9 points
3 Semester Hours of C =	6 points
3 Semester Hours of D =	3 points
3 Semester Hours of F =	0 points
15 Semester Hours	30 points

Thirty (30) points divided by 15 semester hours = 2.00 GPA

GPA Minimum

Students are considered to be making "satisfactory progress" toward a degree if they attain a cumulative GPA consistent with the table listed below. Incomplete ("I") and In Progress ("IP") grades are tentative grades and until changed are not considered in computing either the cumulative grade point average or the grade point average for the particular semester concerned. "W" hours do not count as hours attempted or in the GPA. (See section on Withdrawal Procedures)

Semester Credit Hours	Cumulative GPA
0 – 15	1.70
16 – 30	1.80
31 – 45	1.90
46 and above	2.00

Students failing to achieve the minimum GPAs listed above will be placed on academic probation. The student will remain on probation until the minimum GPA is achieved, providing the student earns a minimum semester GPA of 2.00. If a student already on academic probation fails to earn a semester GPA of 2.00, the student will be placed on academic suspension. The student will be prohibited from further attendance at Mesa State College for a minimum of one semester (see Academic Probation and Suspension section.)

A student must achieve a cumulative grade point average of 2.00 or higher to graduate at the certificate, associate, or baccalaureate level. Some programs have additional GPA requirements to remain in and graduate from that program. See Programs of Study section and subject program sheet for specifics.

Calculation of Grade Point Average for Graduation

Only the grades and credits awarded at Mesa State College will be used in calculating the student's grade point average for graduation. Grades awarded from any other institution will not be utilized in the grade point average calculation.

The specific discipline area program requirements must be completed as required by the appropriate academic department with a cumulative grade point average of 2.00 or higher.

Academic Probation and Suspension

Good Standing signifies that the student is making satisfactory academic progress (see Academic Standards section) and is eligible to continue studies at Mesa State College.

Academic Probation indicates a student is not in good standing and constitutes a warning to the student that the student's scholastic achievement needs improvement or suspension will result. Students will be placed on academic probation if their cumulative grade point average at Mesa State falls below the minimums listed under GPA minimum.

Upon being placed on academic probation, students are permitted to continue studies for one semester, during which time they are expected to improve their cumulative grade point average to the minimum required levels. Those who succeed will be removed from academic probation.

Students on academic probation will remain on academic probation until they raise their cumulative grade point average to the required level. Once on probation, a student must maintain a minimum semester grade point average of 2.00 to avoid being placed on academic suspension. Additionally, students with a cumulative Mesa State College grade point average of 2.00 or lower will be limited to 15 credit hours per semester.

Academic Suspension indicates the student is not in good standing and represents a temporary, involuntary separation of the student from the College for a minimum of one semester for failure to meet minimum academic standards.

Following an academic suspension, a student must apply for readmission to Mesa State College. For degree programs that do not have separate admission policies, the readmission to Mesa State College is also readmission to the degree program as long as the degree still exists. For degree programs having admission policies over and above admission to Mesa State College, the student must also reapply to the degree program.

A student may be suspended from and readmitted to Mesa State College a maximum of two times. Academic suspension, when imposed, becomes effective immediately upon the recording of grades at the end of the semester or summer term.

The first suspension shall be for a period of one semester; i.e., a student suspended at the end of fall semester may not attend the following spring semester; a student suspended at the end of spring semester may not attend the following summer and fall semesters. A student suspended at the end of summer term may not attend the following fall semester.

The second suspension shall be for a period of two semesters (i.e., a student suspended at the end of fall semester may not attend the next spring or fall semester; a student suspended at the end of spring semester may not attend the following fall or spring semester). A student suspended at the end of summer term may not attend the following fall or spring semester.

Students may not enroll in any credit classes whatsoever (including summer term) during the period of suspension.

Grade Improvement

Any course which is taken more than once for academic credit at Mesa State College is done so only for "grade improvement" wherein academic credit is awarded only once and the last grade received is the one used to compute the student's cumulative grade point average and to fulfill requirements for the degree.

Exceptions to this policy are DANP (performing dance), MUSL (music lessons) and MUSP (performing music) classes, each of which may be taken twice for academic credit; Independent Studies (a maximum of six semester credit hours may be taken for credit – see the Independent Study section in this catalog); and in some cases Topics, Practicums, Seminars, Internships, Structured Research, and Cooperative Education. See program sheets and the appropriate department head or director for these exceptions.

Additionally, program-specific exceptions to retaking courses for grade improvement may exist regarding courses in the major and may supersede the College's general policy. Students should check with the head of the academic department for their major to determine if there are any restrictions for repeating a course.

The option of repeating a course for grade improvement is available to a student only if the course s/he wishes to repeat is still offered at Mesa State and is scheduled to be offered in the semester in which the student wishes to take it. The last grade earned will be the grade used, whether better or worse than the earlier grade(s).

Courses taken at Mesa State College may not be repeated at another college for improvement of the original grade and courses taken at another college may not be repeated at Mesa State College for improvement of the original grade.

Academic Renewal

A student who re-enrolls at Mesa State College following an absence of at least five years may be eligible for academic renewal. If academic renewal is approved, none of the course credits and grades earned at Mesa State College prior to the five-year minimum absence will be used for meeting graduation requirements or in determining the student's grade point average.

Among the requirements to be eligible to apply/petition for "academic renewal" is that the student must have completed 24 academic course credits at Mesa State College, excluding kinesiology courses and remedial courses below the 100 level, with a minimum grade point average of 3.00. The student must apply/petition in the Registrar's Office no later than the semester following the completion of these 24 semester credit hours. Matriculation and/or course completion at other institutions during the five-year period of absence has no bearing on the application/petition.

Non-Traditional Credit

Non-traditional credit can be earned from sources such as the following:

1. **Advanced Placement/ Credit Program**
   Students wishing academic credit or advanced placement for college level work done while in high school should take the appropriate College Board Advanced Placement examination. These examinations are administered several times each year at numerous locations throughout the United States. College Board Advanced Placement examination scores currently accepted at Mesa State are as follows: Studio Art – General; Studio Art – Drawing; Art History; Biology; Chemistry; Computer Science A; Computer Science AB; Macroeconomics; Microeconomics: English Literature and Composition; English Language and Composition; French Language; French Literature; German Language; German Literature; Latin – Virgil; Latin Literature; Spanish Language; Spanish Literature; Government and Politics – United States; Government and Politics – Comparative; U.S. History; European History; World History; Human Geography; Mathematics – Calculus AB; Mathematics – Calculus BC; Music Theory; Physics B; Physics C – Mechanics; Physics C – Elec. and Mag.; Psychology; Statistics.

The Registrar's Office will supply information concerning the scores required for earning academic credit or advanced placement in the various subject areas.

2. **College Credit by Examination and Department Challenge Examinations**
   Students attending Mesa State College may earn college credit by examination in certain subject areas on the College Level Examination Program (CLEP) and DANTES Examination Program. Credit may also be earned by subject matter tests offered through various departments at Mesa State College (Department Challenge examinations). Students must have completed 12 semester credit hours of course work at Mesa State College before challenge credits will be recorded on a transcript.

Registered Nurse (RN) students seeking credit for prior nursing learning experiences should see the Bachelor of Science in Nursing in the Academic Programs section of this catalog.

For more information contact the appropriate department head or director of the College's Testing Center.

3. **International Baccalaureate**
   Mesa State College recognizes the International Baccalaureate Diploma Program and awards credit to qualified high school students. For policy details contact the Registrar's Office or check the MSC website.

Non-traditional Credit Guidelines
The faculty and department head of each department determine if and under what conditions non-traditional credit is allowed. If allowed, the following limits apply:

1. Military credits – maximum of 20 lower division semester credit hours.
2. CLEP, DANTES and Credit by Examination/Department Challenge examinations – maximum of 20 semester credit hours for a baccalaureate degree or an Associate of Applied Science degree, a maximum of 12 semester credit hours for an Associate of Arts or an Associate of Science degree and a maximum of six semester credit hours for a technical certificate. Students may not earn CLEP or DANTES credit in a class in which they have been previously enrolled including a class from which the student withdrew, so that the transcript shows a – "W," "WP," or "WF." Students must receive approval and follow the procedure to challenge a course, including enrolling in that course. See the Registrar's Office for a copy of the procedure.
3. Advanced Placement – maximum of 30 semester credit hours for a baccalaureate degree, 15 semester credit hours for an associate's degree or six semester credit hours for a technical certificate.
4. International Baccalaureate – The subject exams and scores shown on each student's transcript will determine the number of semester credit hours allowed. Maximum credit allowed will be 30 semester credit hours toward a baccalaureate degree or 15 semester credit hours toward an associate degree.
5. Competency credit – maximum of 12 semester credit hours towards a baccalaureate degree or 25 percent of the total semester credits required for the program towards an associate degree at the prerogative of the department head. Further restrictions apply. See the Registrar's Office for details and guidelines or visit mesastate.edu/main/policies, click on "Academic and Student Affairs", and navigate to the Competency Credit Policy and Application Form.
6. Cooperative Education, Internships, Practica, etc. – non-classroom oriented courses such as cooperative education, internships, practicums and other courses determined to be of this type are subject to the following limits: a maximum of 15 semester hours of credit may be used to satisfy the required academic semester credits for a baccalaureate degree. A maximum of 6 semester hours may be used to satisfy the academic semester hours for an Associate of Science or Associate of Arts degree. A maximum of 15 semester hours may apply toward the 40 upper division hour requirement. No restriction on the maximum number of semester credits above and beyond any degree requirement is intended. These restrictions do not apply to the Associate of Applied Science degree or certificate programs.

The total combination of any non-traditional credit cannot exceed:
1. 30 semester credits for a baccalaureate degree;
2. 15 semester credits for an Associate of Science or Associate of Arts degree;
3. 20 semester credits for an Associate of Applied Science degree;
4. Twenty-five percent of the semester credits required for a technical certificate.

Cooperative Education

According to the National Commission for Cooperative Education, "Cooperative education is a working partnership in which an educational institution joins with an employer in a structured relationship. The basic purpose is that of providing a means whereby a student can combine study at the institution with a work experience which is under the supervision of the employer in order to fulfill the total requirements of a particular educational program".

Cooperative education is a three-way partnership involving the student, the employer, and the college. There is a great deal of difference between cooperative education and simply holding a job. Cooperative education is based on learning objectives which are related to the student's academic discipline and are established in cooperation with the student, the employer, the faculty advisor, and others at Mesa State College.

Typically, cooperative education is open to junior and senior students. Interested students should consult with their faculty advisor and academic department head or director. There are limits on the amount of credit which will apply towards a degree. Undergraduate students see Non-Traditional Credit section in this catalog. Graduate students, see Graduate Policies and Procedures section of this catalog.

Independent Study

Independent study permits the motivated student an opportunity to expand his or her body of knowledge beyond the scope of the standard curriculum. It endeavors to foster qualities of self-initiative, organizational skills, self-discipline and independent thinking. It is expected that the student will engage in intensive study and research of the topic.

Independent study does not satisfy general education requirements or specific course requirements. Independent study hours may be taken for elective credit. Independent study is available only to students at the junior and senior levels except in certain certificate and A.A.S. programs and only in those disciplines listed in the Course Descriptions section of this catalog.

To be eligible for independent study, a student must have a minimum of eight semester credit hours in the discipline of the independent study area, as well as a minimum GPA of 2.75 within that discipline area. The work is to be completed within one semester from the initiation date and is limited to a total of six or fewer semester credit hours taken at Mesa State College. The department head or director of the academic department issuing credit must approve any exceptions.

A written contract is to be initiated by the student desiring independent study in consultation with a supervising instructor. The contract must include justification, description, monitoring, and evaluating procedures. Upon approval by the instructor and department head, the student submits the signed, completed contract to the Office of the Registrar to register for the independent study course no later than the last day to add a full semester course.

Further restrictions apply in some disciplines. One example is the requirement that an application for independent study be completed in advance - in some cases six weeks prior to the end of the semester preceding the one in which the student wishes to take the independent study. Students wishing to take an independent study should check with the appropriate instructor and/or department head or director well in advance.

With permission of the instructor, students may register for regular classes but do the work independently, or on their own. This is not the same as "Independent Study". Students who have made prior arrangement with the instructor will still register for the regular course, and not for Independent Study.

Learning Progress Evaluation

The evaluation of a student's learning progress in a course is considered to be a planned and continuous process and consists of a variety of activities including judgment, observation, testing, etc. Final examinations are a part of the evaluation process.

Article 13 of House Bill 1187, enacted in July of 1985 by the Colorado General Assembly, established that institutions of higher education in Colorado are to be held accountable for demonstrable improvements in student knowledge, capacities, and skills between entrance and graduation.

Students are required by Mesa State College to take part in testing and other programs deemed necessary for compliance with this legislation. Students who do not abide by these requirements may be denied registration and/or graduation privileges. Portions of the assessment process may require time outside the normal class periods.

Honor Lists

The President's List is made up of those students who earn a GPA of 4.00 while enrolled in a minimum of 12 semester hours for a particular semester.

The Dean's List includes students who achieve a grade point average of between 3.50 and 3.99 while enrolled in a minimum of 12 semester hours for a particular semester.

The lists are based on semester grades, not cumulative grade point averages. Regardless of grade point average, a student who receives a failing grade ("F") in any course is not eligible for the Dean's List.

To graduate with Honors or Distinction, the student's cumulative grade point average will be used in the determination of inclusion in the Honors/Distinction categories listed below. Each year during formal commencement ceremonies Mesa State College recognizes the following categories of academic achievement:

For Associate Degrees:

With Distinction—
Associate degree graduates with cumulative grade point averages of 3.50 to 3.74.

With High Distinction—
Associate degree graduates with cumulative grade point averages of 3.75 to 4.00.

For Baccalaureate Degrees:

Cum Laude—
Baccalaureate degree graduates with cumulative grade point averages of 3.50 to 3.74.

Magna Cum Laude—
Baccalaureate degree graduates with cumulative grade point averages of 3.75 to 3.89.

Summa Cum Laude—
Baccalaureate degree graduates with cumulative grade point averages of 3.90 to 4.00.

Exceptions for students not explicitly meeting the criteria for a particular category may be recommended to the Vice President for Academic Affairs by the department head or director. The grade point average for honors/distinction at commencement does not include final-term, in-progress courses. The ultimate honors/distinction recognition to appear on the permanent record/transcript will reflect the appropriate category based on the inclusion of the final-term course grades required for the completion of degree requirements.

Honor Societies

Membership in **Alpha Chi** is the highest academic honor which Mesa State College can bestow upon its scholars. To be eligible for election, students must have completed at least 75 semester hours toward the baccalaureate degree with a GPA of 3.75 or better and be fully recognized by their faculty and department heads as having the qualities of character pertaining to the true scholar. Alpha Chi is the second oldest and second largest of those national scholastic honoraries which elect members from all academic fields.

Alpha Phi Sigma is the national honor society in criminal justice. For membership in Alpha Phi Sigma, a political science major or other student who has completed at least four classes in criminal justice must maintain an overall GPA of 3.20 and a 3.2 GPA in criminal justice.

Beta Beta Beta is the National Honor Society in Biology at Mesa State College. For full membership in Beta Beta Beta, a biology major must have completed at least three classes in biology and have a minimum GPA of 3.00. With these qualifications, a student may be nominated for membership.

Kappa Mu Epsilon is an honor society for students of mathematics. Its chapters are located in colleges and universities of recognized standing which offer a strong mathematics major. The nominated and inducted members are selected from students of mathematics and other closely related fields who have maintained high standards of scholarship, have professional merit, and have attained academic distinction. The local chapter, Colorado Delta, is a working organization throughout the academic year. It functions as an integral part of the Computer Science, Mathematics, and Statistics Department of Mesa State College.

Nu Kappa Chapter, Sigma Theta Tau International, recognizes achievement in nursing. The purposes of the society are to recognize superior achievement and leadership qualities, foster high professional standards, encourage creative work and strengthen commitment to the ideals and purposes of the profession. Students must have a minimum GPA of 3.00 and rank in the upper 35 percent of their class to be eligible for membership. Nurses from the community may also be nominated for membership if they have demonstrated marked achievement in nursing education, practice, research or publication.

Phi Alpha Theta is the international honor society in history. The objective of this professional honor society is the promotion of the study of history through the encouragement of research, good teaching, publication, and the exchange of learning and thought among historians. To be eligible for membership, a student must have completed twelve or more hours of history with a minimum GPA in history of 3.10 and a minimum overall GPA of 3.00.

Pi Sigma Alpha is the national honor society in political science. For membership in Pi Sigma Alpha, a political science major or other student who has completed at least four classes in political science (three at the 300 or 400 level) must maintain an overall GPA of 3.00 and a 3.2 GPA in political science.

Psi Chi, the national honor society in psychology, is open for membership to students with either a major or minor in psychology. Minimum qualifications for membership are as follows: rank in the top 35% of one's class with a minimum 3.00 overall GPA; 3.25 psychology GPA; completion of 9 semester hours in psychology; and completion of at least three semesters of college coursework. The purpose of Psi Chi is to promote and maintain excellence in scholarship in the field of psychology and to advance the science of psychology.

Sigma Gamma Epsilon, a national honor society for the earth sciences, has for its objectives the scholastic and scientific advancement of its members and the extension of friendship and assistance among colleges, universities, and scientific schools for the advancement of the Earth Sciences. Membership in Zeta Nu Chapter of Sigma Gamma Epsilon is open to continuing Earth Science majors with at least twelve credit hours of Earth Science coursework completed with a minimum GPA of 3.00. Qualified students are reviewed and may be nominated each semester.

Sigma Pi Sigma is the national honor society in physics. For membership in Sigma Pi Sigma, a physics major or other student who has completed at least three classes in physics must maintain an overall GPA of 3.00 and a 3.25 GPA in physics. A qualifying student may then be nominated for membership by the combined physics faculty.

Sigma Tau Delta, the national English honor society, endeavors to encourage, promote, and recognize scholarship and achievement in English language and literature. Membership is open to sophomore, junior, and senior English majors with a minimum GPA of 3.00 in English.

Upsilon Pi Epsilon is the national honor society for computer science.

Student Conduct

Mesa State College is a community consisting of students, faculty, support staff, and administrators. The College does not attempt to define all "student conduct." It relies on students to assume the responsibility and obligation of conducting themselves in a manner compatible with the purpose of the College as an educational institution and the community as a place of residence. In addition to College rules and regulations, all students are subject to the same local, state, and federal laws as non-students and are beneficiaries of the same safeguards of rights as non-students.

The academic community has a long and cherished tradition of expecting its members to conduct themselves in accordance with the highest standards of personal behavior. The following are among those acts of misconduct which are not consistent with the educational goals of Mesa State College or with the traditions of the academic community:

1. Academic dishonesty, such as cheating, plagiarism, or knowingly furnishing false information to the College.
2. Forgery, alteration, misuse or mutilation of College documents, records, identification materials, or educational materials.
3. Obstruction or disruption of teaching, research, administrative, or public service functions of the College.
4. Intentional interference with an individual's rights to free speech, freedom to make academic inquiry, or freedom of conscience.
5. Aiding, abetting or inciting others to commit any act of misconduct set forth in 1 through 4 above.

Penalties for acts of misconduct including, but not limited to, those set forth above can range from official warning to expulsion from College, depending upon the seriousness of the misconduct. Detailed disciplinary procedures are available from the Office of the Vice President for Student Services and Outreach, located in Lowell Heiny Hall 109.

Undergraduate Graduation Requirements

Contact: Office of the Registrar, Lowell Heiny Hall Room 121, Mesa State College, 1100 North Avenue, Grand Junction CO 81501-3122. Call 970-248-1555.

Students are expected to assume responsibility for planning their academic programs in accordance with College and department policy. Each student is responsible for obtaining a program sheet, available online at mesastate.edu/academics or from the appropriate academic department, at the beginning of his or her work detailing the exact requirements for the degree or certificate being pursued. Students are urged to consult with their advisors. The College assumes no responsibility for difficulties arising when a student fails to establish and maintain contact with his or her faculty advisor and department head. The student is ultimately and solely responsible for knowing the requirements for a particular degree and for fulfilling those requirements.

Requirements for Degrees

Some requirements may vary with the program and academic department. Each student must abide by the rules set forth in the program sheet which may be obtained from the department offering the degree s/he is seeking. Candidates for all degrees must accomplish the following:

Graduation Checklist and Commencement Deadlines

Graduation documents are due the semester prior to completion of all coursework. The student should pick up an "Intent to Graduate" and "Graduation Planning Sheet" in the Registrar's Office. The student must then meet with his/her advisor and submit to the advisor his/her completed program sheet.

It is the student's responsibility to become familiar with the procedure established for his/her particular program, and to adhere to the designated schedule. The "Intent to Graduate" form must be submitted to the Registrar's Office on February 15 for fall graduates and September 15 for spring graduates. The deadline for summer graduates is February or September, depending on the ceremony in which the student wishes to participate. To participate in the May ceremony, the "Intent to Graduate" is due September 15 of the fall semester prior to the ceremony.

Deficiencies

All academic and financial deficiencies must be removed (i.e., incomplete grades and/or unpaid financial obligations).

Final Credit Requirements Taken at Another College

Mesa State College generally accepts academic credits from regionally accredited colleges and universities. When a student intends to earn a Mesa State College degree but the final credits for completing that degree program are earned at another institution, the following restrictions apply:

1. Specific approval of the proposed institution and courses must be given by the appropriate academic department head and the Office of the Registrar at Mesa State College during the time of the student's last enrollment at Mesa State College, and the student must receive a grade of "C" or higher in each course.
2. No more than 15 semester hours of final credit will be accepted in transfer.
3. Credit must be earned in no more than one calendar year immediately following final enrollment at Mesa State College.

Declaring a Major

The major the student lists on the Mesa State College application is considered for admission purposes. Once admitted, a student may change his/her major. In order to be admitted/declared into the major, the major must be accepting students and the student must meet the requirements to be admitted to the degree. Some majors have additional admission requirements and for those the student must visit the department for more information. Students who are admitted as an undeclared major are strongly encouraged to declare a major prior to registering for their second semester.

A student can change/declare their official major by working with the department of his/her desired major. Each academic department is available to aid students in changing their major and assigning a faculty advisor. Students should obtain the appropriate program sheet for their major at the time that the major is declared.

Catalog Under Which Student Graduates

Students must follow the Mesa State College graduation requirements from the same catalog as the program sheet for their declared major. In general, the graduation requirements for each student are stated in the Mesa State catalog that is in effect at the time the student first registers at the college. This is true provided (1) a student remains "continuously enrolled" until graduation and (2) the degree, emphasis or certificate area is still accepting students into the program when the student officially declares his/her major.

A student shall be considered to be "continuously enrolled" if s/he does not have an interruption in enrollment of more than one semester (excluding summer sessions). If an interruption in enrollment occurs so that the student is no longer "continuously enrolled" as described above, the catalog requirements applicable at the time of re-enrollment shall apply.

Students retain the right to use the graduation requirements in any single catalog published during their period of enrollment. The student's major must be listed in that catalog, the major must still be available, and continuous enrollment must be maintained from the period of the designated catalog to the point of Mesa State College degree completion.

If a candidate for a degree is unable to meet the requirements because of an event such as the removal of a required course from the offerings of the College or some other unforeseen academic change, it shall be the candidate's responsibility to arrange an exception or understanding approved by the Registrar and the appropriate department head.

English and Mathematics Requirements

Mesa State College students are required to complete English composition and mathematics for general education prior to exceeding sixty semester credit hours. Students should take the courses as freshmen. Those who need preparatory courses before they are ready to enroll in the required courses should enroll in the preparatory courses their first semester at Mesa State. Students who are completing sixty hours of course work will not be permitted to enroll in any additional courses until they have passed the required courses. Exceptions to the policy require the written permission of the appropriate department head (English or Mathematics) or their designee.

Wellness Requirement

To graduate with a baccalaureate degree, a student must earn three semester credit hours in Kinesiology. Each student must take KINE 100 and two activity courses.

To graduate with an associate degree, a student must earn two semester credit hours in Kinesiology. Each student must take KINE 100 and one activity course.

Kinesiology activity courses include those with the "KINA" prefix in addition to DANC 160L, 169L, 174L and 177L. Each course is scheduled for an eight-week module and includes lectures on the history, rules, techniques, and strategies of the activity and participation in the activity. Students are examined both on knowledge of the activity and proficiency in the activity. Prerequisites for all "Intermediate" or Part II classes: the corresponding beginning course or consent of instructor.

1. The only exception to taking KINE 100 will be for those who request and pass a proficiency test at least at the 80 percent level. Contact the Kinesiology Department Head for additional information.
2. A course may be taken for credit only once, except for "grade improvement."

3. In addition to the required, up to six KINA courses may be taken as electives toward graduation with a baccalaureate degree. Up to three KINA courses may be taken as electives toward graduation with an associate degree. (With the exception of varsity athletics.)

See the Kinesiology Course Description section for the list of courses from which to choose for the KINA and DANC 160L, 169L, 174L, 177L activity courses.

Varsity Athletics: KINA180-191 designates the first year of varsity athletics; 280-291, the second; 380-391, the third; and 480-491, the fourth. These courses must be taken in sequence. In addition to the rules above for all KINA courses, the following apply:

1. Only one varsity sport activity course, numbered KINA 180-191, may be used to meet the baccalaureate KINA activity requirement.
2. A student may elect to register for a particular varsity sports class for credit as many as four times (once at each level).
3. Varsity sports activity credit at the 300 and 400 level may not be counted towards the 40 credit hour upper division requirement for graduation unless they are a required part of a degree program.

Philosophy & Goals of a Baccalaureate Education

The avowed hope of institutions of higher learning is that students will emerge with well-developed faculties for critical judgment, analytical thought, and an awareness of their world. In the college environment, students are expected to embrace some of the great ideas and expressions of creative energy which characterize the human condition. Specifically, a baccalaureate education emphasizes the following:

1. The origins and structure of modern society;
2. The enduring ideas which have inspired humanity through the ages;
3. The scientific perspective and its impact on society;
4. The expression of the creative spirit in literature and the arts;
5. The importance of becoming a contributing citizen;
6. The competencies needed for self-directed, ongoing learning; and
7. Advanced competencies within a specific discipline.

Mesa State College reaffirms these ideals. They have been tested through the centuries in a tradition which harks back to the earliest universities. Their contemporary expression at Mesa State College will strengthen the foundation of all academic programs.

Educated men and women share a basic body of perception and knowledge. This heritage is at the core of the mission of a baccalaureate college. Other aspects of a student's curriculum reflect particular talents and career aspirations, but this statement builds upon universals – the acknowledged foundations of the arts, letters, social and natural sciences in our civilization.

The design of general education has been guided by ten goals. A Mesa State College baccalaureate graduate should:

1. Be able to communicate effectively in the English language;
2. Understand the structure and discipline of mathematical thought and its use in problem-solving;
3. Be aware of the great moral, ethical, and philosophical issues which have endured through the ages;
4. Have an understanding of the multicultural nature of our world;
5. Be able to think critically and creatively;
6. Have an understanding of the complexities of social, economic and political systems;
7. Have knowledge of the natural world and an understanding of scientific methods;
8. Appreciate the contributions of literature to our perception of ourselves and the world;
9. Appreciate the aesthetic spirit of humanity through the arts; and
10. Possess the knowledge and skills necessary to achieve a healthy lifestyle.

Requirements for a Baccalaureate Degree

Mesa State College offers baccalaureate degrees in the traditional liberal arts and sciences disciplines, professional fields of study, and interdisciplinary fields. Candidates for baccalaureate degrees must accomplish or be governed by, as appropriate, the following:

Credit Hour Requirements
In general, 120 semester credit hours are required for completion of each baccalaureate degree program. The distribution of the 120 credit hour requirement is:

General Education:
31 semester credit hours

Applied Studies Requirement:
3 semester credit hours

Wellness Requirement:
3 semester credit hours

Major Requirements:
42-78 semester credit hours*

Degree Distinction:
6 semester credit hours

Unrestricted Electives:
0-36 semester credit hours

**Some professional programs may exceed 60 hours.*

Note that the same course may not be counted to satisfy more than one category within a degree.

Students should work closely with their faculty advisors and obtain a program sheet online at mesastate.edu/academics, or from that faculty advisor or the department head at the time they begin their baccalaureate degree program at Mesa State College. The student is ultimately and solely responsible for knowing the requirements for a particular degree and for fulfilling those requirements.

The program sheet lists all requirements for the degree program for the catalog under which the student is working. It is to be kept up-to-date by the student and advisor as the student progresses in meeting requirements.

The specific number of semester hours that must be earned in courses numbered 300 or higher are indicated on the program sheet. A cumulative grade point average of 2.00 or higher for all courses taken and for the courses which comprise the area of the major field of study must be achieved. See a faculty advisor for a program sheet listing specific requirements for the degree and major sought.

Upper-Division Requirements
Students seeking a baccalaureate degree must earn a minimum number of upper-division semester credit hours (numbered between 300 and 499), depending on the degree and major.

A minimum of 40 semester credit hours is required for all Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science, and Bachelor of Business Administration degrees. Students seeking a Bachelor of Science in Nursing or Bachelor of Applied Science should refer to their program sheet for the minimum upper-division credit hour requirement.

Academic Residency for Baccalaureate Degrees
To receive a baccalaureate degree from Mesa State College, students must complete a minimum of 28 semester hours of credit in no fewer than two semesters of study at Mesa State College with at least 15 semester hours in major discipline courses numbered 300 or higher.

Degree Distinctions
The six semester credit hour degree distinction for the B.A. and B.F.A. degrees and the B.S., B.S.N., B.B.A., and B.A.S. degrees are a part of each major's program requirements and must be outside the general education requirements. Students must earn a grade of "C" or higher in each degree distinction course.

Bachelor of Arts and
Bachelor of Fine Arts Distinction
Candidates for the B.A. or the B.F.A degree shall complete six sequential semester hours of one classical or modern foreign language with a grade of "C" or higher. At the discretion of the foreign language faculty and with the approval of the Department Head, the requirement may be satisfied by demonstration of equivalent competency. Students with two or more years of high school coursework in a foreign language may (1) see the Department Head for placement in a higher level class; (2) receive credit by successful completion of a CLEP test in that language; or (3) pursue another language.

Bachelor of Science and
Bachelor of Business Administration Distinction
Candidates for the B.S. and B.B.A degrees shall complete at least six semester hours of the following: one additional course chosen from either the Humanities or Social and Behavioral Sciences general education categories and one additional course chosen from any computer science (CSCI) , any statistics (STAT) or another college mathematics (MATH) course considered higher level than college algebra (MATH 113). The candidate must complete each of these courses with a grade of "C" or higher. At the discretion of the mathematics and computer science faculty, the requirement may be satisfied by a demonstration of equivalent competency.

The above requirements are separate from and in addition to the General Education requirements (i.e., the same course cannot be used for general education, degree distinction and/or other major requirements).

Bachelor of Science in Nursing and
Bachelor of Applied Science Distinction
Candidates for the B.S.N. or B.A.S. degree should refer to their specific major's program sheet to determine their requirements for degree distinction.

General Education Overview

Each student must complete the 31 minimum semester hour general education requirement of lower division credit as specified by the Mesa State College faculty. For specific course requirements and choices, refer to the section titled Courses Approved for General Education Baccalaureate Degree Requirements.

The only exceptions are:
(1) students who have already earned a baccalaureate degree from a regionally accredited institution and (2) students who have an Associate of Arts (A.A.) or Associate of Science (A.S.) degree from a regionally accredited institution or whose transcript contains the "Common Core" statement indicating completion of the Colorado Core Transfer Consortium general education curriculum. In both of these cases, the student's general education is completed and no further general education course work is required at Mesa State College.

For students seeking to transfer all or part of a General Education Program from another institution, the Mesa State College Registrar's Office will check the program to see if it conforms to the statewide guaranteed transfer program.

Students may select their general education courses from the designated list according to their own preference. The only exception is that any course used to meet major requirements cannot be used to fulfill the general education requirement. The following are guidelines for General Education:

1. Those students who qualify may substitute Honors English (ENGL 129) for ENGL 111 and ENGL 112. When Honors English is substituted for ENGL 111 and ENGL 112, only ten General Education courses would be required (30 semester credit hours). The courses must be taken in sequence, and students are encouraged to take them in consecutive semesters. A "C" or higher must be earned in ENGL 111 before a student can take ENGL 112 and a "C" or higher grade must be earned in ENGL 112 to satisfy this requirement.
2. For specific mathematics requirement, students should complete the course specified on the program sheet. For all majors, the mathematics requirement can only be met with a grade of "C" or higher.
3. A student may satisfy a General Education requirement with an appropriate AP, CLEP or DANTES test, if the test has been approved by the appropriate academic department at Mesa State College. See section on non-traditional credit elsewhere in this catalog.
4. No General Education course, except sequential courses, can have a specific course as a prerequisite or co-requisite, unless the prerequisite or co-requisite is in a different discipline.

General Education Core Course Requirements

English: 6 semester credit hours

Mathematics: 3 semester credit hours.

History: 3 semester credit hours
Note: 3 additional hours of history may be chosen to fulfill the Humanities requirement below.

Humanities: 3 semester credit hours chosen from history, literature, philosophy.

Social and Behavioral Science: 6 semester credit hours chosen from anthropology, economics, geography, political science, psychology, sociology.

Fine Arts: 3 semester credit hours chosen from art, dance, fine arts, music, theatre.

Natural Sciences: 7 semester credit hours (must include 1 lab) chosen from biology, chemistry, environmental sciences, geology, physics.

Note: At least one of the two courses must have an associated lab or field component, and both the lecture and lab must be taken in all courses listed which have both, if general education credit is to be received. Courses which fit this lecture and laboratory requirement are marked with an asterisk in the Natural Sciences general education list.

Other Lower-Division Course Requirements

Applied Studies: 3 semester credit hours chosen from the list of courses approved on the following page.

Wellness: 3 semester credit hours including KINE 100 Health and Wellness and any two (2) activity courses chosen from KINA 100-191 or DANC 160L, 169L, 174L, and 177L.

Note: Only one varsity sport course numbered KINA 180-191 may be used to meet the activity requirement.

Courses Approved for Mesa State General Education Baccalaureate Degree Requirements

The following courses are approved to meet the general education requirements for a baccalaureate degree from Mesa State College.

All MSC general education core courses below are approved by the Colorado Department of Higher Education for statewide guaranteed transfer, as part of the gtPathways program (see "Colorado Department of Higher Education Statewide Guaranteed Transfer Courses" section on page 47.)

English
ENGL 111 English Composition and
ENGL 112 English Composition
or
ENGL 129 Honors English

Mathematics
MATH 110 College Mathematics
MATH 113 College Algebra
MATH 119 Precalculus Mathematics
or
MATH 149 Honors Mathematics
MATH 151 Calculus I
MATH 205 Elements of Mathematics II

Students seeking the B.A. or B.F.A. degree must complete MATH 110 or a higher level mathematics course with a grade of "C" or higher to fulfill their mathematics competency under general education; students seeking the B.S., B.S.N., or B.B.A. degree must complete MATH 113 or higher level mathematics course with a grade of "C" or higher to fulfill their mathematics competency under general education; students seeking the B.A.S. degree must refer to their specific program to determine the mathematics competency requirement under general education.

History
HIST 101, 102 Western Civilization
HIST 131, 132 United States History

Humanities
ENGL 131, 132 Western World Literature I, II
ENGL 150 Introduction to Literature
ENGL 222 Mythology
ENGL 231, 232 Non-Western World Literature I, II
ENGL 254, 255 Survey of English Literature I and II
ENGL 261, 262 Survey of American Literature I and II

HIST 101, 102 Western Civilization
HIST 131, 132 United States History

MASS 110 Mass Media Impact and History

PHIL 105 Critical Thinking
PHIL 110 Introduction to Philosophy

Social and Behavioral Sciences
ANTH 201 Cultural Anthropology
ANTH 222 World Prehistory

ECON 201 Principles of Macroeconomics
ECON 202 Principles of Microeconomics

GEOG 103 World Regional Geography

POLS 101 American Government
POLS 261 Comparative Politics

PSYC 150 General Psychology
PSYC 233 Human Growth and Development

SOCO 144 Marriage and Families
SOCO 260 General Sociology
SOCO 264 Social Problems

Fine Arts
ARTE 101 Two-Dimensional Design
ARTE 102 Three-Dimensional Design
ARTE 115 Art Appreciation
ARTE 118 Survey of Art History, Ancient-Modern
ARTE 119 History of Art, Renaissance to Present

DANC 115 Dance Appreciation

FINE 101 The Living Arts

MUSA 220 Music Appreciation
MUSA 266 History of Popular Music

THEA 141 Theatre Appreciation
THEA 145 Introduction to Dramatic Literature

Natural Sciences
*BIOL 101, 101L General Human Biology and Laboratory
*BIOL 102, 102L General Organismal Biology and Laboratory
*BIOL 105, 105L Attributes of Living Systems and Laboratory

CHEM 100 Chemistry and Society
*CHEM 121, 121L Principles of Chemistry and Laboratory
*CHEM 122, 122L Principles of Organic Chemistry and Laboratory
*CHEM 131, 131L General Chemistry and Laboratory
*CHEM 132, 132L General Chemistry and Laboratory

*ENVS 103, 103L Field-Based Introduction to Environmental Science

GEOL 100 Survey of Earth Science
GEOL 103 Weather and Climate
GEOL 104 Oceanography
GEOL 105 Geology of Colorado
GEOL 106 Introduction to Dinosaurs
GEOL 107 Natural Hazards and Environmental Geology
*GEOL 111, 111L Principles of Physical Geology and Laboratory
*GEOL 112, 112L Principles of Historical Geology and Laboratory
*GEOL 113, 113L Field-Based Introduction to Physical Geology and Laboratory

PHYS 100 Concepts of Physics
PHYS 101 Elementary Astronomy
*PHYS 105, 105L Physics by Inquiry
*PHYS 111, 111L General Physics and Laboratory
*PHYS 112, 112L General Physics and Laboratory
*PHYS 131, 131L Fundamental Mechanics and Laboratory
*PHYS 132, 132L Electromagnetism and Optics and Lab

** Only these courses fulfill the requirement of Natural Science with an associated lab or field component. Both the lecture and laboratory must be taken if general education credit is to be received.*

Courses Approved for Other Lower-Division Credit Requirements

Applied Studies
ACCT 201 Principles of Financial Accounting

BIOL 154, 154L Technobiology and Laboratory

BUGB 101 Introduction to Business
BUGB 231 Survey of Business Law
BUGB 249 The Business of Life

CISB 101 Business Information Technology

CSCI 100 Computers in Our Society
CSCI 106 Web Page Design I

ENGL 219 Introduction to Professional Writing

FLAF 111, 112 First-Year French I, II
FLAG 111, 112 First-Year German I, II
FLAS 111, 112 First-Year Spanish I, II

GEOG 131 Introduction to Cartography

KINE 265 First Aid/CPR for the Professional Rescuer

PHIL 275 Introduction to Logic

SPCH 101 Interpersonal Communication
SPCH 102 Speechmaking
SPCH 112 Voice and Diction

UTEC 120 Industrial Safety Practices

Wellness
KINE 100 Health and Wellness

KINA 100-191 Activity Courses

DANC 160L Beginning Ballet Lab
DANC 169L Beginning Modern Dance Lab
DANC 174L Beginning Jazz Dance Lab
DANC 177L Beginning Tap Dance Lab

Colorado Department of Higher Education Statewide Guaranteed Transfer Courses

Mesa State College has 75 general education courses approved for guaranteed transfer and accepts nearly 500 courses from other Colorado public institutions of higher education. Guaranteed transfer courses are universally transferable across the institutions and are applicable to general education requirements within all associate and baccalaureate degree programs.

All courses listed under the "Courses Approved for Mesa State General Education Baccalaureate Degree Requirements" section and STAT 200 have been approved by the Colorado Department of Higher Education (CDHE) as guaranteed transfer courses. For more information regarding this designation, reference may be made to the CDHE website at highered.colorado.gov/academics/transfers/students.html, the Registrar's Office, or your faculty advisor. Courses approved through Colorado's gtPathways program, the state's guaranteed transfer program, are grouped into five content areas, four of which have sub groupings:

Arts and Humanities:
- GT-AH1 - Arts and Expression
- GT-AH2 - Literature and Humanities
- GT-AH3 - Ways of Thinking
- GT-AH4 - Foreign Languages

Communication:
- GT-CO1- Introductory Writing
- GT-CO2 - Intermediate Writing

Mathematics - GT-MA1
[Note: no subgroups]

Natural and Physical Sciences
- GT-SC1 - with laboratory
- GT-SC2 - without laboratory

Social and Behavioral Sciences
- GT-HI1 - History
- GT-SS1 - Economic and Political Systems
- GT-SS2 - Geography
- GT-SS3 - Human Behavior, Culture, or Social Frameworks

The course listing found under "MSC's General Education Baccalaureate Degree Requirements" and in back of this catalog identifies gtPathways courses and the above content area for which it has been approved.

Multiple Concentrations Within One Degree

Under many of the baccalaureate degrees, concentrations are available. Before graduating with a baccalaureate degree, a student may complete requirements for one or several of the concentrations as desired. However, after a degree has been awarded, if courses are taken that would have satisfied requirements for an additional concentration, the additional concentration cannot be added to the degree already awarded. The coursework will be shown on the student's transcript.

Students wishing to receive multiple concentrations within one degree must satisfy all the requirements for each concentration. Only one degree will be awarded. All concentrations must be declared on the petition to graduate.

Second Baccalaureate Degree

A student seeking a second baccalaureate degree at Mesa State College must earn a minimum of 30 additional semester hours of credit, at least 18 of which must be in courses numbered 300 and higher. None of these 30 credits may have been used toward another baccalaureate degree, and all must be earned at Mesa State College. In addition, the student must satisfy all specific program requirements of the new degree and concentration as well as any graduation requirements not previously met (e.g., the degree distinction). Students with a baccalaureate degree from another institution who are pursuing a second baccalaureate degree from Mesa State College are exempt from the Wellness requirement.

Requirements for a Minor

A minor is an approved program of study to broaden the scope of the educational experience and can be awarded with any baccalaureate degree. A minor, if chosen, must be outside the major field of study. Students are urged to consult a faculty advisor and to obtain a program sheet for the minor sought. A minor is not a degree by itself and must be earned at the same time as a baccalaureate degree. The number of minors a student may earn with any baccalaureate degree at Mesa State College shall not exceed two.

A minor consists of 15-24 semester hours. There may be prerequisites required for the minor which will increase the total number of credit hours for a student who has not already taken those prerequisites. Since a minor is optional, courses taken to satisfy general education, major requirements, or electives can be counted toward the minor if applicable. At least 33 percent of the minor must be in courses numbered 300 or above and at least 25 percent of the classes must be taken at Mesa State College. A cumulative grade point average of 2.00 or higher for the courses used for the minor must be achieved.

Requirements for Teacher Licensure

Students preparing to teach in the public schools (elementary, secondary, K-12) must contact both the Mesa State College Center for Teacher Education regarding state licensure requirements and the appropriate department head regarding program requirements for the major. It is crucial that students seeking teacher licensure plan their schedules with their advisors early in their academic careers, preferably the first semester of their work at Mesa State College.

Teacher licensure is a separate process and must be pursued in addition to a baccalaureate degree. See the section on Center for Teacher Education.

Requirements for Associate Degree Programs

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

Credit Hour Requirements

For most associate degrees, 60 semester credit hours in approved course work must be earned. A cumulative grade point average of 2.00 or higher for all courses taken and for the courses which comprise the area of emphasis must be achieved. Some programs have additional GPA requirements.

Academic Residency for Associate Degrees

To receive an associate degree from Mesa State College, students must complete a minimum of 16 semester hours of credit in no fewer than two semesters of study at Mesa State.

Associate of Arts (A.A) and Associate of Science (A.S.) Degree Requirements

A.A. and A.S. degree programs are designed to prepare students for upper division collegiate work (junior level) in colleges and universities granting the Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) degree. All A.A. and A.S. degree programs include the Colorado Statewide General Education Core and will thus meet the lower-division general education requirements of most baccalaureate degree programs at public institutions in Colorado. A grade of "C" or higher is required in each core course in order to be accepted for transfer under the Core Transfer Agreements. Course work for the A.A. or A.S. degree includes:

1. Completion of the college's general education core which is aligned with the state's general education curriculum. Specific information about the content areas, required hours, and courses are found under general education overview.
2. Other lower-division requirements, (i.e. applied studies and wellness) listed in the general education overview.
3. Discipline classes (emphasis), as detailed in the Programs of Study section in this catalog or as developed in consultation with a faculty advisor and indicated on the program sheet.
4. Electives

The A.A. degree is designed for transfer into a baccalaureate degree program, with junior standing, in the arts, humanities, social or behavioral sciences, or one of the professional fields with such disciplines as its base. The A.S. degree is designed for transfer into a baccalaureate degree program,

with junior standing, in one of the mathematical, biological, or physical sciences, or in one of the professional fields with such disciplines as its base.

Students should consult with their faculty advisors to assure that the emphasis and electives chosen will satisfy requirements of the particular baccalaureate programs to which they plan to transfer. A.A. and A.S. degrees in emphases not described in this catalog may be developed in consultation with the faculty advisor. An A.A. or A.S. degree indicates that the holder has developed proficiencies sufficient to prepare for upper-division collegiate work and is awarded only for completion of a coherent program of study designed for a specific purpose.

Once a student has decided upon a program of study, s/he needs to obtain a program sheet from the faculty advisor. All degree requirements, as agreed upon, will be included on the program sheet.

Associate of Applied Science (A.A.S.) Degree Requirements

A.A.S. degree programs are intended to prepare individuals to enter skilled and/or para-professional occupations or to upgrade/stabilize their employment. With the exception of the Bachelor of Applied Science degree, these programs generally are not intended for transfer to baccalaureate degree programs; however, certain courses may be accepted toward a baccalaureate degree at some institutions. The A.A.S. degrees available at Mesa State College, along with the courses required to complete each degree, are listed in the Programs of Study section in this catalog.

Students are urged to consult with a faculty advisor and to obtain from the advisor a program sheet for the degree sought.

Coursework for the A.A.S. degree includes:

1. General Education Requirements for the A.A.S. Degree include:
   a. 4 semester hours of Mathematics: UTEC 107 or MATH 113. See your advisor for the appropriate course; UTEC 107 will not meet the mathematics general education requirement for students who subsequently pursue a baccalaureate degree.
   b. 6 semester hours English: ENGL 111 and ENGL 112
   c. 6 semester hours Social Sciences/ Humanities/and selected Applied Studies chosen from the following:

      Social Sciences: See the "Social and Behavioral Sciences" general education requirements listed in the Baccalaureate section of the catalog.

      Humanities: See the "Humanities" general education requirements listed in the Baccalaureate section of the catalog.

      Applied Studies: SPCH 101 or SPCH 102
2. Wellness Requirement: 2 semester hours
3. The remaining requirements and electives are found under the specific program in the Programs of Study section in this catalog.
4. Additional requirements apply for some degrees. See the program sheet for more information.

Double Emphasis Within an Associate Degree

Students wishing to receive a double emphasis within one degree must satisfy all the requirements for each emphasis. Only one degree will be awarded. All emphases desired must be declared on the petition to graduate.

Second Associate Degree

A minimum of 15 semester hours of credit beyond that required for the first associate degree must be earned by a student seeking a second associate degree at Mesa State College. A minimum of one semester of residency at Mesa State College is also necessary. In addition, the student must satisfy all specific requirements for the new degree. Only one A.A. and only one A.S. degree may be granted to any student.

Requirements for Technical Certificates

Candidates for the Mesa State College Technical Certificate must satisfy all requirements specified for the certificate with a cumulative grade point average of 2.00 or higher for all courses. A grade lower than "C" in the discipline filed will not be counted toward satisfying certificate requirements.

Programs of Study

CHANGES OF PROGRAM AND COURSE OFFERINGS

Acceptance of registration by Mesa State College and admission to any education program to the College does not constitute a contract or warranty that the College will continue to offer the program in which a student is enrolled. The College expressly reserves the right to change, phase out or discontinue any program. The listing of courses contained in any College bulletin, catalog or schedule is by way of announcement only and shall not be regarded as an offer of contract. The College expressly reserves the right to:

1. add or delete courses from its offerings,
2. change times or locations of courses or programs,
3. change academic calendars without notice,
4. cancel any course for insufficient registrations, or
5. revise or change rules, charges, fees, schedules, courses, requirements for degrees, and any other policy or regulation affecting students, including, but not limited to, evaluation standards, whenever the same is considered to be in the best interests of the College.

ACCOUNTING

FACULTY
Craig Fossett, Geoffrey Gurka, Suzanne Lay, David Rogers

CONTACT INFORMATION
Department of Business, Academic Classroom Building 309,
970-248-1778

PROGRAMS OFFERED

Bachelor of Science
- Accounting – Information Technology
- Accounting – Public Accounting

Minor
- Accounting

Bachelor of Science + Master of Business Administration
This option is a five year (3+2) program that allows students to graduate with a Bachelor of Science in Accounting and a Master of Business Administration. The program meets the CPA certification requirements in all states. See faculty advisor for requirements.

Bachelor of Science in Accounting Degree Requirements

General Education (31 credit hours)

B.S. Degree Distinction
- STAT 200 Probability & Statistics
- Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Accounting Core:
- ACCT 201 Principles of Financial Accounting
- ACCT 202 Principles of Managerial Accounting
- ACCT 321 Intermediate Accounting I
- ACCT 322 Intermediate Accounting II
- ACCT 331 Cost Accounting
- ACCT 441 Individual Income Tax

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

BUGB 349 Legal Environment of Business or BUGB 351 Business Law I
BUGB 352 Business Law II
CISB 205 Advanced Business Software
ECON 201 Principles of Macroeconomics
ECON 202 Principles of Microeconomics
FINA 301 Managerial Finance
MANG 201 Principles of Management
MANG 491 Business Strategy
MARK 231 Principles of Marketing

Concentration (Students must choose one):
Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Special Requirements:
To be admitted to the Accounting Program at Mesa State College, students must meet certain requirements. See Department for specific requirements. Note that admission to the college does not guarantee admission to the program.

1. Prior to admission, potential Accounting majors will be given the classification code for "pre-Accounting." To be eligible for admission to the program, a student must have successfully completed the following:
   a. 30 credit hours (entering freshmen are not eligible) with a 2.75 GPA or higher;
   b. Freshman English (ENGL 111 and 112, or 129);
   c. 9 hours of the General Education requirement excluding the English requirement listed above;
   d. College Algebra (MATH 113) or higher;
   e. Business Information Technology (CISB 101);
   f. Principles of Management (MANG 201);
   g. Financial and Managerial Accounting (ACCT 201 & 202) with a minimum 2.5 GPA.
2. An application for admission should be submitted to the Accounting Program Admission Committee when the above requirements have been met. Specific admission information may be obtained from the department. Only students admitted to the Accounting Program will be allowed to enroll in upper division Accounting courses with the exception of Intermediate Accounting I and II and/or Cost Accounting I and II.
3. A grade of "D" in any one of the courses specifically identified above is not acceptable.
4. Exceptions to any of the above requirements may be made by the Admissions Committee in special circumstances.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

ADMINISTRATIVE OFFICE TECHNOLOGY

FACULTY
Alane Wooster

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED

Technical Certificate
- Administrative Office Technology – General Office Administration

Associate of Arts
- Administrative Office Technology Emphasis

Associate of Applied Science
- Administrative Office Technology – Accounting Technician
- Administrative Office Technology – Administrative Professional
- Administrative Office Technology – Legal Assistant
- Administrative Office Technology – Medical Administrative Assistant

Technical Certificate in Administrative Office Technology – General Office Administration Requirements

OFAD 101 Office Bookkeeping
OFAD 105 Ten Key
OFAD 153 Word Processing I
OFAD 201 Office Procedures
OFAD 202 Records Management
OFAD 253 Word Processing II
OFAD 267 Presentation, Publishing & Desk Top Management Software
OFAD 206 Computerized Bookkeeping
OFAD 208 Spreadsheets
OFAD 269 Complete PC Database
Electives – 3 credit hours chosen from:
- OFAD 147 Medical Terminology
- OFAD 221 Transcription Machines
- OFAD 244 Legal Office Procedures
- OFAD 248 Medical Coding & Insurance Billing
- OFAD 249 Medical Office Procedures
- OFAD 293 Cooperative Education

Associate of Arts: Administrative Office Technology Emphasis Degree Requirements

General Education for Associate Degree (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Course requirements specific to this degree:
- ACCT 201 Principles of Financial Accounting
- BUGB 211 Business Communications
- CISB 101 Business Information Technology
- MANG 201 Principles of Management
- OFAD 153 Word Processing I
- OFAD 201 Office Procedures
- OFAD 202 Records Management
- OFAD 253 Word Processing II

Electives (3 credit hours)

Associate of Applied Science in Administrative Office Technology – Accounting Technician Degree Requirements

ENGL 111, 112 English Composition (6 credit hours)

Social/Behavioral Science, Humanities, or Applied Studies (6 credit hours)

UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses:
- ACCT 201 Principles of Financial Accounting
- ACCT 202 Principles of Managerial Accounting
- BUGB 211 Business Communications
- MANG 121 Human Relations in Business
- OFAD 101 Office Bookkeeping
- OFAD 105 Ten-Key

OFAD 153 Word Processing I
OFAD 201 Office Procedures
OFAD 202 Records Management
OFAD 206 Computerized Bookkeeping
OFAD 253 Word Processing II
OFAD 293 Cooperative Education
OFAD 267 Presentation, Publishing & Desk Top Management Software
OFAD 208 Spreadsheets
OFAD 269 Complete PC Database

Associate of Applied Science in Administrative Office Technology – Administrative Professional Degree Requirements

ENGL 111, 112 English Composition (6 credit hours)

Social/Behavioral Science, Humanities, or Applied Studies (6 credit hours)

UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses:
BUGB 211 Business Communications
OFAD 293 Cooperative Education
MANG 121 Human Relations in Business
OFAD 208 Spreadsheets
OFAD 101 Office Bookkeeping
OFAD 105 Ten Key
OFAD 153 Word Processing I
OFAD 201 Office Procedures
OFAD 202 Records Management
OFAD 206 Computerized Bookkeeping
OFAD 253 Word Processing II
OFAD 267 Presentation, Publishing & Desk Top Management Software
OFAD 269 Complete PC Database

Electives – 6 credit hours

Associate of Applied Science in Administrative Office Technology – Legal Assistant Degree Requirements

ENGL 111, 112 English Composition (6 credit hours)

Social/Behavioral Science, Humanities, or Applied Studies (6 credit hours)

UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses:
BUGB 211 Business Communications
BUGB 231 Survey of Business Law
MANG 121 Human Relations in Business
OFAD 101 Office Bookkeeping
OFAD 105 Ten Key
OFAD 153 Word Processing I
OFAD 202 Records Management
OFAD 206 Computerized Bookkeeping
OFAD 244 Legal Office Procedures
or OFAD 201 Office Procedures
OFAD 253 Word Processing II
OFAD 293 Cooperative Education
OFAD 208 Spreadsheets
OFAD 221 Transcription Machines
or CRMJ 201 Introduction to Criminal Justice
OFAD 267 Presentation, Publishing & Desk Top Management Software
OFAD 269 Complete PC Database

Associate of Applied Science in Administrative Office Technology – Medical Administrative Assistant Degree Requirements

ENGL 111, 112 English Composition (6 credit hours)

Social/Behavioral Science, Humanities, or Selected Speech (6 credit hours)

UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

BIOL 209 Human Anatomy
BIOL 209L Human Anatomy Lab
OFAD 293 Cooperative Education

BUGB 211 Business Communications
MANG 121 Human Relations in Business
OFAD 101 Office Bookkeeping
OFAD 105 Ten Key
OFAD 147 Medical Terminology
OFAD 153 Word Processing I
OFAD 202 Records Management
OFAD 206 Computerized Bookkeeping
OFAD 249 Medical Office Procedures
or OFAD 201 Office Procedures
OFAD 253 Word Processing II
OFAD 269 Complete PC Database
OFAD 208 Spreadsheets
OFAD 267 Presentation, Publishing & Desk Top Management Software
OFAD 248 Medical Coding and Insurance Billing

See faculty advisor or department contact for a program sheet detailing exact and complete requirements for the degree, emphasis, or certificate chosen.

ARCHAEOLOGY

CONTACT INFORMATION
Department of Social and Behavioral Sciences; Lowell Heiny Hall 411, 970-248-1696.

PROGRAMS OFFERED
Minor
Archaeology

Minor Requirements
See faculty advisor for requirements.

ART
SEE ALSO GRAPHIC DESIGN

FACULTY
Steven Bradley, Joshua Butler, Suzie Garner, Laverne Mosher, Carolyn Quinn-Hensley, Deborah Snider, Toru Sugita, Marilyn Wounded Head

CONTACT INFORMATION
Department of Art, Fine Arts 200, 970-248-1833

PROGRAMS OFFERED
- Bachelor of Fine Arts
  - Art History
  - Art–K-12 Teaching
  - Studio Art
  - Visual Arts Administration
- Minors
  - Studio Art

Bachelor of Fine Arts In Art-Art History Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Art Core
- ARTE 101 Two-Dimensional Design
- ARTE 102 Three-Dimensional Design
- ARTE 118 History of Art, Prehistory to Renaissance
- ARTE 119 History of Art, Renaissance to Present
- ARTS 151 Foundation Drawing
- ARTS 251 Figure Drawing
- ARTE 300 Exh. & Vis. Arts Admin.
- ARTE 494 Senior Seminar & Portfolio

Art History Core (24 credit hours from ARTH courses)

Art Studios (See program sheet for list of courses)
- ARTS 200 level studios (9 credit hours)
- ARTS 300 level studios (9 credit hours)
- ARTE 400 level studios (6 credit hours)

Electives (5-6 credit hours)

Bachelor of Fine Arts In Art–K-12 Teaching Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Art Education Concentration
- ARTE 101 Two-Dimensional Design
- ARTE 102 Three-Dimensional Design
- ARTS 151 Basic Drawing
- ARTE 118 History of Art, Prehistory to Renaissance
- ARTE 119 History of Art, Renaissance to Present
- ARTS 231 Fibers Workshop I
- ARTS 241 Workshop I & Hand Building
- ARTS 251 Figure Drawing
- ARTS 271 Printmaking – Intaglio & Relief
- ARTS 291 Foundation Painting
- ARTH 315 Nineteenth-Century Art
- ARTH 316 Twentieth-Century Art to 1950
- Two of the following courses:
  - ARTS 281 Modeling & Mold Making Workshop II
  - ARTS 282 Bronze Casting Workshop I
  - ARTS 283 Carving & Construction Workshop I
  - ARTS 284 Ceramic Sculpture Workshop I

Art Certification Specialty (6 credit hours chosen from):
- ARTS 321 Metalsmithing
- ARTS 331 Fibers Workshop II
- ARTS 342 Workshop III: Intermediate Throwing
- ARTS 345 Noborigama Wood Fire Ceramics I
- ARTS 351 Drawing Workshop I
- ARTS 354 Figure Modeling & Drawing
- ARTS 360 Sketchbook
- ARTS 381 Modeling & Mold Making Workshop II
- ARTS 382 Bronze Casting Workshop II
- ARTS 383 Carving & Construction Workshop II
- ARTS 396 Topics

Education Licensure
- EDUC 211 Foundations of Education
- EDUC 342 Pedagogy & Assessment – Secondary/K12
- EDUC 343 Teaching to Diversity
- ARTS 410 Elementary Art Education Methods
- ARTS 410L Field/Studio Experience – Elem. Ed Methods
- ARTS 412 Secondary Art Education Methods
- EDUC 442 Integrating Literacy: Secondary/K12 Art
- EDUC 499D Teaching Internship & Colloquia – EL for K12
- EDUC 499H Teaching Internship & Colloquia - Sec for K12

Special Requirements:
1. K-12 Art licensure candidates are expected to show proficiencies in State of Colorado Performance-Based and Art Model Content Standards. Formal evaluation of that knowledge is shown through a professional proficiency portfolio, developed throughout licensure coursework and reviewed by both Art Education and Teacher Education faculty at the end of the student teaching internship.
2. Candidates are expected to earn a minimum grade of "B" in all licensure classes, which must be taken in sequence prescribed by the Center for Teacher Education. The licensure sequence is begun during the junior year (usually spring semester), and requires three semesters for completion.
3. Professional dispositions for teaching are measured throughout the licensure sequence and include qualities such as ethical and responsible behaviors, personal presentation, ability to work in collegial capacities, ability to manage time, paperwork and resources, and an aptitude for elevating the academic standing of the Art Education field.
4. Completion of admission to the K-12 Art Licensure program includes:
   - A. All requirements and prerequisite courses are met for the Center for Teacher Education's application for admission (usually completed during the sophomore year).
   - B. A meeting with Art Education faculty to discuss professional goals and establish a timeline for completion of requirements.
   - C. A cumulative GPA of 3.0 or better in all studio and art history courses.
   - D. Completion of ARTE 101, 102, 118, 119, 151, 231, 241, 251 and 271 within the first 60 hours.
   - E. A professional disposition form completed by a minimum of three Art Department faculty from whom the student has taken lower-division courses as above.

5. Art licensure students must pass the PLACE content exam with a minimum score of 220 (out of 300) points prior to student teaching (fee required).
6. The ARTD 410 Hybrid/On-line class does not meet the K-12 Art licensure requirements.

NOTE: Additional fees are required through the licensure program and range from $200-$300, covering basic proficiency tests, fingerprinting, and content exam, in addition to the cost of textbooks and art materials.

Bachelor of Fine Arts in Art-Studio Art Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Art Studies
- ARTE 101 Two-Dimensional Design
- ARTE 102 Three-Dimensional Design
- ARTE 118 History of Art, Prehistory to Renaissance
- ARTE 119 History of Art, Renaissance to Present
- ARTS 151 Foundation Drawing
- ARTS 251 Figure Drawing
- ARTE 300 Exhibitions & Visual Arts Administration
- ARTE 494 Senior Seminar & Portfolio
- ARTE 497 Senior Exhibition

Art History (12 credit hours chosen from ARTH courses)
Art Studios (See program sheet for list of courses)
- ARTS 200 level studios (9 credit hours)
- ARTS 300 level studios (12 credit hours)
- ARTS 400 level studios (9 credit hours)

Electives (5-6 credit hours)

See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Bachelor of Fine Arts In Art- Visual Arts Administration Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Art Core
- ARTE 101 Two-Dimensional Design
- ARTE 102 Three-Dimensional Design
- ARTE 118 History of Art, Prehistory-Ren.
- ARTE 119 History of Art, Ren. to Present
- ARTS 151 Foundation Drawing
- ARTS 251 Figure Drawing
- ARTS 291 Foundation Painting
- ARTE 300 Exhibitions & Vis. Arts Admin.
- ARTH 315 Nineteenth-Century Art
- ARTH 316 Twentieth-Century Art to 1950
- ARTE 494 Senior Seminar & Portfolio

Business Core (24 credit hours from ARTH courses)
- MARK 231 Principles of Marketing
- MANG 201 Principles of Management
- MANG 300 Small Business Management
- MANG 371 Human Resource Mgmt.
- BUGB 340 Applied Financial Management For Emerging Businesses
- BUGB 349 Legal Envir. Of Business

Art Studios (See program sheet for list of courses)
- ARTS 200 level studios (6 credit hours)
- ARTS 300 level studios (9 credit hours)

Electives (8 credit hours)

See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Minor Requirements

See faculty advisor or department for detailed minor requirements.

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

ATHLETIC TRAINING

FACULTY
Robert Ryan

CONTACT INFORMATION
Department of Kinesiology, Saunders 120, 970-248-1374.

PROGRAMS OFFERED
Bachelor of Science

Bachelor of Science in Athletic Training Degree Requirements

General Education (31 minimum credit hours)

B.S. Degree Distinction (6 credit hours)
STAT 200 Probability & Statistics, any CSCI course, or MATH 119 or higher
Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Athletic Training Core Courses:
KINE 200 History and Philosophy of Sport and Physical Education
KINE 213 Applications of Physical Fitness and Physical Education
KINE 234 Prevention and Care of Athletic Injuries
KINE 240 Introduction to Clinical Athletic Training
KINE 303/303L Exercise Physiology and Lab
KINE 309/309L Anatomical Kinesiology and Lab
KINE 365 First Responder
KINE 367 Field Experiences in Athletic Training I
KINE 368 Clinical Experiences in Athletic Training I
KINE 373 Upper Body Injury Assessment
KINE 374 Lower Body Injury Assessment
KINE 378 Clinical Experiences in Athletic Training II
KINE 401 Org. Ad./Legal Considerations in PE and Sport
KINE 410 Rehabilitative Exercises
KINE 420 Therapeutic Modalities
KINE 430 Medical Conditions and Pharmacology in Sports
KINE 467 Field Experiences in Athletic Training II
KINE 468 Clinical Experiences in Athletic Training III
KINE 478 Clinical Experiences in Athletic Training IV

Required Related Study Area:
(Should be completed by the end of the sophomore year.)
BIOL 209/209L Human Anatomy and Physiology I and Lab
BIOL 210/210L Human Anatomy and Physiology II and Lab

Electives: 17 credit hours; additional upper division hours may be needed.

Special Requirement:
American Red Cross CPR/AED for the Professional Rescuer and Emergency Response certification is required.
Students seeking a degrees in Athletic Training and Teaching should see their faculty advisors in both Athletic Training and Teacher Licensure.

The Board of Certification (BOC) will only allow students who have graduated from a Commission on Accreditation of Athletic Training Education (CAATE) accredited Athletic Training Education Program (ATEP) to take the BOC national certification exam. The ATEP at Mesa State College is accredited through CAATE.

Admission into the ATEP is competitive and admission into Mesa State College does not guarantee admission into the ATEP. Students may declare the Pre- Athletic Training course of study at any time but only those who have been accepted into the ATEP clinical program may declare the Athletic Training degree of study.

The ATEP is a 4 semester clinical program designed to be completed during the junior and senior years. To obtain official requirements for admittance into the ATEP please contact the ATEP Program Director (PD) or visit the ATEP website.

Applications to the ATEP are due by April 15th for admittance into the clinical program for the following fall semester. If there is space available, applications may be considered on an individual basis throughout the year.

Transfer students are encouraged to contact the ATEP early in the spring semester prior to transferring to assure that they have time to develop the required skills and knowledge pre-requisites. Applications from transfer students at the junior level or above will be accepted after the April 15th deadline and may be granted acceptance directly into the clinical program if space is available. All transfer students accepted directly into the clinical program must possess the skills and knowledge equivalent to that obtained in KINE 234 & 240 and demonstrate these skills prior to the start of ~~the start of~~ KINE 367. (Required skills are listed on the ATEP website)

The following are required for admission into the ATEP:
1. Have a cumulative GPA of 2.5 or higher
2. Completed the following courses (Grade "C" or higher)
   a. KINE 234 (or equivalent)
   b. KINE 240 (or equivalent knowledge, skills and observations
   c. BIOL 209, 209L (or equivalent)

The following materials must accompany the application to the ATEP:
1. Completed Physical Examination
2. Completed Technical Standards Form.
3. Immunization records showing immunization for
   a. DPT
   b. MMR
   c. Polio
   d. Chickenpox
   e. Hepatitis B
4. TB test
5. Provide documentation of current adult CPR certification.
6. Essay on why you want to pursue a concentration in Athletic Training (1-2 pages)
7. Unoffical Transcripts

Students admitted into the clinical program must:
1. maintain current CPR/AED for the Professional Rescuer (or equivalent) (training will be provided by the ATEP faculty)
2. complete an annual physical examination and TB test
3. maintain and provide documentation of professional liability insurance
4. maintain and provide documentation of personal health insurance
5. maintain and provide documentation of National Athletic Trainers Association membership (beginning the spring semester of their junior year)
6. be available to begin course work and field experiences (KINE 367, 467) during fall pre-season practices.

BIOLOGY

FACULTY
Bruce Bauerle, Margot Becktell, Phyllis Chowdry, Forbes Davidson, Richard Dujay, Kristy Duran, Stephanie Matlock-Cooley, Gary McCallister, Denise McKenney, Kyle McQuade, Carrie McVean-Waring, Aparna Palmer, Thomas Walla, Steven Werman

CONTACT INFORMATION
Department of Biological Sciences, Science Lab 222, 970-248-1993.

PROGRAMS OFFERED
- Associate of Science
  - Biology Emphasis
- Bachelor of Science
  - Biological Sciences – Biology
  - Biological Sciences – Biology - Secondary teaching
- Minor
  - Biology

Associate of Science: Biology Emphasis Degree Requirements

General Education for Associate Degree (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- BIOL 105, 105L Attributes of Living Systems & Lab
- BIOL 106, 106L Principles of Animal Biology & Lab
- BIOL 107, 107L Principles of Plant Biology & Lab
- BIOL 208, 208L Fundamentals of Ecology & Evolution & Lab

Additional courses in biology specialization should be selected in consultation with advisor. (8 credit hours)

General Education and course requirements in discipline plus electives chosen in consultation with the student's advisor up to the minimum of 60 credit hours comprise the requirements for this emphasis.

Study directed toward the Associate of Science degree will serve as a basis for the Bachelor of Science degree in the same discipline and also for other programs at Mesa State College and at other colleges. Faculty advisors will assist students in planning programs to meet requirements. Programs of study in the sciences are very sequential and advanced planning for the transition from an associate to a baccalaureate program is crucial for economy of time and effort.

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Bachelor of Science in Biological Sciences Degree Requirements

General Education (31 credit hours)

B.S. Degree Distinction
- STAT 200 Probability & Statistics or
  - MATH 146 Calculus for Biological Studies
- Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- BIOL 105, 105L Attributes of Living Systems & Lab
- BIOL 106, 106L Principles of Animal Biology & Lab
- BIOL 107, 107L Principles of Plant Biology & Lab
- BIOL 208, 208L Fundamentals of Ecology & Evolution & Lab
- BIOL 301, 301L Principles of Genetics & Lab
- BIOL 483 Senior Thesis Additional biology courses must be selected from three of the following areas (minimum of 20 credit hours, 10 credit hours must be upper division):

1. Cell, Developmental, and Molecular
   - BIOL 302, 302L Cellular Biology & Lab
   - BIOL 310, 310L Developmental Biology & Lab
   - BIOL 343, 343L Immunology & Lab
   - BIOL 425 Molecular Genetics
   - BIOL 442 Pharmacology
   - CHEM 315, 315L Biochemistry & Lab

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

2. Organismal
   BIOL 221, 221L Plant Identification & Lab
   BIOL 250, 250L Intro to Medical Microbiology & Lab
   BIOL 331, 331L Insect Biology & Lab
   BIOL 333 Marine Biology
   BIOL 335, 335L Invertebrate Zoology & Lab
   BIOL 336 Fish Biology
   BIOL 350, 350L Microbiology & Lab
   BIOL 411, 411L Mammalogy & Lab
   BIOL 412, 412L Ornithology & Lab
   BIOL 413, 413L Herpetology & Lab
   BIOL 416, 416L Ethology & Lab
   BIOL 431, 431L Animal Parasitology & Lab
   BIOL 433 Marine Invertebrate Communities
   BIOL 450, 450L Mycology & Lab

3. Anatomical and Physiological
   BIOL 209, 209L Human Anatomy & Physiology & Lab
   BIOL 210, 210L Human Anatomy & Physiology II & Lab
   BIOL 241 Pathophysiology
   BIOL 341, 341L General Physiology & Lab
   BIOL 342, 342L Histology & Lab
   BIOL 421, 421L Plant Physiology & Lab
   BIOL 423, 423L Plant Anatomy & Lab
   BIOL 426, 426L Intro to Electron Microscopy & Lab
   BIOL 441, 441L Endocrinology & Lab

4. Ecology, Evolution, and Systematics
   BIOL 211, 211L Ecosystem Biology & Lab
   BIOL 315 Epidemiology
   BIOL 320 Plant Systematics
   BIOL 321, 321L Taxonomy of Grasses & Lab
   BIOL 403 Evolution
   BIOL 405, 405L Advanced Ecological Methods & Lab
   BIOL 406 Plant-Animal Interactions
   BIOL 407 Tropical Field Biology
   BIOL 408 Desert Ecology
   BIOL 414, 414L Aquatic Biology & Lab
   BIOL 415 Tropical Ecosystems
   BIOL 418, 418L Wild Life Management & Lab

Required Related Study Area:
CHEM 131, 131L General Chemistry & Lab (or higher level)
CHEM 132, 132L General Chemistry & Lab (or higher level)
PHYS 111, 111L General Physics & Lab (or higher level)
PHYS 112, 112L General Physics & Lab (or higher level)

Concentration (Students must choose one):
Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Students seeking a degree in Biology–Secondary Teaching should see their faculty advisors in both Biology and Teacher Licensure.

Special Requirements and Recommendations:
1. A minimum grade of "C" is required for all "Required Courses" and "Required Related Study Area" courses.
2. 20 credit hours of Degree Distinction and Required Related Study Area must be completed by end of sophomore year (≤ 70 credit hours).

Minor Requirements
See faculty advisor or department for detailed minor requirements.

BUSINESS

FACULTY
Morgan Bridge, Michael Gallagher, Thea Chase, Timothy Hatten, Georgann Jouflas, Agim Kukeli, Frank Markham, Robert Mayer, Jerry Moorman, Deborah Parman, Patrick Schutz, Richard Vail

CONTACT INFORMATION
Department of Business, Academic Classroom Building 309, 970-248-1778

PROGRAMS OFFERED

Associate of Arts
- Business Administration Emphasis

Bachelor of Applied Science
- Business Administration

Bachelor of Business Administration
- Business Economics
- Entrepreneurship
- Finance
- Human Resource Management
- Landman/Energy Management
- Management
- Marketing
- Travel, Tourism, and Commercial Recreation Management

Master of Business Administration

Minors
- Business Administration
- Economics
- Entrepreneurship
- Travel and Tourism

Associate of Arts: Business Administration Emphasis
Degree Requirements

General Education for Associate Degree (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
ACCT 201 Principles of Financial Accounting
ACCT 202 Principles of Managerial Accounting
BUGB 101 Introduction to Business
BUGB 211 Business Communications
BUGB 231 Survey of Business Law
STAT 200 Probability & Statistics

Electives (5 credit hours)

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Bachelor of Applied Science in Business Administration
Degree Requirements

To be admitted to the B.A.S. degree, an applicant must possess an A.A.S. degree from an accredited school in an appropriate discipline.

General Education (31 credit hours)

B.A.S. Degree Distinction
STAT 200 Probability & Statistics
Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:

36 credit hours taken as part of a state accredited Associate of Applied Science degree

Business courses:
- ACCT 201 Principles of Financial Accounting
- BUGB 349 Legal Environment of Business
- FINA 301 Managerial Finance
- MANG 201 Principles of Management
- MANG 300 Small Business Management
- MANG 371 Human Resource Management
- MANG 450 Entrepreneurship
- MANG 471 Operations Management
- MARK 231 Principles of Marketing
- MARK 332 Promotion

Upper division electives (11 credit hours)

See faculty advisor for a program sheet detailing exact and complete requirements for this degree. A meeting with the BAS advisor is required prior to registration.

Bachelor of Business Administration Degree Requirements:
To be admitted to the BBA Program at Mesa State College, students must meet certain requirements. Note that admission to the college does not guarantee admission to the program.

Prior to admission, potential BBA majors will be given the classification code for "pre-BBA". To be eligible for admission to the program, a student must meet certain requirements (see department for requirements.)

Once a student has completed 23 semester credit hours, and has met the other specific criteria for admittance, s/he may apply to the Business Administration Program Admission Committee. Specific admission information may be obtained from the Department of Business.

General Education (31 minimum credit hours)
- Required General Education Courses:
  - ECON 201 Principles of Macroeconomics
  - ECON 202 Principles of Microeconomics

B.B.A. Degree Distinction
- STAT 200 Probability & Statistics
- Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- ACCT 201 Principles of Financial Accounting
- ACCT 202 Principles of Managerial Accounting
- BUGB 105 Freshman Business Seminar
- BUGB 211 Business Communications
- BUGB 349 Legal Environment of Business
- CISB 101 Business Information Technology
- FINA 301 Managerial Finance
- MANG 201 Principles of Management
- MANG 491 Business Strategies
- MARK 231 Principles of Marketing

Concentration (Students must choose one):
Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

To be admitted to the concentrations, certain prerequisites must be satisfied. Please see the Business Department Head for complete requirements and application form. Requests for more than 6 hours of internship credit must be approved by the advisor and Department Head.

Master of Business Administration Degree Requirements
See Graduate Policies and Programs section for complete degree requirements.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

CHEMISTRY -
SEE PHYSICAL SCIENCES

CLASSICAL STUDIES

FACULTY
Luis Lopez, Douglas O'Roark

CONTACT INFORMATION
Department of Languages, Literature, and Mass Communication, Lowell Heiny Hall 445, 970-248-1687

–or–

Department of Social and Behavioral Sciences, Lowell Heiny Hall 411, 970-248-1696

PROGRAMS OFFERED
Minor

Minor Requirements:
See faculty advisor for requirements.

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

COMPUTER INFORMATION SYSTEMS

FACULTY
Donald Carpenter, Gayla Jo Slauson, Johnny Snyder

CONTACT INFORMATION
Department of Business, Academic Classroom Building 309, 970-248-1778

PROGRAMS OFFERED
Associate of Arts
Business Computer Information Systems Emphasis
Bachelor of Science
Computer Information Systems
Bachelor of Applied Science
Computer Information Systems
Minor
Computer Information Systems
Managerial Informatics

Associate of Arts: Business Computer Information Systems Emphasis Degree Requirements

General Education for Associate Degree (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
ACCT 201 Principles of Financial Accounting
BUGB 211 Business Communications
CISB 205 Advanced Business Software
CISB 210 Fundamentals of Information Systems
CISB 206 Business Database Application Programming
or CSCI 110 Beginning Programming
CISB 260 Information Systems Architecture
or TECI 260 Info Tech Hardware & System Software
Electives (6 credit hours)

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Bachelor of Science in Computer Information Systems Degree Requirements

General Education (31 credit hours)

B.S. Degree Distinction
STAT 200 Probability & Statistics
Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses: (No grade less than "C".)
CISB 205 Advanced Business Software
CISB 210 Fundamentals of Information Systems
CISB 331 Advanced Business Programming
CISB 392 Information Systems Theory & Practice
CISB 400 Data Communications & Network Management
CISB 442 Systems Analysis & Design
CISB 451 Database Administration
CISB 460 Electronic Commerce Systems
CISB 471 Advanced Information Systems
CISB 206 Business Database Application Programming
or CSCI 110 Beginning Programming
CISB 260 Information Systems Architecture
or TECI 260 IT Hardware & System Software

Business Support Courses: (No grade less than "C".)
ACCT 201 Principles of Financial Accounting
ACCT 202 Principles of Managerial Accounting
BUGB 349 Legal Environment of Business
ECON 201 Principles of Macroeconomics
ECON 202 Principles of Microeconomics
FINA 301 Managerial Finance
MANG 201 Principles of Management
MANG 341 Quantitative Decision Making
or CISB 341 Quantitative Decision Making
MARK 231 Principles of Marketing

Electives (17 credit hours, 10 must be upper division) It is highly recommended that at least 3 credit hours be individualized study such as Cooperative Education, Directed Readings or Independent Study.

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Bachelor of Applied Science in Computer Information Systems Degree Requirements

General Education (31 credit hours)

B.A.S. Degree Distinction
STAT 200 Probability & Statistics
CISB 206 Business Database Application Programming
or CSCI 110 Beginning Programming

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
CISB 205 Advanced Business Software
CISB 210 Fundamentals of Information Systems
CISB 331 Advanced Business Programming
CISB 392 Information Systems Theory and Practice
CISB 400 Data Communications & Network Mgmt
CISB 442 Systems Analysis and Design
CISB 451 Database Administration
CISB 460 Electronic Commerce Systems
CISB 471 Advanced Information Systems
CISB Elective (must be upper division)

Electives (11 credit hours, 9 must be upper division)

B.A.S. Core (36 semester hours)
36 semester hours taken as part of a state accredited Associate of Applied Science degree

Special Requirements:

To be admitted to the B.A.S. degree, an applicant must possess an A.A.S. degree from an accredited school in computer information systems, computer programming, electronic engineering technology, information technology, network technology, telecommunications, or related area such as computer aided design or graphics design. Please see the Business department head for complete requirements and application form. Requests for more than 6 hours of cooperative education internship must be approved by the advisor. All degree requirements must be completed as described above. Any exceptions or substitutions must be recommended in advance by the faculty advisor and approved by the Department Head. Students are required to participate in exit examinations or other programs deemed necessary to comply with the college accountability requirement. A meeting with the BAS advisor is required prior to registration.

Minor Requirements

See faculty advisor or department for detailed minor requirements.

COMPUTER SCIENCE

FACULTY
Arun Ektare, Warren MacEvoy, Lori Payne, Gary Rader, Anne Spalding

CONTACT INFORMATION
Department of Computer Science, Mathematics, and Statistics,
Wubben Hall 157, 970-248-1407

PROGRAMS OFFERED
- Associate of Science
  - Computer Science Emphasis
- Bachelor of Science
  - Computer Science
- Minor
  - Computer Science

Associate of Science: Computer Science Emphasis
Degree Requirements

General Education for Associate Degree (minimum 31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- MATH 151 Calculus I
- CSCI 111 Computer Science I
- CSCI 112 Computer Science II
- CSCI 206 Web Page Design II
- CSCI 241 Computer Architecture
- CSCI 250 Data Structures

Electives (3-8 credit hours; MATH 152 Calculus II is recommended)

Special Requirements and Recommendations:
1. It is recommended that a strong background in mathematics (at least Calculus I and Calculus II) be completed simultaneously.
2. General Education and course requirements in the discipline area plus electives chosen in consultation with the student's advisor up to the minimum of 60 credit hours comprise the requirements for this emphasis.
3. No more than one "D" may be used in completed major requirements, and a GPA of at least 2.5 in the major is required.

Bachelor of Science in Computer Science Degree Requirements

General Education (minimum 31 credit hours)

B.S. Degree Distinction (6 credit hours)
- STAT 200 Probability and Statistics
- Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

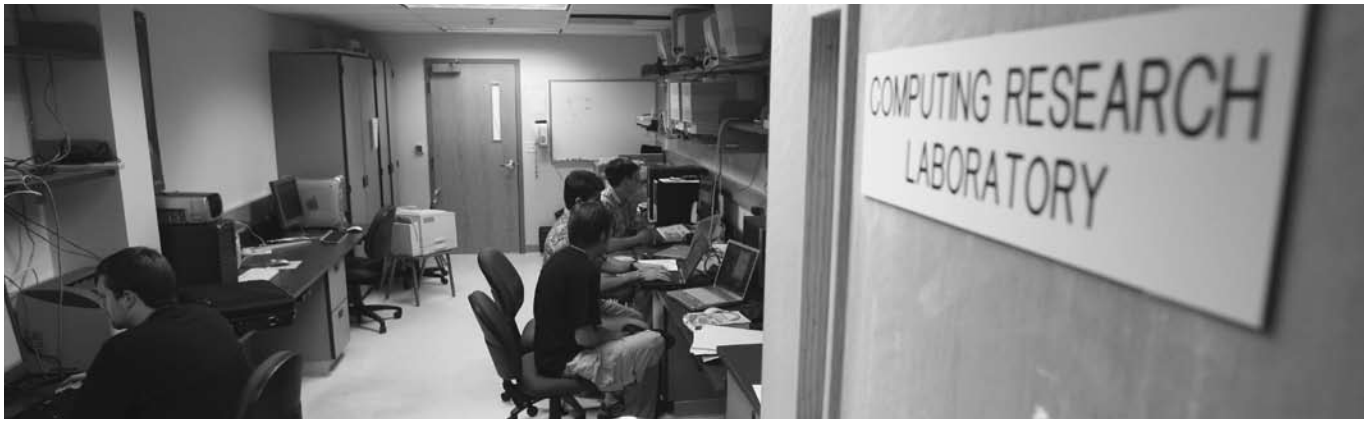
Required Courses:
- CSCI 111 Computer Science I
- CSCI 112 Computer Science II
- CSCI 241 Computer Architecture
- CSCI 250 Data Structures
- CSCI 321 Assembly Language Programming
- CSCI 330 Programming Languages
- CSCI 470 Operating Systems Design
- CSCI 484 Computer Networks
- CSCI 490 Software Engineering
- MATH 369 Discrete Structures I
- MATH 152 Calculus II
- Select five courses from the following:
  - CSCI 306 Web Page Design III
  - CSCI 333 UNIX Systems Programming
  - CSCI 337 User Interface Design
  - CSCI 375 Object Oriented Programming
  - CSCI 380 Operations Research
  - CSCI 445 Computer Graphics
  - CSCI 450 Compiler Structure
  - CSCI 460 Database Design
  - CSCI 480 Theory of Algorithms
  - CSCI 486 Artificial Intelligence
  - MATH 361 Numerical Analysis
- Electives (23-24 credit hours; 7 hours of upper division may be needed.)

No more than one "D" in the major and a GPA of at least 2.5 in the major will be required.

See faculty advisor for a program sheet detailing exact and complete requirements for the degree chosen.

Special Requirements:
Requests for more than 6 hours of cooperative education internship must be approved by the advisor. All degree requirements must be completed as described above. Any exceptions or substitutions must be recommended in advance by the faculty advisor and approved by the Department Head. Students are required to participate in exit examinations or other programs deemed necessary to comply with the college accountability requirement.

Minor Requirements
See faculty advisor or department for detailed minor requirements.



Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

CONSTRUCTION MANAGEMENT

FACULTY
Charlie Gains

CONTACT INFORMATION
Department of Business, Academic Classroom Building 309, 970-248-1778

PROGRAMS OFFERED
Bachelor of Science
Construction Management

Bachelor of Science in Construction Management Degree Requirements

General Education (31 credit hours)

B.S. Degree Distinction
Math course higher than MATH 113
Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
ACCT 201 Principles of FinancialAccounting
BUGB 349 Legal Environment of Business
FINA 301 Managerial Finance
MANG 201 Principles of Management
MANG 371 Human Resource Management
CONC 101 Construction Safety and Regulations
CONC 116 Building Materials
CONC 161 Building Mechanical and Electrical
CONC 208 Construction Equipment
CONC 218 Surveying
CONC 251Construction Preparation (Codes, Permits, etc.)

Required Concentration Courses (27 semester hours)
CONM 316 Construction Materials and Methods
CONM 340 Advanced Construction Estimating/Bidding
CONM 361 Advanced Building Systems
CONM 362 Structural Analysis-Statics/Materials Strength
CONM 370 Managing Safety and Regulatory Environment
CONM 401 Construction Financial Management
CONM 462 Soil and Foundation Construction
CONM 472 Planning and Scheduling
CONM 480 Project Management (Capstone)

Electives (17 credit hours)

See faculty advisor for a program sheet detailing exact and complete requirements for the degree chosen.

CONSTRUCTION TECHNOLOGY

FACULTY
Rick Leonard, Steve Peterson

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Technical Certificate
Construction Technology
Associate of Applied Science
Construction Technology - Craft
Construction Technology - Supervision

Technical Certificate in Construction Technology Requirements
CONC 100 Introduction to the Trades
CONC 101 Construction Safety & Regulation
CONC 102 Electrical Safety
CONC 103 Rigging Safety Basic
CONC 104 Architectural/Civil Print Reading
CONC 120 General Construction Framing
CONC 121 Floor Framing
CONC 122 Wall & Ceiling Framing
CONC 125 Roof Framing, Materials & Methods
CONC 130 Windows & Exterior Doors
CONC 131 Exterior Trim
CONC 140 Stair Construction/Layout
CONC 147 General Interior Finishes and Trim
CONC 201 Building Permits, Codes, & Ethics
CONC 202 Introduction to Concrete Materials
CONC 203 Concrete Placing & Finishing
CONC 205 Job Site Layout & Measuring
CONC 215 Form & Foundation Systems
CONC 235 Thermal & Moisture Methods & Materials
CONC 253 Cabinets/Countertop

Associate of Applied Science in Construction Technology–Craft Degree Requirements

ENGL 111, 112 English Composition (6 credit hours)

Social and Behavioral Science, Humanities, or Selected Speech (6 credit hours)

UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

CONC 100 Introduction to the Trades
CONC 101 Construction Safety & Regulations
CONC 102 Electrical Safety
CONC 103 Rigging Safety Basic
CONC 104 Architectural/Civil Print Reading
CONC 120 General Construction Framing
CONC 121 Floor Framing
CONC 122 Wall & Ceiling Framing
CONC 125 Roof Framing, Material & Methods
CONC 130 Windows & Exterior Doors
CONC 131 Exterior Trim
CONC 140 Stair Construction/Layout
CONC 147 General Interior Finishes & Trim
CONC 201 Building Permits, Codes, & Ethics
CONC 202 Introduction to Concrete Materials

CONC 203 Concrete Placing & Finishing
CONC 205 Job Site Layout & Measuring
CONC 215 Form & Foundation Systems
CONC 235 Thermal & Moisture Methods & Materials
CONC 253 Cabinets/Countertop

Electives (3-8 credit hours)

Associate of Applied Science in Construction Technology–Supervision Degree Requirements

ENGL 111, 112 English Composition (6 credit hours)

Social and Behavioral Science, Humanities, or Applied Studies (6 credit hours)

UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

CONC 101 Construction Safety & Regulations
CONC 104 Architectural/Civil Print Reading
CADT 106 Computer Aided Design
CONC 116 Building Materials
CONC 117 Building Materials Testing
CONC 161 Building Mechanical & Electrical
CONC 208 Construction Equipment
CONC 218 Surveying
CONC 228 Estimating & Cost Control
CONC 231 Construction Ethics
CONC 245 Project Management
CONC 251 Construction Preparation
CONC 265 Planning & Scheduling for the Construction Sup.

Electives (3-8 credit hours)

CRIMINAL JUSTICE

FACULTY
John Reece

CONTACT INFORMATION
Associate Degree: Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

Baccalaureate Degree: Department of Social and Behavioral Sciences, Lowell Heiny Hall 411, 970-248-1696

PROGRAMS OFFERED

Associate of Applied Science
- Criminal Justice (WCCC)
- Criminal Justice (Delta/Montrose Technical Center)

Bachelor of Arts
- Criminal Justice

Minor
- Criminal Justice

Through a cooperative program with Bishop Campus, the Colorado State Patrol (CSP) Academy, Western Colorado Community College and Mesa State College, students and completers from these institutions may enroll in an A.A.S. degree program. Students seeking the A.A.S. degree would enroll in the Police Academy Program at Delta-Montrose Technical College (DMTC) or CSP and then complete the remaining general education courses through Mesa State.

Associate of Applied Science in Criminal Justice Degree Requirements (DMTC):

ENGL 111, 112 English Composition (6 credit hours)

Social and Behavioral Science, Humanities, or Applied Studies (6 credit hours)

UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Criminal Justice Core Requirements:
CRJ 110 Intro to Criminal Justice
CRJ 111 Substantive Criminal Law
CRJ 112 Procedural Criminal Law
CRJ 125 Law Enforcement Operations
CRJ 135 Judicial Function
CRJ 145 Correctional Process
CRJ 210 Constitutional Law
CRJ 220 Human Relations/Social Conflict
CRJ 230 Criminology

Associate of Applied Science in Criminal Justice Degree Requirements (WCCC):

ENGL 111, 112 English Composition (6 credit hours)

Social and Behavioral Science, Humanities, or Applied Studies (6 credit hours)

MATH 108 Technical Mathematics or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Criminal Justice Core Requirements:
CRMJ 101Basic Police Academy
CRMJ 102 Basic Police Academy II
CRMJ 105 Basic Law
POLS 236 State and Local Government
CRMJ 106 Arrest Control
CRMJ 107 Law Enforcement Driving
CRMJ 108 Firearms
POLS 101 American Government
SOCO 264 Social Problems

Students should consult the program sheet for the AAS in Criminal Justice for required courses beyond the above core.

Contact the DMTC at 970-874-7671 for fees and charges for CRJ courses. Contact the Director of Instruction, Western Colorado Community College, 2508 Blichmann Avenue, Building A125, 970-255-2606 for a program sheet detailing exact and complete requirements for this degree.

Bachelor of Arts in Criminal Justice Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Core Requirements:
CRMJ 201 Introduction to Criminal Justice
CRMJ 301 Criminal Procedure
CRMJ 310 The Police Process
CRMJ 320 Corrections
CRMJ 328 The American Court System
CRMJ 370 Criminology
CRMJ 420 Criminal Law
CRMJ 494 Senior Seminar for Criminal Justice
SOCI 310 Methods of Social Research
SOCO 316 Social Inequality

STAT 200 Probability & Statistics

Criminal Justice Electives (15 credit hours)
PADM 315 Public Management
CRMJ 410 Criminal Investigations
CRMJ 412 Constitutional Law
CRMJ 415 Counter-terrorism and Law Enforcement
CRMJ 425 Trial, Evidence, and Legal Advocacy
CRMJ 426 Mock Trial (1 credit hour)
CRMJ 470 Restorative Justice
CRMJ 396 Topics*
CRMJ 499 Internship (3 credit hours)

* May be taken more than one time if the course has a different topic.

Restricted Electives (6 credit hours)
POLS 413 Civil Liberties
POLS 236 State and Local Government
POLS 342 Public Administration
PSYC 320 Social Psychology
PSYC 410 Drugs and Human Behavior
PSYC 425 Forensic Psychology
SOCO 301 Introduction to Human Services
POLS 453 Political Theory: Modern or
SOCO 400 Classical Social Theory

Minor Requirements:
See faculty advisor or department for detailed minor requirements.

CULINARY ARTS

FACULTY
Dan Kirby, Wayne Smith, Jonathan St. Peter

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Technical Certificate
Culinary Arts
Associate of Applied Science
Culinary Arts

Technical Certificate in Culinary Arts Requirements
Required Courses:
CUAR 125 Introduction to Foods
CUAR 129 Center of the Plate
CUAR 145 Introduction to Baking
CUAR 101 Food Safety and Sanitation

Choose 19 credit hours from the following:
CUAR 136 Bartending
CUAR 190 Dining Room Management
CUAR 156 Nutrition for the Hospitality Professional
CUAR 157 Menu Planning
CUAR 261 Cost Controls
CUAR 262 Purchasing for the Hospitality Industry
CUAR 233 Advanced Line Prep and Cookery
CUAR 255 Supervision in the Hospitality Industry
CUAR 256 Marketing in the Hospitality Industry
CUAR 281 Internship

Students enrolling in the Culinary Arts program must obtain a minimum grade of 2.00 "C" in each course listed in their program sheet, and must satisfy all other graduation requirements. Students seeking a technical certificate must see their faculty advisor before registering for classes.

Associate of Applied Science in Culinary Arts Degree Requirements
General Education
ENGL 111, 112 English Composition (6 credit hours)
UTEC 107 Math for Technology or MATH 113 College Algebra (4 credit hours)
Social/Behavioral Science or Literature (6 credit hours)
Wellness (Kinesiology) Requirement (2 credit hours)

CISB 101 Business Information Technology

Required Courses:
CUAR 125 Introduction to Foods
CUAR 129 Center of the Plate
CUAR 136 Bartending
CUAR 190 Dining Room Management
CUAR 145 Introduction to Baking
CUAR 101 Food Safety and Sanitation
CUAR 156 Nutrition for the Hospitality Professional
CUAR 157 Menu Planning
CUAR 261 Cost Controls
CUAR 262 Purchasing for the Hospitality Industry
CUAR 233 Advanced Line Prep and Cookery
CUAR 255 Supervision in the Hospitality Industry
CUAR 256 Marketing in the Hospitality Industry
CUAR 281 Internship

Students enrolling in the Culinary Arts Program must obtain a minimum grade of 2.00 "C" in each course listed on their program sheet, and must satisfy all other graduation requirements.

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

EDUCATION: EARLY CHILDHOOD

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Associate of Arts
Early Childhood Education Emphasis

Associate of Arts: Early Childhood Education Emphasis Degree Requirements

General Education (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
EDEC 238* Early Childhood Development or
PSYC 233 Human Growth & Development
EDEC 220* Introduction to Early Care & Education
EDEC 230 Curriculum & Development: Infant/Toddler
EDEC 240* Curriculum & Development: Early Childhood
EDEC 250 Exceptionalities in Early Education
EDEC 299 Student Teaching in Early Education

Electives (5 credit hours)
BIOL 205* Health, Nutrition, & Safety
EDEC 102* Intro to Early Childhood Lab
EDEC 148* Guidance Strategies for Children
EDEC 196 Topics
EDEC 216* Early Childhood Admin: Human Relations
EDEC 264 Administration in Early Education
EDEC 290 Early Literacy for the Young Child
EDEC 297 Practicum
ENGL 240 Children's Literature

*24 hours required for Childcare Center Director Qualification per Colorado Department of Human Services

See faculty advisor for program sheet detailing exact and complete requirements for the Associate of Arts Degree/Director Qualification and suggested electives.

Study directed toward the Associate of Arts degree may serve as a basis for the Bachelor of Arts degree with Elementary Education licensure. Programs of study are very sequential and advanced planning for the transition from an associate program to a baccalaureate program is crucial for economy of time and effort. Faculty advisors will assist students in planning programs to meet requirements. The curriculum will increase students' understanding of the education and care of young children. Students seeking Childcare Center Director Qualification need to meet with an advisor to assist in planning a program to meet specific certification requirements.

EDUCATION: TEACHER LICENSURE

FACULTY
Madeline Becker, Blake Bickham, Cindy Chovich, Lisa Friel, Jean Gauley, Sandra Murray, Ted Okey, Bernadine Sherman

CONTACT INFORMATION
Center for Teacher Education, Academic Classroom Building
970-248-1786

The Center for Teacher Education offers licensure programs in elementary, secondary, and K-12 education. Licensure to teach in public schools in the State of Colorado requires each teacher candidate to complete a baccalaureate degree including a sequence of professional education courses that include extensive field experiences. Licensure is a separate process from the degree, although both may be pursued concurrently. Formal admission to the Center for Teacher Education is required of all students expecting to obtain a Colorado Educator License in any teaching field. Please see the section in this catalog on the Center for Teacher Education.

In order to complete all licensure requirements in a timely manner it is important that students contact the Center as soon as possible after enrolling at Mesa State College. Interested students may enroll in EDUC 211 Foundations of Education before applying for formal admission to the Center for Teacher Education.

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

ELECTRIC LINEWORKER

FACULTY
Patrick Roark

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Technical Certificate
Electric Lineworker

Technical Certificate in Electric Lineworker Program Requirements
MATH 108 Technical Math
ELCL 120 Fundamentals of Electricity
ELCL 125 Job Training and Safety
ELCL 131, 131L Electrical Distribution Theory I & Lab
ELCL 132, 132L Electrical Distribution Theory II & Lab
ELCL 137, 137L Advanced Electrical Distribution & Lab
ELCL 140, 140L Underground Procedure & Lab
ELCL 145, 145L Hotline Procedures & Lab

Special Requirements and Recommendations:
Students will be required to have current First Aid and CPR certification before they successfully complete the requirements of this program. This may be achieved by any of the following:

- Holding current cards;
- Obtaining American Red Cross "Standard" or "Advanced" rating and American Heart Association or equivalent certification; or,
- Successfully completing KINE/HPWA 265 offered by Mesa State College.

Summer and/or Fall Semester:
ELCL 199, Internship (6 credit hours, 640 contact hours) is required for any students selected to participate in the Western Area Power Administration (WAPA) on-the-job training program. This portion is not a part of the program approved for VA benefits.

Students seeking a Technical Certificate must obtain a minimum of 2.00 ("C") in each listed course, except ELCL 120, and must satisfy all other graduation requirements. See faculty advisor for a program sheet detailing exact and complete requirements for this certificate.

Additional expenses: Students will be required to purchase or have approximately $1,000.00 in tools and personal equipment. This does not include required textbooks or an adequate pair of workboots. These costs may vary with student needs and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields.

Students receive field training and practical theory in all phases of powerline installation and maintenance. An outdoor school laboratory covers climbing, setting and removing various sizes of poles; guy work; conductors; transformers; street lights; installation of services; and the use and care of safety equipment. Climbing and working on poles and towers is required. Prospective students are encouraged to contact the College about physical requirements. This program begins only in the fall semester of each year.

ELECTRONIC ENGINEERING TECHNOLOGY

FACULTY
Gordon Koch, John Sluder, Jack Yon

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAM OFFERED
Associate of Science
Electronic Engineering Technology Emphasis

Associate of Science in Electronic Engineering Technology Degree Requirements

General Education for Associate Degree (31 credit hours)

Kinesiology (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
CSCI XXX Pascal, FORTRAN, or other approved language (consult with advisor)
TECI 117 DC Passive Circuits
TECI 118 AC Passive Circuits
TECI 164, 164L Electronic Circuits I & Lab
TECI 165, 165L Applied Digital Circuits & Lab
TECI 231, 231L Electronic Circuits II & Lab
MATH 130 Trigonometry
MATH 151 Calculus I

Special Requirements and Recommendations:
It is recommended that the student take PHYS 111, 111L, 112 and 112L. See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Additional expenses: Student will be required to have an appropriate multi-meter (20,000 ohms/volts or more), hand tools costing approximately $60.00, and a scientific calculator. A power supply kit is required for TECI 117, approximate cost is $32.00. This does not include the cost of required textbooks. These costs may vary with student need and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields.

Engineering technology has become very important in the fields of electronics and computer hardware. The engineering technologist works closely with engineers and technicians to assure proper installation and optimum operation of electronic systems. The Associate of Science program is designed specifically to transfer to a four-year baccalaureate degree program in the same field. By itself, it is not designed for specific employment preparation after only two years of study. Ten specified electronics courses are the same as those in the A.A.S. degree program in Technology Integration – Certified Electronics Technician and will apply toward the completion of this degree. The curriculum is in compliance with state agency policy governing the subject matter content and purpose of Associate of Science degrees.

EMERGENCY MEDICAL TECHNICIAN

FACULTY
Daniel Barela

CONTACT INFORMATION
Department of Health Sciences, Medesy Hall 142, 970-248-1398

PROGRAMS OFFERED

Technical Certificate
- Emergency Medical Technician - Basic
- Emergency Medical Technician - Paramedic

Associate of Applied Science
- Emergency Medical Technician - Paramedic

Admission to Mesa State College does not guarantee admission into the Emergency Medical Technician programs, which requires a separate application. Students admitted to the EMT programs must undergo a background check and maintain current CPR certification and professional liability insurance. An admission committee selects students from applicants who best meet requirements. All admission materials must be on file in the Department of Health Sciences office prior to deadlines established for each program. Please contact the Health Sciences department for additional information.

Students transferring in credit for human anatomy and physiology taken at out-of-state accredited colleges/universities must provide evidence that these courses had separate laboratory components before the course can be accepted to fulfill program requirements. This will not necessarily appear on the transcript.

Students must have a 2.0 ("C") on a 4.0 scale or higher grade for all courses required for completion of the EMT programs. This policy applies regardless of when the course was taken. A "D" grade or lower in any required course is not acceptable.

Technical Certificate in Emergency Medical Technician Requirements
- EMTS 101 EMS Basic I
- EMTS 102 EMS Basic II
- EMTS 103 EMS Basic III

Technical Certificate in Emergency Medical Technician Requirements

Emergency Medical Technician Required Support Courses:
- BIOL 209, 209L Human Anatomy & Physiology I & Lab
- BIOL 210, 210L Human Anatomy & Physiology II & Lab

Emergency Medical Technician Core:
- EMTS 130 EMT IV
- EMTS 190 Basic EKG Interpretation
- EMTS 225 Fundamentals of Paramedic Practice
- EMTS 226 Fundamentals of Paramedic Practice Lab
- EMTS 227 Paramedic Special Considerations
- EMTS 228 Paramedic Special Considerations Lab
- EMTS 229 Paramedic Pharmacology
- EMTS 230 Paramedic Pharmacology Lab
- EMTS 231 Paramedic Cardiology
- EMTS 232 Paramedic Cardiology Lab
- EMTS 233 Paramedic Medical Emergencies
- EMTS 234 Paramedic Medical Emergencies Lab
- EMTS 235 Paramedic Trauma Emergencies
- EMTS 236 Paramedic Trauma Emergencies Lab
- EMTS 237 Paramedic Internship Prep
- EMTS 280 Paramedic Internship I
- EMTS 281 Paramedic Internship II

Associate of Applied Science in Emergency Medical Technician Degree Requirements

General Education
- ENGL 111, 112 English Composition (6 credit hours)
- PSYC 150 & SOCO 264 Social/Behavioral Science (6 credit hours)
- MATH 113 (or higher level)

Wellness (Kinesiology) Requirement (2 credit hours)

Emergency Medical Technician Required Support Courses:
- BIOL 209, 209L Human Anatomy & Physiology I & Lab
- BIOL 210, 210L Human Anatomy & Physiology II & Lab

Emergency Medical Technician Core:
- EMTS 130 EMT IV
- EMTS 190 Basic EKG Interpretation
- EMTS 225 Fundamentals of Paramedic Practice
- EMTS 226 Fundamentals of Paramedic Practice Lab
- EMTS 227 Paramedic Special Considerations
- EMTS 228 Paramedic Special Considerations Lab
- EMTS 229 Paramedic Pharmacology
- EMTS 230 Paramedic Pharmacology Lab
- EMTS 231 Paramedic Cardiology
- EMTS 232 Paramedic Cardiology Lab
- EMTS 233 Paramedic Medical Emergencies
- EMTS 234 Paramedic Medical Emergencies Lab
- EMTS 235 Paramedic Trauma Emergencies
- EMTS 236 Paramedic Trauma Emergencies Lab
- EMTS 237 Paramedic Internship Prep
- EMTS 280 Paramedic Internship I
- EMTS 281 Paramedic Internship II

EMT-Basic certification is required prior admission to the EMT-Paramedic program.

ENGINEERING

SEE MECHANICAL ENGINEERING

ENGLISH

FACULTY
Julie Barak, Richard Berkey, William Brown, Julie Bruch, Carol Christ, Barbara Geiger, TJ Gerlach, Kurtis Haas, Kristen Hague, Michele Hanson, Penney Chapin Hills, Robert Johnson, Barry Laga, Ann Leadbetter, Luis Lopez, Gabriele Mayer-Hunke, Maureen Neal, John Nizalowski, Randy Phillis, William Wright

CONTACT INFORMATION
Department of Languages, Literature, and Mass Communication; Lowell Heiny Hall 445, 970-248-1687

PROGRAMS OFFERED
- Bachelor of Arts
  - English – Literature
  - English – Technical and Professional Writing
  - English – Writing
  - English – Secondary teaching
- Minors
  - English – Literature
  - English – Writing

Bachelor of Arts in English Degree Requirements
- General Education (minimum 31 credit hours)
- B.A. Degree Distinction (foreign language 6 credit hours)
- Wellness (Kinesiology) Requirement (3 credit hours)
- Applied Studies (3 credit hours)
- English Core:
  - ENGL 254 Survey of English Literature I
  - ENGL 255 Survey of English Literature II
  - ENGL 261 Survey of American Literature I
  - ENGL 262 Survey of American Literature II
  - ENGL 421 Introduction to Literary Theory and Criticism
  - ENGL 492 Seminar in Writing-Technical & Professional Writing
  - ENGL 494 Seminar in Literature-Literature, Writing & Secondary Education

Concentration (Students must choose one):
Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

All English majors must maintain at least a 3.0 average in their upper division ENGL courses as well as a cumulative GPA of at least 2.0.

Students seeking a degree in English–Secondary Teaching should see their faculty advisors in both English and Teacher Licensure.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

ENVIRONMENTAL SCIENCE AND TECHNOLOGY

FACULTY
Deborah Kennard, Tamera Minnick, Russell Walker

CONTACT INFORMATION
Department of Physical and Environmental Sciences, Wubben Hall 238, 970-248-1993

PROGRAMS OFFERED

Bachelor of Science
- Environmental Science and Technology–Environmental Science
- Environmental Science and Technology–Environmental Restoration and Waste Management
- Environmental Science–Secondary Teaching

Minor
- Environmental Science and Technology

Bachelor of Science in Environmental Science and Technology – Environmental Science Degree Requirements

General Education (minimum 31 credit hours)

B.S. Degree Distinction
- STAT 200 Probability & Statistics
- Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Enviormental Science Courses:
- ENVS 104 Environmental Science: Global Sustainability
- ENVS 204 Introduction to Ecosystem Management
- ENVS 204L Introduction to Ecosystem Management Lab
- ENVS 221 Science & Technology of Pollution Control
- ENVS 221L Science & Technology of Pollution Control Lab
- ENVS 312 Soils & Sustainability
- ENVS 312L Soils & Sustainability Lab
- ENVS 331 Water Quality
- ENVS 331L Water Quality Lab
- ENVS 340 Applied Atmospheric Science
- ENVS 455 Restoration Ecology
- ENVS 455L Restoration Ecology Lab
- ENVS 492 Capstone in Environmental Science & Technology

Required Support Courses:
- POLS 488 Environmental Politics
- MATH 151 Calculus I or
  - MATH 146 Calculus for Biological Sciences
- BIOL 107 Principles of Plant Biology
- BIOL 107L Principles of Plant Biology Lab
- CHEM 121/121L Principals of Chemistry & Lab and
- CHEM 123 Introduction to Environmental Chemistry
  - or CHEM 131/131L General Chemistry & Lab and

CHEM 132/132L General Chemistry & Lab

Restricted Electives:
(14-15 credit hours selected from the following):
- ENVS 301 Environmental Project Management
- ENVS 313, 313L Characterization of Contaminated Sites & Lab
- ENVS 315 Mined Land Rehabilitation
- ENVS 321 Environmental Risk Analysis

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

ENVS 332, 332L Introduction to Geographic Information Systems & Lab
ENVS 350, 350L Ecology/Management of Shrublands/ Grasslands & Lab
ENVS 360/360L Fire Ecology & Lab
ENVS 396 Topics
ENVS 413 Environ. Fate & Transport of Contaminants
ENVS 420, 420L Adv. Env. Samp. & Analytical Meth & Lab
ENVS 431 Water & Wastewater Treatment
ENVS 433 Restoration of Aquatic Systems
ENVS 460, 460L Fire Management & Lab
ENVS 496 Topics
ENVS 497 Structured Research

Electives (13 credit hours)

Bachelor of Science in Environmental Science and Technology-Environmental Restoration and Waste Management Degree Requirements

General Education (minimum 31 credit hours)

B.S. Degree Distinction
STAT 200 Probability & Statistics
Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Enviormental Science Courses:
ENVS 104 Environmental Science: Global Sustainability
ENVS 204 Introduction to Ecosystem Management
ENVS 204L Introduction to Ecosystem Management Lab
ENVS 212 Environmental Health & Safety
ENVS 212L Environmental Health & Safety Lab
ENVS 221 Science & Technology of Pollution Control
ENVS 221L Science & Technology of Pollution Control Lab
ENVS 301 Environmental Project Management
ENVS 313, 313L Characterization of Contaminated Sites & Lab
ENVS 331 Water Quality
ENVS 331L Water Quality Lab
ENVS 340 Applied Atmospheric Science
ENVS 410 Environmental Regulatory Compliance
ENVS 492 Capstone in Environmental Science & Technology
ENVS 499 Internship

Required Support Courses:
GEOL 111/111L Principles of Physical Geology
or GEOL 113/113L Field-based Introduction to Physical Sciences
CHEM 131 General Chemistry
CHEM 131L General Chemistry Lab
CHEM 132 General Chemistry
CHEM 132L General Chemistry Lab
CHEM 300 Environmental Chemistry
ENGL 385 Technical/Professional Writing

Restricted Electives:
(8 credit hours selected from the following):
ENVS 312 Soils & Sustainability
ENVS 312L Soils & Sustainability Lab
ENVS 315 Mined Land Rehabilitation
ENVS 321 Environmental Risk Analysis
ENVS 350, 350L Ecology/Management of Shrublands Grasslands & Lab
ENVS 360/360L Fire Ecology & Lab
ENVS 396 Topics
ENVS 413 Environ. Fate & Transport of Contaminants
ENVS 420, 420L Adv. Env. Samp. & Analytical Meth & Lab
ENVS 431 Water & Wastewater Treatment
ENVS 433 Restoration of Aquatic Systems
ENVS 496 Topics

Electives (12 credit hours)

Students seeking a degree in Environmental Science Education–Secondary Teaching should see their faculty advisors in both Environmental Science and Teacher Licensure.

Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

FORENSICS

CONTACT INFORMATION
Department of Biological Sciences, Science Lab 222, 970-248-1993.

PROGRAMS OFFERED
Minor
Forensics

Minor Requirements
See faculty advisor for requirements.

GEOGRAPHIC INFORMATION SCIENCE & TECHNOLOGY

CONTACT INFORMATION
Department of Physical and Environmental Sciences, Wubben Hall 238, 970-248-1993

PROGRAMS OFFERED
Technical Certificate
Geographic Information Science and Technology
Minor
Geographic Information Science and Technology

Technical Certificate in Geographic Information Science and Technology Requirements
GEOL 305 Cartography for GIS or
GEOG 131 Introduction to Cartography
GEOL 321 Introduction to Remote Sensing
GEOL 321L Introduction to Remote Sensing Lab
GEOL 332 (BIOL 332, ENVS 332) Introduction to GIS
GEOL 332L (BIOL 332L, ENVS 332L) Introduction GIS Lab
GEOL 375 Global Positioning Systems for GIS
GEOL 375L Global Positioning Systems for GIS Lab
GEOL 432 Advanced GIS
GEOL 432L Advanced GIS
GEOL 445 Geospatial Database and Design
GEOL 445L Geospatial Database and Design Lab

Minor Requirements
Requirements are the same as the Technical Certificate in Geographic Information Science and Technology. See faculty advisor for requirements.

GEOLOGY -
SEE PHYSICAL SCIENCES

GRAPHIC DESIGN
SEE ALSO ART

FACULTY
Suzie Garner, Carolyn Quinn-Hensley

CONTACT INFORMATION
Department of Art, Fine Arts 200, 970-248-1833

PROGRAMS OFFERED
- Bachelor of Fine Arts
  - Animation
  - Print
- Minors
  - Graphic Design

Bachelor of Fine Arts in Graphic Design-Animation Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Art Core
- ARTE 101 Two-Dimensional Design
- ARTE 102 Three-Dimensional Design
- ARTE 118 History of Art, Prehistory to Renaissance
- ARTE 119 History of Art, Renaissance to Present
- ARTS 151 Foundation Drawing
- ARTS 251 Figure Drawing
- ARTS 291 Foundation Painting
- ARTH 315 Nineteenth-Century Art
- ARTH316 Twentieth-Century Art to 1950
- ARTS 351 Drawing Workshop I

Animation Concentration Courses
- ARTG 215 Graphic Design I
- ARTG 221 Graphic Design II
- ARTG 225 Introduction to Animation
- ARTG 301 Computer Illustration
- ARTG 324 Animation I
- ARTG 325 Animation II
- ARTG 337 Illustration & Storyboard
- ARTG 405 Web Site Design
- ARTG 424 Animation Studio I
- ARTG 425 Animation Studio II
- ARTG 493 Portfolio Construction
- ARTG 499 Internship

Electives (11-12 credit hours)

Special Requirements:
(1) In an effort to meet industry standards, Macintosh computers are used exclusively in all computer-based ARTG courses. Majors are strongly advised to consider purchasing a Macintosh and related print, web publication and animation software for personal use.
(2) Progression requirements: All Graphic Design courses must be taken in sequence. All required 200 level courses must be completed before 300 level courses may be taken. All required 300 level courses must be completed before 400 level courses may be taken.
(3) Admission in the program after the sophomore year will be contingent upon the student's satisfying the following requirements:
  (a) Completion of Graphic Design Admission Application Form.
  (b) Completion of ARTE 101 Two-Dimensional Design, ARTE 102 Three-Dimensional Design, ARTS 151 Foundation Drawing, ARTG 215 Graphic Design I, and ARTG 221 Graphic Design II, with a grade of B or A.
  (c) A grade of B or A in all coursework in the major.

Bachelor of Fine Arts in Graphic Art-Print Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Art Core
- ARTE 101 Two-Dimensional Design
- ARTE 102 Three-Dimensional Design
- ARTE 118 History of Art, Prehistory to Renaissance
- ARTE 119 History of Art, Renaissance to Present
- ARTS 151 Foundation Drawing
- ARTS 251 Figure Drawing
- ARTS 291 Foundation Painting
- ARTH 315 Nineteenth-Century Art
- ARTH 316 Twentieth-Century Art to 1950
- ARTS 351 Drawing Workshop I

Print Concentration Courses
- Art Studio 200 Level
  (Choose one 200-level course from the following: ARTS 231, ARTS 241, ARTS 271, ARTS 283, ARTS 292, ARTG 225)
- Art Studio 300 Level
  (Choose one 300-level course from the following: ARTG 324, ARTS 331, ARTS 360, ARTS 383, ARTS 391)
- ARTG 215 Graphic Design I
- ARTG 221 Graphic Design II
- ARTG 301 Computer Illustration
- ARTG 320 Letterforms & Typography
- ARTG 337 Illustration & Storyboard
- ARTG 338 Advertising Design I
- ARTG 405 Web Site Design
- ARTG 450 Corporate Design
- ARTG 493 Portfolio Construction
- ARTG 499 Internship

Electives (11-12 credit hours)

Special Requirements:
(1) In an effort to meet industry standards, Macintosh computers are used exclusively in all computer-based ARTG courses. Majors are strongly advised to consider purchasing a Macintosh and related print and web publication software for personal use.
(2) Progression requirements: All Graphic Design courses must be taken in sequence. All required 200 level courses must be completed before 300 level courses may be taken. All required

300 level courses must be completed before 400 level courses may be taken.

(3) Admission in the program after the sophomore year will be contingent upon the student's satisfying the following requirements:
   a. Completion of Graphic Design Admission Application Form.
   b. Completion of ARTE 101 Two-Dimensional Design, ARTE 102 Three-Dimensional Design, ARTS 151 Foundation Drawing, ARTG 215 Graphic Design I, and ARTG 221 Graphic Design II, with a grade of A or B.
   c. A grade of B or A in all coursework in the major.

HISTORY

FACULTY
Douglas O'Roark, Vincent Patarino, Elizabeth Propes, Paul Reddin, Steven Schulte, Sarah Swedberg

CONTACT INFORMATION
Department of Social and Behavioral Sciences, Lowell Heiny Hall 411, 970-248-1696

PROGRAMS OFFERED
Bachelor of Arts
- History
- History–Secondary teaching

Minor
- History

Bachelor of Arts in History Degree Requirements

General Education (31 minimum credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- HIST 101 Western Civilizations
- HIST 102 Western Civilizations
- HIST 132 United States History
- HIST 202 Introduction to Historical Research
- HIST 404 Senior Seminar in Historical Research

Upper Division courses as follows (21 credit hours)

European History, one course selected from:
- HIST 301 History of England Since 1485
- HIST 302 History of Modern France
- HIST 303 History of Modern Germany
- HIST 330 History of 19th Century Europe
- HIST 331 The 20th Century
- HIST 350 Renaissance & Reformation
- HIST 360 Medieval Europe
- HIST 400 The Soviet Union & Eastern Europe
- HIST 430 The Ancient Mediterranean World

United States History, two courses selected from:
- HIST 305 The Old South
- HIST 342 The Early American Republic
- HIST 344 The Age of Industry in America
- HIST 346 The 1950's and 1960's
- HIST 347 Global America: 1970-2000
- HIST 370 Early U.S. Women's History
- HIST 371 20th Century U.S. Women's History
- HIST 415 Colonial America
- HIST 416 The American Revolution
- HIST 420 Civil War

Third World History, one course selected from:
- HIST 306 History of South & Southeast Asia
- HIST 310 Latin American Civilization
- HIST 340 History of the Islamic World
- HIST 401 East Asia: The Formative Period
- HIST 403 East Asia & the Modern World
- HIST 406 History of the African Continent

Topical History, two courses selected from:
- HIST 315 American Indian History
- HIST 320 The American West
- HIST 332 History of Modern Warfare
- HIST 355 Ancient & Medieval Cities
- HIST 375 American Sport History
- HIST 405 Introduction to Public History
- HIST 410 Environmental History
- HIST 435 Classical Archaeology
- HIST 440 Early & Medieval Christianity

Three additional courses selected from the four areas listed above.

Electives (29 credit hours)

See faculty advisor for a program sheet detailing exact and complete requirements for the major.

All history majors are encouraged to take an additional six hours of a language beyond the six required for the B.A. degree distinction.

Students who want an option in History - Secondary teaching should see their faculty advisors both in History and Teacher Licensure.

Minor Requirements
See faculty advisor for requirements.

HUMANITIES

CONTACT INFORMATION
Department of Languages, Literature, and Mass Communication; Lowell Heiny Hall 445, 970-248-1687.

PROGRAMS OFFERED
Associate of Arts
- Humanities Emphasis

Associate of Arts: Humanities Emphasis Degree Requirements

General Education (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Course Requirements specific to this emphasis

Twenty-four credits must be earned in a program drawn from one or more of the areas listed below:

English; Fine and Performing Arts; Foreign Languages; Literature; Mass Communication; Philosophy; Speech

INTERNATIONAL STUDIES

CONTACT INFORMATION
Department of Social and Behavioral Sciences,
Lowell Heiny Hall 411, 970-248-1696.

PROGRAMS OFFERED
Minor
International Studies

Minor Requirements
See faculty advisor for requirements.

KINESIOLOGY

FACULTY
Richard Bell, Jill Cordova, Keith Fritz, Guy Leadbetter, Steven Murray, Robert Ryan, Susan Yeager

CONTACT INFORMATION
Department of Kinesiology; Saunders 125, 970-248-1635.

PROGRAMS OFFERED
Bachelor of Arts
Kinesiology – Adapted Physical Education
Kinesiology – Exercise Science
Kinesiology – K-12 Teaching
Minors
Personal Training

Bachelor of Arts in Kinesiology Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Core Courses:
BIOL 209, 209L Human Anatomy & Physiology & Lab
KINE 200 History & Philosophy of Sport & PE
KINE 213 App. of Physical Fit. & Exercise Prescrip.
KINE 303, 303L Exercise Physiology & Lab
KINE 309, 309L Anatomical Kinesiology & Lab
KINE 401 Org/Ad/Legal Considerations of PE/Sports
KINE 494 Senior Seminar (Capstone)

Concentration (Students must choose one):
Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Special Requirement:
Red Cross Standard First Aid/CPR certification is required.

Students seeking a degree in Kinesiology with Teaching should see their faculty advisors in both Kinesiology and Teacher Licensure.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

LIBERAL ARTS (INTERDISCIPLINARY MAJOR)

CONTACT INFORMATION
Education Option:
Center for Teacher Education, Albers Hall 205, 970-248-1786.

Non-Education Option:
Department of Languages, Literature, and Mass Communication, Lowell Heiny Hall 445, 970-248-1687,

–or–

Department of Social and Behavioral Sciences, Lowell Heiny Hall 411, 970-248-1696,

–or–

Department of Art, Fine Arts 200, 970-248-1833.

PROGRAMS OFFERED
Bachelor of Arts
Liberal Arts
Non-Education Option
Elementary Education Option

Requirements specific to this degree:
The purpose of the Liberal Arts degree is to allow the strong academic student to pursue his or her interdisciplinary interests in a focused, interdisciplinary program of study. Please note that the Liberal Arts degree has two options:

1. The first option is for students pursuing only the B.A. degree. It is an option for students whose academic interests cannot be met by one of Mesa State's traditional degrees and who require an individualized course of study.
2. The second option is for students pursuing the degree in liberal arts plus elementary teacher licensure. The program for students pursuing licensure requires very specific classes in order to meet state licensure standards. Therefore, students interested in elementary licensure should use the Liberal Arts/Elementary Education program sheet.

Bachelor of Arts in Liberal Arts (Non-Education Option) Degree Requirements

General Education (31 minimum credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Interdisciplinary Core (15-24 credit hours)

Capstone thesis (3 hours) plus 12-21 lower division in content areas chosen below

Content areas
33-42 Upper Division classes chosen from two or three disciplines

Elective hours (The number needed to total 120 credit hours. At least 40 hours of the 120 must be upper division.)

Special Requirements:
Declaration of Major:
A student cannot declare a liberal arts major without teacher licensure until s/he has completed 60 credit hours of college-level work. The final 30 hours must be completed after the declaration of the liberal arts major and approval of the program

of study. To be accepted as a liberal arts major without teacher licensure, a student must prepare a proposal for his or her course of study that explains (1) the reason that no other MSC major serves his or her needs and (2) the focus and purpose of the designed program of study. The student must also present a transcript of completed classes with the proposal.

The proposal will be submitted to the department head, who will appoint three faculty members to the liberal arts committee to approve, disapprove, or modify the proposal. The committee will then choose a faculty advisor for the student. This advisor will then monitor the student's progress through the plan for the degree program and will also supervise the student's capstone thesis project. The thesis will be read and evaluated by the advisor and at least one other faculty member appointed by the liberal arts committee.

Grade Point Average:
To graduate with a Liberal Arts degree, a student must have at least a 3.0 GPA in all upper-division classes.

NOTE: Exceptions to core and major requirements may be made by the Liberal Arts Committee and department head.

Bachelor of Arts in Liberal Arts (Elementary Education Option) Degree Requirements

General Education (31 minimum credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Interdisciplinary Core
- Literacy
  - ENGL 240 Children's Literature
  - ENGL 245 Imaginative Writing
  - ENGL 343 Language Systems & Linguistic Diversity
- Math
  - MATH 105 Elements of Mathematics I
  - MATH 301 Mathematics for Elementary Teachers
- Social Science
  - POLS 101 American Government
  - ECON 201 Principles of Macroeconomics
  - HIST 225 History of Colorado
- Science
  - CHEM 100 Chemistry & Society
  - GEOL 100 Survey of Earth Sciences
- Kinesiology
  - KINE 320 Methods of Teaching PE in Elementary Schools
- Art
  - ARTE 410 Elementary Art Education Methods

CONTENT AREAS–
Choose one content area (15 hours for each discipline)
- English
  - ENGL 451 Structure of the English Language
  - Two additional upper division Literature courses
  - Two additional upper division English courses (Consult program sheet, catalog, and English advisor concerning course choices & prerequisites for upper division courses.)
- Social Science
  - HIST 102 Western Civilizations
  - ANTH 201 Cultural Anthropology
  - POLS 236 State & Local Government
  - 6 credit hours chosen from:
    - ANTH 405 Globalization & Culture Change
    - ANTH 410 World Cultures
    - HIST 305 The Old South
    - HIST 342 The Early American Republic
    - HIST 370 Early U.S. Women's History
    - HIST 410 Environment History of the U.S.
    - HIST 415 Colonial America
    - HIST 416 The American Revolution
    - HIST 420 Civil War

Mathematics
- STAT 200 Probability & Statistics
- CSCI 110 Beginning Programming
- MATH 151 Calculus I or MATH 146 Calculus for Biological Sciences
- MATH 394 Mathematics Colloquium
- Choose one from the following list:
  - MATH 305 Euclidean Geometry
  - MATH 369 Discrete Structures
  - STAT 311 Statistical Methods

Required Education Courses
- EDUC 211 Foundations of Education
- EDUC 341 Pedagogy & Assessment: K-6/EL
- EDUC 343 Teaching to Diversity
- EDUC 441 Methods of Teaching Language & Literacy: EL
- EDUC 451 Methods of Teaching Mathematics: EC/EL
- EDUC 461 Methods of Teach Sci & Social Studies: EC/EL
- EDUC 499C Teaching Internship/Colloquia: EL

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

MANUFACTURING SUPERVISION

CONTACT INFORMATION
Montrose Campus, 234 South Cascade, Montrose, 970-249-7009

Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Technical Certificate
Manufacturing Supervision

Technical Certificate in Manufacturing Supervision
Required Courses:
BUGB 101 Introduction to Business
BUGB 211 Business Communications
MAMT 101 Introduction to Manufacturing
MAMT 105 Print Reading and Sketching
MAMT 106 Geometric Tolerancing
MANG 201 Principles of Management

MANUFACTURING TECHNOLOGY

FACULTY
Kevin Kern, William McCracken, Denis Thibodeau, Melanie Snyder, Brigitte Wilson

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Technical Certificate
Manufacturing Technology – Computer-Aided Design Technology
Manufacturing Technology – Machine & Manufacturing Trades
Manufacturing Technology – Welding
Associate of Science
Manufacturing Technology Emphasis
Associate of Applied Science
Manufacturing Technology – Computer-Aided Design Technology
Manufacturing Technology – Machining Technology
Manufacturing Technology – Welding

Technical Certificate in Computer-Aided Design Technology Requirements
Required Courses:
CADT 101 Introduction to Computers
CADT 106 Computer Aided Design
CADT 107 Advanced Computer Aided Design
CADT 108 CAD – Mechanical
CADT 109 CAD – Mechanical Advanced
CADT 110 CAD Application
CADT 120 Intro to Still Images
CONC 104 Architectural/Civil Print Reading
ENGL 111 English Composition
MAMT 105 Print Reading/Sketching
MAMT 106 Geometric Tolerancing
UTEC 107 Mathematics for Technology
Electives (3 credit hours with advisor's approval)

Students seeking a technical certificate must obtain a minimum grade of 2.00 ("C") in each course and must satisfy all other graduation requirements.

See faculty advisor for a program sheet detailing exact and complete requirements for this certificate.

The Machine and Manufacturing Trades certificate program is designed to give students an opportunity to develop knowledge and competency considered essential for employment as entry-level or "apprentice" level machinists. Persons not having an adequate background in mathematics or three dimensional perception skill will be encouraged to enroll in preparatory courses either as prerequisites or co-requisites. Open entry and flexible scheduling is possible in this program.

Technical Certificate in Machine and Manufacturing Trades Requirements
Required Courses:
MAMT 105 Print Reading/Sketching
MAMT 106 Geometric Tolerance
MAMT 115 Intro to Machine Shop
MAMT 120 Machine Technology I
MAMT 125 Machine Technology II
MAMT 130 Machine Technology III
MAMT 140 Job Shop Machining II
or MAMT 170 Practical Applications
MAMT 148 CNC Applications
MAMT 151 Numerical Control Machining I
MAMT 155 Numerical Control Machining II
MAMT 160 Properties of Materials
UTEC 107 Mathematics for Technology

Special Requirements and Recommendations:
Physical requirements on the job include ability to lift up to 50 pounds regularly and to stand for long periods of time while doing machine work. Average hearing and eyesight, natural or corrected is desirable.

Students seeking a technical certificate must obtain a minimum of 2.00 ("C") in each required MAMT course and must satisfy all other graduation requirements. See faculty advisor for a program sheet detailing exact and complete requirements for this certificate.

Additional expenses: Students in Machine Trades may be required to purchase approximately $375.00 in safety glasses, tools, and material. This does not include cost of text books. This cost may vary with student needs and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields.

Certificate programs are designed to be employment directed for beginning level jobs. Students should check with a welding instructor/advisor about options for specialized employment training requiring a shorter period of training.

Technical Certificate in Welding Requirements
Required Courses:
CADT 101 Introduction to Computers
ENGL 111 English Composition
MAMT 105 Print Reading/Sketching
MAMT 160 Properties of Materials
UTEC 107 Mathematics for Technology
UTEC 150 Fluid Power
UTEC 120 Industrial Safety Practices or UTEC 220 Industry Employment Practices

WELD 110 SMAW I
WELD 115 Welding & Structural Theory
WELD 117 OFW & C I
WELD 133 Fabrication Layout
WELD 170 Practical Applications
WELD 211 GMAW/FCAW

Special Requirements and Recommendations:
See faculty advisor for a program sheet detailing exact and complete requirements for this certificate. Students seeking a Technical Certificate must obtain a minimum of 2.00 ("C") in each required WELD course and must satisfy all other graduation requirements.

Additional expenses: Students in welding may be required to purchase approximately $200 in tools and personal safety and welding equipment. This does not include required textbooks. These costs may vary with student need and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields.

Associate of Science: Manufacturing Technology Emphasis Degree Requirements

General Education (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
CADT 101 Introduction to Computers
CADT 108 CAD Mechanical
MAMT 105 Print Reading/Sketching
MAMT 115 Introduction to Machine Shop
MAMT 120 Machine Technology I
MAMT 125 Machine Technology II
MAMT 148 CNC Applications
MAMT 151 Numerical Control Machining II
MATH 130 Trigonometry & MATH 151 Calculus I (with MATH 113) or
MATH 152 Calculus II (with MATH 113) & MATH 253 Calculus III

Special Recommendations:
It is recommended that the student take MATH 113 (prerequisite to MATH 130) and PHYS 111, 111L. See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Additional Expenses: Students in Machine Trades may be required to purchase approximately $375.00 in safety glasses, tools, and material. This does not include the cost of textbooks. These costs may vary with student needs and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields.

Associate of Applied Science in Manufacturing Technology: Computer-Aided Design Technology Degree Requirements

General Education
ENGL 111, 112 English Composition (6 credit hours)
Social & Behavioral Sciences, Humanities or Selected Speech (6 credit hours)
MATH 113 College Algebra(4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Required courses:
CADT 101 Introduction to Computers
CADT 106 Computer Aided Design
CADT 107 Advanced Computer Aided Design
CADT 108 CAD – Mechanical
CADT 109 CAD – Mechanical Advanced
CADT 110 CAD Application
CADT 120 Intro to Still Images
CADT 130 CAD – Civil
CADT 135 CAD – Civil II
CADT 140 Architectural Theory
CADT 141 Structural Materials
CADT 142 CAD – Residential Architecture
CADT 143 CAD – Commercial Architecture
CONC 104 Architectural/Civil Print Reading
MAMT 101 Introduction to Manufacturing
MAMT 105 Print Reading/Sketching
MAMT 106 Geometric Tolerancing
MAMT 115 Intro to Machine Shop or WELD 151 Industrial Welding

Electives (6 credit hours)

Special Requirements and Recommendations:
Students seeking an Associate of Applied Science degree must obtain a minimum of 2.00 ("C") in each course and must satisfy all other graduation requirements. See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

The Associate of Applied Science degree program includes many of the same technical courses as the Technical Certificate. Also included are mathematics and management courses that are essential for job advancement to more technical levels after employment.

Associate of Applied Science in Manufacturing Technology: Machining Technology Degree Requirements

General Education:
ENGL 111, 112 English Composition (6 credit hours)

Social & Behavioral Sciences, Humanities or Selected Speech (6 credit hours)

UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses:
CADT 101 Introduction to Computers
CADT 108 CAD Mechanical
MAMT 101 Introduction to Manufacturing
MAMT 105 Print Reading/Sketching
MAMT 106 Geometric Tolerancing
MAMT 115 Introduction to Machine Shop
MAMT 120 Machine Technology I
MAMT 125 Machine Technology II
MAMT 130 Machine Technology III
MAMT 140 Job Shop Machining II or MAMT 170 Practical Applications
MAMT 148 CNC Applications
MAMT 151 Numerical Control Machining I
MAMT 155 Numerical Control Machining II
MAMT 160 Properties of Materials
MAMT 207 Introduction to Statistical Processes
UTEC 220 Industry Employment Practices
WELD 151 Industrial Welding
PHYS 100 Concepts of Physics (or higher level)

Elective (3 credit hours)

Special Requirements and Recommendations
Students seeking an Associate of Applied Science degree must obtain a minimum of 2.00 ("C") in each MAMT course and must satisfy all

other graduation requirements. See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Additional expenses: Students in the Manufacturing Technology Cluster may be required to purchase approximately $375.00 in safety glasses, tools, and material. This does not include the cost of textbooks. These costs may vary with student needs and brand or quality of tools or equipment purchased. All safety glasses must meet a minimum industry safety standard of Z-87 with side shields.

Courses are designed to give students an adequate knowledge of metals, layout work, and welding processes, along with an opportunity to gain manipulative skills and the related information needed to enter and progress in various welding occupations. Instruction and shop practice is offered in SMAW, GMAW, FCAW, and GTAW of mild steel in all positions as well as pipe and specialty welding. Various cutting and fabrication methods are included. Students can arrange work experience as an elective part of the regular program after completing two semesters or more.

Associate of Applied Science in Manufacturing Technology: Welding Degree Requirements

General Education:
- ENGL 111, 112 English Composition (6 credit hours)
- Social & Behavioral Sciences, Humanities or Selected Speech (6 credit hours)
- UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)
- Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses:
- CADT 101 Introduction to Computers
- CADT 106 Computer Aided Design
- MAMT 101 Introduction to Manufacturing
- MAMT 105 Print Reading/Sketching
- MAMT 106 Geometric Tolerancing
- MAMT 115 Introduction to Machine Shop
- MAMT 150 Introduction to Numerical Control
- MAMT 160 Properties of Materials
- MAMT 207 Intro to Statistical Process Control
- UTEC 150 Fluid Power
- UTEC 220 Industry Employment Practices or UTEC 120 Industrial Safety Practices
- WELD 110 SMAW
- WELD 115 Welding & Structural Theory
- WELD 117 OFW & C
- WELD 133 Fabrication Layout
- WELD 170 Practical Applications
- WELD 211 GMAW/FCAW
- WELD 230 GTAW

Elective (6 credit hours)

Special Requirements and Recommendations

Students seeking an Associate of Applied Science degree must obtain a minimum of 2.00 ("C") in each required WELD course and must satisfy all other graduation requirements. See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Additional expenses: Students in welding may be required to purchase approximately $200.00 in safety glasses, tools, and material. This does not include required textbooks. These costs may vary with student needs and brand or quality of tools or equipment purchased. All safety glasses must meet a minimum industry safety standard of Z-87 with side shields.

MASS COMMUNICATION

FACULTY

Byron Evers, Dan Flenniken, Eric Sandstrom, Regis Tucci

CONTACT INFORMATION

Department of Languages, Literature, and Mass Communication; Fine Arts Building, 970-248-1833.

PROGRAMS OFFERED

Bachelor of Arts
- Mass Communication – Broadcasting
- Mass Communication – News/Editorial
- Mass Communication – Print Media
- Mass Communication – Public Relations/Advertising

Minor
- Mass Communication

Bachelor of Arts in Mass Communication Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Mass Communication Core:
- MASS 110 Mass Media: Impact & History
- MASS 201 Writing & Reporting for the Media
- MASS 397 Practicum
- MASS 480 Journalism Law & Ethics
- MASS 490 Theory & Research
- MASS 494 Seminar
- MASS 499 Internship

Mass Communication - 3 credit hour elective (one of the courses below OUTSIDE the chosen concentration)
- MASS 301 Broadcast Journalism Writing
- MASS 320 Fundamentals of Photojournalism
- MASS 350 Public Relations Concepts

Concentration (Students must choose one):
Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Special Requirements:

Continuation in the program after the sophomore year will be contingent upon the student's satisfying the following requirements:
1. Completion of the English Composition sequence with at least a 3.0 GPA (no grade below "B")
2. Completion of the two introductory courses (MASS 110 and MASS 201) in Mass Communication, with at least a 2.5 GPA and no grade of "D" or "F".
3. Maintenance of at least a 2.5 GPA in MASS courses, in addition to at least a 2.0 GPA overall, is necessary for Mass Communication majors to proceed to graduation.

Minor Requirements

See faculty advisor for requirements.

MATHEMATICS

FACULTY
Cathy Barkley, Robert Becker, Cathy Bonan-Hamada, Edward Bonan-Hamada, James Brock, Harold Davenport, Tracii Friedman, Philip Gustafson, Philip Kavanagh, Richard Ott, Erik Packard, Lori Payne, Markus Reitenbach, Mark Rogers, Daniel Schultz-Ela, Zhong Wu

CONTACT INFORMATION
Department of Computer Science, Mathematics, and Statistics, Wubben Hall 157, 970-248-1407

PROGRAMS OFFERED
- Associate of Science
  - Mathematics Emphasis
- Bachelor of Science
  - Mathematics
    - Mathematics
    - Mathematics - Secondary teaching
    - Statistics
- Minors
  - Mathematics
  - Statistics

Associate of Science: Mathematics Emphasis
Degree Requirements

General Education (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- MATH 151 Calculus I
- MATH 152 Calculus II
- MATH 253 Calculus III
- MATH 260 Differential Equations
- STAT 200 Probability & Statistics

Electives (2-9 credit hours)

Special Requirements and Recommendations:
1. MATH 225, MATH 240 and CSCI 111 are highly recommended to be included.
2. General Education and course requirements in the discipline area plus electives chosen in consultation with the student's advisor up to the minimum of 60 credit hours comprise the requirements for this emphasis.
3. See faculty advisor for a program sheet detailing exact and complete requirements for this degree.
4. Additional expenses: TI-83 or TI-84 (preferred) or equivalent calculator is recommended or required for mathematics courses.

Bachelor of Science In Mathematics Degree Requirements

General Education (minimum 31 credit hours)

B.S. Distinction (Mathematics/Statistics/Computer Science)
- STAT 200 Probability & Statistics
- Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- CSCI 111 Computer Science
- MATH 152 Calculus II
- MATH 240 Intro to Advanced Mathematics
- MATH 253 Calculus III
- MATH 325 Linear Algebra I
- MATH 452 Introduction to Real Analysis I
- MATH 490 Abstract Algebra I
- MATH 453 Introduction to Real Analysis II or
- MATH 491 Abstract Algebra II
- MATH 484 Senior Seminar I
- MATH 494 Senior Seminar II
- Four courses from the following list*:
  - MATH 260 Differential Equations
  - MATH 310 Number Theory
  - MATH 360 Methods of Applied Math
  - MATH 361 Numerical Analysis
  - MATH 365 Mathematical Modeling
  - MATH 369 Discrete Structures I
  - MATH 370 Discrete Structures II
  - MATH 386 Geometries
  - MATH 420 Introduction to Topology
  - MATH 430 Mathematical Logic
  - MATH 450 Complex Variables
  - MATH 460 Linear Algebra II
  - MATH 453 Introduction to Real Analysis II or MATH 491 Abstract Algebra II
  - MATH 396 Topics or MATH 496 Topics
  - STAT 311 Statistical Methods

  *NOTE: at most, one Topics class, which must be 3 credit hours, can be used as one of these four courses.

Concentration (Students must choose one):
Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Special Requirements and Recommendations:
No more than one "D" may be used in completing major requirements, and a GPA of at least 2.50 in the major is required.

Additional expenses: Graphing calculator is recommended for several mathematics and statistics courses. See department for recommended models.

Students seeking a degree in Mathematics - Secondary teaching should see their faculty advisors in both Mathematics and Teacher Licensure.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

MECHANICAL ENGINEERING

CONTACT INFORMATION
Department of Physical and Environmental Sciences,
Wubben Hall 222, 970-248-1993

PROGRAMS OFFERED
Pre-Engineering Track

Bachelor of Science
Mechanical Engineering
(degree awarded by the University of Colorado at Boulder)

Mesa State College and the University of Colorado at Boulder have created a partnership to deliver a mechanical engineering program in its entirety in Grand Junction. The MSC/CU-Boulder Mechanical Engineering Partnership Program prepares students for careers in a wide range of industries through the rigorous study of mechanical engineering. Students completing the program will be awarded a Bachelor of Science in Mechanical Engineering degree from CU-Boulder.

Special Admission Requirements and Recommendations:

First-Time Students
Applicants who meet both Mesa State's general admission requirements and CU-Boulder's College of Engineering and Applied Science Minimum Academic Preparation Standards (MAPS) and Guaranteed Admission Requirements for Colorado Freshmen can be admitted to the program at the outset.

If an interested first-time student does not meet the admissions criteria, the student may be admitted to MSC's pre-engineering track and subsequently apply to transfer in to the MSC/CU-Boulder, Mechanical Engineering Partnership Program when the following are achieved:

- 2.9 GPA for all courses at Mesa State College;
- Complete 2 course sequence in calculus with a grade of 'B' or higher; and
- Complete 2 physical science courses (calculus-based physics and/or college chemistry) with a grade of 'B' or higher.

Admission at this point could occur at the end of the first year.

Transfer Students:
Students also may transfer into the program prior to beginning their junior year if they have earned a 2.9 cumulative GPA and completed all required lower-division coursework.

Interested students can learn more about the program and admission options at mesastate.edu/engineering. All interested students should contact the Mesa State College faculty coordinator for the MSC/CU-Boulder Mechanical Engineering Partnership Program, for complete details on admission requirements.

MUSIC

FACULTY
Monte Atkinson, Adam Ballif, Jack Delmore, Carlos Elias, Sean Flanigan, Calvin Hofer, Arthur Houle, Darin Kamstra

CONTACT INFORMATION
Department of Music, Moss Performing Arts Center 113,
970-248-1233

PROGRAMS OFFERED
Bachelor of Arts
Elective Studies in Business*
Music Performance
Instrumental
Keyboard
Vocal
Music Education - K-12 teaching
Music Liberal Arts*
Minor
Music (Instrumental or Vocal)
Pending final approval from NASM.

Students seeking admittance as a music major at Mesa State College must pass a performance audition, a music theory placement exam, and a piano proficiency assessment. Admission to Mesa State College does not guarantee admission into a music degree program. Prospective music majors should consult the music department website or contact the music department for information about audition material and scheduling an audition with the faculty in their area of interest.

Following the audition, students will be notified by letter regarding audition results. Students admitted as new music majors will be assigned an advisor, and should plan to attend an orientation, registration, and advising session. If the advisor is unavailable, students should contact the Music Department Head.

Students in any baccalaureate degree program at Mesa State College desiring to minor in music should contact the music department to be directed to a faculty member in the student's area of interest. Prospective music minors should schedule a meeting with the faculty member, who will serve as their advisor for the minor in music. Students should be prepared to discuss their musical background, goals, and perform a solo. Requirements for completing a minor in music and course registration information will also be discussed.

The Bachelor of Arts with a concentration in performance is designed for those students who desire a performance-focused career. A strong core curriculum of musicianship courses include music theory, history, literature, pedagogy, ensemble performance and applied study. These courses develop the student's abilities and prepare them to perform in a plethora of venues and genres such as symphony orchestras, chamber ensembles, armed forces ensembles, musical theaters, opera, and countless entertainment venues. This degree also prepares students to pursue graduate study or to teach privately.

The Bachelor of Arts with a concentration in music education provides students with the knowledge, skills, and musicianship to become a successful music educator. Studies in music theory, history, literature, ensemble performance, and applied study give the student a strong foundation on which to build a successful career in music education. Classes in conducting, instrumental, choral, and elementary techniques as well as music education philosophy develop the skills and knowledge needed for a rewarding career as a

K-12 music educator. These skills and knowledge are applied during field experiences as well as during the student teaching internship. Courses taken from the Teacher Education Department lead to a K-12 teaching license in the state of Colorado.

The Bachelor of Arts in Music with a concentration in liberal arts is designed to meet the needs of students seeking extended training in music, but who are not interested in pursuing preparation in performance or public/private school music teaching. Many music majors have goals that include pursuing careers in church music, composition, music technology, arts management, to name a few. Music majors earning the Liberal Arts concentration will be strong in music and the related arts, and along with their music training, will complete both broad and specific learning in other academic areas of interest.

The Bachelor of Arts in Music with Elective Studies in Business is designed for those students who desire a career within the music industry. A strong core curriculum of musicianship courses include music theory, history, literature, ensemble performance, and applied study. These courses develop the student's abilities and prepare them to perform in a variety of venues and genres such as symphony orchestras, chamber ensembles, armed forces ensembles, musical theaters, opera, and countless entertainment venues. Also included in the degree are all of the requirements for a Minor in Business Administration. Courses in this area include accounting, economics, management, marketing, the legal aspects of business, and a specialized course in music industry and marketing. These courses develop the student's knowledge of business practices and relationships and prepare them to handle professional responsibilities in a wide range of business careers. This degree also prepares students to pursue graduate study in music.

Bachelor of Arts in Music Degree Requirements

General Education (31 minimum credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:

MUSA 111 Music Technology
MUSA 114 Theory I – Introduction
MUSA 115 Theory II – Diatonic Concepts
MUSA 116 Ear Training & Sightsinging I
MUSA 117 Ear Training & Sightsinging II
MUSA 214 Theory III - Chromatic Concepts
MUSA 215 Theory IV - 20th Century Form & Analysis
MUSA 250 Beginning Conducting
MUSA 3xx Music Literature Course
MUSA 317 Orchestration
MUSA 326 Music History & Literature I
MUSA 327 Music History & Literature II
MUSA 426 Music of World Cultures
MUSP 420 Senior Recital
8 credit hours from Music Lessons
(MUSL - each level 100-400 taken twice)
8 credit hours from Music Ensembles
(MUSP - each level 100-400 taken twice)

Options for Performance Majors:
Each student must choose one of the following options and take specific courses required for that option:

Instrumental
Keyboard
Vocal

Please refer to the Music Student Handbook for specific courses in each option.

Music Education
Students who choose the concentration in Music Education should see their faculty advisors in both Music and in Teacher Licensure and refer to the program sheets detailing requirements.

Students majoring in music must:

1. Pass all music courses with a C or better
2. Pass the piano proficiency or Class Piano I-IV with a C or better
3. Successfully complete a jury at the end of each semester
4. Pass the Sophomore Review
5. Pass the Senior Recital, including a Senior Recital Preview
6. Participate in regular advising sessions with faculty
7. Music Education majors must meet specific requirements. Please refer to the Music Student Handbook.

Minor Requirements
See faculty advisor for requirements.

NURSE AIDE

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED

Technical Certificate

Nurse Aide

Technical Certificate in Nurse Aide Requirements

NURA 101 Certified Nurse Aide
NURA 170 Nurse Aide Clinical

NURSING

FACULTY
Debra Bailey, Judith Brock, Sandy Forrest, Sue Goebel, Judy Goodhart, Cathy Hartt, Bethany Hoffman, Kristine Reuss, Cheryl Roy, Deborah Sharpe, Cindy Thomas, Jennifer Zadrozny

CONTACT INFORMATION
Department of Health Sciences, Medesy Hall 142, 970-248-1398

PROGRAMS OFFERED

Certificate of Practical Nursing (P.N.)
Associate of Applied Science in Nursing (A.A.S.)
Bachelor of Science in Nursing (B.S.N.)

Admission to Mesa State College does not guarantee admission into the nursing program, which requires a separate application. Please contact the Health Sciences department for additional information.

High school courses in biology, chemistry and algebra are recommended. All non-nursing college courses must be completed before a student can be admitted to the nursing programs. An admission committee selects students from applicants who best meet requirements. All admission materials must be on file in the Department of Health Sciences office prior to deadlines established for each program:

LPN program: March 1 for fall entrance
AAS program: October 1 for spring entrance

BSN Program: October 1 for spring entrance, or March 1 for fall entrance.

Students admitted to nursing programs must undergo a background check and maintain current CPR certification and professional liability insurance.

Students transferring in credit for human anatomy and physiology taken at out-of-state accredited colleges/universities must provide evidence that these courses had separate laboratory components before the course can be accepted to fulfill program requirements. This will not necessarily appear on the transcript.

Students must have a 2.0 ("C") on a 4.0 scale or higher grade for all courses required for completion of the nursing programs. This policy applies regardless of when the course was taken. A "D" grade or lower in any required course is not acceptable.

Any RN or LPN who desires to enroll in a nursing course for personal enrichment only must secure permission from the course instructor.

Certificate of Practical Nursing Degree Requirements

Prospective students must demonstrate college-level proficiency in reading and writing to be admitted to this program. This program has selective admission requirements which may change from year to year. It is the student's responsibility to obtain the current admission requirements, which are available in the Department of Health Sciences.

General Education Requirements
- ENGL 111 English Composition
- ENGL 112 English Composition
- PSYC 233 Human Growth & Development

Prerequisites
- BIOL 209 Human Anat & Physiology I
- BIOL 209L Human Anat & Physiology I Lab
- BIOL 210 Human Anat & Physiology I
- BIOL 210L Human Anat & Physiology I Lab

Practical Nursing Courses
- NURS 101Pharmacology Calculations
- NURS 106 Fund Med Surg Concepts I
- NURS 106L Fund Med Surg Concepts I
- NURS 107 Foundations of Nursing
- NURS 107L Foundations of Nursing Lab
- NURS 108 Foundations of Nursing II
- NURS 108L Foundations of Nursing II Lab
- NURS 112 Basic Concepts of Pharmacology
- NURS 117 Nursing Care of Childbearing Family
- NURS 117L Nursing Care of Childbearing Family Lab
- NURS 118 Nursing Care of Children
- NURS 118L Nursing Care of Children Lab
- NURS 156 Socialization into Practical Nursing
- NURS 172 Fund Med Surg Concepts II
- NURS 172L Fund Med Surg Concepts II Lab

* These courses must have been completed within the five years prior to applying to the nursing program.

Associate of Applied Science in Nursing Degree Requirements

The L.P.N. - A.A.S. Program is a component of the nursing career ladder that allows licensed practical nurses (L.P.N.) to advance their career to practice as a registered nurse. Students admitted to the program must have a current LPN license and meet the admission requirements.

General Education
- ENGL 111, 112 English Composition (6 credit hours)

Social/Behavioral Science, Humanities, or Selected Speech (6 credit hours)

MATH 110 or higher College Mathematics

Wellness (Kinesiology) Requirement (2 credit hours)

Prerequisites:
- BIOL 209, 209L Human Anatomy & Physiology I & Lab
- BIOL 210, 210L Human Anatomy & Physiology II & Lab
- BIOL 241 Pathophysiology
- PSYC 233 Human Growth & Development**

Required Courses:
- NURS 200 Role Transition
- NURS 206, 206L Advanced Concepts of Medical-Surgical Nursing I and Lab
- NURS 210, 210L Nursing Care of Complex OB and Pediatrics and Lab
- NURS 211, 211L Nursing Care of Psychiatric Clients and Lab
- NURS 216, 216L Advanced Concepts of Medical-Surgical Nursing II and Lab
- NURS 217 Leadership for Professional Nursing Practice
- NURS 288 Practicum: Health & Physical Assessment for Nursing
- NURS 289 Capstone: Comprehensive Nursing Internship

* MATH 110 does not meet the mathematics requirement for the BSN degree.

** Course is counted in General Education, but is also a program requirement

Bachelor of Science in Nursing Degree Requirements

General Education (minimum 31 credit hours)

Required General Education Courses
- PSYC 150 General Psychology
- PSYC 233 Human Growth & Development

B.S. Degree Distinction
- STAT 200 Probability & Statistics
- Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- *BIOL 209, 209L Human Anatomy & Physiology & Lab
- *BIOL 210, 210L Human Anatomy & Physiology II & Lab
- *BIOL 241 Pathophysiology
- NURS 201, 201L Nursing Fundamentals & Lab
- NURS 202, 202L Health Assessment/Promotion & Lab
- NURS 203 Pharmacology I
- NURS 204 Nursing Theory/Foundations
- NURS 301, 301L Medical/Surgical Process & Lab
- NURS 302 Family Nursing Through the Lifespan
- NURS 303 Professional Development
- NURS 304 Pharmacology II
- NURS 313, 313L Mental Health & Lab
- NURS 314, 314L The Childbearing Family & Lab
- NURS 315, 315L Pediatrics & Lab
- NURS 403, 403L Community Health Nursing & Lab
- NURS 406, 406L Advanced Medical/Surgical & Lab
- NURS 407 Nursing Research
- NURS 411, 411L Leadership & Lab
- NURS 412L Senior Specialty
- NURS 415 Business of Health Care
- NURS 416 Nursing Therapeutics

* These courses must have been taken within the last five years to fulfill graduation requirements. If not, the course must be re-taken or competency proven. Contact a nursing advisor.

Electives (upper-division, 3 credit hours)
Unrestricted (1 credit hours)
Upper-division NURS course (2 credit hours)

If desired, a student may use electives towards satisfying requirements for a minor.

LPN's may apply for advanced placement within the BSN Program. Consult advisor for requirements.

Special Requirements:
There is a separate application form. Please contact the Department of Health Sciences.

Progression requirements: All nursing courses must be completed in sequence. All required 200 level courses must be completed before 300 level nursing courses may be taken. All required 300 level courses must be completed before 400 level nursing courses may be taken. Students must complete all 200 level nursing courses or be an (RN) advanced placement student to enroll in the nursing elective courses.

Registered Nurse to Bachelor of Science Degree Requirements

The RN-BSN program is the final step on the nursing career ladder at Mesa State College. Registered nurses must submit a separate application for RN-BSN program and will receive credit for prior nursing learning experiences according to "The Colorado Nursing Articulation Model."

General Education (minimum 31 credit hours)
Required General Education Courses
PSYC 150 General Psychology
PSYC 233 Human Growth & Development

B.S. Degree Distinction
STAT 200 Probability & Statistics

Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
*BIOL 209, 209L Human Anatomy & Physiology & Lab
*BIOL 210, 210L Human Anatomy & Physiology II & Lab
*BIOL 241 Pathophysiology
NURS 202, 202L Health Assessment/Promotion & Lab
NURS 300 Professional Transition
NURS 302 Family Nursing Through the Lifespan
NURS 403, 403L Community Health Nursing & Lab
NURS 407 Nursing Research
NURS 411, 411L Leadership & Lab
NURS 415 Business of Health Care

* These courses must have been taken within the last five years to fulfill graduation requirements. If not, the course must be re-taken or competency proven. Contact a nursing advisor.

Electives (upper-division, 3 credit hours)

Unrestricted (1 credit hours)

Upper-division NURS course (2 credit hours)

All NURS courses are offered in online format for the RN-BSN program.

PEACE OFFICER STANDARDS AND TRAINING (POST)

FACULTY
John Reece

CONTACT INFORMATION
Police Academy Director, Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Technical Certificate
Police Officer Standards and Training (POST)

Technical Certificate: POST Requirements
CRMJ 101 Basic Police Academy I
CRMJ 102 Basic Police Academy II
CRMJ 105 Basic Law
CRMJ 106 Arrest Control
CRMJ 107 Law Enforcement Driving
CRMJ 108 Firearms
KINA 127 Physical Conditioning

This certificate program exceeds the Colorado Peace Officers Standards Training (POST) requirements for peace officer entry-level training. The individual training requirements for Arrest Control, Law Enforcement Driving, and Firearms are included in the program. Students enrolled in the program will earn 36 credit hours that may be applied towards Associate or Bachelor's degrees at Mesa State. This is a 16 week course that requires full time participation during the weeks of enrollment. The program is not an open enrollment program and requires a separate application to the Academy. Please see the Academy Director for details.

PHILOSOPHY

FACULTY
Leslie Miller

CONTACT INFORMATION
Department of Languages, Literature, and Mass Communication; Lowell Heiny Hall 445, 970-248-1687.

PROGRAMS OFFERED
Minor
Philosophy

Minor Requirements
See faculty advisor for requirements.

PHYSICAL SCIENCES

FACULTY
Andres Aslan, James Ayers, Rex Cole, David Collins, Alex Gurshtein, Harold Hase, Verner Johnson, Suzanne Kenney, Richard Livaccari, Donn Lorhammer, Chad Middleton, Gigi Richard, Joseph Richards, William Tiernan

CONTACT INFORMATION
Department of Physical and Environmental Sciences, Science Lab 222, 970-248-1993

PROGRAMS OFFERED
- Associate of Science
  - Geology Emphasis
  - Physics Emphasis
- Bachelor of Science
  - Physical Sciences – Chemistry
  - Physical Sciences – Environmental Geology
  - Physical Sciences – Geology
  - Physical Sciences – Geology - Secondary Teaching
  - Physical Sciences – Physics
- Minors
  - Chemistry
  - Geology
  - Physics
  - Watershed Science

Associate of Science: Geology Emphasis Degree Requirements
- General Education for Associate Degree (31 credit hours)
- Wellness (Kinesiology) Requirement (2 credit hours)
- Applied Studies (3 credit hours)
- Required Courses:
  - GEOL 111, 111L Principles of Physical Geology & Lab or GEOL 113, 113L Field-Based Intro to Physical Geology & Lab
  - GEOL 112, 112L Principles of Historical Geology & Lab
  - GEOL 250 Environmental Geology
  - Additional courses in geology specialization (14 credit hours, to be selected in consultation with advisor)

General education and course requirements in discipline area plus electives chosen in consultation with the student's ad visor up to the minimum of 60 credit hours comprise the requirements for this emphasis.

Study directed toward the Associate of Science degree will serve as a basis for the Bachelor of Science degree with the same discipline and also for other programs at Mesa State College and at other colleges. Faculty advisors will assist students in planning programs to meet requirements. Programs of study in the sciences are very sequential and advanced planning for the transition from an associate program to a baccalaureate program is crucial for economy of time and effort.

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Associate of Science: Physics Emphasis Degree Requirements
- General Education for Associate Degree (31 credit hours)
- Wellness (Kinesiology) Requirement (2 credit hours)
- Applied Studies (3 credit hours)
- Required Courses:
  - PHYS 131, 131L Fundamental Mechanics & Lab
  - PHYS 132, 132L Electromagnetism & Optics & Lab
  - PHYS 231 Modern Physics
  - Electives (12 credit hours)

General Education and course requirements in discipline area plus electives chosen in consultation with the student's advisor up to the minimum of 60 credit hours comprise the requirements for this emphasis.

Study directed toward the Associate of Science degree will serve as a basis for the Bachelor of Science degree with the same discipline and also for other programs at Mesa State College and at other colleges. Faculty advisors will assist students in planning programs to meet requirements. Programs of study in the sciences are very sequential and advanced planning for the transition from an associate program to a baccalaureate program is crucial for economy of time and effort.

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Bachelor of Science in Physical Sciences–Chemistry Degree Requirements
- General Education (31 credit hours)
- B.S. Degree Distinction
  - MATH 152 Calculus II
  - Humanities or Social & Behavioral Sciences (3 credit hours)
- Wellness (Kinesiology) Requirement (3 credit hours)
- Applied Studies (3 credit hours)
- Required Courses:
  - CHEM 131, 131L General Chemistry & Lab
  - CHEM 132, 132L General Chemistry & Lab
  - CHEM 211, 211L Quantitative Analysis & Lab
  - CHEM 311, 311L Organic Chemistry & Lab
  - CHEM 312, 312L Organic Chemistry & Lab
  - CHEM 321 Physical Chemistry I
  - CHEM 322 Physical Chemistry II
  - CHEM 341 Advanced Laboratory I
  - MATH 253 Calculus III
  - PHYS 131 Fundamental Mechanics
    - or
  - PHYS 111 General Physics
  - PHYS 132, 132L Electromagnetism & Optics & Lab
    - or
  - PHYS 112, 112L General Physics & Lab
- Restricted Electives (7 credit hours chosen from the following)
  - CHEM 315, 315L Biochemistry & Lab
  - CHEM 396 Topics
  - CHEM 411 Main Group Elements
  - CHEM 412 Transition Elements
  - CHEM 421 Advanced Organic Chemistry I
  - CHEM 422 Advanced Organic Chemistry II
  - CHEM 431, 431L Instrumental Analysis & Lab
  - CHEM 482 Senior Research I and
  - CHEM 483 Senior Research II
  - CHEM 496 Topics
- Electives (22 credit hours)

Bachelor of Science in Physical Science–Geology Degree Requirements
- General Education (31 credit hours)
- B.S. Degree Distinction

STAT 200 Probability & Statistics
Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
GEOL 111, 111L Principles of Physical Geology & Lab or GEOL 113, 113L Field-Based Intro to Physical Geology & Lab
GEOL 112, 112L Principles of Historical Geology & Lab
GEOL 202 Introduction to Field Studies
GEOL 204 Computer Applications in Geology
GEOL 301, 301L Structural Geology & Lab
GEOL 331, 331L Crystallography & Mineralogy & Lab
GEOL 340, 340L Igneous & Metamorphic Petrology & Lab
GEOL 402, 402L Applications of Geomorphology & Lab
GEOL 404, 404L Geophysics & Lab
GEOL 444, 444L Stratigraphy & Sedimentation & Lab
GEOL 480 Summer Field Camp
GEOL 490 Seminar

Required Support Courses
BIOL 102, 102L General Organismal Biology & Lab
CHEM 131, 131L General Chemistry & Lab
PHYS 111, 111L General Physics & Lab or PHYS 131, 131L Fundamental Mechanics & Lab

Restricted Electives (8 credit hours; 7 may need to be upper division; see a faculty advisor for elective choices.)

Electives (8 credit hours; may need some upper division)

Options: Specific courses are required if the following options available under this degree are chosen:
Environmental Geology;
Geology - Secondary Teaching

Those pursing either option should meet with their faculty advisor to discuss requirements. Students who want an option in Geology-Secondary Teaching should meet with a faculty advisor in Teacher Licensure as well.

Bachelor of Science in Physical Science – Physics Degree Requirements

General Education (31 credit hours)

B.S. Degree Distinction
MATH 152 Calculus II
Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
PHYS 131, 131L Fundamental Mechanics & Lab
PHYS 132, 132L Electromagnetism & Optics & Lab
PHYS 231 Modern Physics
PHYS 232 Modern Physics II
PHYS 251 Electronics for Scientists
PHYS 252 Intermediate Laboratory
PHYS 311 Electromagnetic Theory I
PHYS 321 Quantum Theory
PHYS 331 Advanced Laboratory I
PHYS 342 Advanced Dynamics
PHYS 362 Statistical & Thermal Physics
PHYS 422 Quantum Theory II
PHYS 473 Modern Optics
PHYS 482 Senior Research (taken twice)
PHYS 494 Seminar (taken twice)
MATH 253 Calculus III
MATH 260 Differential Equations
MATH 360 Methods of Applied Mathematics

Electives (22 credit hours)

Requirements may vary according to the concentration and option selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major, concentration, and option chosen.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

PHYSICS -
SEE PHYSICAL SCIENCES

POLITICAL SCIENCE

FACULTY
Timothy Casey, John Redifer

CONTACT INFORMATION
Department of Social and Behavioral Sciences, Lowell Heiny Hall 411, 970-248-1696

PROGRAMS OFFERED
Bachelor of Arts
Political Science
Minors
Political Science

Bachelor of Arts in Political Science Degree Requirements

General Education (31 minimum credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Political Science Core
POLS 101 American Government
POLS 236 State & Local Government
POLS 261 Comparative Politics
POLS 324 The Legislative Process
POLS 325 The American Presidency
POLS 342 Public Administration
POLS 370 World Politics
POLS 412 Constitutional Law
POLS 452 Political Theory: Classical/Medieval or POLS 453 Political Theory: Modern
POLS 475 American Foreign & National Security Policy
POLS 490 Senior Seminar: Political Science
SOCI 310 Methods of Social Research
STAT 200 Probability & Statistics

Political Science Electives (9 credit hours selected from):
POLS 310 Development of U.S. Constitution
POLS 328 The American Court System
POLS 352 Religion & Politics
POLS 355 Politics in the Information Age
POLS 365 European Government & Politics
POLS 413 Civil Liberties

POLS 452 Political Theory: Classical & Medieval (if not used in core) or POLS 453 Political Theory: Modern (if not used in core)
POLS 488 Environmental Politics & Policy
POLS 499 Political Science Internship

Electives (30 credit hours)
Recommended: 9 upper division credit hours from the following disciplines (hours included in general electives): Anthropology, Economics, History, Philosophy, Psychology, or Sociology

See faculty advisor for a program sheet detailing exact and complete requirements.

Students are encouraged to complete an internship as part of the program. See Course Description section for a description of the internships offered.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

PROCESS SYSTEMS TECHNOLOGY

FACULTY
Gordon Koch, John Sluder, Jack Yon

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Associate of Applied Science
Process Systems Technology

Associate of Applied Science in Process Systems Technology Degree Requirements

General Education
ENGL 111, 112 English Composition (6 credit hours)
Social & Behavioral Sciences, Humanities or Selected Speech (6 credit hours)
MATH 108 Technical Mathematics

Wellness (Kinesiology) Requirement (2 credit hours)

Required courses:
TECI 132 Introduction to Information Tech. Hard./Soft.
PROS 100 Introduction to Process Technology
PROS 110 Safety, Health, and Environment
TECI 110 Applied Physics
PROS 117 DC Circuits
PROS 118 AC Circuits
CHEM 100 Chemistry and Society
PROS 120 Process Technology I: Equipment
PROS 130 Instrumentation
PROS 210 Process Technology II: Systems
TECI 251 Personal and Professional Leadership Development
PROS 220 Process Technology III: Operations
PROS 230 Quality in Process Technology
PROS 292 Capstone

PSYCHOLOGY

FACULTY
Bruce Bishop, Susan Becker, Karen Ford, Myra Heinrich, Jessica Herrick, Harry Tiemann

CONTACT INFORMATION
Department of Social and Behavioral Sciences, Lowell Heiny Hall 411, 970-248-1696

PROGRAMS OFFERED
Bachelor of Arts
Psychology
Psychology – Counseling Psychology
Minor
Psychology

Bachelor of Arts in Psychology Degree Requirements

General Education (31 minimum credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
PSYC 150 General Psychology
*PSYC 311 Quantitative Research or *SOCI 310 Methods of Social Research
PSYC 312, 312L Experimental Psychology & Lab
PSYC 314, 314L Psychology of Learning & Lab
PSYC 320 Social Psychology
PSYC 414 Systems & Theories of Psychology
STAT 200 Probability & Statistics

24 upper division credit hours selected from the following:
ANTH 340 Ethnopsychology
PSYC 310 Child Psychology
PSYC 325 Environmental Psychology
PSYC 330 Psychology of Adolescents & Young Adults
PSYC 335 Psychology of Women
PSYC 340 Abnormal Psychology
PSYC 350 Psychology of Adulthood
PSYC 360 Sport Psychology
PSYC 370 Cross-Cultural Psychology
PSYC 380 Comparative Psychology
PSYC 395 Independent Study
PSYC 396 Topics
PSYC 400 Psychological Testing
PSYC 410 Drugs & Human Behavior
PSYC 412 Industrial & Organizational Psychology
PSYC 416 Memory & Cognition
PSYC 420 Personality
PSYC 422 Sensation & Perception
PSYC 425 Forensic Psychology
PSYC 430 Biopsychology
PSYC 495 Independent Study
PSYC 496 Topics

*If not used in the Psychology Core, one of the following may be a choice as a Psychology Elective:
SOCI 310 Methods of Social Research or
PSYC 311 Quantitative Research Methods

Electives (31 credit hours)

Requirements will vary in the counseling concentration. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Special Requirement:
To continue in the program and eventually graduate as psychology "minors" or "majors," with or without a concentration in counseling, students must earn, within no more than three attempts, at least a grade of "C" in all core, major elective, or concentration course required for the major.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

PUBLIC ADMINISTRATION/ PUBLIC SAFETY

CONTACT INFORMATION
Department of Social and Behavioral Sciences, Lowell Heiny Hall 411, 970-248-1696

PROGRAMS OFFERED
Bachelor of Applied Science
Public Administration/Public Safety

Bachelor of Applied Science in Public Administration/Public Safety Degree Requirements

General Education (31 minimum credit hours)

B.A.S. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

POLS 236 State and Local Government
POLS 342 Public Administration
PADM 314 Public Organization Theory
PADM 315 Public Management
PADM 442 Public Budgeting
PADM 446 Public Personnel Management
ENGL 219 Introduction to Professional Writing
ENGL 385 Technical and Professional Writing
SOCO 301 Introduction to Human Services
CISB 210 Fundamentals of Information Systems
CISB 392 Information Systems Theory and Practice

BAS Core (36 credit hours)

Restricted Electives (9 credit hours - must be upper division)

To be admitted to the B.A.S. degree, program applicants must possess an A.A.S. or equivalent A.A. degree in Criminal Justice, Fire Science, Emergency Medical Services, or a related field of study. Applicants possessing a certificate of completion from a certified training program in one of these areas may also be admitted conditionally to the program while completing the requirements for an A.A.S. degree. Please see the Social and Behavioral Sciences Department Head for complete requirements and application form. All degree requirements must be completed as described above. Any exceptions or substitutions must be recommended in advance by the faculty advisor and approved by the department head. Students are required to participate in an exit examinations or other programs deemed necessary to comply with the college accountability requirement.

RADIOLOGIC TECHNOLOGY

FACULTY
Bette Schans, Patrice Ward

CONTACT INFORMATION
Department of Health Sciences, Medesy Hall 142, 970-248-1398

PROGRAMS OFFERED
Associate of Applied Science
Radiologic Technology
Bachelor of Applied Science
Radiologic Technology

Students applying to the radiologic technology program must submit additional material. ACT or SAT scores are required for all radiologic technology applicants. Students applying for admission into the radiologic technology program must be admitted into the general College. Admission to Mesa State College does not guarantee admission into the radiologic technology program, which requires a separate application. Please contact the nursing and radiologic sciences department for additional information.

Associate of Applied Science in Radiologic Technology Degree Requirements
Prerequisite
BIOL 209, 209L Human Anatomy & Physiology & Lab

General Education

ENGL 111, 112 English Composition (6 credit hours)

Social or Behavioral Science, Humanities, or Selected Speech (6 credit hours, PSYC 150 General Psychology recommended)

Wellness (Kinesiology) Requirement (2 credit hours)

MATH 113 College Algebra

Prerequisites:
BIOL 209, 209L Human Anatomy & Physiology & Lab

Required Courses:
RTEC 114 Radiographic Clinical Experience I
RTEC 120 Introduction to Rad Tech & Patient Care
RTEC 121, 121L Radiographic Anatomy & Positioning I & Lab
RTEC 122, 122L Principles of Exposure & Lab
RTEC 124 Radiographic Clinical Experience II
RTEC 125 Radiologic Science
RTEC 131, 131L Radiographic Anatomy & Positioning II & Lab
RTEC 132, 132L Radiographic Equipment & Special Imaging & Lab
RTEC 135 Radiation Biology & Protection
RTEC 214 Radiographic Clinical Experience III
RTEC 224 Radiographic Clinical Experience IV
RTEC 234 Radiographic Clinical Experience V
RTEC 251 Radiographic Pathology
RTEC 255 Radiographic Assessment I
RTEC 261 Radiographic Review
RTEC 265 Radiographic Assessment II

Bachelor of Applied Science in Radiologic Technology Degree Requirements

General Education (31 minimum credit hours)

B.A.S. Degree Distinction (6 credit hours)
STAT 200 Probability & Statistics
BIOL 241 Pathophysiology

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

BIOL 210 Anatomy and Physiology II
BIOL 210L Anatomy and Physiology II Lab
RTEC 321 Informatics in Radiology
RTEC 365 Advanced Patient Care
RTEC 460 Quality Management
NURS 415 Business of Health Care
RTEC 494 Capstone/ Research

Choose from one of the following groups: (11 semester hours)
RTEC 450 Mammography I
RTEC 470 Mammography II

RTEC 452 CV Interventional I
RTEC 472 CV Interventional II

RTEC 454 Computed Tomography I
RTEC 474 Computed Tomography II

RTEC 456 Magnetic Resonance I
RTEC 476 Magnetic Resonance II
AND
RTEC 490 Clinical Specialization

Electives (11 credit hours)

To be admitted to the B.A.S. degree, program applicants must possess an A.A.S degree in Radiologic Technology or Radiologic Science. Applicants possessing a certificate of completion from a JRCERT accredited program in Radiologic Technology may also be admitted conditionally to the program while completing the requirements for an A.A.S. degree. Please see the Radiologic Science Program Director for complete requirements and application form. All degree requirements must be completed as described above. Any exceptions or substitutions must be recommended in advance by the faculty advisor and approved by the Department Head. Students are required to participate in exit examinations or other programs deemed necessary to comply with the college accountability requirement.

There is a separate application form used for admittance to the program. Contact the Department of Health Sciences.

REAL ESTATE BROKER

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Technical Certificate
Real Estate Broker

Technical Certificate in Real Estate Broker Requirements
REEB 201 Real Estate Broker I
REEB 202 Real Estate Broker II

SOCIAL SCIENCE

CONTACT INFORMATION
Department of Social and Behavioral Sciences, Lowell Heiny Hall 411, 970-248-1696

PROGRAMS OFFERED
Associate of Arts
Social Science Emphasis
Bachelor of Arts
Social Science

Associate of Arts: Social Science Emphasis Degree Requirements
General Education (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Students are required to select a minimum of 18 hours of lower-division courses from one or more of the following disciplines
Anthropology
Economics
History
Political Science
Psychology
Sociology

Electives (6 credit hours)

Students wishing to concentrate in a specific discipline should consult with an advisor in that discipline or the Head of the Department of Social and Behavioral Sciences.

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

Bachelor of Arts in Social Science Degree Requirements
General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
HIST 101 Western Civilizations
HIST 102 Western Civilizations
HIST 131 United States History
HIST 132 United States History
GEOG 103 World Regional Geography
ANTH 201 Cultural Anthropology
POLS 101 American Government
POLS 261 Comparative Politics
PSYC 150 General Psychology
ECON 201 Principles of Macroeconomics
SOCO 260 General Sociology
SOCO 264 Social Problems

International subject to be selected from the following: (Cannot be from Primary Area):
ANTH 390 World Ethnicity & Nationalism
ANTH 405 Globalization & Cultural Change
ANTH 410 World Cultures
HIST 331 The 20th Century
HIST 332 History of Modern Warfare
HIST 340 History of the Islamic World
HIST 400 The Soviet Union & Eastern Europe

HIST 403 East Asia & the Modern World
POLS 365 European Government & Politics
POLS 370 World Politics

Required Primary and Secondary areas of study

1. Primary and Secondary Requirements – Select one Primary area track and one Secondary area of study from the following academic disciplines: Anthropology, Economics (secondary only), History, Political Science, Psychology or Sociology.
2. Primary area track requirements: 18-19 credit hours in the discipline selected, 15 of which are upper division. Any courses offered under the discipline may be chosen.
3. Secondary area requirements: 9 upper division hours in the discipline selected. Any courses offered under the selected discipline may be chosen.

Electives (14-15 credit hours)

Students will take the exit exam in the Primary Area, unless Anthropology is the Primary Area.

See faculty advisor for a program sheet detailing exact and complete requirements for the major.

SOCIOLOGY

FACULTY
Clare Boulanger, Adele Cummings, Constance Holland, Barry Michrina, Brenda Wilhelm

CONTACT INFORMATION
Department of Social and Behavioral Sciences; Lowell Heiny Hall 411, 970-248-1696.

PROGRAMS OFFERED

Bachelor of Arts
- Sociology – Sociology
- Sociology – Anthropology
- Sociology – Human Services

Minors
- Anthropology
- Sociology

Bachelor of Arts in Sociology Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
Sociology Core
ANTH 201 Cultural Anthropology
SOCI 310 Methods of Social Research
SOCO 260 General Sociology
SOCO 264 Social Problems
SOCO 400 Classical Social Theory
SOCO 410 Contemporary Social Theory
STAT 200 Probability & Statistics

Sociology Electives
(Select 18 upper division hours from the following):
ANTH 390 World Ethnicity and Nationalism
ANTH 405 Globalization and Culture Change
SOCO 300 Political Sociology
SOCO 305 Environmental Sociology
SOCO 310 Sociology of Religion
SOCO 312 Social Movements
SOCO 314 Population
SOCO 316 Social Inequality
SOCO 320 Life Course Sociology
SOCO 325 Racial & Ethnic Relations
SOCO 330 Crime & Delinquency
SOCO 340 Sex and Gender
SOCO 350 Sociology of Death and Dying
SOCO 360 Social Influences of Small Groups
(Or any other upper division Sociology Elective approved by a Sociology advisor.

Restricted Electives (Select 9 upper division hours from):
ANTH 310 Ethnographic Methods
ANTH 330 Religion and Culture
ANTH 410 World Cultures
SOCO 301 Introduction to Human Services
PSYC 320 Social Psychology
(Or any upper division course chosen from Economics, History, or Political Science)

Electives (30 credit hours)

Bachelor of Arts Sociology- Anthropology
Bachelor of Arts Sociology- Human Services

Requirements will vary if a concentration is selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Special Requirement
To continue in the program and eventually graduate as a Sociology major, with or without a concentration, students must earn, within no more than three attempts, at least a grade of "C" in all core, major elective, or concentration courses required for the major.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

SPANISH

FACULTY
Thomas Acker, Tyler Anderson, Blake Crossley, Albino Gonzales, Andrew Gordon, Luis Silva-Villar, Mayela Vallejos-Ramirez

CONTACT INFORMATION
Department of Languages, Literature, and Mass Communication; Lowell Heiny Hall 445, 970-248-1687.

PROGRAMS OFFERED

Bachelor of Arts
- Spanish – Applied Professional Spanish
- Spanish – Literature and Language
- Spanish - Secondary Education

Minors
- Spanish

Bachelor of Arts in Spanish Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Spanish Core:
- FLAS 301 Advanced Spanish Grammar
- FLAS 302 Advanced Spanish Composition
- FLAS 311 History and Culture of Spain
- FLAS 312 History and Culture of Latin America
- FLAS 314 Advanced Spanish Conversation
- FLAS 321 Introduction to the Literature of Spain
- FLAS 322 Introduction to the Literature of Latin America
- FLAS 411 Spanish and the Nature of Language
- FLAS 498 Spanish Senior Practicum

Concentration (Students must choose one):
Requirements vary with the concentration selected. See faculty advisor for a program sheet detailing exact and complete requirements for the major and concentration chosen.

Students seeking a degree in Spanish - Secondary teaching should see their faculty advisors in both Spanish and Teacher Licensure.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

SPEECH

FACULTY
Paula Casey, Sandra Woodworth

CONTACT INFORMATION
Department of Theatre Arts, Moss Performing Arts Center 113, 970-248-1233.

PROGRAMS OFFERED
- **Minor**
  - Speech

Minor Requirements
See faculty advisor for requirements.

SPORT MANAGEMENT

FACULTY
Richard Bell, Steven Murray, Susan Yeager

CONTACT INFORMATION
Department of Kinesiology; Saunders 122, 970-248-1365.

PROGRAMS OFFERED
- **Associate of Science**
  - Sport Management
- **Bachelor of Science**
  - Sport Management
- **Minor**
  - Sport Management

Associate of Science: Sport Management Emphasis Degree Requirements

General Education for Associate Degree (31 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- BUGB 211 Business Communications
- CISB 101 Business Information Technology
- KINE 200 History and Philosophy of Sport and P.E.
- KINE 205 Introduction to Sport Management
- MANG 201 Principles of Management
- MARK 231 Principles of Marketing

Electives (6 credit hours)

Bachelor of Science in Sport Management Degree Requirements

General Education (minimum 31 credit hours)

B.S. Degree Distinction
- STAT 200 Probability & Statistics, any CSCI course, or MATH 113 or higher
- Humanities or Social & Behavioral Sciences (3 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Required Courses:
- CISB 101 Business Information Technology
- ACCT 201 Principles of Financial Accounting
- BUGB 211 Business Communication
- ECON 201 Principles of Macroeconomics
- ECON 202 Principles of Microeconomics
- MANG 201 Principles of Management
- MARK 231 Principles of Marketing
- KINE 200 History & Philosophy of Sport & Physical Education
- KINE 205 Introduction to Sport Management
- KINE 335 Sport in Society
- KINE 342 Sport Law and Risk Management
- KINE 345 Survey of Economics and Finance in Sport
- KINE 350 Leadership and Ethics in Sport
- KINE 401 Org./Ad./Legal Considerations in PE and Sport
- KINE 402 Sport Marketing
- KINE 406 Governance and Communication in Sport
- KINE 499 Internship

Electives (17 credit hours)

Special Requirement:
Red Cross Standard First Aid/CPR certification is required.

TECHNOLOGY INTEGRATION

FACULTY
Gordon Koch, Joe Quesenberry, John Sluder, Jack Yon

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
- **Technical Certificate**
  - Technology Integration
    - Certified Electronics Technician
    - Network Technician
    - Process Maintenance Technician
    - Telecommunications Engineer
- **Associate of Applied Science**
  - Technology Integration
    - Certified Electronics Technician
    - Network/Telecommunication Technician

Technical Certificate in Technology Integration - Certified Electronics Technician Requirements

TECI 117 DC Passive Circuits
TECI 118 AC Passive Circuits
TECI 132 Introduction to IT Hardware & System Software
TECI 164, 164L Electronic Circuits I & Lab
TECI 165, 165L Applied Digital Circuits & Lab
TECI 231, 231L Electronic Circuits II & Lab
TECI 260, 260L Info Tech Hardware & System Software & Lab
TECI 290 Certification:
UTEC 107 Math for Technology
UTEC 251 Personal & Professional Leadership Development

Technical Certificate in Technology Integration - Network Technician Requirements

TECI 132 Introduction to IT Hardware & System Software
TECI 170 Introduction to Communications
TECI 180 Cisco Networking I
TECI 185 Cisco Networking II
TECI 230 Cisco Networking III
TECI 235 Cisco Networking IV
TECI 260, 260L Info Tech Hardware & System Software & Lab
TECI 290 Certification:
UTEC 107 Math for Technology
UTEC 251 Personal & Professional Leadership Development

Technical Certificate in Technology Integration - Process Maintenance Technician Requirements

UTEC 107 Math for Technology
TECI 110 Applied Physics
TECI 117 DC Passive Circuits
TECI 118 AC Passive Circuits
TECI 132 Introduction to IT Hardware & System Software
UTEC 150 Fluids/Hydraulics/Pneumatics
MAMT 160 Properties of Materials
MAMT 207 Process Control
MAMT 250, 250L Process Systems Technology & Lab
UTEC 251 Personal & Professional Leadership Development
Suggested Electives: WELD 117, or TSTC 100 & 101

Technical Certificate in Technology Integration - Telecommunications Engineer Requirements

TECI 132 Introduction to IT Hardware & System Software
TECI 170 Introduction to Communications
TECI 180 Cisco Networking I
TECI 185 Cisco Networking II
TECI 230 Cisco Networking III
TECI 235 Cisco Networking IV
TECI 240 VoIP Fundamentals
TECI 290 Certification:
UTEC 107 Math for Technology
UTEC 251 Personal & Professional Leadership Development

Associate of Applied Science in Technology Integration – Certified Electronics Technician Degree Requirements

General Education

ENGL 111 & 112 English Composition (6 credit hours)

Social & Behavioral Science, Humanities, or Selected Speech (6 credit hours)

MATH 108 Technical Mathematics (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses:

TECI 110 Applied Physics
TECI 117 DC Passive Circuits
TECI 118 AC Passive Circuits
TECI 121 Electronic Design/Layout
TECI 132 Intro to Info Tech Hardware/System Software
TECI 164, 164L Electronic Circuits I & Lab
TECI 165, 165L Applied Digital Circuits & Lab
TECI 170 Intro to Communications
TECI 180 Cisco Networking I
TECI 231, 231L Electronic Circuits II & Lab
TECI 256, 256L Electronic Communication & Lab
TECH 260, 260L Info Tech Hardware & System Software & Lab
TECI 290 Certification:
TECI 292 Capstone in Technical Engineering Planning & Economics
UTEC 251 Personal & Professional Leadership Dev

Associate of Applied Science in Technology Integration – Network/Telecommunication Technician Degree Requirements

General Education

English 111 & 112 English Composition (6 credit hours)

Social & Behavioral Science, Humanities, or Selected Speech (6 credit hours)

MATH 108 Technical Mathematics (4 credit hours)

Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses:

TECI 117 DC Passive Circuits
TECI 118 AC Passive Circuits
TECI 132 Introduction to IT Hardware and System Software

TECI 170 Introduction to Communications
TECI 180 Cisco Networking I
TECI 185 Cisco Networking II
TECI 230 Cisco Networking III
TECI 235 Cisco Networking IV
TECI 260 Information Technology Hardware and System Software
TECI 260L Information Technology Hardware and System Software Lab
TECI 265 Advanced IT Hardware and System Software
TECI 265L Advanced IT Hardware and System Software Lab
TECI 290 Certification:
TECI 292 Capstone in Technical Engineering Planning and Economics
TECI 110 Applied Physics
UTEC 251 Personal and Professional Leadership Development
TECI 240 VoIP Fundamentals

Students enrolling in the Technology Integration program must obtain a minimum grade of 2.00 ("C") in each course listed on their program sheet, and must satisfy all other graduation requirements.

See faculty advisor for a program sheet detailing exact and complete requirements for this degree.

THEATRE

FACULTY
Melonie Buchanan Murray, Richard Cowden, David Cox, Jeremy Franklin, Jeanine Howe, Peter Ivanov, Matthew Lindstrom, Heather Waggoner

CONTACT INFORMATION
Department of Theatre Arts, Moss Performing Arts Center 113, 970- 248-1233

PROGRAMS OFFERED
Bachelor of Arts
- Theatre Arts
  - Theatre—Acting/Directing
  - Theatre—Dance
  - Theatre—Design/Technical Theatre
  - Theatre—Music Theatre

Minors
- Dance
- Speech
- Theatre

The Department of Theatre Arts represents one of the most successful theatre training degree programs in Colorado. The Denver Post (2002) recognized the program as the number one college Design/Technical and number two overall theatre training program in Colorado. Offering four distinct concentrations (Acting/Directing, Design/Technical, Music Theatre and Dance) from which to choose. Students acquire a sound understanding of the performing arts in our newly built, state of the art facilities.

The Acting/Directing concentration is constructed to help students meet the rigorous demands of a professional career in acting and provide a strong foundation and practical experience for future directors. Beginning with the first semester, students enroll in performance courses taught by academically and professionally experienced faculty. Unlike larger institutions, acting opportunities in all productions at Mesa State College are open to motivated and talented freshmen. In acting courses, students are exposed to techniques and approaches that are industry standards today. Training is grounded in Stanislavski, Meisner, Cohen, Spolin, Chekhov and Epstein and Harrop for period work. Voice and movement courses are complimented by individual vocal lessons and performance opportunities in student and faculty choreographed dance concerts. Acting students also audition for one act plays directed by the Directing courses each year. A season of experimental and other challenging productions is also produced in the Mesa Experimental Theatre, a 175-seat black box.

Dance, the newest concentration in the Theatre Arts at Mesa State College, is thriving with an array of dance styles, performance opportunities and travel. Modern, jazz, ballet and tap are offered from beginning to professional levels. Other courses include composition, improvisation, pedagogy, history, music analysis, healthy dancer and repertory performance. The faculty members have professional backgrounds in all forms of dance and musical theatre. With four dance concerts a year, Mesa State College provides students with a chance to choreograph original works and to dance for and with visiting guest artists from the professional dance world. Mesa State dance students travel throughout the United States to share the art of dance with other universities and colleges. Dance at Mesa State College features courses with an emphasis on positive reinforcement from challenging professors and a strong technical foundation. It is a place where dancers can establish lifelong relationships as they strive for excellence in the art of dance.

The Design/ Technical Theatre concentration and recommended course of study exposes students to multiple areas of the visual and technical aspects of Theatre, including Costume Design, Scenography, Lighting Design, and Theatre Technology. Coursework focuses on functional, expressive, and compositional aspects of design. The program culminates in a final design project during the fourth year. Students are involved in the many Theatre Department shows, and this production work allows for a controlled, supervised

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

applications. The Design faculty emphasizes performance labs to apply and refine the Tech students' skills in planning and executing production design in a variety of styles and performance spaces. Personalized instruction and supervised "hands-on" design experiences that stretch from designs on paper to fully realized productions provide the Mesa State Design/Technical concentration with exciting challenges and skills that are the basis for success in graduate studies or the professional theatre.

The Music Theatre concentration represents one of the most unique programs offered in Colorado, stressing strong technical foundations in music, theatre, and dance. This approach creates "triple threats" and enhances the young performer's potential for an exciting career in musical theatre. Students begin training with music theory and ear training, private voice instruction, choir and class piano. Acting I and II, Ballet and Tap are also included to complete first year academic requirements. To compliment technical courses, students also participate in a wide variety of performance related assignments which include two main stage productions, Mesa Experimental Theatre productions, choral ensembles, dance concerts, student directed one-acts, and technical crew assignments. Students continue interdisciplinary course work in audition techniques; resume writing, style, as well as preparing and performing vocal/acting auditions and specialty perform===ance assignments throughout their next three years. The Music Theatre Program offers beginning students an extra benefit that results in highly personalized instruction provided by skilled professors who are seasoned performers, coaches, directors, teachers and technicians. Working graduates cite this as one of the prime reasons for their success in gaining employment in both local and national venues. Music theatre graduates currently work on Broadway, off-Broadway, in national tours, regional theatres, dinner theatres, cruise ships, and with Disney and Universal Studios.

Students seeking admission as Theatre Arts majors at Mesa State College must successfully audition for acceptance into the Acting/Directing, Dance, and Music Theatre concentrations. Admission to the College does not guarantee admission into one of these programs. Prospective Theatre Arts majors should consult the department's website or contact the department directly for information regarding audition dates and requirements. Prospective students interested in departmental scholarships must audition no later than March 1 of the year they seek admission.

Bachelor of Arts in Theatre Arts Degree Requirements

General Education (minimum 31 credit hours)

B.A. Degree Distinction (foreign language 6 credit hours)

Wellness (Kinesiology) Requirement (3 credit hours)

Applied Studies (3 credit hours)

Theatre Core

THEA 153 Acting I: Beginning Acting
THEA 401 Performing Arts Management

Concentrations:
Acting/Directing: Required Courses

THEA 117 or 118 Play Production
THEA 142 or 143 Make-up or Costuming
THEA 145 Introduction to Dramatic Literature
THEA 154 Acting II: Auditions
THEA 217 or 218 Play Production
THEA 243 or 244 Theatre Practice or Beginning Lighting
THEA 253 Acting III: Stage Movement
THEA 254 Acting IV: Dialects
THEA 317 or 318 Play Production
THEA 331 Theatre History I
THEA 332 Theatre History II
THEA 380 Playwriting I
THEA 381 Directing I
THEA 382 Directing II
THEA 494 Performance Seminar (capstone)

Select 9 semester hours from the following advanced acting options:

THEA 353 Styles in Acting
THEA 354 The Meisner Approach
THEA 453 Acting for the Camera
THEA 454 Elizabethan Acting Techniques
THEA 459 Chekhov Technique

Select 6 semester hours from the following options:

THEA 130 Script Analysis
THEA 322 Stage Management
THEA 345 World Drama
THEA 411 American Drama
THEA 412 Contemporary Drama
ENGL 355 Shakespeare

Select 3 semester hours from the following performance options:

THEA 119-419/120-420 Technical Performance
THEA 147-447/148-448 Drama Performance
DANP 157-457 Repertory Dance

Acting/Directing majors are also required to take SPCH 112 (Voice and Diction) as their General Education Applied Studies requirement

Dance: Required Courses

DANC 225 The Healthy Dancer
DANC 250 Dance Improvisation
DANC 255 Dance Composition
DANC 315 Hist. & Phil. Of Dance I
DANC 316 Hist. & Phil. Of Dance II
DANC 326 Dance Pedagogy
DANC 328 Music Analysis for Dance
DANC 494 Senior Dance Capstone

Select 6 semester hours from the following Ballet technique courses:

DANP 276 Ballet IIA
DANP 277 Ballet IIB
DANP 376 Ballet IIIA
DANP 377 Ballet IIIB
DANP 476 Ballet IVA
DANP 477 Ballet IVB

Select 6 semester hours from the following Jazz technique courses:

DANP 274 Jazz IIA
DANP 275 Jazz IIB
DANP 374 Jazz IIIA
DANP 375 Jazz IIIB
DANP 474 Jazz IV A
DANP 475 Jazz IV B

Select 4 semester hours from the following Tap technique courses:

DANC 177 Beginning Tap Dance with
DANC 177L Beginning Tap Dance Lab

DANP 278 Tap IIA
DANP 279 Tap IIB
DANP 378 Tap IIIA
DANP 379 Tap IIIB
DANP 478 Tap IVA
DANP 479 Tap IVB

Select 4 semester hours from the following Modern technique courses:
DANC 169 Beginning Modern Dance with
DANC 169L Beginning Modern Dance Lab
DANP 270 Modern IIA
DANP 271 Modern IIB
DANP 370 Modern IIIA
DANP 371 Modern IIIB
DANP 470 Modern IVA
DANP 471 Modern IVB

Select 4 semester hours from the following Performance/ Choreography Options:
DANP 157, 257, 357, 457 Repertory Dance
DANP 297 Choreography Practicum
DANP 397 Choreography Practicum II
DANP 497 Choreography Practicum III

Select 8 semester hours from DANP Dance technique courses: (excluding DANP 157-457 and DANP 297-497)

Dance Support Courses (5 semester hours)
DANC 157-457 Repertory Dance
DANC 297-497 Choreography Practicum
DANC 160 Beginning Ballet with
DANC 160L Beginning Ballet Lab
DANC 174 Beginning Jazz Dance with
DANC 174L Beginning Jazz Dance Lab
DANC 180 Beginning Hip Hop
DANC 280 Intermediate Hip Hop
DANC 196, 296, 396, 496 Topics
DANC 219 Ballroom Dance
THEA 117-417/118-418 Play Production
THEA 119-419/120-420 Technical Performance
THEA 147-447/148-448 Drama Performance
THEA 142 Make-up
THEA 143 Costuming
THEA 154 Acting II: Auditions
THEA 244 Beginning Lighting
THEA 253 Acting III: Stage Movement
THEA 322 Stage Management
THEA 341 Music Theatre History & Literature
KINA 167 T'ai Chi
KINA 168-169Yoga

Design/Technical Theatre Required Courses:
THEA 117 Play Production
THEA 118 Play Production
THEA 130 Script Analysis
THEA 142 Make-Up
THEA 145 Introduction to Dramatic Literature
THEA 217 Play Production
THEA 218 Play Production
THEA 244 Beginning Lighting
THEA 317 Play Production
THEA 318 Play Production
THEA 322 Stage Management
THEA 331 Theatre History I
THEA 332 Theatre History II
THEA 417 Play Production
THEA 418 Play Production
THEA 445 or 446 Senior Tech/Design Capstone

Select 9 semester hours from the following Design emphasis options:
THEA 143 Costuming
THEA 243 Theatre Practice
THEA 260 Costume Construction I
THEA 343 Scene Design
THEA 344 Advanced Lighting
THEA 360 Costume Construction II

Select 8 semester hours from the following Performance options:
THEA 119/120-419/420 Technical Performance
THEA 147/148-447/448 Drama Performance
DANP 157-457 Repertory Dance

Select 9 semester hours from the following Tech/Design support courses:
ARTE 101 Two-Dimensional Design
ARTE 102 Three-Dimensional Design
ARTS 151 Basic Drawing
ARTG 215 Graphic Design I
ARTS 221 Metalsmithing
ARTS 251 Figure Drawing
ARTS 291 Foundation Painting
THEA 381 Directing I
THEA 499 Internship
Or any other THEA Tech/Design course

Music Theatre Required Courses:
THEA 117 or 118 Play Production
THEA 142 Make-Up
THEA 154 Acting II: Auditions
THEA 253 Acting III: Stage Movement
THEA 255 Music Theatre Techniques
THEA 341 Music Theatre History/Literature
THEA 355 Music Theatre Repertoire
THEA 494 Performance Seminar (capstone)
MUSA 113 Fundamentals of Theory
MUSA 116 Ear Training/Sight Singing
MUSL 137 (taken twice) Voice Lessons
MUSL 237 (taken twice) Voice Lessons
MUSL 337 (taken once) Voice Lessons
MUSL 437 (taken once) Voice Lessons
MUSP Choral Ensemble (4 lower division semester hours)
MUSP Choral Ensemble (2 upper division semester hours)

Select 4 semester hours from Ballet technique courses:
DANC 160 Beginning Ballet with
DANC 160L Beginning Ballet Lab
DANP 276 Ballet IIA
DANP 277 Ballet IIB
DANP 376 Ballet IIIA
DANP 377 Ballet IIIB
DANP 476 Ballet IVA
DANP 477 Ballet IVB

Select 4 semester hours from Jazz technique courses:
DANC 174 Beginning Jazz Dance with
DANC 174L Beginning Jazz Dance Lab
DANP 274 Jazz IIA
DANP 275 Jazz IIB
DANP 374 Jazz IIIA
DANP 375 Jazz IIIB
DANP 474 Jazz IV A

DANP 475 Jazz IV B
Select 4 semester hours from Tap technique courses:
DANC 177 Beginning Tap Dance with
DANC 177L Beginning Tap Dance Lab
DANP 278 Tap IIA
DANP 279 Tap IIB
DANP 378 Tap IIIA
DANP 379 Tap IIIB
DANP 478 Tap IVA
DANP 479 Tap IVB
Select 3 semester hours from the following Performance options:
THEA 119/120-419/420 Technical Performance
THEA 147/148-447/448 Drama Performance
DANP 157-457 Repertory Dance
Select 5 semester hours from any THEA, DANC, DANP, MUSA, MUSL, or MUSP course

Students deficient in piano skills will be required to complete MUSA 130, Class Piano I and MUSA 131 Class Piano II as lower division elective courses

Music Theatre majors are required to take SPCH 112, Voice and Diction, to fulfill their General Education Applied Studies requirement.

Minor Requirements
See faculty advisor or department for detailed minor requirements.

TRANSPORTATION SERVICES

FACULTY
Brad Buchholz, James Goetz, Gary Looft, Keith Wright

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED
Technical Certificate
Transportation Services – Automotive Service
Transportation Services – Diesel Mechanics
Associate of Applied Science
Transportation Services – Automotive Technology
Transportation Services – Diesel Technology

Technical Certificate in Transportation Services – Automotive Service Requirements
Required Courses:
TSTC 100 Intro to Transportation Services
TSTC 101 Vehicle Service & Inspection
TSTC 110 Engine Fundamentals
TSTC 130 Electrical Fundamentals
TSTC 140 Drive Train Fundamentals
TSTC 160 Electronic Control System Fundamentals
TSTC 170 Chassis Fundamentals
TSTC 171 Brake System Fundamentals
TSTC 180 Fuel System Fundamentals
TSTC 190 Climate Control Fundamentals
UTEC 107 Mathematics for Technology
UTEC 120 Industry Safety Practices
UTEC 150 Fluid Power
WELD 151Industrial Welding
Electives (13 hours selected from the following):
TSTA 245 Manual Drive Trains
TSTA 247 Automatic Drive Train Service
TSTA 265 Engine Control Service
TSTA 267 Body & Chassis Controls
TSTA 275 Alignment & Suspension Service
TSTA 287 Engine Performance & Emissions
TSTG 115 Gas Engine Reconditioning
TSTG 135 Electrical Component Repair
TSTG 140 Job Shop
TSTG 170 Practical Application
TSTG 175 Hydraulic Brake Service
TSTG 195 Climate Control Service
TSTG 240 Advanced Job Shop
TSTG 270 Advanced Practical Applications
UTEC 220 Industry Employment Practices

Technical Certificate in Transportation Services – Diesel Mechanics Requirements
Required Courses:
TSTC 100 Intro to Transportation Services
TSTC 101 Vehicle Service & Inspection
TSTC 110 Engine Fundamentals
TSTC 130 Electrical Fundamentals
TSTC 140 Drive Train Fundamentals
TSTC 160 Electrical Control Fundamentals
TSTC 170 Chassis Fundamentals
TSTC 171 Brake System Fundamentals
TSTC 180 Fuel System Fundamentals
TSTC 190 Climate Control Fundamentals
UTEC 107 Mathematics for Technology
UTEC 120 Industrial Safety Practices
UTEC 150 Fluid Power
WELD 151Industrial Welding
Electives (13 hours selected from the following):
TSTA 245 Manual Drive Trains
TSTA 265 Engine Control Service
TSTA 287 Engine Performance & Emissions
TSTD 177 Airsystems Repair & Service
TSTD 215 Diesel Engine Reconditioning
TSTD 265 Diesel Engine Controls
TSTD 275 Heavy Duty Suspensions
TSTD 285 Diesel Fuel Injection
TSTG 135 Electrical Component Repair
TSTG 140 Job Shop
TSTG 170 Practical Application
TSTG 175 Hydraulic Brake Service
TSTG 195 Climate Control Service
TSTG 240 Advanced Job Shop
TSTG 270 Advanced Practical Applications
UTEC 220 Industry Employment Practices

Students seeking a Technical Certificate must obtain a minimum of 2.00 ("C") in each course.

Additional expenses: Students entering the program may be required to purchase or have hand tools and appropriate personal clothing and safety gear with a total cost of approximately $1,375.00. This does not include the cost of required textbooks. These costs may vary with student need and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields.

Associate of Applied Science in Transportation Services – Automotive Technology Degree Requirements

Automotive technology covers general service and repair of vehicles in today's society. Courses will cover theory, applications, maintenance, repair and diagnosis of vehicle systems using hand, power and specialty tools and equipment. Diagnostics and computer systems receive special em=phasis. WCCC is a satellite training center for Ford, Chrysler, Toyota, and Subaru.

General Education

- English 111 and 112 English Composition (6 credit hours)
- Social and Behavioral Science, Humanities, or Selected Speech (6 credit hours)
- UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)
- Wellness (Kinesiology) Requirement (2 credit hours)
- Required Courses:
  - TSTC 100 Introduction to Transportation Services
  - TSTC 101 Vehicle Service and Inspection
  - TSTC 110 Engine Fundamentals
  - TSTC 130 Electrical Fundamentals
  - TSTC 140 Drive Train Fundamentals
  - TSTC 160 Electronic Control Systems
  - TSTC 170 Chassis Fundamentals
  - TSTC 171 Brake System Fundamentals
  - TSTC 180 Fuel System Fundamentals
  - TSTC 190 Climate Control Fundamentals
  - UTEC 120 Industry Safety Practices
  - UTEC 150 Fluid Power
  - UTEC 220 Industry Employment Practices
  - WELD 151Industrial Welding

Electives (Choose 30 credit hours from the following):

- TSTA 245 Manual Drive Trains
- TSTA 247 Automatic Drive Train Service
- TSTA 265 Engine Control Service
- TSTA 267 Body and Chassis Controls
- TSTA 275 Alignment and Suspension Service
- TSTA 287 Engine Performance & Emissions
- TSTD 285 Diesel Fuel Injection
- TSTG 115 Gas Engine Reconditioning
- TSTG 135 Electrical Component Repair
- TSTG 140 Job Shop
- TSTG 170 Practical Applications
- TSTG 175 Hydraulic Brake Service
- TSTG 195 Climate Control Service
- TSTG 240 Advanced Job Shop
- TSTG 270 Advanced Practical Applications

Students seeking an Associate of Applied Science degree must obtain a minimum of 2.00 ("C") in each course entitled TSTC, TSTG, and TSTA.

Additional expenses: Students entering the program may be required to purchase or have hand tools and appropriate personal clothing and safety gear with a total cost of approximately $1,375.00. This does not include the cost of required textbooks. The above costs may vary with student need and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry standard of Z-87 with side shields.

See a faculty advisor for a program sheet detailing exact program requirements.

Learn more about the programs of study listed here, and find program sheets detailing exact and complete requirements for majors and concentrations, online at ***mesastate.edu/academics****.*

Associate of Applied Science in Transportation Services–Diesel Technology Degree Requirements
Diesel technology covers general service and repair of diesel powered vehicles in today's society. Course will cover theory, applications, maintenance, repair and diagnosis of vehicle systems using hand, power and specialty tools and equipment. Diagnostics and computer systems receive special emphasis.

General Education
- ENGL 111 and 112 English Composition (6 credit hours)
- Social and Behavioral Science, Humanities, or Selected Speech (6 credit hours)
- UTEC 107 Mathematics for Technology or MATH 113 College Algebra (4 credit hours)
- Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses:
- TSTC 100 Introduction to Transportation Services
- TSTC 101 Vehicle Service and Inspection
- TSTC 110 Engine Fundamentals
- TSTC 130 Electrical Fundamentals
- TSTC 140 Drive Train Fundamentals
- TSTC 160 Electronic Control Systems
- TSTC 170 Chassis Fundamentals
- TSTC 171 Brake System Fundamentals
- TSTC 180 Fuel System Fundamentals
- TSTC 190 Climate Control Fundamentals
- UTEC 120 Industry Safety Practices
- UTEC 150 Fluid Power
- UTEC 220 Industry Employment Practices
- WELD 151Industrial Welding

Electives (Choose 30 hours minimum from the following):
- TSTA 245 Manual Drive Trains
- TSTA 287 Engine Performance and Emission
- TSTD 177 Air System Repair and Service
- TSTD 215 Diesel Engine Reconditioning
- TSTD 265 Diesel Engine Controls
- TSTD 275 Heavy Duty Suspension
- TSTD 285 Diesel Fuel Injection
- TSTG 115 Gas Engine Reconditioning
- TSTG 135 Electrical Component Repair
- TSTG 140 Job Shop
- TSTG 170 Practical Applications
- TSTG 175 Hydraulic Brake Service
- TSTG 195 Climate Control Service
- TSTG 240 Advanced Job Shop
- TSTG 270 Advanced Practical Applications

Students seeking an Associate of Applied Science degree must obtain a minimum of 2.00 ("C") in each course entitled TSTC, TSTG, TSTD.

Additional expenses: Students entering the program may be required to purchase or have hand tools and appropriate personal clothing and safety gear with a total cost of approximately $1,375.00. This does not include the cost of required textbooks. The above costs may vary with student need and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry standard of Z-87 with side shields.

See a faculty advisor for a program sheet detailing exact program requirements.

VISUAL COMMUNICATIONS

CONTACT INFORMATION
Office of Student Services, WCCC, Bishop B102, 2508 Blichmann Avenue, 970-255-2670

PROGRAMS OFFERED

Technical Certificate
- Visual Communications-Animation Technology

Associate of Applied Science
- Visual Communications-Animation Technology

Technical Certificate in Visual Communications-Animation Technology Requirements
- MGDA 106 Creativity and Visual Thinking
- MGDA 111 Adobe Photoshop I
- MGDA 112 Adobe Illustrator I
- MGDA 152 Digital Animatics
- MGDA 153 3D Animation
- MGDA 253 3D Animation II
- ARTE 101 Two-Dimensional Design
- ARTE 102 Three-Dimensional Design
- ARTE 151 Basic Drawing
- MATH 108 Technical Mathematics

Associate of Applied Science in Visual Communications-Animation Technology Requirements

General Education
- ENGL 111 and 112 English Composition (6 credit hours)
- Social and Behavioral Science, Humanities, or Selected Speech (6 credit hours)
- MATH 108 Technical Mathematics (4 credit hours)
- Wellness (Kinesiology) Requirement (2 credit hours)

Required Courses
- MGDA 106 Creativity and Visual Thinking
- MGDA 111 Adobe Photoshop I
- MGDA 112 Adobe Illustrator I
- MGDA 152 Digital Animatics
- MGDA 153 3D Animation
- MGDA 163 Sound Design I
- MGDA 164 Digital and Video Editing I
- MGDA 253 3D Animation II
- ARTE 101 Two-Dimensional Design
- ARTE 102 Three-Dimensional Design
- ARTE 151 Basic Drawing
- TECI 110 Applied Physics

Electives (3 credit hours)

WATERSHED SCIENCE

CONTACT INFORMATION
Department of Physical and Environmental Sciences, Science Lab 222, 970-248-1993

PROGRAMS OFFERED

Minor
- Watershed Science

Minor Requirements
See faculty advisor for requirements.

Center for Teacher Education (Licensure)

Contact: Center for Teacher Education, Mesa State College, Academic Classroom Building, 970-248-1786

The Center for Teacher Education offers licensure programs in Elementary, Secondary, K-12 Education, and a Master of Arts in Education. Licensure to teach in public schools in the State of Colorado requires each teacher candidate to complete a baccalaureate degree including a sequence of professional education courses that include extensive field experiences. Licensure is a separate process from the degree, although both may be pursued concurrently. Formal admission to the Center for Teacher Education is required of all students expecting to obtain a Colorado Educator License in any teaching field.

In order to complete all licensure requirements in a timely manner it is important that students contact the Center as soon as possible after enrolling at Mesa State College. For information on the M.A. program, see the Graduate Programs section.

Elementary Education Licensure

(Colorado Teacher Licensure and Elementary Education Endorsement, Grades K through 6.)

Students should meet with a Center for Teacher Education advisor as soon as possible in order to obtain information specific to the elementary education licensure program. The components of the Mesa State College elementary licensure program are as follows:

1. Academic Major: All elementary licensure students must complete the requirements for a Bachelor of Arts in Liberal Arts (Interdisciplinary Studies).
2. Formal admission to the Center for Teacher Education.
3. Professional Education Sequence for Elementary Teacher Licensure. (Coursework must be taken in the prescribed sequence; see table.)

Elementary Licensure Courses	Credit Hours	Field Hours
EDUC 211: Foundations of Education*	2	20
EDUC 341: Pedagogy and Assessment - Elementary	3	20
EDUC 343: Teaching to Diversity	3	20
EDUC 441: Methods of Teaching Language and Literacy	6	180
EDUC 451: Methods of Teaching Mathematics	3	
EDUC 461: Methods of Teaching Science & Social Studies	3	
EDUC 499C: Teaching Internship and Colloquia	12	600
Total Hours Required	**32**	**840**

*Can be taken before formal acceptance into CTE

Secondary Education Licensure

(Colorado Teacher Licensure and Secondary Education Endorsement, Grades 7 through 12.)

Students should meet with a Center for Teacher Education advisor as soon as possible in order to obtain information specific to the secondary education licensure program. Following are the components of the Mesa State College secondary licensure program:

1. Academic Major: All secondary licensure students must complete the requirements for a Bachelor of Arts or Science in one of the following academic disciplines: Biology, English, Environmental Science, History, Mathematics, Physical Science (Geology), or Spanish.
2. Formal admission to the Center for Teacher Education.
3. Professional Education Sequence for Secondary Teacher Licensure. (Coursework must be taken in the prescribed sequence; see table.)

K-12 Education Licensure

(Colorado Teacher Licensure and K-12 Endorsement, Kindergarten through 12th Grade.)

Students should meet with a Center for Teacher Education advisor as soon as possible in order to obtain information specific to the K-12 Education licensure program. Following are the components of the Mesa State College K-12 teacher licensure program.

1. Academic Major: K-12 licensure students must complete the requirements for the Bachelor of Arts in Kinesiology or Music, or a Bachelor of Fine Arts in Art.
2. Formal admission to the Center for Teacher Education.
3. Professional Education Sequence for K-12 Teacher Licensure.** (Coursework must be taken in the prescribed sequence; see table.)

**Students seeking licensure in art must take EDUC 442 (5 cr. hr. and 60 field hours) in addition to the sequence below. Students seeking licensure in music are not required to take EDUC 343.

Secondary Licensure Courses	Credit Hours	Field Hours
EDUC 211: Foundations of Education*	2	20
EDUC 342: Pedagogy and Assessment - Secondary	3	20
EDUC 343: Teaching to Diversity	3	20
EDUC 442: Integrating Literacy Across the Curriculum - Secondary	5	60
EDUC 497 Content Methodology Practicum	3	80
EDUC 497a-e Methods of Teaching Secondary Discipline	1	
EDUC 499G: Teaching Internship and Colloquia	12	600
Total Hours Required	29	800

*Can be taken before formal acceptance into CTE

K-12 Licensure Courses	Credit Hours	Field Hours
EDUC 211: Foundations of Education*	2	20
EDUC 342: Pedagogy and Assessment - Secondary	3	20
EDUC 343: Teaching to Diversity	3	20
Content Area Methods Courses	Varies	140
EDUC 499d: Teaching Internship and Colloquia - Elementary	6	300
EDUC 499h: Teaching Internship and Colloquia - Secondary	6	300
Total Hours Required	Varies	800

*Can be taken before formal acceptance into CTE

Post-Baccalaureate Licensure Options

Conventional (Resident) Post-Baccalaureate Licensure (PBL)
Students holding a Bachelor's degree may apply for elementary, secondary (Biology, English, Environmental Science, History, Mathematics, Physical Science (Geology), Spanish) or K-12 (Art, Kinesiology, and Music) licensure through the Center for Teacher Education. Depending on the student's undergraduate degree, leveling courses may be required. The Education program sequence may be completed within three semesters, including the final semester of student teaching; students with leveling courses may need additional semesters to complete all licensure requirements. Please see a Center for Teacher Education advisor for further information and for an evaluation of transcripts pertinent to the licensure path desired.

Intensive (Cohort) Post-Baccalaureate Licensure (PBL)
This program is available for elementary licensure only, and may be delivered to students anywhere in the 14-county region served by Mesa State College. Some students may have leveling courses to complete prior to their admission into the Intensive PBL program. The intensive cohort begins each year in June and runs for 12 months. Students begin with hybrid face-to-face and on-line courses during the summer. Fall and spring semesters are spent on-site at an elementary school in the region; during this academic year, students also participate in coursework, seminars and colloquia on-line and at the college. Please see an intensive PBL advisor for an evaluation of transcripts for elementary licensure.

Master of Arts in Education

See the Graduate Programs section of this catalog for details.

College-wide Academic Offerings

Academic Honors Program

Contact Information

Dr. Kristen Hague, Director of Honors Program, LHH 453, 970-248-1385

Program Description

As a member of the National Collegiate Honors Council, Mesa State's honors program offers promising and highly-motivated students opportunities for enhanced intellectual stimulation and increased personal scholarship. Students achieve the Program's goal by contributing to their own learning at a level beyond what is normally required by most college courses.

The Academic Honors Program is open to any currently-enrolled Mesa State student with a grade point average of 3.00 or above. Transfer students with a GPA of 3.00 or above from their previous educational institutions also are invited to apply to the Program.

To be considered for admission, students must submit a letter of application to the program director, describing how they will benefit from participation in the Program as well as the unique qualities they will bring to it. Additionally, two letters of recommendation must be sent to the director; one letter of recommendation must be from a teacher while the other may come either from a peer or from another teacher. Exceptions to these guidelines for admission may be made on a case-by-case basis by the program director. Once accepted into the Program, students are required to take a minimum of one honors course per school year and maintain a GPA of 3.00 or above to continue in the Program.

There are two ways to participate in the Academic Honors Program. Students can choose to take 18 credits of honors program courses or to write an honors thesis. Honors students may also choose to pursue one or both avenues. Honors courses provide challenging curricula, as they are small in size to facilitate active learning. They prepare students for the climate of postgraduate or professional schools, and they take advantage of the special interests and expertise of faculty members. Lower-division honors courses often fulfill general education requirements while upper-division honors courses are often interdisciplinary and open to all majors.

An honors thesis emphasizes independent thought and creativity and encourages mastery of research methods. It prepares students for the rigors of postgraduate or professional study and is completed under the supervision of faculty advisors. Completed theses are catalogued in the Mesa State College Tomlinson Library Special Collections.

In addition to being part of a community of like-minded learners and having the opportunity to participate in extracurricular activities, honors students have access to the honors house and receive priority registration for classes each semester. Because honors courses are typically small in size, they allow for closer interaction between students and professors. The "Honors" course designation on a student's transcript signifies that the course is among the college's more challenging courses.

Students who earn an average of "B" or higher in 18 hours of honors program coursework (six of which must be from upper-division courses) are recognized at graduation and on their transcripts for achieving Academic Honors. Students who produce an honors thesis are also cited at graduation and on their transcripts for achieving Academic Honors. All program graduates earn medals to wear at graduation.

Freshman Year Initiative Program

Mesa State College offers first-year students an opportunity to participate in a program designed specifically to enhance their first-year experience and ease the transition from high school to college. This program, the Freshman Year Initiative (F. Y. I.) is offered to new freshmen prior to the start of each fall semester. The College's academic success course, SUPP 101, Introduction to Higher Education, is the primary focus of the F. Y. I. Program. SUPP 101 is a two-credit elective course designed to introduce students to the resources of the College and to enhance their study skills in order to be better prepared for the expectations of college work. SUPP 101 is also offered during the fall and spring semesters. For more information contact the Admissions Office at 970-248-1458 or visit us on the web at mesastate.edu/fyi.

Undergraduate Developmental Courses

Contact Information

WCCC Office of Student Services, Bishop B102, 970-255-2670

Developmental Programs serve postsecondary students who are not academically prepared to perform college-level work, including:

- Recent high school graduates;
- Adults who have been out of school for some time;
- High school students preparing for college.

Developmental courses are available in several subjects at Mesa State College. Numbers of such courses are below the 100 level (e.g., ENG 090, Basic Writing; MATH 090, Introductory Algebra and MATH 091, Intermediate Algebra; READ 090, College Preparatory Reading). These courses are designed for students needing to strengthen their backgrounds before entering college-level classes. All courses numbered 001-099 are developmental in nature, not intended for transfer purposes, and will not usually fulfill degree requirements. Students are encouraged to consult with their advisors about the need to register into these classes.

Students who have passed any ENGL class numbered 100 or above will not be permitted to register for credit in any ENGL class numbered below 100. Students who have passed any MATH class numbered 100 or above will not be permitted to register for credit in any MATH class numbered below 100.

Graduate Programs

General Admissions Policies & Procedures

Admission Criteria
Faculty in each degree program establish admission standards for the graduate programs, which often exceed the minimum standards set by Mesa State College's Graduate Council. Applicants should consult the academic department head or faculty in the program(s) of interest for any additional admission requirements. Each academic department that offers a graduate program shall utilize the same criteria for admission to the program.

Students wishing to take graduate courses not associated with a graduate program must still gain admission to MSC as a non-degree seeking graduate student. Each applicant must possess a baccalaureate degree from an accredited college or university, or equivalent certification, and have an undergraduate grade point average (GPA) of 2.50. Faculty can make recommendations for admission of non-degree seeking students who do not meet the criteria to the Assistant Vice President for Academic Affairs.

An individual without a baccalaureate degree may be admitted to a master's degree program only if he or she is admitted to a combined program at MSC, such as the BS/MBA program.

Admission Procedures
To begin a graduate program at MSC, a student must possess a baccalaureate degree from an accredited institution, have a grade point average (GPA) of 3.00 on the most recent 60 semester hours, and must submit the following items to the Admissions Office:

1. A completed Application for Admission to Graduate Programs and a $50 application fee. The fee is non-refundable and is not applicable toward tuition. An application form may be obtained by writing the MSC Admissions Office or by telephoning 970-248-1875, or online at www.mesastate.edu.
2. Official transcripts of all college and university work must be sent directly to the Admissions Office by each institution attended. Transcripts received directly from students cannot be accepted except for advisement purposes. The transcripts of students who previously attended MSC shall be obtained from the Registrar's Office and shall not require a student request.
3. Scores from either the Educational Testing Services for the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT), or from the Psychological Corporation for the Miller Analogies Test (MAT) must be provided. Students must request the scores be sent to MSC. See degree program for required examination.
4. Score from an English language proficiency test (Test of English as a Foreign Language/TOEFL) for students whose native language is not English must be provided. A minimum score of 550 is required.

Academic departments offering graduate programs may recommend admission based upon supplemental/alternate criteria that have been established by the major department and approved by the Graduate Council. If someone is recommended for admission who does not meet the graduate program standards, a rationale must be provided stating the factors which were considered in recommending the student: GPA in the discipline; maturity; letters of recommendation; samples of the student's work; GRE, MAT or GMAT scores; or other compelling factors. The Assistant Vice President for Academic Affairs shall review all recommendations for admission below the standard.

Students should check with individual programs regarding specific application and admission deadlines.

Admission Expiration
Admission to any graduate program shall remain valid for one academic year following the first day of the applicant's proposed semester of enrollment. If a student does not begin coursework during that year, the student shall be required to submit a new application with the appropriate processing fee and satisfy all admission requirements.

Conditional Admission
Conditional admission refers to applicants admitted pending the receipt of application requirements specified by either MSC and/or the major department. No student shall be permitted to register for an additional semester or receive financial aid unless the specified requirements are met during the first semester of the student's program.

Enrollment Prior to Admission
Students who have applied for admission to a graduate program at MSC are not permitted to enroll for more than nine credit hours in that graduate program as a non-degree seeking student. A hold shall be placed on the student's registration, and the student cannot continue to enroll until an admission decision has been reached. Thus, a student's application must be complete, and the program faculty must recommend either a regular admission or must deny admission by the end of the first semester, or nine semester hours, whichever is later.

Academic Advisor
Each student shall be assigned an academic advisor upon acceptance into a graduate program by the appropriate department. The chief responsibility of the academic advisor is the planning, filing, and overseeing of the student's Degree Plan. The academic advisor also is responsible for assisting students with questions regarding their academic programs such as expectations for comprehensive examinations, theses, and/or practicum, as specified by MSC, as well as professional advising and guidance for academic and professional endeavors. Any advisor-approved deviations from published program requirements or Degree Plans must be communicated to the Assistant Vice President for Academic Affairs, in writing, by the student in conjunction with the academic advisor.

Note: The importance of the academic advisor cannot be overstated. Advisement includes all aspects of students' present and future academic and professional planning. It is often the academic advisor who is able to help students conceptualize their academic program within the context of their own professional goals and aspirations.

Degree Plan
After acceptance into a graduate program, each student shall meet with his or her academic advisor and determine a Degree Plan that, when completed, shall lead to the attainment of the graduate degree. The Degree Plan shall be constructed before the student completes twelve credit hours of coursework following the guidelines of MSC and the department. The respective Degree Plan shall list all courses, including those needed for any remediation and/or weaknesses deemed by the academic advisor, practicums, theses, and research requirements necessary to complete the specific degree. The Degree Plan shall have the signature of the student, the academic advisor, the department head, and the Assistant Vice President for Academic Affairs indicating approval, and be filed with the Office of Academic Affairs. Upon completion of the Degree Plan, and upon the recommendation of the Faculty and approval of the Board of Trustees, the student shall be awarded the respective graduate degree.

Note: An addendum can be submitted to the Degree Plan provided the signatures of the student, the academic advisor, the department head, and the Assistant Vice President for Academic Affairs are secured approving the changes.

English Competency: Spoken and Written
A student is expected to have sufficient competency in English usage and speech skills that enable the student to progress satisfactorily in his or her program of study. Consequently, a student may be required to enroll in English and/or speech courses for remediation.

Transfer Credit
Students can transfer up to nine credit hours from another accredited institution into their Degree Plan for a graduate degree provided they meet the General Transfer Policies of MSC and are approved by the academic advisor, the department head, and the Assistant Vice President for Academic Affairs.

- Transfer work is not used in the calculation of the graduate GPA.
- Transfer credit shall not be accepted if the work was used to obtain a degree or is included as part of another degree at any institution.
- Transfer work must be approved by the department and must be "A" or "B" work.
- Transfer credit cannot be used to meet any residency requirement.
- Transfer credit cannot be used to make up "D," "F," or "U" grades received in required courses.
- Only courses graded by "letter" grades are transferable. Courses graded "S/U" or "P/F" are not transferable.
- All program requirements, including transfer work, must be completed within the time limits of the degree program. (See the section on Program Time Limits.)
- Transfer courses must be numbered as graduate level according to the

course numbering system at the originating institution.

- Transfer courses must be from accredited institutions of higher education that offer equivalent level degrees.

Students who wish to transfer credit must provide the Registrar's Office with complete documentation showing the course(s) to be transferred. The student then must present the complete transcript to the program advisor for approval or disapproval. Any transfer credits must be included on the Degree Plan. Courses requested for transfer must meet all criteria for credit transfer (see general transfer policies) to be approved by the department.

Course Level Requirements
Graduate courses are numbered 500 and above, and are used to satisfy the requirements of graduate programs. Master's degree programs must have a minimum of 30 semester hours of courses numbered at 500 and above. Programs may require additional hours, some of which may include 400-level courses, included on the degree plan.

Note: Upon prior written permission of the instructor, the academic advisor, and the department, a currently enrolled undergraduate student may take 500-level courses.

Dual-listed Courses
Upon approval by the Graduate Council, courses numbered 400-599 may be dual-listed allowing undergraduate and graduate students to enroll simultaneously. All dual-listed courses may be offered independently at either the graduate or undergraduate level. Note: At least 70 percent of a student's master's degree program must be in courses that are at the 500 level and not dual listed.

Grades

Grades of "A," "B," "C," "D," and "F" are used and are computed in the GPA. Other marks used are "I," incomplete; "W," withdrawn; "NC," no credit; "P," passing. At the discretion of programs, "Pass/Fail" ("P/F") grades may be allowed for research, practicum, and thesis courses. "I," "W," "NC," and "P" grades are not counted in determining the GPA. Courses for which "D," "F," "I," "W," or "NC" grades are awarded shall not count in graduate degree programs and shall not satisfy program deficiency requirements.

Incomplete ("I") grades are temporary grades given to a student only in an emergency case and at the discretion of the instructor.

At the end of the semester following the one in which an "I" is given, the "I" becomes the grade that is submitted by the instructor to the Registrar's Office. If the instructor does not submit a grade by the deadline for that semester, the grade becomes an "F." A grade of "I" given spring semester must be addressed by the end of the following fall term.

Extension of the time to complete work may be made in exceptional circumstances at the discretion of the instructor. A student with an "I" grade, however, may not change the "I" by enrolling in the same course another semester.

Grades can be changed, using the Special Grade Report, within the first two weeks of the semester following the receipt of the original grade by the Registrar's Office. However, students wishing to appeal an assigned grade must follow the academic appeals procedure and must initiate the appeals process within the semester following receipt of the contested grade.

GPA Requirement

Students may apply no more than six semesters of work with a grade of "C" toward graduation requirements. Grades of "D", "F", "I", "NC" do not fulfill graduation requirements for graduate programs.

Graduate students may repeat a maximum of six hours of graduate credit. No course may be repeated more than once. When a course is repeated, the last grade earned is computed into the student's GPA. The previously attempted courses and grades remain in the academic record but are not computed in the overall average. Transcripts will contain a statement indicating the grade point average has been re-computed and stating the basis for re-computation.

To remain in good graduate standing, a graduate student must maintain a GPA of 3.00 or better. If the cumulative graduate GPA falls below 3.00, a graduate student shall be placed on probation. Students have one semester to show progress toward good standing. Probationary students with 12 or more earned semester hours of graduate work shall be suspended whenever progress toward good standing is not demonstrated.

A graduate student shall be suspended whenever the graduate cumulative GPA falls below 2.50. A student may appeal suspension by submitting a written petition to his or her advisor, then to the student's graduate committee. This petition must provide justification for continued registration.

Student Termination

A student's degree program may be terminated for one or more of the following reasons:

- Based on an overall evaluation of a student's progress, the major department recommends that the student be suspended or dismissed from the program.
- The student fails to maintain the cumulative 3.0 GPA standard.
- The student fails the retake of the written and/or oral comprehensive examination or its approved equivalent.
- The student submits an unsatisfactory thesis.
- The time limit established for the degree program expires before the degree requirements are completed.

Program Time Limits

The maximum time allowed for the completion of the master's degree is six calendar years beginning with the first semester of enrollment after admission has been granted. The student may request an extension of time by written request to the student's advisor, then to the student's graduate committee.

Plagiarism

The following is the approved definition of plagiarism:

Plagiarism is the act of appropriating the written, artistic, or musical composition of another, or portions thereof; or the ideas, language, or symbols of same and passing them off as the product of one's own mind. Plagiarism includes not only the exact duplication of another's work but also the lifting of a substantial or essential portion thereof.

Regarding written work in particular, direct quotations, statements which are a result of paraphrasing or summarizing the work of another, and other information which is not considered common knowledge, must be cited or acknowledged, usually in the form of a footnote.

As long as a student adequately acknowledges his or her sources and as long as there is no reason to believe that the student has attempted to pose as the originator, the student shall not be charged with plagiarism even though the form of the acknowledgement may be unacceptable. However, students should be aware that most professors require certain forms of acknowledgment and some may evaluate a project on the basis of form.

Graduation Checklist

All graduate students must apply for graduation no later than February 15 for Fall graduates and September 15 for Spring graduates. The student has the responsibility for completing an Intent to Graduate form with the Registrar's Office.

If the student does not complete all requirements for the degree, and, therefore, does not graduate at the end of the proposed semester, the application shall be placed in the deferred file. The student must give written notice to the Registrar's Office when he or she wishes to appear again on the tentative list of graduates.

Graduation requirements are checked in accordance with one specific MSC catalog. The catalog used to meet graduation requirements is normally the one published for the academic year during which the student first enrolls after admission to MSC. The student must specify the catalog under which he or she wishes to be evaluated and must meet all requirements in that catalog. The student may select any subsequent catalog up to and including the current one, provided the student was in attendance at MSC during that academic year. However, a student may not choose to meet some requirements in one catalog and other requirements in another catalog.

MSC reserves the right to modify or change catalog provisions from time to time in order to fulfill the MSC Role and Mission or to accommodate circumstances beyond its control. Any such changes or modifications may be implemented as applicable to all or some students without prior notices, without obligation, and unless specified otherwise, are effective when made. MSC reserves the right to terminate or modify program requirements, content, and the sequence of program offerings from time to time for educational or financial reasons that it deems sufficient to warrant such actions.

Research Activities

Research is an important component of graduate studies. Specific research requirements and activities are defined by each degree program specifically.

Sponsored Programs

The Office of Sponsored Programs mission is to provide support to faculty and other College personnel in obtaining and administering external funds for research and other scholarly activities. Research at Mesa State includes explorations that lead to the discovery and dissemination of new knowledge, the development of new applications of existing knowledge, the development of new paradigms for teaching and learning, and/or the related creative activities in the fine arts.

The Office of Sponsored Programs is responsible for protecting college interests through the review of sponsored project proposals to non-college sources, contract and grant award review and negotiation, administration of award funds, and policy and procedure initiation and implementation.

Human Subjects and Animal Research

All research conducted by faculty, staff, or students that involves human subjects must be reviewed and approved by the Human Subjects Committee (also known as the Institutional Review Board or IRB). All research conducted by faculty, staff, or students that involves animals must be reviewed and approved by the Institutional Animal Care and Use Committee (IACUC). Graduate student research to fulfill course, thesis, or dissertation requirements is also subject to this regulation.

The Office of Sponsored Programs encourages all students to meet with their advisor if they intend to do research with humans or animals. Human subject research can include something as simple as an interview or survey. Failure to obtain approval by the IRB or IACUC before beginning a research project can be grounds for rejecting a thesis or dissertation and constitutes a serious breach of academic research ethics and federal law.

The policy, procedure, and forms required for human subject or animal research are available on the Sponsored Programs website at: www.mesastate.edu/faculty/sponsored. In addition, students may contact the Office of Sponsored Programs.

Research Misconduct

In accordance with federal regulations, the College has in place a Misconduct in Research Policy. This policy applies to the conduct of research and/or related activities, whether the research is funded or not and regardless of: the field of study; presentation and/or publication of results; process of applying for funds; expenditure of project funds; and fiscal reporting on the use of project funds. This policy applies to all faculty, students, administrators, and staff on all Mesa State campuses.

As defined in the Mesa State College Misconduct in Research Policy, research misconduct includes fabrication, falsification, or plagiarism in proposing or performing research; abuse of confidentiality or other practices that seriously deviate from those commonly accepted within the academic community for proposing, conducting, and reporting on research; and plagiarism or abuse of confidentiality in reviewing proposals for a funding agency. The definition of research misconduct does not include honest error or differences of opinion or interpretations or judgments of data. The definition contained in this policy is not intended to override or contradict provisions of other regulations or policies, in particular those policies governing human research subjects and animal welfare. A finding of substantive violation of specific policies in these areas will also be considered misconduct under this policy. A copy of this policy may be found at www.mesastate.edu/faculty/sponsored.

Master of Business Administration

Mesa State College began offering the first of its graduate level programs—the Master of Business Administration (MBA)—in 1997-98. The MBA program at Mesa State is administered by the Department of Business. The department is guided on academic policy matters by the Graduate Council, which receives and acts on proposals submitted by the faculty immediately responsible for the program.

The Mesa State College MBA is a challenging program designed to prepare graduates for the changing business world. The degree is awarded after successful completion of 36 semester hours of rigorous study. The program is designed to provide the student with a broad background in business while allowing the student to focus on a specified area of study, if desired. To this end, students acquire knowledge of management operations; an appreciation of the interrelationships involved; an understanding of the economic, political and social environment in which businesses function; and behavioral skills that are essential in the manager's role in the implementation of business decisions. The MBA program endeavors to provide an atmosphere conducive to the development of each student's ability to think in a creative manner. The program makes extensive use of lectures, seminars, group projects, case studies and independent research.

The Mesa State MBA has three basic components: a 24 hour core, a 6 hour general elective requirement, and a 6 hour research component. The program is open to all baccalaureate holding applicants who can demonstrate through academic or experiential preparation an appropriate background in the core requirements that include work in management, finance, marketing, law and ethics, organizational theory and behavior, and accounting regardless of the undergraduate field of study. Students without this background or adequate depth in this background may be required to complete leveling requirements.

Electives include such courses as global business, entrepreneurship, managerial economics and management information systems. Electives also provide the student with the opportunity to develop and present an original research project or practicum.

Admission to the MBA Program

Applicants must:

- Possess an undergraduate degree from a regionally accredited college or university;
- Have earned a GPA of 3.00 or better from the most recent 60 credit hours of course work earned toward a bachelor's degree;
- Have a cumulative 3.00 GPA or better for prior graduate work;
- Take the GRE and have results sent to the Admissions Office. The GMAT score will be considered as an alternative to the GRE;
- Submit a written essay describing applicant's motivation and experience that will help with successful completion of the MBA program;
- Provide two letters of professional and/or academic recommendation;
- Interview, if required, with members of the Graduate Admission Committee.
- Meet other program admission requirements.

International students also must take the TOEFL and achieve a score of 550 or higher.

Candidates meeting ALL of the above requirements may be admitted under full status.

Candidates not meeting all of the above requirements may be admitted under conditional status.

MBA for Those Without a Business Degree

While the MBA program is designed for the student having earned a bachelor's degree in a business related field, the opportunity for study is available for the non-business degree holder. For these students, a series of leveling courses have been designed to address any deficiency. Through careful selection of undergraduate courses, students may be admitted to the MBA program without needing any of the leveling courses.

Management Practicum/Thesis

Each graduate program requires a directed research project.

A management practicum is a directed work experience within an institution that the student is currently employed.

For the management practicum, the student must complete a management project. The project will be developed by the student working in conjunction with the employer. The student must secure a faculty member to work with him/her on the topic of study, research design, and quantitative methods. Approval from the graduate committee, program director, and academic department head are required.

The project is initiated, developed, conducted, completed and reported by the student and must relate to as many courses completed in the MBA program as possible. The expected impact of the student's recommendations must be beyond the boundaries of a single functional area.

BUGB 595 is the three-hour course for the practicum. Completion of, or simultaneous enrollment in, all MBA core courses is required prior to the experience.

A thesis track may substitute for the practicum. Students who are permitted must complete, under faculty supervision, an original research paper and prepare an oral presentation of the thesis. The student must secure a faculty member to work with him/her on the topic of study, research design, and quantitative methods. Approval from the student's graduate committee, program director, and academic department head are required. See Department for specific requirements for the practicum/thesis.

Student Probation and Termination

A student will be placed on probation when one or more of the following occurs:

- a second grade of "C" is received in an MBA class
- one "C" and one "D" are received in MBA classes

A student's MBA program may be terminated when one or more of the following occurs:

- one "C" or one "D" is received in an MBA class after a student has been placed on academic probation
- one "F" is received in an MBA class.

A student on probation must petition the MBA Committee through the MBA Director in order to be considered for removal from probation.

Written Comprehensive Examination

Each MBA student must pass a written comprehensive examination. The purpose of the exam is to evaluate the student's ability to analyze, synthesize, evaluate, and communicate knowledge from and interrelationships between the functional areas of Accounting, Management, Marketing, Finance, and Business Analysis.

The MBA Director will determine the student's eligibility for taking the examination as well as scheduling time, date, and place of the examination. This examination may not be taken until the student has:

- been granted regular admission to the MBA Program;
- completed MBA course requirements;
- maintained a GPA of at least 3.0; and
- received approval from the MBA Director.

The student must apply to the MBA Director for the written comprehensive examination and will receive information regarding examination format, procedures, time, date, and place.

1. The MBA written comprehensive exam (comp) will normally consist of essay questions requiring high-level analysis or a case analysis with similar questions.
2. Each student's comp will consist of one question from each of the functional areas identified above. Questions will be developed by faculty in each area.
3. Students are restricted to a two-page typed response for each question.
4. Comps will be scheduled in a computer laboratory during the

exam week that the students' practicum or thesis is scheduled.

5. Students will not be allowed to access personal computer directories during the comp. Students must use the computer room log-in and may not access their personal login.
6. Comps will be scheduled for a four-hour time period. Note: If the student leaves the examination session and does not return, the examination will be considered taken, and the exam will be evaluated accordingly and reported to the Assistant Vice President for Academic Affairs.
7. Response to comp questions will be graded by professors in the appropriate functional areas. All comp questions will be graded on: analytical skills, communication skills, and subject knowledge in the functional areas.
8. Each question will be graded "Pass" or "Fail."
9. Results for each student's individual functional area comp questions will be forwarded to the MBA Committee where a final overall comp evaluation will be made. Final overall evaluation options are "Pass" or "Fail."
10. Once the examination has been evaluated, the MBA Director must return the signed report form to the Assistant Vice President for Academic Affairs indicating a pass or failure of the examination. This must be done on or before the published deadline to submit the results of the written comprehensive examination for that semester.
11. If a retake of the comprehensive examination is necessary, it may not be scheduled during the same semester that the original examination was completed. Failure of the retake of the examination or its equivalent will result in the termination of the student's degree program.

Program of Study

Required Courses

ACCT 500 Managerial Accounting

BUGB 500 Advanced Business Law and Ethics

FINA 500 Financial Strategy

MANG 500 Advanced Management Theory

MANG 501 Operations Management

MANG 510 Organizational Theory and Behavior

MANG 590 Business Strategy

MARK 500 Marketing Strategy

Elective Courses

BUGB 510 Global Business

BUGB 520 Seminar in Current Business Topics

CISB 500 Management Information Systems

CISB 560 Electronic Commerce Systems

ECON 530 Managerial Economics

KINE 500 Facility and Equipment Management in Sport and Fitness

KINE 510 Event and Program Management in Sport and Fitness

KINE 520 Management Policies, Principles, and Regulations in Sport and Fitness

MANG 520 Human Resource Management

MANG 540 Advanced Quantitative Methods

MANG 550 Entrepreneurship

If the seminar topics are different, BUGB 520 may be taken for credit up to three times.

Research Courses

BUGB 530 Research Design

BUGB 590 Thesis (6 hours)

BUGB 595 Research Practicum

Students are required to meet with their advisor and submit information by the appropriate deadlines.

All graduate courses for the MBA are listed in the Course Descriptions section of this catalog in the prefix areas of Accounting (ACCT), Business Administration (BUGB), Computer Information Systems in Business (CISB), Economics (ECON), Finance (FINA), Kinesiology (formerly Human Performance and Wellness) (KINE), Management (MANG), and Marketing (MARK).

Leveling Courses

If the prospective MBA student does not have an undergraduate business degree, the student may need to complete the following Mesa State College courses or equivalent. Equivalent courses are determined by the applicant's graduate committee.

ACCT 201 Principles of Financial Accounting

ACCT 202 Principles of Managerial Accounting

BUGB 349 Legal Environment of Business

CISB 101 Business Information Technology

ECON 201 Principles of Macroeconomics

FINA 301 Managerial Finance

MANG 201 Principles of Management

MARK 231 Principles of Marketing

STAT 200 Probability and Statistics

General Policies

Up to nine credit hours may be taken in a "non-degree seeking student" status and later applied to the program requirements. Up to nine credit hours of applicable courses, with a grade of "B" or higher, may be transferred from a regionally accredited institution into the program. Additional information may be found in the Transfer Credit section.

Master of Arts in Education

Mesa State College began offering the Master of Arts in Education in summer 2006. The program is administered by the Center for Teacher Education (CTE). The CTE is guided on academic policy issues by the Graduate Council.

The Master of Arts in Education is designed as a dynamic, current program to meet the needs of education professionals as they gain additional expertise in one or more state endorsement areas. The degree is awarded after successful completion of 34 semester hours of rigorous study. The program is designed to provide the student with ten hours of core knowledge in educational design, theory, assessment, technology and research. The additional 24 semester hours allow the student to focus on a particular endorsement area.

The program is designed using the cohort model with a group of participants completing all requirements in a three-semester cycle. The current cognate areas are Educational Leadership (EDLD) and English for Speakers of Other Languages (ESOL).

Admission to the program follows the stated guidelines for graduate admission procedures indicated in this catalog. Additionally, students must provide three letters of reference from the profession, proof of working with youth, current employment in K-12 education and a statement of purpose. For Educational Leadership, only students with valid teaching or special service licensure shall be considered for admission.

Capstone

The Master of Arts in Education requires the successful completion of the capstone competency. The capstone culminates in a professional presentation representing enduring understanding illustrating a synthesis of learning. This presentation must represent sufficient rigor to garner final approval from Mesa State College to grant the Master of Arts degree in Education.

Program of Study

Core Courses:

- EDUC 500 Culture and Pedagogy
- EDUC 501 Educational Technology
- EDUC 502 Theory, Design, and Assessment of Curriculum
- EDUC 503 Introduction to Educational Research

ESOL Cognate Courses:

- EDUC 504 Methods of Teaching English as a Second Language
- EDUC 510 Strategies in the Content Area
- EDUC 535 Internship in ESOL: K-6
- ENGL 543 Linguistic Diversity and Multicultural Literacies
- EDUC 545 Internship in ESOL: 7-12
- EDUC 554 Theories of Second Language Acquisition
- EDUC 555 Multicultural Narratives
- EDUC 556 Assessment in English as a Second Language

EDLD Cognate Courses:

- EDLD 505 Reform and Organizational Change in Education
- EDLD 515 Dynamic School Leadership in a Democratic Society: Introduction to School Administration
- EDLD 520 Principalship I & II
- EDLD 530 Legal Aspects of School Administration: Educational Policy and the Law
- EDLD 531 School Finance & Budgeting
- EDLD 535 Internship in EDLD: K-6
- EDLD 540 School Improvement and Accountability
- EDLD 542 Instructional Supervision and Management/HR
- EDLD 544 Strategies in School Improvement
- EDLD 545 Internship in EDLD: 7-12

Up to nine credit hours may be taken in a non-degree seeking student status and later applied to program requirements. Up to nine credit hours of applicable courses, with a grade of B or higher, may be transferred from a regionally accredited institution into the program. Applicable courses for transfer must be approved by the CTE Graduate Committee to meet program requirements.

Course Descriptions

The course descriptions in this catalog indicate the content of the course and prerequisites when applicable. Courses are listed in alphabetical order with a four-letter prefix code, followed by number and title. The number in parentheses at the end of the course title indicates the credit granted, in terms of semester hours, for each course. Generally, the number of semester hours is the number of times a class will meet each week. Exceptions are noted in individual course descriptions and , in most cases, prerequisites and/or corequisites stated. The course number after the prefix indicates the college year in which the courses should ordinarily be taken.

100-199	Freshman year	200-299	Sophomore year
300-399	Junior year	400-499	Senior year

Courses numbered 01-099 are preparatory in nature, not intended for transfer purposes, and will not usually fulfill degree requirements.

For course equivalencies between the Colorado Community College System and Mesa State College/WCCC classes, check the Common Course Crosswalk listed on the current program sheet.

Mesa State College reserves the right to withdraw any program or course which is not justified due to lack of enrollment or availability of instructor. Other courses may be added if there is sufficient demand. Certain courses are only offered during the fall or spring semesters, or may be available only in alternating years. It is the student's responsibility to meet with their advisor and check the two-year course matrix on the Mesa State College website for course availability. Learn more at www.mesastate.edu/academics.

Accounting (ACCT)

ACCT 201 Principles of Financial Accounting (3)
A basic course that introduces the concepts of bookkeeping, generally accepted accounting principles, and financial statements.

ACCT 202 Principles of Managerial Accounting (3)
A basic course that introduces the use of accounting information in managerial decision making, control, and planning. Prerequisites: ACCT 201, and CISB 101 or CISB 205.

ACCT 311 Advanced Managerial Accounting (3)
An advanced course primarily for non-accounting majors that provides in-depth coverage on the applications of accounting information in decision-making, organization, control and planning. Prerequisites: ACCT 202, and CISB 101 or CISB 205.

ACCT 321 Intermediate Accounting I (5)
Development of a foundational understanding of Generally Accepted Accounting Principles and their application to external financial statements. Prerequisite: ACCT 201.

ACCT 322 Intermediate Accounting II (4)
Continuation of ACCT 321. Prerequisite: ACCT 321.

ACCT 331 Cost Accounting (3)
Costs and their relationship to planning, controlling, inventory valuation, and decision making. Prerequisite: ACCT 202, CISB 205.

ACCT 392 Accounting Information Systems (3)
A study of the concepts and design of the Accounting Information System with emphasis on the internal control structures, requirements, and professional standards. Prerequisites: ACCT 322; CISB 205.

ACCT 393 Cooperative Education (3-12)
Cooperative Education provides students an opportunity to put their education to practical use in the workplace under the joint supervision of an employer participating in the Cooperative Education program and a faculty member designated by the institution. (See "Cooperative Education" in this catalog).

ACCT 395 Independent Study (1-3)

ACCT 396 Topics (1-3)

ACCT 401 Governmental Accounting (3)
Accounting principles as they apply to governmental units. Prerequisite: ACCT 322.

ACCT 402 Advanced Accounting (3)
The course provides coverage of consolidated financial statements, partnership accounting, bankruptcy, estates, trusts, and international operations. Prerequisite: ACCT 322.

ACCT 411 Auditing I (3)
This course provides coverage of the scope and purposes of the work of a certified public accountant, including study of the theory of auditing, professional ethics, legal liability of the auditor, and internal control. Prerequisites: ACCT 322, STAT 200 or 214, and senior standing.

ACCT 412 Auditing II (3)
Continuation of ACCT 411. This course provides coverage of the application of auditing theory to financial statements, including examination of the audit programs, procedures, and work papers used in each phase of an audit. Prerequisite: ACCT 411.

ACCT 441 Individual Income Tax (4)
Individual Income Tax designed for BS in accounting degree candidates. Covers the Federal Income Tax Law in-depth as it relates to individual taxpayers. Introduction to various tax reference resources that deal with the subject. Limited enrollment. Prerequisite: ACCT 322, senior standing.

ACCT 442 Advanced Tax and Tax Research (5)
Federal Income Tax Law for corporations, partnerships, estates, trusts, and gifts. In-depth experience with tax research resources, research methodologies and related projects. The student will be required to participate in the Volunteer Income Tax Assistance (VITA) program in order to acquire practical experience in communication with taxpayers and preparation of tax returns. Prerequisite: ACCT 441.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

ACCT 493 Cooperative Education (3-12)
See description of ACCT 393.

ACCT 495 Independent Study (1-3)

ACCT 496 Topics (1-3)

Anthropology (ANTH)

ANTH 201 Cultural Anthropology-GTSS3 (3)
Basic concepts of cultural anthropology including the theoretical perspectives, social and political institutions, ceremonies, and linguistics. Cultural change and cultural destruction are also included.

ANTH 222 World Prehistory-GTSS3 (3)
Basic theory and method will be described. Prehistory includes human origins, Stone Age hunters, domestication of animals, the rise of agriculture and the emergence of civilizations.

ANTH 296 Topics (1-3)

ANTH 301 North American Indian (3)
Cultural systems of the North American Indian including ideology, revitalization, political history, and contemporary conditions. Case studies of selected groups will be emphasized. Prerequisites: ANTH 201.

ANTH 310 Ethnographic Methods (3)
Theoretical, descriptive, and instructive aspects of qualitative social research including theoretical perspectives, field journalism, participant observation, interviewing, ethics, and research design. Students will conduct and discuss brief fieldwork in the community. Prerequisite: ANTH 201.

ANTH 320 U.S. as a Foreign Culture (3)
Study of the U.S. from an outsider's perspective, understanding and intellectually building upon foreign views of the U.S. Students will learn how to objectify and analyze U.S. culture in its many forms. Prerequisites: ANTH 201.

ANTH 330 Religion and Culture (3)
Comparison of organized beliefs in the spiritual world and their relationship to the cultures in which they are practiced. Several theoretical perspectives will be emphasized. Prerequisite: ANTH 201.

ANTH 340 Ethnopsychology (3)
Study of indigenous theories about emotions and cognition and a functionalist analysis relating traditional healing methods to the social and psychological aspects of illness. Prerequisites: ANTH 201 and PSYC 150.

ANTH 345 Medical Anthropology (3)
Exploration of the various ways anthropology and medicine intersect (e.g., the cultural construction of disease, disease environment, cure, and health) and the practical applications of such knowledge. Prerequisite: ANTH 201.

ANTH 350 Regional Study (3)
Specific geographical region will be described. History, politics, economics, ideologies, cultural traditions, and contemporary conditions will be discussed. Prerequisites: ANTH 201.

ANTH 360 Gender and Culture (3)
Study of culturally ascribed roles based on sex, their symbolic basis, and the functionalist and conflict theory explanations for the forces giving rise to them. Prerequisites: ANTH 201.

ANTH 370 Applied Anthropology (3)
Inquiry into the ways anthropology might be applied to practical ends; exploring how a degree in anthropology can lead to a career in anthropology or at least an anthropologically-informed career. Prerequisite: ANTH 201.

ANTH 380 Language and Culture (3)
Social, psychological, and epistemological aspects of language. Critical assessment of the use of language in writing about anthropology. Prerequisites: ANTH 201.

ANTH 390 World Ethnicity and Nationalism (3)
Inquiry into the concepts of ethnicity and nationalism - how they evolved, to what purposes they have been applied, and how they have figured and continue to figure in several contexts around the world. Prerequisite: ANTH 201.

ANTH 395 Independent Study (1-3)

ANTH 396 Topics (1-3)

ANTH 405 Globalization and Culture Change (3)
Analyses from several perspectives of the effect of global systems on cultural change, particularly in non-state cultures. It emphasizes the significance of economy, polity, and ideology in both the global system and the non-state societies. Prerequisites: ANTH 201.

ANTH 410 World Cultures (3)
Study of band, tribal, chiefdom, and state societies from a variety of theoretical perspectives, also includes the study of contemporary cultural change in non-state societies. Prerequisites: ANTH 201.

ANTH 495 Independent Study (1-3)

ANTH 496 Topics (1-3)

Archaeology (ARKE)

ARKE 225 Introduction to North American Archaeology (3)
Survey of archaeology in North America, highlighting the Mississippi Mound builders, eastern cultures, Aztecs, and Maya. Development of archaeological theory and its application to the study of prehistoric sites in North America. Work with archaeological material curated at the Museum of Western Colorado.

ARKE 325 Geoarchaeology (3)
Introduction of aspects of geological science used to solve archaeological problems. Survey of the sub-fields of geology pertinent to archaeological data recovery, site formation processes, and site interpretation in the Mountain west. Includes aspects of physiography, geomorphology, Quaternary stratigraphy, geochemistry and mineralogy, and lithic materials identification. Prerequisites: GEOL 111 and GEOL 111L

ARKE 350 Southwest Archaeology (3)
Prehistory and cultural background of the southwestern United States. Archaeological sites of Colorado, Utah, Arizona and New Mexico highlighted. Introduction to cultures inhabiting these areas for the last 5,000 years with emphasis on the Anasazi, Fremont, Uto-Aztecan and Athabaskan groups. Prerequisite: ARKE 225

ARKE 410 Archaeological Fieldwork (3)
ARKE 410L Archaeological Fieldwork Lab (2)
Overview of contemporary methods of archaeological survey, site recordation, and excavation techniques. Artifact collection, interpretation, and analysis presented as is record keeping, artifact conservation, and curation. Topics include maps and mapping, geographic information systems (GIS), Global Positioning System (GPS), field and specimen photography, recovery and analysis of supplemental materials (macrobotanical, pollen, chronometric, etc). Prerequisite: ARKE 225 and ARKE 350.

Art: Art Education (ARTD)

ARTD 196 Topics: (1-3)

ARTD 296 Topics: (1-3)

ARTD 395 Independent Study (1-3)

ARTD 396 Topics: (1-3)

ARTD 410 Elementary Art Education Methods (3)

Explorations of theory, methods and materials for teaching art, kindergarten through sixth grade. Required for K-6 elementary teachers and K-12 Art Education majors. Studio applications, aesthetics, creative problem solving, art history, lesson and unit plans explored. Prerequisites: EDUC 211, EDUC 343, and EDUC 341 or 342, all with a grade of "B" or higher.

ARTD 410L Field/Studio Experience in Elementary Art Education Methods (1)
Required for K-12 art education majors only. Forty field hours in local public schools. Co-requisite to ARTD 410. Prerequisites: EDUC 211, EDUC 342, and EDUC 343.

ARTD 412 Secondary Art Education Methods (4)
Seminar that covers theory, methods and materials for teaching art in middle and high schools, grades 7-12. Applies options in teaching through embedded field hours. Development of a year-long art curriculum. Required for K-12 Art Education majors. Prerequisites: EDUC 211, EDUC 342, and EDUC 343, all with a grade of "B" or higher.

ARTD 414 Biennial Art Education Symposium (1)
Explorations of current issues in art education.

ARTD 495 Independent Study (1-3)

ARTD 496 Topics: (1-3)

Art – General (ARTE)

ARTE 101 Two-Dimensional Design-GTAH1 (3)
The principles of form and function in two-dimensional design with emphasis on color theory and use. Two hours of lecture and two hours of studio per week.

ARTE 102 Three-Dimensional Design-GTAH1 (3)
The principles of form and function in three-dimensional design with emphasis on color theory and use. Two hours of lecture and two hours of studio per week.

ARTE 115 Art Appreciation-GTAH1 (3)
Some of the hows, whys, and whos of painting, sculpture, and functional design in selected periods and places. This course is intended for non-art majors. Art majors should take ARTE 118 instead.

ARTE 118 History of Art, Prehistory to Renaissance-GTAH1 (3)
Survey of the development of art from Prehistory up to the emergence of the Renaissance. Course focus will be the study of major monuments to gain an understanding of the important factors that defined the artistic production of each civilization and historic period.

ARTE 119 History of Art, Renaissance to Present-GTAH1 (3)
Survey of the development of art from the Renaissance to the late 20th century. Course focus will be the study of major monuments to gain an understand of the important factors that defined the artistic production of different historic periods.

ARTE 196 Topics: (1-3)

ARTE 296 Topics (1-3)

ARTE 300 Exhibitions and Arts Management (3)
Coordination of annual, multi-campus art exhibit. Includes design of all promotional materials; working with artists, jurors, media, art agencies; food, hospitality and public relations; gallery design. Further investigations of diverse arts management issues and venues. Prerequisite: junior or senior standing.

ARTE 302 Native Arts of North America (3)
Exploration and examination of the art of tribal peoples of North America, with special attention to the peoples' view of art and beauty as integral to life. Students will investigate the blending of oral history and art, as well as hands-on artistic techniques. Prerequisites: ARTE 115 or ARTE 118 or ANTH 201 or HIST 131 or HIST 132, or consent of instructor.

ARTE 395 Independent Study (1-3)

ARTE 396 Topics (1-3)

ARTE 413 Fearless Creativity (3)
Experimental applications of drawing, painting, paper collage, printmaking, photography, basic sculpture, and fibers. Designed for anyone desiring a safe environment for creative expression.

ARTE 494 Senior Seminar & Portfolio (3)
Capstone course for studio artists. Topics include art criticism, aesthetics, and current art developments. Professional portfolio created. Includes résumé, artist's statement, an arts business plan, photos of art and other appropriate documents. Prerequisite: senior standing or consent of instructor.

ARTE 495 Independent Study (1-3)

ARTE 496 Topics (1-3)

ARTE 497 Senior Exhibition (3)
All seniors pursuing a B.F.A. degree with a studio art concentration are required to participate in a senior exhibition in the Johnson Art Gallery. They must enroll in this course during the semester in which their exhibition is presented. Prerequisites: ARTE 300 and ARTE 494.

ARTE 498 Studio Assistant and Teaching Aid (3)
Designed for the senior level artist. Gain experience in teaching by preparing demonstrations and performing in-studio maintenance of studio equipment. Taught in conjunction with 200-level classes and requires instructor permission. Prerequisite: Consent of instructor.

ARTE 499 Internship (3)
Placement in a gallery, art center or museum setting (excluding the Johnson Gallery). The student is expected to complete 135 clock hours. Prerequisites: ARTE 300 and ARTE 494.

ARTE 596 Topics (1-3)

Art – Graphic Design (ARTG)

ARTG 196 Topics: (1-3)

ARTG 201 Adobe Illustrator (2)
Introduction. Techniques for using vector-based drawing program explored through exercises to learn the application and features as used by graphic designers for print and electronic media.

ARTG 202 Adobe Photoshop (2)
Introduction. Techniques for using raster-based software for print, video, web and other multi-media applications.

ARTG 215 Graphic Design I (3)
Basic use and operation of graphics computer, exclusively Macintosh, with focus on terminology, hardware, peripheral devices, system management, and software (systems and applications). Including establishment of operation files, job information files, information capture and placement, and maintenance. Prerequisites: ARTE 101 and 102, and ARTS 151.

ARTG 221 Graphic Design II (3)
Principles of design and layout techniques, including thumbnail, rough, and comprehensive layouts: work planning and preparation of artwork with focus on computer and hand generated images. Prerequisites: ARTE 101, ARTE 102, ARTS 151, and ARTG 215.

ARTG 225 Introduction to Animation (3)
Survey of animation history, current trends, principles, practice, tools, techniques, software and hardware. Additional focus on story development, storyboarding,

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traditional drawing skills, and creation of basic animations. Prerequisite: ARTG 215 with grade of "B" or higher.

ARTG 296 Topics: (1-3)

ARTG 301 Computer Illustration (3)
Focus on developing knowledge and skills to produce computer generated artwork, both black/white and color, including color separation camera ready art using software application programs primarily on Macintosh computers. Prerequisites: ARTG 215 and ARTG 221.

ARTG 320 Letterforms & Typography (3)
Study of letterforms and typography including terminology, type style identification and design, use of type within a design, composition, copyfitting, and basic principles of pattern and spatial design. Prerequisite: ARTG 221.

ARTG 324 Animation I (3)
Exploration of 2D computer animation software, techniques and production, development of storylines, storyboards, and animation production processes. Continued development of traditional drawing skills. Prerequisite: ARTG 221 with grade of "B" or higher.

ARTG 325 Animation II (3)
Exploration of 3D computer animation software, techniques and production processes. Emphasis on character modeling and development, motion, timing and traditional drawing skills. Prerequisite: ARTG 324 with grade of "B" or higher.

ARTG 337 Illustration & Storyboard (3)
Traditional drawing skills used in illustration and storyboarding to communicate ideas with visual images. Emphasis on applying effective composition, design, color and conceptualization to creative and expressive imagery. Particular focus on the production storyboard as art form, demonstrating aesthetic and style. Prerequisites: ARTG 221 and ARTS 251.

ARTG 338 Advertising Design I (3)
Exploration of the various graphic communication applications common to the promotion of products and services, including brochures, posters, mailers, package design, and other items designed for print. Emphasis will be placed on design processes, prepress print production and the history of advertising. Prerequisite: ARTG 221, 301, and 320.

ARTG 339 Advertising Design (3)
Advanced exploration of the various graphic communication applications common to the promotion of products and services, including brochures, posters, mailers, package design, and other items designed for print. Emphasis will be placed on design processes, prepress print production and the history of advertising. Prerequisites: ARTG 301, 320, and 338.

ARTG 395 Independent Study (1-3)

ARTG 396 Topics: (1-3)

ARTG 405 Web Site Design (3)
Creation and development of well-designed and functional Web pages/sites to accommodate clients' promotional and business needs. Topics covered include software, creation of graphics, publishing, design theory for the Web, typography and promotion. Prerequisites: ARTG 215, ARTG 221, ARTG 301, ARTG 302, and ARTG 338, or consent of the instructor.

ARTG 424 Animation Studio I (3)
2D and 3D computer animation. Emphasis on advanced character modeling and development, lighting, shading, textures, rendering, scene building, and sound editing and Web animation. Traditional drawing emphasis. Prerequisite: ARTG 325 with grade of "B" or higher.

ARTG 425 Animation Studio II (3)
Advanced 2D and 3D animation. Includes complex character development and modeling, rendering techniques, distribution, copyright and publishing issues, DVD production, and animation portfolio development. Prerequisite: ARTG 242 with a grade of "B" or higher.

ARTG 437 Illustration and Storyboard II (3)
Advanced illustration and storyboarding development focusing on concept, content, materials and techniques. Emphasis on individual artistic style and personal visual communication perception. Prerequisite: ARTG 337 and instructor permission.

ARTG 450 Corporate Design (3)
Exploration of visual communication and symbols designed specifically for corporate and organization identity. Examples include logos, logotypes, business stationery, forms, annual reports, advertising and signage. Emphasis will be placed on the process of design, prepress print production and the history of corporate design. Prerequisite: ARTG 338.

ARTG 493 Portfolio Construction (3)
Assigned designed problems and development of items for assembly into a portfolio to be used as employment material. Prerequisite: ARTG 337, ARTG 338, ARTG 450.

ARTG 495 Independent Study (1-3)

ARTG 496 Topics: (1-3)

ARTG 499 Internship (3)
Placement in an agency or corporate department to provide an enhanced transition from the classroom to the work setting through first-hand experience. The student is expected to complete 135 clock hours. Prerequisite: ARTG 450.

Art – Art History (ARTH)

ARTH 196 Topics: (1-3)

ARTH 296 Topics: (1-3)

ARTH 315 Nineteenth-Century Art (3)
Comprehensive survey of the major art movements of the nineteenth century: Neoclassicism, Romanticism, Academic Art, the invention of photography, Realism, Impressionism, Post-Impressionism, Symbolism, and Art Nouveau. Prerequisites: ARTE 118 and ARTE 119.

ARTH 316 20th Century Art to 1950 (3)
Foundations of modernism from Post-Impressionism through Surrealism through the study of major artists and art works and related manifestations including important theories of modern art, the modernist transformation of design aesthetics, and social and political reactions to modern art. Prerequisites: ARTE 118 and ARTE 119.

ARTH 317 American Art History (3)
Examination of art and artists of America from Colonial times up to the present with attention to the role of the artist and the visual arts in American social experiment. Prerequisites: ARTE 118 and ARTE 119.

ARTH 318 Development of Contemporary Art (3)
Examination of art produced within the past 40 years with attention to the plurality of successful styles and subjects pursued by artists, the increasingly important role of the art critic and the contemporary art museum in interpreting trends, the impact of the commercial art market on the production and dissemination of contemporary art, and various experimental art forms developed by artists to counteract the influence of critics, institutions and commercial interests. Prerequisites: ARTE 118 and ARTE 119.

ARTH 319 Art of the American West (3)
Examination of the artist's encounter with the West as both real and imagined experience from the works of expeditionary artists of the early 19th century to recent large scale "earthworks" that transform the Western landscape. Emphasis on the works of the

major 19th century protagonists of the heroic Western image as well as the important role of Santa Fe and other Western locations in the development of a Western art tradition. Prerequisites: ARTE 118 and ARTE 119.

ARTH 320 Symbolism to Surrealism: Art & the Subconscious (3)
Examination of artistic fascination with symbolic meaning and suggestive content as a vehicle to explore myth and the subconscious from the late 19th century through the 20th century. Focus on how symbolic meaning is conveyed through visual content and theories about the role of myth and subconscious imagery in artistic experience. Prerequisites: ARTE 118, ARTE 119, and ARTH 315.

ARTH 321 Gothic and Northern Renaissance Art and Architecture (3)
Architectural accomplishments of Gothic style and the revival and development of painting and sculpture from the Gothic period through the Renaissance in the North. Includes invention of oil painting, growth of realism and direct observation of the real world in art, and effects of the Protestant Reformation on artistic styles and content. Prerequisites: ARTE 118 and ARTE 119.

ARTH 322 Expressionism in 20th Century Art (3)
Expressionism in Germany during the early 20th century and its recurrence in the latter half of the 20th century. Visual language of expressionism as a distinctive style and the artistic goals of Expressionism that define a specific role for the artist in society. Prerequisites: ARTE 118, ARTE 119, and ARTH 316.

ARTH 323 History of Modern Architecture (3)
Modern architecture as a form of applied artistic expression. Examination of major stylistic developments in architecture and applied design from 19th century historically-inspired styles through 20th century innovations that transformed traditions of architectural design and the role of the architect in modern society. Prerequisites: ARTE 118 and ARTE 119, and ARTH 315 and ARTH 316.

ARTH 395 Independent Study (1-3)

ARTH 396 Topics: (1-3)

ARTH 495 Independent Study (1-3)

ARTH 496 Topics: (1-3)

Art – Studio Art (ARTS)

ARTS 151 Foundation Drawing (3)
Development of the artist's perceptual drawing skills. Abstract or conceptual approaches may be introduced. Traditional drawing media stressed. Focus on nature of drawing, historical traditions and contemporary processes.

ARTS 196 Topics (1-3)

ARTS 221 Metalsmithing (3)
Prerequisite: ARTE 102 or consent of instructor.

ARTS 231 Fibers Workshop I (3)
Introduction to fiber and fabric art forms, including creation of original weaving, felt and fabric collage, batik and other applications. Prerequisites: ARTE 101 and ARTS 151.

ARTS 241 Workshop I: Hand Building (3)
Introduction to the ceramic process using traditional materials and methods for hand formed ceramics objects. Involvement in clay from raw material through the glazing and firing process. Studio emphasis on technique and creative process.

ARTS 242 Workshop II: Beginning Throwing (3)
Beginning throwing processes. Creating vessels while learning the technique of shaping clay by throwing. Form and function explored. Initial firing process for bisque fire taught. Development of under-glaze and glaze techniques.

ARTS 251 Figure Drawing (3)
Perceptual skills from foundations drawing applied to drawing the human figure. Human anatomy as applied to the visual artist. Further instruction in composition and design. Individual and group critiques ongoing. Nude models used to explore skeletal, muscular, and anatomical problems. Prerequisites: ARTS 151 and ARTE 101.

ARTS 252 Mixed Media Drawing (3)
Artistic exploration of experimental media, dry and wet, and alternative media alone or combined on varied drawing surfaces to give dimension, texture and vitality to a drawing. Figure and still life are main subject matter for observational approach. Prerequisite: ARTS 251.

ARTS 271 Printmaking-Intaglio/Relief (3)
Production of matrix from which multiple copies produced. Introduction of basic techniques of intaglio (dry point, hard ground etching, aquatint, soft ground etching) and relief (woodcut). Slide lectures used to introduce historical and contemporary concepts. Individual and group critiques are ongoing. Prerequisites: ARTE 101 and ARTS 151.

ARTS 272 Printmaking - Lithography (3)
Training explored in drawing, processing, and printing from stones and aluminum plates. Emphasis given to black and white printing. Color processes introduced. Slide lectures used to introduce historical and contemporary concepts. Individual and group critiques are ongoing. Prerequisites: ARTE 101 and ARTS 151.

ARTS 281 Modeling & Mold Making Workshop I (3)
Introduction to the modeling and mold making processes. Involvement includes history, terminology, equipment, tools, and procedure. Process includes modeling with water and plasticene clay creating from abstract to figurative. Mold making includes press and piece molds in plaster and a rubber mold of a portrait or bust. Prerequisite: ARTE 102.

ARTS 282 Bronze Casting Workshop I (3)
Introduction to bronze casting using the lost wax process and ceramics shell. Includes history, terminology, equipment, and procedure. Process includes modeling in wax, sprueing the art, ceramic shell investment, technical pouring procedures, devesting the shell and patina. Studio emphasis on technique and creative process ending in a finished based sculpture. Prerequisite: ARTE 102.

ARTS 283 Carving & Construction Workshop I (3)
Sculpture as a process of three-dimensional expression in stone, wood and fabrication/construction using multiple media. Exploration of materials, techniques and concepts emphasizing traditional methods and approaches to sculpture from relief to full round. Prerequisite: ARTE 102.

ARTS 284 Ceramic Sculpture Workshop I (3)
Introduction to water-based clay as a sculptural material fired for permanence. Basic processes include coil, slab, and thrown constructions. Glaze development with sculptural clay includes cone 10, 5, 06, and 019. Some figurative work on slabs and 3D explored. Prerequisite: ARTS 241.

ARTS 291 Foundation Painting (3)
Bridge between drawing and painting. Mixing and use of color as it relates to perceptual problem solving. Focus on the application of watercolor and acrylic paint. Discussion of basic physics, perceptual and psychological effects of color. Prerequisites: ARTE 101 and ARTS 151.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

ARTS 292 Oil Painting (3)
Introduction to techniques and materials of oil painting. Designed for limited experience in oil painting. Observational approach. Exposure to varieties of subject matter and developing skills for individual expression. Prerequisite: ARTS 291.

ARTS 296 Topics: (1-3)

ARTS 321 Metalsmithing (3)
Prerequisites: ARTS 151 and ARTS 221.

ARTS 331 Fibers Workshop II (3)
Intermediate examination of several fiber or fabric applications. Prerequisite: ARTS 231.

ARTS 342 Workshop III: Intermediate Throwing (3)
A continuation of the throwing process involving more complex vessels and techniques using lids, spouts, and pedestals. Assignment to firing teams for studio production for high fire clay. Prerequisite: ARTS 242.

ARTS 344 Workshop IV: Clay Alteration (3)
Alteration of thrown vesels using several techniques, including wet shaping, leatherhard shaping, marks, incising, and stamping. Creating larger vessels using a two-piece technique. Kiln teams assigned for high firings. Prerequisite: ARTS 342.

ARTS 345 Noborigama Wood Fire Ceramics I (3)
A comprehensive study of wood fire ceramics that includes research on the development of clays, glaze, and firing techniques for wood fire. Historical background, vocabulary, studio involvement, and firing at the kiln site required. Prerequisites: ARTS 242 and ARTS 342.

ARTS 346 Workshop V: Low Fire Technique (3)
All low fire processes and terra sigillatta, raku, low fire salt bisque, barrel firing and Maria dung firings. Prerequisite: ARTS 342.

ARTS 351 Drawing Workshop I (3)
Traditional and contemporary drawing processes and advanced compositional strategies. Perceptual, abstract, and conceptual ideas explored within the context of strengthening the artist's formal skills and idea development. Matting and framing works on paper. Individual and group critiques ongoing. Prerequisite: ARTS 251.

ARTS 352 Drawing Workshop II (3)
Formal mastery of the visual language and development of a personal artistic direction. Critical thinking skills about individual artistic influences explored. Exhibition of works in a public space. Individual and group critiques ongoing. Digital portfolio developed. Prerequisite: ARTS 351.

ARTS 353 Visual/Conceptual Thinking (3)
Learning meaningful questioning. Engaging in creative problem solving. Assumptions about art questioned. Media selection is not limited; problems posed may be solved with 2D or 3D media. Prerequisite: ARTS 251.

ARTS 354 Figure Drawing and Modeling (3)
Human figure as a critical component. Combines 3-D modeling methods with classical drawing approaches developing a deeper understanding of the subtleties of human anatomy. Group and individual critiques are ongoing. Digital documentation of work for portfolios. Prerequisites: ARTE 102 and ARTS 251.

ARTS 360 Sketchbook (3)
The sketchbook as a primary medium for developing creativity and the artist's thought processes. Exploring exercises and field assignments for building an approach to keeping a sketchbook as a place for ideas and recording the artist's visual experience. Prerequisites: ARTE 101 and ARTS 251, or consent of instructor.

ARTS 371 Printmaking Workshop I (3)
Develop skills with intaglio, relief, and lithograph. Exploration of advanced techniques. May include multiple color printing processes, engraving, and collagraph. Work created will be matted. Prerequisites: ARTS 271 and ARTS 272.

ARTS 372 Printmaking Workshop II (3)
Exploration of printmaking media. Investigation of a printmaker of choice to develop critical thinking about personal artistic skills. Artwork created will be matted, shown in a public space, and documented digitally. Prerequisite: ARTS 371.

ARTS 381 Modeling & Mold Making Workshop II (3)
Creating in clay using various techniques of manipulation and developing complex molds using plaster, rubber, and resins. Various explorations in clay using elements of the figure, representational and abstract explored. Artwork based and finished for professional presentation. Independent work via student/professor contract. Prerequisite: ARTS 281.

ARTS 382 Bronze Casting Workshop II (3)
Creating in wax using various techniques, including molds. Explorations in wax using elements of the figure, representational and abstract explored. Artwork will be based and finished for professional exhibition. Independent work via student/professor contact. Prerequisite: ARTS 282.

ARTS 383 Carving & Construction Workshop II (3)
Continuation of sculpture as a process of three-dimensional expression in stone, wood and fabrication/construction using multiple media. Exploration of materials, techniques and concepts emphasizing traditional methods and approaches to sculpture from relief to full round. Prerequisite: ARTS 283.

ARTS 384 Ceramic Sculpture Workshop II (3)
Creating in clay using various techniques and processes. Explorations with clay includes elements of the figure, representational and abstract, as well as 3D forms as pure sculpture. Artwork based and finished for professional exhibition. Independent work via student/professor contract. Prerequisite: ARTS 284.

ARTS 385 Summer Institute in Marble, Colorado (3)
Summer symposium at Marble/Marble Carving Symposium. Carve Colorado Yule Marble from the same quarries used in the Lincoln Memorial, the Tomb of the Unknown Soldier and other projects. A fee for the summer institute is in addition to Mesa State tuition and fees. Prerequisite: ARTS 283.

ARTS 386 Bronze Casting Workshop III (3)
Thematic concepts for development of a BFA exhibit in bronze explored. Artwork based and finished for professional presentation. Independent work via student/professor contract. Prerequisite: ARTE 382.

ARTS 387 Bronze Commissions: Workshop I (3)
Special bronze commissions and projects as a liaison project with schools or the community. Direct experience at creating art from inception to mounted sculpture. Presentations to respective clients, budgets, armatures, sculpting, molds, wax, investing, and finishing of the bronze. Basing of the sculptures complete the process. Prerequisite: ARTS 281.

ARTS 388 Ceramic Sculpture Workshop III (3)
Thematic concepts for the development of a BFA exhibit in clay explored. Student/mentor consultation of utmost importance as the them is developed. Independent work via student/professor contract. Artwork based for professional presentation. Prerequisite: ARTS 384.

ARTS 391 Painting Workshop I (3)
Skills developed in painting media of choice. Exploring advanced techniques to develop individual artistic expression. Discussions of personal influences and historical context ongoing. Prerequisite: ARTS 292.

ARTS 392 Painting Workshop II (3)
Further investigation of techniques and material in individual painting medium. Personal artistic influences identified tools to aid individual artistic direction. Individual and group critiques are ongoing. End of semester artwork presented in public space and documented digitally. Prerequisite: ARTS 391.

ARTS 395 Independent Study (1-3)

ARTS 396 Topics: (1-3)

ARTS 421 Metalsmithing (3)
Prerequisite: ARTS 321

ARTS 431 Fibers Workshop III (3)
Creating of advanced fiber and fabric artwork; examination of historical precedents. Prerequisite: ARTS 331.

ARTS 441 Glaze Calculation (3)
Prerequisite: Consent of instructor.

ARTS 442 Kiln Construction (3)
Prerequisite: Consent of instructor.

ARTS 443 Workshop VIII: Production Throwing (3)
Using the potter's wheel to develop a production style involvement in the throwing process. Discussion of marketing and establishing a studio to create clay art. Develop skills to create thrown multiples in clay. Prerequisite: ARTS 342.

ARTS 444 Workshop VI: Clay Alteration (3)
Alteration of thrown vessels using several techniques, including wet shaping, leatherhard shaping, marks, incising, and stamping. Creating larger vessels using a two-piece technique developed. Kiln teams assigned for high firings. Prerequisite: ARTS 344.

ARTS 445 Noborigama Wood Fire Ceramics II (3)
A comprehensive study of wood fire ceramics that includes research on the development of clays, glaze, and firing techniques for wood fire. Historical background, vocabulary, studio involvement, and firing at the kiln site required. Prerequisites: ARTS 242, ARTS 342, and ARTS 345.

ARTS 446 Workshop VII: Low Fire Techniques (3)
Continuation of all low fire processes. Involvement with terra sigillatta, raku, low fire salt bisque, barrel firing, and Maria dung firings. Prerequisite: ARTS 346.

ARTS 451 Drawing Workshop III (3)
Senior level drawing. Develop drawings used in senior exhibitions and professional purposes. Exploration and analysis of what historical context fits artist's style. Individual and group critiques ongoing. Digital portfolio developed. Prerequisite: ARTE 352

ARTS 452 Drawing Workshop IV (3)
Subject matter, content, and form are determined by the student under the guidance of the instructor. Ability to speak and write articulately about created artwork developed. Digital portfolio developed. Prerequisite: ARTS 451.

ARTS 453 Visual and Conceptual Thinking (3)
Advanced. Continuation of ARTS 353. Prerequisite: ARTS 353.

ARTS 471 Printmaking Workshop III (3)
Research a printmaking technique that has not been introduced. Create a print and present the method. Develop a professional portfolio of artwork for senior exhibition and professional shows. Artwork created will be matted and documented digitally. Prerequisite: ARTS 372.

ARTS 472 Printmaking Workshop IV (3)
Technical refinement and conceptual development. Refining a personal direction for the artist's imagery. Artwork created will be matted and documented digitally. Prerequisite: ARTS 471.

ARTS 481 Modeling & Mold Making Workshop III (3)
Thematic concepts for development of a BFA exhibit in any material assisted by this process. Independent work via student/professor contract. Artwork based and finished for professional presentation. Prerequisite: ARTS 381.

ARTS 482 Bronze Casting Workshop IV (3)
Thematic concepts for development of a BFA exhibit in bronze continued. Artwork based and finished for professional presentation. Independent work via student/professor contract. Prerequisite: ARTS 382.

ARTS 483 Carving & Construction Workshop III (3)
Continuation of sculpture as a process of three-dimensional expression in stone, wood and fabrication/construction using multiple media. Exploration of materials, techniques and concepts emphasizing traditional methods and approaches to sculpture from relief to full round. Prerequisite: ARTS 383.

ARTS 484 Ceramic Sculpture Workshop IV (3)
Thematic concepts for the development of a BFA exhibit in clay continued. Independent work via student/professor contract. Artwork based for professional presentation. Prerequisite: ARTS 384.

ARTS 485 Modeling & Mold Making Workshop IV (3)
Continuation of thematic concepts for development of a BFA exhibit in any material assisted by this process. Independent work via student/professor contract. Artwork based and finished for professional presentation. Prerequisite: ARTS 481.

ARTS 486 Bronze Casting Workshop V (3)
Thematic concepts for development of a BFA exhibit in bronze continued. Artwork based and finished for professional presentation. Independent work via student/professor contract. Prerequisite: ARTE 482.

ARTS 487 Bronze Commissions Workshop II (3)
Special bronze commissions and projects as a liaison project with schools or the community. Direct experience at creating art from inception to mounted sculpture. Presentations to respective clients, budgets, armatures, sculpting, molds, wax, investing, and finishing of the bronze. Basing of the sculptures complete the process. Continuation of a year-long project at the 400 level. Prerequisite: ARTS 387.

ARTS 491 Painting Workshop III (3)
Workshop III continues development of professional portfolios of artwork used for senior exhibitions and other professional shows. Artistic influences explored. Oral and written communication skills developed in preparation for professional interaction. End of semester artwork documented digitally. Prerequisite: ARTS 392.

ARTS 492 Painting Workshop IV (3)
Technical refinement and conceptual development emphasized. Refinement of the artist's imagery. Ability to speak and write about work developed. End of semester artwork documented digitally. Prerequisite: ARTS 491.

ARTS 495 Independent Study (1-3)

ARTS 496 Topics: (1-3)

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

Biology (BIOL)

BIOL 101 General Human Biology-GTSC1 (3)
BIOL 101L General Human Biology Lab-GTSC1 (1)
Scientific method, ecology, pollution, drugs, reproduction, cancer, heart disease, nutrition, and selected body structure and function relationships. Labs will include required field trips. Can be taken for graduation or general education credit by biology majors who have completed no more than 10 hours in BIOL. Three lectures and one two-hour laboratory per week.

BIOL 102 General Organismal Biology-GTSC1 (3)
BIOL 102L General Organismal Biology Lab-GTSC1 (1)
Selected body structure and function relationships, genetic engineering, animal phylum relationships, evolution, plant growth and development. Labs will include dissections and some required field trips. Can be taken for graduation or general education credit by biology majors who have completed no more than 10 hours in BIOL. Three lectures and one two hour laboratory per week.

BIOL 105 Attributes of Living Systems-GTSC1 (3)
BIOL 105L Attributes of Living Systems Lab-GTSC1 (1)
Cell structure and function, cell energetics, biochemistry and genetics. Three lectures and one two-hour lab per week. High school chemistry recommended.

BIOL 106 Principles of Animal Biology (3)
BIOL 106L Principles of Animal Biology Lab (1)
Broad morphological, physiological, and ecological features of principal phyla of animals and relationships between them. Three lectures and one two-hour laboratory per week. Prerequisite: BIOL 105 or consent of instructor.

BIOL 107 Principles of Plant Biology (3)
BIOL 107L Principles of Plant Biology Lab (1)
Organisms traditionally assigned to the plant kingdom; bacteria, fungi, green-protists, algae, and true plants. Morphology, reproductive biology, anatomy, and phylogeny of each group. Three lectures and one two-hour laboratory per week. Prerequisite: BIOL 105 or consent of instructor.

BIOL 113 Outdoor Survival (3)
Learning skills necessary for biologists working in the field, including wilderness survival, wilderness medicine, camping/climbing skills, edible/poisonous plants, urban survival skills, and epidemiological/radiation/chemical threats. Three one-hour lectures per week.

BIOL 154 Technobiology (2)
BIOL 154L Technobiology Lab (2)
Exploration of the electrical, chemical and biological languages of life. Students will learn to program life-like events, build robots, and approach the study of life from the point of view of synthesis instead of analysis. This course may be used for honors credit if extra criteria are met as dictated by instructor.

BIOL 196 Topics (1-3)

BIOL 203 Human Nutrition (3)
Introduction to the science of the effects of food on the body and the body's need for and utilization of essential nutrients.

BIOL 205 Health, Nutrition, Safety (3)
Study of the interrelationships of physical care to ensure a positive growth environment for children. Focus areas shall include: promotion and protection of child health through studies of regulations and community resources; health education activities appropriate for early childhood educators; nutrition standards, preparation, and sanitation.

BIOL 208 Fundamentals of Ecology & Evolution (3)
BIOL 208L Fundamentals of Ecology & Evolution Lab (1)
Introduction to current theory and experimental work on biology of populations, species interactions, community structure, organismal and molecular evolution, genetic structure of populations, and natural selection. Lab field trips and laboratory-based learning experiences in ecology and evolution. Prerequisites: BIOL 105, and BIOL 106 or BIOL 107 (may be taken concurrently), or consent of instructor.

BIOL 209 Human Anatomy and Physiology (3)
BIOL 209L Human Anatomy and Physiology Lab (1)
Study of the form and function of several major systems of the human body. For students with an interest in pre-med, nursing, human health, and biology. A background in general biology is recommended. Three lectures and two one and one-half hour laboratories per week.

BIOL 210 Human Anatomy and Physiology II (3)
BIOL 210L Human Anatomy and Physiology II Lab (1)
Continuation of Human Anatomy and Physiology, which covers additional body systems and disease processes. For students with an interest in pre-med, nursing, human health, and biology. Three one-hour lectures and two one and one-half hour laboratories per week.

BIOL 211 Ecosystem Biology (4)
BIOL 211L Ecosystem Biology Lab (1)
Ecological studies utilizing the concepts of population biology: energetics, dynamics, distribution, and sociology. Overnight and/or weekend field trips may be required. Four lectures and one three-hour laboratory per week.

BIOL 221 Plant Identification (2)
BIOL 221L Plant Identification Lab (2)
Identification of flowering plants through the use of regional floras and recognition of common plant families. Plant collection and herbarium techniques. Two lectures and two twohour laboratories per week. Prerequisites: BIOL 107.

BIOL 241 Pathophysiology (4)
Function of the human body with emphasis on interpretation of those functions in relation to disease processes. Prerequisite: BIOL 209 or 341.

BIOL 250 Introduction to Medical Microbiology (3)
BIOL 250L Introduction to Medical Microbiology Lab (2)
Microorganisms, especially the procaryotic bacteria; culture techniques, biochemical identification, and infectious human diseases. Three lectures and two two-hour laboratories per week.

BIOL 296 Topics (1-3)

BIOL 301 Principles of Genetics (3)
BIOL 301L Principles of Genetics Lab (1)
Principles of genetics at the organismal, cellular, and molecular level dealing with the genetics of prokaryotic and eukaryotic organisms and viruses. Three lectures and one three-hour laboratory per week. Prerequisites: BIOL 105 and MATH 113; BIOL 302 recommended.

BIOL 302 Cellular Biology (3)
BIOL 302L Cellular Biology Lab (1)
Form, function, and bioenergetics of the cell. Three lectures and one two hour laboratory per week. Prerequisites: BIOL 106, 107, or consent of instructor.

BIOL 310 Developmental Biology (3)
BIOL 310L Developmental Biology Lab (2)
Embryonic growth and development of plants and animals. Also errors in normal development, cancer, aging, and related topics. Three lectures and two two-hour laboratories per week.

Certain courses are only offered during the fall or spring semesters, or may be available only in alternating years. It is the student's responsibility to meet with their advisor and/or check the two-year course planning calendar on the Mesa State College website for course availability. Learn more at **mesastate.edu/academics.**

BIOL 315 Epidemiology (3)
Characteristic patterns of communicable disease occurrence as related to individuals, geographic location, and time; factors affecting disease occurrence, the nature of vital statistics, sampling procedures, and study design. An independent project is required.

BIOL 320 Plant Systematics (3)
Systematic botany encompassing principles of classification, nomenclature, and evaluation of current classifications of angiosperms.

BIOL 321 Taxonomy of Grasses (2)
BIOL 321L Taxonomy of Grasses Lab (2)
A study of the grass family and grass-like plants (sedges and rushes) dealing with the evolution, classification, and identification of these plants. Two lectures and two two-hour laboratories per week. Prerequisite: BIOL 107 or consent of instructor.

BIOL 331 Insect Biology (3)
BIOL 331L Insect Biology Lab (2)
Insect taxonomy, evolution, ecology, and physiology. Insect collection required. Three lectures and two two-hour laboratories per week. Prerequisites: BIOL 106.

BIOL 332 Introduction to Geographic Information Systems (2)
BIOL 332L Introduction to Geographic Information Systems Lab (1)
Basic knowledge of the fundamentals of GIS with regard to theoretical, technical, and application issues. Prerequisites: GEOL 305 or GEOG 131.

BIOL 333 Marine Biology (3)
Study of the principles that govern biological systems in the ocean with an emphasis on the natural history, ecology, and evolution of marine organisms. Three one-hour lectures per week. Prerequisites: BIOL 106 and BIOL 107, or consent of instructor.

BIOL 335 Invertebrate Zoology (3)
BIOL 335L Invertebrate Zoology Lab (1)
Study of the evolution, morphology, life history, ecology and classification of invertebrates with a focus on non-insect invertebrates. Three one-hour lectures and one two-hour lab per week. Prerequisites: BIOL 106, or consent of instructor.

BIOL 336 Fish Biology (3)
Study of the anatomy and physiology of fish. Topics include ecology, fish diseases, and marine and freshwater fishery techniques. Field trips may be offered. Prerequisite: BIOL 106 or consent of instructor.

BIOL 337 Criminalistics (3)
BIOL 337L Criminalistics Lab (1)
Offers a broad view of forensic techniques and subjects. Case studies of crimes and subsequent investigations discussed along with methodologies in evidence collection and analysis in modern crime laboratories as well as the limitations of such. Students use this course to narrow their field of interest and study. Prerequisites: BIOL 105/105L and CHEM 131/131L.

BIOL 341 General Physiology (3)
BIOL 341L General Physiology Lab (1)
Function of the circulatory, nervous, respiratory, digestive, urinary, reproductive, and endocrine systems of the human body. Three lectures and one two-hour laboratory per week. Prerequisite: BIOL 106 or consent of instructor.

BIOL 342 Histology (2)
BIOL 342L Histology Lab (2)
Microscopic study of tissues and organs. Two lectures and two two-hour laboratories per week. Prerequisites: BIOL l06 or BIOL 107 and consent of instructor.

BIOL 343 Immunology (3)
BIOL 343L Immunology Lab (1)
Immune system of animals with emphasis on human immune response. Includes the immune organs and both cellular and humoral responses. An independent research project is required. Three lectures and one two-hour laboratory per week. Prerequisites: BIOL 302 and BIOL 302L, or BIOL 301 and BIOL 301L.

BIOL 344 Forensic Molecular Biology (3)
BIOL 344L Forensic Molecular Biology Lab (1)
Molecular biology and genetics used in forensic investigations, including the genetic basis of diversity and DNA typing techniques. Prerequisites: BIOL 105/105L and CHEM 131/131L.

BIOL 350 Microbiology (3)
BIOL 350L Microbiology Lab (1)
Growth, morphology, metabolism, genetics and ecology of microorganisms. Includes aspects of industrial microbiology, clinical microbiology, and genetic engineering. Three lectures and one three-hour laboratory per week. Prerequisites: BIOL 105, and CHEM 121/121L or CHEM 131/131L.

BIOL 386 Introduction to Science Education (3)
Theories of learning and how they relate to methods of instruction in science education. Application of instructional methods and the development of course curricula. Required for Teacher Licensure (Secondary) in Biology.

BIOL 387 Structured Research (1-3)
Independent research beyond the scope of the published curriculum. Designed for advanced sophomore and junior level students to participate in research activities under the direction of a specific faculty member. May be repeated for up to 6 credit hours. Prerequisites: sophomore or junior standing, or consent of instructor.

BIOL 395 Independent Study (1-3)

BIOL 396 Topics (1-3)

BIOL 396A Topics (1-3)

BIOL 403 Evolution (3)
Organismal and molecular evolution emphasizing its importance as the unifying theory in biology. Evolution of natural selection on genetic structure of populations. Prerequisites: BIOL 106, 107, 301, and senior standing.

BIOL 405 Advanced Ecological Methods (3)
BIOL 405L Advanced Ecological Methods Lab (2)
Examination of quantitative methods in population, community, and ecosystems ecology. Extensive writing, computer work and field trips are required. Three lectures and two two-hour laboratories per week. Prerequisites: BIOL 105, 106, 107; STAT 311 is recommended.

BIOL 406 Plant-Animal Interactions (3)
Ecological, evolutionary, and applied approaches to the studies of herbivory, ant-plant interactions, pollination, and seed dispersal. Prerequisites: BIOL 105, 106, 107; BIOL 331 is recommended.

BIOL 407 Tropical Field Biology (5)
Field research techniques, ecology and natural history in lowland and montane tropical rainforests of Ecuador. Ten nine-hour labs and fifteen two-hour lectures conducted at biological field stations in Ecuador. Prerequisite: BIOL 105, 106, 107, or consent of instructor.

BIOL 408 Desert Ecology (3)
Overview of desert ecology in the surrounding area and in the United States. Covers ecology of U.S. deserts including specific plant, animal, and human adaptations. Discussion on world deserts. Field trips may be offered. Prerequisites: BIOL 208, and upper division standing or consent of instructor.

BIOL 411 Mammalogy (3)
BIOL 411L Mammalogy Lab (1)
Classification, life histories, and ecology of mammals. Overnight and/or weekend field trips may be required. Two lectures and one two-hour laboratory or three-hour field trip per week. Prerequisites: upper division standing or consent of instructor.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

BIOL 412 Ornithology (3)
BIOL 412L Ornithology Lab (1)
Classification and life history of birds, including field identification. Overnight and/or weekend field trips may be required. Three lectures and one two-hour laboratory or three-hour field trip per week. Prerequisite: upper division standing or permission of instructor.

BIOL 413 Herpetology (3)
BIOL 413L Herpetology Lab (1)
Classification, evolution, morphology and ecology of amphibians and reptiles. Overnight or weekend field trips may be required. Three lectures and one two-hour laboratory per week. Prerequisites: upper division standing or consent of instructor.

BIOL 414 Aquatic Biology (3)
BIOL 414L Aquatic Biology Lab (1)
Classification, life history, and ecology of aquatic animals. Overnight and/or weekend field trips may be required. Three lectures and one two-hour laboratory or three-hour field trip per week. Prerequisite: upper division standing or permission of instructor.

BIOL 415 Tropical Ecosystems (2)
Ecology of rainforests, grasslands, and desert ecosystems of the world. Prerequisites: one year of biological sciences or consent of instructor.

BIOL 416 Ethology (3)
BIOL 416L Ethology Lab (1)
Mechanisms and evolution of behavior utilizing captive animals and field trips. Overnight field trips may be required. Three lectures and one two-hour laboratory per week and several field trips, possibly overnight. Prerequisites: BIOL 106, 107, and consent of instructor.

BIOL 418 Wildlife Management (3)
Examination of wildlife biology and management. Topics covered include managing habitat, mammals, birds, fish, and other small animals. Three one-hour lectures per week. Prerequisites: Upper division standing, BIOL 211 recommended. Corequisite: BIOL 418L.

BIOL 418L Wildlife Field Techniques (2)
Methods for using equipment in the field of wildlife and fisheries management. One one-hour laboratory and one three hour field trip per week. Prerequisite: Upper division standing or consent of instructor. Corequisite: BIOL 418

BIOL 421 Plant Physiology (3)
BIOL 421L Plant Physiology Lab (1)
Plant-water relationships, plant mineral nutrition, photosynthesis, plant growth and development at the molecular and cellular level to account for plant growth at the organismal level. Three lectures and one two-hour laboratory per week. Prerequisites: BIOL 107, CHEM 121 and also recommended CHEM 122.

BIOL 423 Plant Anatomy (3)
BIOL 423L Plant Anatomy Lab (2)
Form, variability, and structure of the tissues comprising the body of the higher plant. Three lectures and two two-hour laboratories per week. Prerequisites: BIOL 107, 107L.

BIOL 425 Molecular Genetics (3)
Nature and expression of genetic information at the molecular level in prokaryotic and eukaryotic organisms. Prerequisite: BIOL 301.

BIOL 426 Introduction to Electron Microscopy (2)
BIOL 426L Introduction to Electron Microscopy Lab (2)
History, theory and techniques of Electron Microscopy science. Some detailed knowledge of biology, histology, chemistry and physics is required to thoroughly and competently investigate selected specimens. Special attention will be paid to the operation of the microscope at Mesa State College. Prerequisites: restricted to juniors and seniors with instructor approval.

BIOL 431 Animal Parasitology (3)
BIOL 431L Animal Parasitology Lab (1)
Common and important parasites of domestic animals and man. Ecology, epidemiology, diagnosis, and control are discussed with examples from the Protozoa, Trematoda, Cestoda, Nematoda, and Arthropoda. An independent research project is required. Three lectures and one two-hour laboratory per week.

BIOL 433 Marine Invertebrate Communities (3)
Techniques of collection and laboratory examination of marine invertebrates from intertidal and subtidal habitats. Seven eight-hour labs and seven two-hour lectures will be conducted at a marine biological research station. Prerequisites: BIOL 106, or consent of instructor.

BIOL 441 Endocrinology (3)
BIOL 441L Endocrinology Lab (1)
Anatomy and physiology of the endocrine system of vertebrates. Lab: emphasis on normal and abnormal endocrine functions. Three lectures and one two-hour laboratory per week. Prerequisite: BIOL 106 or consent of instructor.

BIOL 442 Pharmacology (3)
Principles underlying absorption, distribution, metabolism, and excretion of drugs with emphasis on mechanisms of action and physiological responses. Prerequisite: BIOL 209 and 209L, one year of chemistry, and junior or senior standing.

BIOL 450 Mycology (2)
BIOL 450L Mycology Lab (2)
Fungi, with emphasis on comparative morphology and development, classification, physiology, genetics, and ecological relationships. Emphasis will also be placed on the importance of fungi in industry, agriculture, and medicine. Two lectures and two two-hour laboratories per week. Prerequisites: BIOL 107 or consent of instructor.

BIOL 482 Senior Research (2)
Designed to introduce students to appropriate procedures for conducting literature reviews, designing experiments, collecting and analyzing data, and preparing written and oral presentations of such experiments. Two lectures per week or equivalent. Prerequisites: senior standing, 2.80 GPA, and consent of instructor.

BIOL 483 Senior Thesis (2)
Students prepare an in-depth thesis elaborating on a major conceptual issue(s) in biology. The purpose of the thesis is to ascertain the student's ability to collect a broad array of information and integrate this into a logical conceptual framework that traverses organizational levels of living systems. The thesis topic must be approved by the instructor. Prerequisites: senior standing and consent of instructor.

BIOL 487 Advanced Research (1-3)
Provides students with an individualized research experience on a topic approved and directed by a specific faculty member. A detailed report in the form of a scientific journal article must be provided to the instructor. May be repeated for up to 6 credit hours. Prerequisites: BIOL 482 or consent of instructor; BIOL 387 is highly recommended.

BIOL 493 Lab Teaching Practicum (1)
Assist in laboratory teaching to support instruction and enhance student learning. Prerequisite: Junior/senior standing or consent of instructor. Must have taken the course to be supported or have sufficient experience in other related courses.

BIOL 494 Seminar (1)
Current problems, topics, and research procedures in biological sciences and medicine. Topics announced each semester. Prerequisites: sophomore standing and consent of instructor.

BIOL 495 Independent Study (1-3)

Certain courses are only offered during the fall or spring semesters, or may be available only in alternating years. It is the student's responsibility to meet with their advisor and/or check the two-year course planning calendar on the Mesa State College website for course availability. Learn more at **mesastate.edu/academics.**

BIOL 496 Topics (1-3)

BIOL 499 Internship (2-10)
Work experience obtained on a job where assignments are primarily biological projects. The amount of credit awarded is determined by the school based on the nature of the assignment. Prerequisites: biology major, senior standing with either a 2.80 GPA in major courses, completion of BIOL 482, or consent of instructor.

BIOL 533 Marine Invertebrate Communities (3)
Techniques of collection and laboratory examination of marine invertebrates from intertidal and subtidal habitats. Design and execution of a research project and a written paper are required. Seven eight-hour labs and seven two-hour lectures will be conducted at a marine biological research station. Prerequisites: Undergraduate degree in biology or a related field AND instructor permission.

Business (BUGB)

BUGB 101 Introduction to Business (3)
American business system operations in the economy, business functions, and interrelations between the businessman and his environment. Prerequisites: Can be taken for credit only by students who have completed fewer than 15 credit hours of BUGB, ACCT, MANG, MARK, OFAD, TRAV, CISB, or FINA courses.

BUGB 105 Freshman Business Seminar (2)
Overview of Mesa State Business Department for prospective majors. Operational strategies and teamwork are developed via cases and projects. Students will gain exposure to all functional business areas through readings, discussions, and presentations. Cannot be taken for credit by students who have completed more than 15 credit hours of business courses.

BUGB 141 Business Mathematics (3)
Fundamental review of whole numbers, decimals, and fractions. Emphasis is placed on percentage applications to solving various business problems in the areas of buying and selling merchandise, inventory computations, interest computations on notes and savings, consumer credit and installment computation, home mortgage loans, and business depreciation computations.

BUGB 211 Business Communications (3)
Development of a non-defensive, supportive, communication system effectively applied to interpersonal and written transactions within the business organization. Prerequisite: ENGL 111.

BUGB 221 Insurance (3)
Common types of protection offered by insurance, including fire, theft, comprehensive, life, automobile, accident, and health. Emphasis on application of insurance to individuals and small business firms.

BUGB 231 Survey of Business Law (3)
Application of law as it applies to employees and individuals not dealing with legal matters of organizations. Topics include contracts, agency law, personal property, business organizations and form, and commercial paper. Especially suited for non-business majors. Students contemplating or enrolled in a four year degree program should take BUGB 349. No credit allowed if credit already established in BUGB 351.

BUGB 241 Income Tax (3)
Personal income tax, including filling out personal tax returns, exemptions, determining taxable income, adjustments to gross income, itemized deductions, rental income, depreciation, capital gains and losses. Not for students with an accounting emphasis.

BUGB 249 The Business of Life (3)
Development of financial and economic literacy to improve personal decision making in the areas of: personal budgeting; developing a personal financial plan including consumer credit, taxes and purchasing a home; money and interest rates; the market economy; free enterprise and competition; and the consequences of externalities, public goods and increasing costs in the service sector.

BUGB 293 Cooperative Education (3-6)
Practical workplace experience under the joint supervision of the employer and the internship coordinator. Designed for non-business majors working in the business environment.

BUGB 340 Applied Financial Management for Emerging Businesses (3)
Overview of basic accounting and finance concepts for non-business majors owning or employed by small business/entrepreneurial ventures.

BUGB 349 Legal Environment of Business (3)
Legal framework of business including foundations of the American legal system, anti-trust law, property law, contracts and sales, negotiable instruments, agency relationships, torts, labor law, international business law and the social environment of business. Prerequisites: junior or senior standing or consent of instructor.

BUGB 351 Business Law I (3)
Contracts (formation, requirements, interpretation, discharge, and enforcement), agency law, and other contracting parties. Includes analysis of the concept of personal property and an introduction to the partnership form of ownership. Prerequisites: junior or senior standing or consent of instructor.

BUGB 352 Business Law II (3)
Corporate form of ownership as artificial persons doing business; Uniform Commercial Code as the primary law covering sales (terms of sales contracts, product liability, performance, and breach); commercial paper (instruments used as a monetary substitute, such as checks, drafts, and promissory notes); credit (security interests in real and personal property); and real property. Prerequisite: BUGB 351 or consent of instructor.

BUGB 393 Cooperative Education (3-9)
Cooperative Education internships provide non-business students an opportunity to put their education to practical use in the workplace under the joint supervision of an organization-based supervisor and a Mesa State College faculty coordinator. Written consent of coordinator required prior to registration.

BUGB 395 Independent Study (1-3)

BUGB 396 Topics (1-3)

BUGB 401 International Business (3)
Current international topics in the disciplines of finance, management, and marketing. Concepts, analytical tools, and models are introduced to help explain the diversity and complexity of the international business environment. Prerequisites: senior standing.

BUGB 493 Cooperative Education (3-12)
See description of BUGB 393.

BUGB 495 Independent Study (1-3)

BUGB 496 Topics (1-3)

BUGB 500 Advanced Business Law and Ethics (3)
Emphasizes the regulations, statutes and cases that impact business on a daily basis. Topics covered include contract law, negotiations, labor law, the Uniform Commercial Code, and the law of business organizations to include limited liability companies.

BUGB 510 Global Business (3)
Explores international management concepts and procedures and their importance to modern managers. Operating in multi-national, multi-cultural managerial environment, the modern manager must

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understand business and management from a global perspective. Emphasis is placed on comparing and contrasting management practices in different nationstates and how this might affect decisions concerning risk, investment, human resources, finances, operations, manufacturing and production in a multi-national business.

BUGB 520 Seminar in Current Business Topics (1-3)
Develops topics of current interest in the business world. Areas included are effective communication strategies, ethics, and the global dimension of business.

BUGB 530 Research Design (3)
Examines the design of research projects. Topics will include selection of the problem, secondary data, historical research, descriptive research, experimental research, the tools of research, and interpretation of data.

BUGB 590 Thesis (6)

BUGB 595 Research Practicum (3)
The cooperative education course provides the student with the opportunity to apply classroom theory to on-the-job experiences related to classroom instruction. During the cooperative education course, the students work off-campus at professional business positions. The student will be required to write his/her own course objectives with the approval of the cooperative education graduate advisor. Prerequisites: ACCT 500, BUGB 500, FINA 500, MANG 500, MANG 501, MANG 510, MARK 500.

Chemistry (CHEM)

CHEM 100 Chemistry and Society-GTSC1 (3)
Introduction to selected topics in chemistry. Nonmathematical approach with frequent lecture demonstrations and particular attention to chemical technology and its impact on society.

CHEM 121 Principles of Chemistry-GTSC1 (4)
CHEM 121L Principles of Chemistry Lab-GTSC1 (1)
Introduction to fundamental principles of chemistry. Designed for students planning a major in science as well as students with a non-science major. Topics include atomic structure, bonding, periodic table, gas laws, mass relationships, solution theory, oxidation-reduction, electrochemistry, and ionic equilibrium. Four lectures and one three-hour lab per week. Prerequisite: mastery of high school algebra.

CHEM 122 Principles of Organic Chemistry-GTSC1 (4)
CHEM 122L Principles of Organic Chemistry Lab-GTSC1 (1)
Introduction to the chemical and physical properties of selected classes of organic compounds. Four lectures and one three-hour laboratory per week. Prerequisite: CHEM 121 or 131 or one year of high school chemistry and consent of instructor.

CHEM 123 Introduction to Environmental Chemistry (4)
Application of basic chemistry principles to the environment. Topics include aquatic and atmospheric chemistry, biogeochemical cycling of the elements required for life and structural organic chemistry as it applies to the physical and biological properties of persistent organic pollutants. Four lectures per week. Prerequisites: CHEM 121 and 121L.

CHEM 131 General Chemistry-GTSC1 (4)
CHEM 131L General Chemistry Lab-GTSC1 (1)
Fundamental principles of chemistry. Designed for students planning a major in science. Topics include atomic structure, bonding, periodic law, kinetic theory, gas laws, stoichiometry, phase relationships, solutions, oxidation-reduction, electrochemistry, and equilibrium. Four lectures and one three-hour laboratory per week. Prerequisites: One year of high school chemistry, mastery of algebra, and a passing score on the chemistry assessment exam or CHEM 121, or consent of instructor. CHEM 131 and 131L are prerequisites for CHEM 132 and 132L.

CHEM 132 General Chemistry-GTSC1 (4)
CHEM 132L General Chemistry Lab-GTSC1 (1)
Fundamental principles of chemistry. Designed for students planning a major in science. Topics include atomic structure, bonding, periodic law, kinetic theory, gas laws, stoichiometry, phase relationships, solutions, oxidation-reduction, electrochemistry, and equilibrium. Four lectures and one three-hour laboratory per week. Prerequisite: one year of high school chemistry and mastery of high school algebra. CHEM 131 and 131L are prerequisites for CHEM 132 and 132L.

CHEM 151 Engineering Chemistry (4)
CHEM 151L Engineering Chemistry Lab (1)
Selected fundamentals of inorganic chemistry. Topics include stoichiometry, periodic law, bonding, gas laws, phase relations, solutions, electrochemistry, and equilibrium. Designed for students of physics and engineering (except chemical engineering.) Four lectures and one three-hour laboratory per week. Corequisite: MATH 113. Prerequisites: high school chemistry and satisfactory entrance examination scores or CHEM 121.

CHEM 196 Topics (1-3)

CHEM 211 Quantitative Analysis (3)
CHEM 211L Quantitative Analysis Lab (1)
Classical methods of analysis, treatment of experimental data, and the underlying logic of quantitative methods. Topics include gravimetric, volumetric, and potentiometric methods. Three lectures and one three-hour laboratory per week. Prerequisite: CHEM 132.

CHEM 296 Topics (1-3)

CHEM 300 Environmental Chemistry (4)
Aquatic and atmospheric chemistry. Basic chemical, physical and biological properties of organic pollutants. Topics include smog formation, stratospheric ozone depletion, greenhouse gases, acid mine waste formation, biogeochemistry, and bioaccumulation of halogenated organics. Prerequisites: CHEM 122 or 132.

CHEM 311 Organic Chemistry (4)
CHEM 311L Organic Chemistry Lab (1)
Chemical and physical properties of the major classes of organic compounds. Four lectures and one three-hour lab per week. Prerequisite: CHEM 132 or consent of instructor.

CHEM 312 Organic Chemistry (4)
CHEM 312L Organic Chemistry Lab (1)
Chemical and physical properties of the major classes of organic compounds. Four lectures and one three-hour lab per week. Prerequisite: CHEM 132 or consent of instructor.

CHEM 315 Biochemistry (3)
CHEM 315L Biochemistry Lab (1)
Classical biochemistry concerned with the control of metabolism, the production of energy, the relationship of structure to function, carbohydrates, lipids, proteins, and nucleic acids. Three lectures and one three-hour laboratory per week. Prerequisite: CHEM 312/312L.

CHEM 321 Physical Chemistry I (3)
CHEM 322 Physical Chemistry II (3)
Application of methods of physics to chemistry. Study of equilibrium properties of bulk matter, quantum theory with applications to molecular structure. Statistical mechanics used to understand the microscopic origin of thermodynamic laws. Calculations of macroscopic thermodynamic properties made from molecular properties. Connection made in kinetics between thermodynamics, quantum theory and statistical mechanics for study of time-dependent processes. Prerequisites: CHEM 132 and MATH 152, and either PHYS 112 or PHYS 132.

CHEM 341 Advanced Lab I (2)
CHEM 342 Advanced Lab II (2)
Experiments from analytical, inorganic, organic, physical, and biological chemistry designed to show the application of theory to chemical problems. In addition to a list of possible core experiments, each student chooses other experiments according to individual interests. Two three-hour laboratories per week. Prerequisites: CHEM 211/211L; 312/312L; and 321.

CHEM 395 Independent Study (1-3)

CHEM 396 Topics (1-3)

CHEM 397 Structured Research (1-3)
Chemical research under the direct guidance of a faculty member. Designed for sophomore through senior level students. Prerequisite: Permission of instructor.

CHEM 411 Main Group Elements (3)
A study of the periodic trends in non-transition elements. Topics include atomic and molecular structure, periodicity, acid-base relationships, and the descriptive chemistry of nontransition elements. Prerequisite: CHEM 322.

CHEM 412 Transition Elements (3)
A study of the periodic trends in transition elements. Topics include coordination compounds, symmetry and group theory, spectroscopy, and the descriptive chemistry of the transition elements. Prerequisite: CHEM 411.

CHEM 421 Advanced Organic Chemistry I (3)
Selected topics in organic chemistry are discussed in detail. Prerequisites: CHEM 312, 322.

CHEM 422 Advanced Organic Chemistry II (3)
Similar in content to CHEM 421, but without overlap in topics. CHEM 421 is not a prerequisite for 422. Prerequisites: CHEM 312, 322.

CHEM 431 Instrumental Analysis (3)
CHEM 431L Instrumental Analysis Lab (1)
Modern instrumental methods of analysis. Topics include signals and noise, atomic spectroscopy, molecular spectroscopy, electroanalytical chemistry and chromatographic separation methods. Three lectures and one 3-hour laboratory per week. Prerequisite: CHEM 211/211L.

CHEM 482 Senior Research I (2)
CHEM 483 Senior Research II (2)
A formal research project undertaken with the guidance of a faculty member. The results will be presented as a formal scientific paper in a format suitable for publication.

CHEM 494 Seminar (1)
Student, faculty, and other speakers present a variety of topics in chemistry and related fields. Prerequisites: Chemistry major with senior standing or consent of instructor.

CHEM 495 Independent Study (1-3)

CHEM 496 Topics (3)

CHEM 596 Topics: (1-3)

Computer-Aided Drafting Technology (CADT)

CADT 101 Introduction to Computers (1)
Introduction to hardware and software including operating systems, word processing, spreadsheets, desktop publishing and presentation software.

CADT 105 Print Reading - Residential, Commerical, Industrial (3)
Reading and interpreting blueprints for residential, commercial, and industrial construction, including site plans. How to do a project take-off and project site layout.

CADT 106 Computer Aided Design (3)
Basic principles of computer aided design through the development of practical drawing problems using a computer. One one-hour lecture and two one and one-half laboratories per week. Corequisites: MAMT 105 and MAMT 106.

CADT 107 Advanced Computer Aided Design (3)
Advanced work in computer aided drafting principles including 2-D, 3-D, shading, etc. One one-hour lecture and two one and one-half hour laboratories per week. Prerequisites: CADT 106, or consent of instructor.

CADT 108 CAD - Mechanical (3)
Offers the student basic principles of computer aided drafting through the development of practical drawing problems using CAD software on the computer. One one-hour lecture and two one and one-half laboratories per week.

CADT 109 CAD-Mechanical Advanced (3)
Advanced work in computer aided drafting principles including 2-D and 3-D shading, solid based modeling and parametric modeling. One one-hour lecture and two one and one-half hour laboratories per week. Prerequisite: CADT 108.

CADT 110 CAD Application (4)
This course offers the student an opportunity to apply skills and knowledge gained in earlier courses. The student will work on computer aided drawings relating to their career field of interest and advice of faculty. Intern or Co-op may be substituted with approval of advisor. Two one-hour lectures and two one and one-half hour laboratories per week. Prerequisites: CADT 107 and CADT 109.

CADT 120 Introduction to Still Images (3)
Students study the fundamentals of the animation software, identify and understand the command panels, toolbars, and special controls of the software's functional features, design and create 3D modeled drawings that are animated and rendered scenes. Course work will include lecture, lab, and presentation of 3D drawings. Prerequisites: CADT 107 or CADT 109.

CADT 130 CAD-Civil (3)
Civil drafting will explore the aspects of current day mapping and topography, instruments, conventions and practices, contours, traverses, profiles, surveying, and photogrammetry through CAD drawings. Students will be introduced to GIS, graphical interface systems. One one-hour lecture and two one and one-half hour laboratories per week. Prerequisites: CADT 107 or CADT 109.

CADT 135 CAD Civil II (3)
Exploration of advanced aspects of current day mapping and topography. An in-depth instruction on road plan and profiles, cut and fill techniques and further instruction using skills from CADT 130. Prerequisite: CADT 130.

CADT 140 CAD - Architectural Theory (2)
Architectural theory will introduce the student to three major areas of architecture: basic structures and their design, building codes and career opportunities. Corequisites: CADT 141, 142 and 142L.

CADT 141 Structural Materials (3)
This course will identify the properties and applications of the materials of industry. Codes, standards and testing will be emphasized in the fields of architecture. There will be an introduction to mechanical, electrical, plumbing and systems requirement. Corequisites: CADT 140, 142 and 142L.

CADT 142 CAD - Residential Architecture (3)
Residential Architectural CAD will provide the student with a realistic residential project that will begin with schematic design and take him/her through to construction documents. Construction documents will include: site plan, floor plan, exterior elevations, foundation plan, floor framing plan, roof framing plan, building section, and a variety of construction details. One one-hour lecture and two one and one-half hour laboratories per week. Corequisites: CADT 140 and 141. Prerequisites: CADT 107 or CADT 109.

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CADT 143 CAD-Commercial Architecture (3)
Commercial Architectural CAD will emphasize the creation of commercial project plans that will begin with schematic design and continue through to construction documents. Construction documents will include site plan, foundation floor slab plan, roof framing plan, building section and a variety of construction details. One one-hour lecture and two one and one-half hour laboratories per week. Prerequisites: CADT 107, and/or CADT 109, and CADT 140.

CADT 150 Advanced Images - Introduction to Animation (4)
Advanced work in computer aided drafting principles including 3-D renderings and animation techniques. One one-hour lecture and two one and one-half hour laboratories per week. Prerequisite: CADT 120.

CADT 195 Independent Study (1-3)

CADT 196 Topics (1-3)

CADT 296 Topics (1-3)

Computer Information Systems (CISB)

CISB 100 Basic Computer Skills (1)

CISB 101 Business Information Technology (3)
Introduction to computing and software. Computing systems in a business environment and applicable software will be covered. Relevance of technology to society, information needs of business and management, security and lifecycle of these components will be addressed.

CISB 205 Advanced Business Software (3)
Advanced skills in using electronic spreadsheets and database management software developed through a combination of lecture, demonstration, and hands-on projects. Content ranges from using numerous functions to developing customized applications with macros in spreadsheets, and from creating tables, reports, forms and queries to creating appropriate relationships and developing customized applications in database software.

CISB 206 Business Database Application Programming (3)
Continuation of CISB 205. Emphasis on solving problems through application programming in a relational database management system. Prerequisite: CISB 205.

CISB 210 Fundamentals of Information Systems (3)
Exploration of information systems in a business environment. Use of information systems to improve business processes and organizational goals. Introduction to hardware, software, ethical issues, career opportunities, and organizational uses of information systems.

CISB 260 Information System Architecture (3)
Principles and applications of information systems hardware and systems software. Theoretical underpinnings, installation, configuration, and operation emphasized. Prerequisite: CISB 210.

CISB 295 Independent Study (1-3)

CISB 305 Solving Problems Using Spreadsheets and Statistical Software (3)
Critical analysis and problem solving using tools in spreadsheet and statistical software. Decision support utilizing spreadsheet tools covered by hands-on cases, book tutorials and lecture materials. Structured problems, semi-structured problems and what-if scenarios explored. Prerequisites: CISB 101 or CISB 205 or instructor permission.

CISB 306 Solving Problems Using Relational Database Management Software (3)
For business students who have minimal background with databases. Assists in understanding the importance of data management in organizations through hands-on experience in solving business problems using relational database management software. Effective data analysis and effective form and report development emphasized. Prerequisites: CISB 101 or CISB 210.

CISB 331 Advanced Business Programming (3)
Procedural and object-oriented software engineering methodologies using modern business languages. Emphasis on data definition and measurement, record and file processing, report generation and other traditional business information systems applications using modern methods of top-down, structured design. Other concepts include developing screen editors, abstract data types, and data structures including sequential, random and indexed files. Prerequisite: CISB 206 or CSCI 110.

CISB 341 Quantitative Decision Making (3)
Application of inferential statistics to realistic business situations; use of quantitative tools to enhance business decision-making ability. Descriptive statistics for data summarization, probability theory, distributions, estimation, and index numbers with emphasis on hypothesis testing, analysis of variance, regression/correlation, time series, and introduction to operations research and linear programming. Prerequisites: MATH 113 or higher, and STAT 200.

CISB 392 Information Systems Theory and Practice (3)
Exploration and application of Information System theory for organizational success. Examination of managerial, user, and IS professional roles within information systems. Prerequisite: CISB 210.

CISB 393 Cooperative Education (3-12)

CISB 395 Independent Study (1-3)

CISB 396 Topics (1-3)

CISB 400 Data Communications and Network Management (3)
Exploration of modern telecommunication and networking technologies. Issues related to network media, including cost, design and management of LANs and WANs addressed. How networks and networking provide and enhance business communications. Networking standards, standards organizations, security, privacy, installation and configuration issues will be in classroom discussions with hands-on assignments. Prerequisite: CISB 260 or TECI 260.

CISB 442 Systems Analysis & Design (3)
Analysis and logical design of information systems. Practice in project management during team-oriented analysis and design of a departmental level system. Prerequisite: CISB 210, and CISB 206 or CSCI 110.

CISB 451 Database Administration (3)
Continuation of CISB 442 Systems Analysis and Design. Covers development and implementation of conceptual and detailed physical system design using proper database tools and methods. Prerequisites: CISB 205 and CISB 442 and ACCT 202.

CISB 460 Electronic Commerce Systems (3)
Comprehensive examination of electronic commerce, how it is conducted and managed, and its opportunities, limitations, issues and risks. Coverage of technological infrastructure that supports e-commerce systems, plus the implications of such systems in the business environment. Exercises include exploration of e-commerce web sites and features, plus discussion and demonstration of state-of-the art e-commerce tools. Prerequisite: CISB 210 or permission of instructor.

CISB 470 Management of Information Systems (3)
Reviews the development of analyzing information use by organizations with different types of information systems. The conceptual foundations of information systems and the development, operation, management, uses, parties, control, structure, and impact of these systems will be addressed. Analysis and design of information systems is stressed through case study projects, emphasizing the role of computing in information systems and design of computer-based systems, expert systems, decision support systems and executive information systems. Prerquisites: Junior or senior status.

CISB 471 Advanced Information Systems (3)
Capstone course for the BS in CIS. Integrates management information needs, decision-making criteria, and design of interactive user interfaces. Design and development of computerized management control systems for major functional modules of an organization investigated, utilizing database management systems, distributed processing and structured systems development. Prerequisites: CISB 331, CISB 392, CISB 400, CISB 442, CISB 451 and CISB 460, or consent of instructor.

CISB 491 Directed Readings in Computer Information Systems (1-3)
Study of a leading edge topic within Computer Information Systems under direction of CIS faculty. Prior to registering, the student must meet with the CIS instructor to determine a topic and a method for reporting. For each credit hour registered, the student will read and report on at least 200 pages of scholarly readings. Prerequisites: CIS major, junior or senior status, and permission of instructor.

CISB 493 Cooperative Education (3-12)

CISB 495 Independent Study (1-3)

CISB 496 Topics (1-3)

CISB 500 Management of Information Systems (3)
Reviews the development of an overall framework for analyzing the use of information by organizations along with examples of different types of information systems. The conceptual foundations of information systems and the development, operation, management, uses, parties, control, structure, and impact of these systems will be addressed. The analysis and design of information systems is stressed through case study and projects, emphasizing the role of computing in information systems and design of computer-based systems, expert systems, decision support systems and executive information systems.

CISB 560 Electronic Commerce Systems (3)
A comprehensive examination of the modern paradigm of electronic commerce, how it is conducted and managed, and its major opportunities, limitations, issues, and risks. Coverage of technological infrastructures that support e-commerce systems, plus the implications of such systems in the business environment. Exercises will include exploration of e-commerce web sites and features, plus discussion and demonstration of state-of-the-art e-commerce tools. Prerequisite: Graduate status at Mesa State College.

Computer Science (CSCI)

CSCI 100 Computers In Our Society (3)
The impact of computers on society and individuals; purpose and use of software integrated systems. Intended for students in disciplines outside the natural sciences and mathematics.

CSCI 106 Web Page Design I (3)
Aspects of Web page design such as HTML, Web servers, Web graphics/sound/video, and programs that automate the design of Web sites and scripts. Students will progressively develop their own sites throughout the term using software tools and concepts presented in the class. Prerequisites: Familiarity with Windows.

CSCI 110 Beginning Programming (3)
Introduction to computer programming. Includes syntax and semantics for sequential, selection, and repetition structures, program design and modularization simple and structured data types, and file I/O. Designed for majors outside the scientific disciplines. Subtitle" indicates language of implementation. Prerequisites: MATH 110 OR MATH 113 (either may be taken concurrently) or consent of instructor."

CSCI 110L Beginning Programming Lab (1)
An optional laboratory course to be taken as a co-requisite to CSCI 110. This lab is intended for those students currently enrolled in CSCI 110 who have little or no previous programming/ computer experience. The student taking this course will complete several computer assignments designed to increase the student's knowledge of programming, debugging, and program design. "Subtitle" indicates language of implementation. Prerequisites: MATH 113 or consent of instructor. Corequisite: CSCI 110.

CSCI 111 Computer Science I (4)
Introduction to problem solving techniques with emphasis on modularity, abstraction, analysis, and correctness of algorithm design. Using C/C++ language as a tool, topics covered include data types, control structures, I/O, and functions. Prerequisite: MATH 113 (may be taken concurrently) or consent of instructor.

CSCI 112 Computer Science II (4)
Continuation of CSCI 111 with emphasis on algorithm design and analysis, procedural abstraction, data abstraction, and quality programming style. Topics covered include distinction between dynamic and static variables; various implementations of elementary stacks, queues, trees and lists; comparison of recursive and iterative algorithms; program correctness; and hierarchical design principles. Programming exercises will focus on modularity of design and data abstraction. Prerequisites: CSCI 111.

CSCI 196 Topics (1-3)

CSCI 206 Web Page Design II (3)
A continuation of CSCI 106. Students will learn a scripting language and how to incorporate scripts in web page design. Prerequisites: CSCI 106 or permission of instructor.

CSCI 241 Computer Architecture (3)
Architecture of a representative processor and its assembly language, introduction to hardware description language, register transfers and sequence control, realization of fetch, address, branch and execute cycles, start, stop and reset the computer, interrupt and memory mapped input-output, peripherals and interfacing. Prerequisite: CSCI 112.

CSCI 250 Data Structures (3)
Complexity analysis and program performance; abstract data types such as lists, trees, stacks and queues; sorting; searching and hashing. Prerequisite: CSCI 112.

CSCI 296 Topics (1-3)

CSCI 306 Web Page Design III (3)
Continuation of CSCI 206. Students will consider web site management issues, server-side scripting, security, and database interactions. Prerequisite: CSCI 206 or consent of instructor.

CSCI 310 Advanced Programming: (3)
Exploration of a higher level programming language for CSCI/CISB majors. Specifics will vary with the language covered. Prerequisite: CSCI 111 or CSCI 110.

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CSCI 321 Assembly Language Programming (3)
Introduction to assembler, creating and executing assembly language program, organization of machine under study, data definition, addressing techniques, data movement instruction, branching instructions, flag and PSW registers, arithmetic instructions, macros and their implementation, hardware and software interrupts, storing instructions, typical applications. Prerequisites: CSCI 241.

CSCI 322 Embedded Systems (3)
Introduction to design of embedded systems. Topics include: basic computer electronics, embedded digital communications, and embedded software design. Prerequisite: CSCI 321.

CSCI 330 Programming Languages (3)
Principles and concepts which characterize various classes of high-level, computer programming languages are covered. Topics will include syntax and semantic issues, data types/classes, control structures, binding, and storage allocation. Prerequisites: CSCI 250.

CSCI 333 UNIX Operating Systems (3)
Introduction to systems programming with UNIX. Topics covered include elementary and advanced user commands, file handling, process control, library routines, device drivers, shell programming, and UNIX utilities. Prerequisites: CSCI 112 or knowledge of C++/C.

CSCI 337 User Interface Design (3)
Examination of user interface design (UID) principles. They include rules of perception, systems analysis, user analysis, good design principles, and testing and evaluation of designs. Using an appropriate Rapid Application Development tool, students will design a major project emphasizing UID concepts. Prerequisite: CSCI 250.

CSCI 345 Video Game Design (3)
Exploration of game engine and development theory. Emphasis is on rendering, physics simulation, artificial intelligence, and optimization techniques used in the modern game construction. Students will develop at least three games during the semester. Prerequisite: CSCI 112.

CSCI 370 Computer Security (3)
Networked-computer security, suitable for both CS and CIS majors. Topics include security framework, access control and site security, firewalls, attack methods, elements of cryptography and cryptographic systems, incidence response, security in e-commerce and e-mail, management and policy decisions for security. Prerequisites: CSCI 250 or CISB 400.

CSCI 375 Object Oriented Programming (3)
Advanced programming techniques using the object-oriented paradigm, with emphasis on abstractness of design, encapsulation, inheritance, and polymorphism. Additional topics include design tools and methodologies for determining classes, responsibilities, collaborations, and hierarchies. Prerequisites: CSCI 250.

CSCI 380 Operations Research (3)
Methods of linear and dynamic programming, inventory and replacement models, queuing theory, game theory, PERT, CPM, and simulation. Prerequisites: MATH 152, STAT 200, CSCI 111.

CSCI 393 Internship (1-3)
The internship course provides the student with the opportunity to apply classroom theory to on-the-job experiences. During the internship course, the student will work at approved professional positions related to the computer science field. The student will be required to write and fulfill course objectives with the approval of the internship coordinator. Prerequisites: Junior standing, written consent of internship coordinator.

CSCI 395 Independent Study (1-3)

CSCI 396 Topics (1-3)

CSCI 445 Computer Graphics (3)
Introduction to the use of the computer to produce images: two and three dimensional graphics, algorithms and data structures for hidden lines and surfaces, shading, and reflections. Prerequisites: MATH 152 and CSCI 250.

CSCI 450 Compiler Structure (3)
Structures and techniques used in compiler writing are discussed with emphasis on scanners, symbol tables, parsers and code generation. The front end of a recursive descent parser is written for the semester project. Error analysis and code optimization are discussed as time permits. Prerequisites: CSCI 321. Corequisite: CSCI 330.

CSCI 460 Database Design (3)
Design and implementation of relational databases. Approaches and methods of design and normalization, SQL, integrity, and security will be discussed. Prerequisite: CSCI 250.

CSCI 470 Operating Systems Design (3)
Aspects of computer operating system design and implementation including memory management, processor management, device management, information management and performance evaluation methods. Some knowledge of C is required. Prerequisite: CSCI 250, 321.

CSCI 480 Theory of Algorithms (3)
Techniques for analyzing time and space requirements of computer algorithms. Models are set up for analysis and techniques are applied to algorithms related to sorting and searching, pattern-matching, graph problems and other selected problems. The notion of NP-hard problems is introduced and related problems are discussed. Prerequisites: MATH 152, CSCI 250.

CSCI 482 Theory of Computation (3)
Computability and automata theory introduced. Regular expressions, finite and pushdown automata, Turing machines, grammars and their relationship to automata, Church-Turing hypothesis, incomputable and undecidable functions and equivalence of computability models are covered. Prerequisites: MATH 369, CSCI 250.

CSCI 484 Computer Networks (3)
Topics include: hardware technology for local and long haul networks, circuit and packet switching, interface between computer and network hardware, network architectures and protocols, routing, congestion and flow problems, queuing theory, and reliability issues. Instructors may choose to implement a sample network in which case the contents may be particularized to that network.

CSCI 486 Artificial Intelligence (3)
Introduction to artificial intelligence programming with study of topics such as knowledge representation, expert systems, solution space search, non-deterministic algorithms (neural nets, genetic algorithms), etc. Programs will be written in a selected AI programming language such as Lisp or Prolog. Prerequisites: CSCI 250, MATH 369.

CSCI 490 Software Engineering (3)
Exploration of the philosophy of software engineering. Software project planning, requirement analysis, software system design and strategies, software design tools, program and system testing, system maintenance, and economics are examined. Prerequisites: CSCI 250 and CSCI 330.

CSCI 494 Seminar (1-3)
Discussions of specialized topics by students, faculty, or visiting professors. One or two one-hour meetings per week.

CSCI 495 Independent Study (1-3)

CSCI 496 Topics (1-3)

Certain courses are only offered during the fall or spring semesters, or may be available only in alternating years. It is the student's responsibility to meet with their advisor and/or check the two-year course planning calendar on the Mesa State College website for course availability. Learn more at **mesastate.edu/academics.**

Construction Management (CONM)

CONM 316 Construction Materials and Methods (3)
Materials and methods utilized in design and construction of vertical and horizontal projects. Course addresses proper construction methods and governing trade association standards. Sustainability and ethics relating to specification, ordering, and installation of construction materials incorporated. Prerequisites: CONC 104, CONC 208, and CONC 251.

CONM 340 Construction Estimating (3)
Application of industry-recognized methods of construction estimating to compile conceptual systems and detailed estimates. Emphasis on students' ability to communicate estimate results in written and oral presentations. Prerequisites: CADT 105, CONC 208, CONC 228, CONC 251, and CONM 316.

CONM 361 Advanced Building Systems (3)
Electrical, heating, ventilation, air conditioning, plumbing, and fire suppression. Emphasis on design, operation, and interaction. Principles of codes, design, methods and materials as applicable to the construction industry included. Building system controls for smart buildings integrated in each component. Prerequisite: CONC 161.

CONM 362 Structure Analysis - Statics/ Materials Strength (3)
Behavior of structural components and systems plus a broad overview of structural engineering analysis/design process. Principles of statics and strength of materials including properties of materials, forces, equilibrium, stresses and strains studied. Emphasis on understanding behavior of structural components associated with construction processes. Prerequisites: STAT 200, MATH 141, PHYS 112, and PHYS 112L.

CONM 370 Managing Safety and the Regulatory Environment (3)
Impact of safety on the construction industry, in-depth discussions concerning application of O.S.H.A. Safety and Health Standards for the Construction Industry. Course emphasis on safety management training for jobsite supervisory personnel. Additionally, various regulatory requirements encountered in construction addressed. Prerequisite: Junior status.

CONM 401 Construction Financial Management (3)
Contract methods for recognizing revenue and its impact on financial statements. Analysis of financial statements and their use in developing budgets, projecting cash needs, pricing construction projects and forecasting impact of business decisions on profit addressed. Prerequisite: FINA 301.

CONM 462 Soil and Foundation Construction (3)
Properties of subsurface materials and principles of subsurface construction. Topics include soil classification and testing, soil mechanics, earthmoving operations and foundation systems from a contractor's perspective. Techniques of subsurface investigations and subsequent interpretation of soil reports studied to understand foundation construction methods and related field problems. Prerequisite: CONM 362.

CONM 472 Planning and Scheduling (3)
Planning, scheduling and controlling construction operations. Emphasis on the planning phase of construction projects, logic diagrams, network-based scheduling techniques, and computer-assisted scheduling. Application of industry-recognized scheduling methodology to construction projects. Emphasis on communicating project schedules in written and oral presentations. Prerequisite: CONC 265.

CONM 480 Project Management (3)
Exploration of professional practice as a constructor requiring understanding of working and contractual relationships among all participants in any project process. Required participation in construction simulation involving initial planning to project completion (includes budgets, estimating, scheduling, financing and creating contracts, and other construction forms as necessary). Prerequisites: CONM 340 and CONM 401.

CONM 499 Construction Internship (1-6)
College/construction industry partnership to provide real-life working experiences. The internship program's primary purpose is to prepare the construction management student with leadership responsibilities in a technologically oriented, diverse, dynamic and global construction environment. Prerequisites: Senior status and consent of instructor.

Construction Technology (CONC)

CONC 100 Introduction to the Trades (1)
Introduction to construction work for all crafts. Reviews history of the trade, describes apprentice programs, identifies career opportunities for construction workers, and addresses the attributes and characteristics workers should possess.

CONC 101 Construction Safety and Regulations (3)
Construction safety and its effect on productivity and employee morale. Application of basic principles of accident prevention. Complying with the various federal, state, and local laws governing safety (OSHA), hazardous chemicals, and drugs in the work place.

CONC 102 Electrical Safety (1)
Introduction to safety rules and regulations for trainees entering the construction trades. Necessary precautions for various electrical hazards found on the job. OSHA mandated lock/tag out procedures.

CONC 103 Rigging Safety Basic (1)
Introduction to the safe use of slings, hardware, hoists, and hitches used in rigging operations. Also highlights critical safety issues and accepted rigging techniques and practices.

CONC 104 Architectural/Civil Print Reading (2)
Reading and hand-drafting prints as used in industry, application of that information to various architectural and civil industries.

CONC 116 Building Materials (3)
Introduction to building materials and methods commonly used today. Includes interior and exterior materials from foundations to roof systems.

CONC 117 Building Materials Testing (3)
Introduction to the properties and testing of materials used in today's construction projects. This includes wood products, metal, soil, aggregates, concrete, and asphalt. Prerequisites: CONC 116 or Instructor Permission.

CONC 120 General Construction Framing (2)
Basic framing methods and materials utilizing a hands-on framing lab. The basics of wood and metal framing. Other methods of construction such as Masonry, EIFS, and Stucco construction also covered.

CONC 121 Floor Framing (2)
Cover framing basics as well as the procedures for laying out and constructing a wood floor using common lumber as well as engineered building materials. Prerequisite: Instructor Permission.

CONC 122 Wall and Ceiling Framing (2)
Focus on the procedures for laying out and framing walls and ceilings, including roughing-in door and window openings,

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construction corners and partition T's, bracing walls and ceilings, and applying sheathing. Prerequisite: Instructor Permission.

CONC 125 Roof Framing Materials and Methods (2)
Introduction to the application techniques and estimation of asphalt and wood roofing products and accessories including gutters and flashing. Prerequisite: Instructor Permission.

CONC 130 Windows & Exterior Doors (2)
Identification of various types of windows, skylights, and exterior doors. Provides instructions for installation. Instruction for installing weather-stripping and locksets. Prerequisite: Instructor's Permission.

CONC 131 Exterior Trim (1)
Cornice and rake construction, corners, windows, and door trim. Installation of soffits, fascia and similar trim items and the estimating and selection of proper materials. Prerequisite: Instructor Permission.

CONC 140 Stair Construction/Layout (2)
Wooden stairs used in residential and commercial construction and procedures for laying out stairs, cutting out stringers and installing and finishing stairs. Prerequisite: Instructor Permission.

CONC 147 General Interior Finishes/Trim (2)
An overview of interior finishes including general painting and wall coverings. Installation and finishing of drywall and suspended ceilings. Material choices and installation techniques of various interior trim, including doors, baseboard, and casement. Prerequisite: Instructor Permission.

CONC 161 Building Mechanical/ Electrical (3)
Introduction to basic electrical, plumbing, heating, ventilation, and air conditioning systems found in residential and commercial building. Basic theory and design concepts included. Prerequisite: Instructor Permission.

CONC 196 Topics (1-3)

CONC 201 Building Permits, Codes, Ethics (1)
Introduction to the basic concepts of code enforcement and governmental regulations concerning building and the process through which these regulations are enforced. Also aspects of the trade and how to assure an ethical approach when dealing with owners/ customers, contractors, and suppliers in meeting industry-building standards.

CONC 202 Introduction to Concrete Materials (1)
Describes the properties, characteristics, and uses of various types of cement, aggregates, and other materials that, when mixed together, form different types of concrete. Procedures for concrete volume estimates and testing of freshly mixed concrete are covered.

CONC 203 Concrete Placing & Finishing (2)
Tools, equipment, and procedures required for handling, placement, and finishing of concrete at the job site. Safety procedures for handling, placing, and finishing concrete are emphasized. Prerequisite: Instructor Permission.

CONC 205 Job Site Layout & Measuring (2)
Job-site layout as outlined on a set of blueprints for a given construction site. Includes complex plot plans and multi-unit site layouts. Prerequisite: Instructor Permission.

CONC 208 Construction Equipment (3)
Basic understanding of general equipment and methods employed in different sectors of the construction industry. Areas covered are factors affecting the selection of equipment, rental versus ownership of equipment, estimating earthwork quantities, figuring equipment production, equipment management, and quality control of projects.

CONC 215 Form & Foundation Systems (2)
Construction of forms for continuous, stepped continuous, pier, and concrete foundations. Also covered are edge forms used for on-grade concrete slabs and similar structures. Forming terms, parts of forms, and the procedures for construction of basic footing and edge forms are included. Prerequisite: Instructor Permission.

CONC 218 Surveying (3)
The fundamentals of modern plane surveying techniques and basic surveying instruments. Emphasis on construction-related aspects of surveying and the development of skills in using surveying field information. Prerequisites: UTEC 107 or MATH 113

CONC 228 Estimating & Cost Control (3)
The estimation process, the role of the estimator, types of estimation, CSI Divisions, bid/contract documents, change order pricing, value engineering, design build projects, and estimate compilation and cost controls. Prerequisites: CADT 105, CONC 116, CONC 161, CONC 208 or Instructor Permission

CONC 231 Construction Ethics (2)
Aspects of the trade and how to assure an ethical approach is taken when dealing with owners/customers, contractors, and suppliers. Industry standards, customer expectations, warranty issues, and bid practices are topics to be discussed.

CONC 235 Thermal & Moisture Methods and Materials (1)
Selection and installation of various types of insulating materials in walls, floors, and attics. Covers the uses and installation practices for vapor barriers and waterproofing materials.

CONC 245 Project Management (3)
Principles of project planning, scheduling, estimation and management. Emphasis on the basic skills required to supervise personnel including oral communication, problem identification, problem solving and decision-making. The course will also cover how to control productivity on the project. Prerequisites: CONC 228 or Instructor Permission

CONC 251 Construction Prep: Codes, Permits (3)
Legal aspects including liens, contracts, bids, specifications, building permits and licensing, inspections and the Uniform Building Code. Introduces intra-trade coordination, remodeling and additions, construction practices, construction management and supervision.

CONC 253 Cabinets & Countertops (3)
Selection, installation, and terminology of factory built cabinets and countertops. Includes various types and design, and examines estimation of cost of cabinets and installation. Prerequisites: Instructor Permission

CONC 265 Planning & Scheduling for the Construction Supervisor (3)
Planning the sequence, duration and relationship of activities for a construction process. Communicate the plan to contractual parties and to use the plan as reference point for examining project changes. Includes planning for safety, organization, manpower, problem solving, and site layout. Prerequisite: Instructor Permission

CONC 270 Practical Applications (4)
Supplemental coursework with practical work experience related to educational program. Students will work under the immediate supervision of experienced personnel at the business location. Students will work on construction sites or projects related to their career field of interest with advice of faculty. Prerequisite: Instructor Permission

CONC 296 Topics (1-3)

Criminal Justice (CRMJ)

CRMJ 101 Basic Police Academy (6)
Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning. Prerequisite: Permission of Academy Director.

CRMJ 102 Basic Police Academy II (12)
Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning. Prerequisite: Permission of Academy Director.

CRMJ 105 Basic Law (8)
Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances. Prerequisite: Permission of Academy Director.

CRMJ 106 Arrest Control (3)
Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force. Prerequisite: Permission of Academy Director.

CRMJ 107 Law Enforcement Driving (3)
Covers the skills, knowledge and abilities required for operation of a law enforcement vehicle. Emphasizes defensive driving. Enables students to demonstrate skills by driving a vehicle under simulated conditions. Prerequisite: Permission of Academy Director.

CRMJ 108 Firearms (3)
Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force. Prerequisite: Permission of Academy Director.

CRMJ 201 Introduction to Criminal Justice (3)
Philosophy, history and development of the American criminal justice system. Survey of the role of law enforcement agencies, the courts, jails, prisons, probation and parole in both juvenile and adult systems.

CRMJ 296 Topics (1-3)

CRMJ 301 Criminal Procedure (3)
Analysis of landmark U.S. Supreme Court cases and their impact on operating procedures of law enforcement and the courts. Focuses on Fourth, Fifth, and Sixth Amendments to the U.S. Constitution. Prerequisites: CRMJ 201 or POLS 101 or consent of instructor.

CRMJ 310 The Police Process (3)
Basic features of policing in the United States. Police work, police organizations, police officers, and the critical problems facing policing today are examined in social and political context. Prerequisite: CRMJ 201.

CRMJ 320 Corrections (3)
The role of corrections in the criminal justice system: history, guiding philosophies and theories, treatment approaches, custody issues, and supervision of offenders on probation and parole. Prerequisite: CRMJ 201 or consent of instructor.

CRMJ 328 American Court Systems (3)
The American court system; local, state, and national, including consideration of the impact of prosecutors, defense personnel, judges, and other factors on court decisions and the criminal justice system. Prerequisites: POLS 101 or ADJU 101.

CRMJ 370 Criminology (3)
Major paradigms in the field of criminology and major contributions tot he field in the U.S. and abroad. Emphasis on socio-historical development and philosophical movements that shaped criminological theory and its implications for criminal justice. Prerequisites: CRMJ 201 or SOCO 260.

CRMJ 395 Independent Study (1-3)

CRMJ 396 Topics (1-3)

CRMJ 410 Criminal Investigations (3)
Analysis of the investigative process and techniques employed in a contemporary criminal investigation. Considers theory and methodology of criminal investigation, and legal dynamics relative to achieving the major goals of an investigation. Use of practical and interactive experiences involves students in the investigative process by utilizing field exercises such as evidence collection and preservation, simulations related to crime scenes, surveillance activities, victim/suspect interviews and interrogations, and sound case preparation. Prerequisite: CRMJ 310.

CRMJ 412 Constitutional Law (3)
An analysis of American constitutional theory as articulated by the U. S. Supreme Court. Specific topics include the nature of judicial review, the powers of the President and Congress, federalism, the regulation of commerce and the development of substantive due process. Prerequisite: POLS 101 or consent of instructor.

CRMJ 415 Counter-Terrorism and Law Enforcement (3)
Emergence of modern terrorism and efforts to combat it. Strategies and systems involved in protecting against and responding to threats. Survey of major policies, practices, concepts, and challenges confronting practitioners in the complex field of counterterrorism and homeland security. Exploration of various issues facing law enforcement agencies in counterterrorism efforts. Prerequisite: CRMJ 310.

CRMJ 420 Criminal Law (3)
Philosophy, history and current state of criminal law with emphasis on analysis and application of Colorado Statutes and the American Law Institute Model Penal Code. Prerequisite: CRMJ 201, or POLS 101, or consent of instructor.

CRMJ 425 Trial, Evidence and Legal Advocacy (3)
Development of written and oral advocacy skills through critical examination of legal issues, focusing on the interpretation of statutory laws and analysis of relevant case law to formulate sound, persuasive argument throughout the adversarial process. Considers trial procedure and the law of evidence. Prerequisites: CRMJ 201; CRMJ 301 or CRMJ 420 is recommended before taking this course.

CRMJ 426 Mock Trial (1)
Taken in conjunction with participation in collegiate mock trial competition. Examination of procedure of trial adversarial process, and participation in mock trial competition. Prerequisites: None. Recommended: CRMJ 425.

CRMJ 470 Restorative Justice (3)
Exploration of an emerging paradigm in the field of criminal justice. Challenges notions of both crime and justice. Explorations of alternative notions to these issues which question the dominant paradigm and a justice system based upon retribution. Examination of the foundation of restorative justice, the principles which guide restorative practices, and gain a critical perspective of this emerging paradigm. Awareness created of the various approaches to crime and justice

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other than the one institutionalized within our American criminal justice system. Prerequisite: CRMJ 201 or SOCO 260.

CRMJ 494 Senior Seminar in Criminal Justice (3)
Arranged tutorials and seminars with Criminal Justice faculty and students, design and execution of a research project and submission of a senior thesis. Prerequisites: CRMJ 201 and senior status.

CRMJ 495 Independent Study (1-3)

CRMJ 496 Topics (1-3)

CRMJ 499 Internship (3)
Provides the student with opportunities to apply theoretical principles in a structured organizational or work environment. Student must have prior instructor and site approval at least one semester in advance of the internship. The student must complete 180 clock hours of service. Prerequisites: senior status in the Criminal Justice concentration and consent of instructor.

Culinary Arts (CUAR)

CUAR 101 Food Safety & Sanitation (2)
Exploration of the basic rules of sanitation, food-borne illnesses, safe food temperatures, and safe food handling techniques.

CUAR 121 Introduction to Food Production (1)
Fundamental principles of commercial kitchen operations.

CUAR 122 Introduction to Hot Foods (1)
Fundamental principles of stocks, soups, sauces, gravies, and products in the kitchen.

CUAR 123 Introduction to Garde Manger (1)
Fundamental principles of cold foods and non-alcoholic beverage preparation.

CUAR 124 Food Production Applications (1)
Basic cooking principles and practices in the production of stocks, soups, sauces and gravies, and vegetables, starches, fruits, salads, and dressing.

CUAR 125 Introduction to Foods (4)
Exploration of fundamental principles and practices of a commercial kitchen, including the organization of work, and basic cooking methods. Corequisite: CUAR 101 or permission of instructor.

CUAR 129 Center of the Plate (4)
Provides the basic methods for preparation and cooking of a variety of complete meals in a commercial kitchen. Corequisite: CUAR 125 and CUAR 101 or permission of instructor.

CUAR 131 Vegetables, Starches, Pastas, Breakfast and Short Order Cookery (1)
Preparation of vegetables, starches, breakfast and grilled items.

CUAR 132 Center of the Plate: Meat (1)
Preparation of a variety of meat dishes.

CUAR 133 Center of the Plate: Poultry, Fish (1)
Preparation of a variety of seafood and poultry dishes.

CUAR 134 Food Production Applications (1)
Practical application of food production techniques related to courses CUAR 121, CUAR 122, CUAR 123, CUAR 134, CUAR 131, CUAR 132, and CUAR 133. Prerequisite: CUAR 124.

CUAR 136 Bartending (2)
Preparation, service, and legal responsibilities of alcohol service.

CUAR 141 Basic Baking Principles and Ingredients (1)
Fundamentals of baking terminology, principles of baking, and the characteristics and functions of the main ingredients used in bakery production.

CUAR 142 Basic Yeast-Raised Products and Quick Breads (1)
Application of basic yeast-raised baking principles.

CUAR 143 Cakes, Pies and Pastry, Cookies (1)
Application of basic cake, pie, pastry, and cookie production.

CUAR 144 Baking Applications (1)
Application of basic baking principles and production.

CUAR 145 Introduction to Baking (4)
Exploration of basic baking principles, the characteristics and functions of ingredients, and production techniques for a variety of baked goods in a commercial kitchen. Corequisites: CUAR 125 and CUAR 129.

CUAR 156 Nutrition for the Hospitality Professional (3)
Fundamentals of nutrition as they apply to the food service industry.

CUAR 157 Menu Planning (3)
Introduction to planning menus and integrating them into foodservice operations.

CUAR 190 Dining Room Management (4)
Explores service related skills common to the "front of the house" through hands-on training in a restaurant dining room. Prerequisite: permission of instructor."

CUAR 196 Topics: (1-3)

CUAR 233 Advanced Line Prep and Cookery (4)
Preparation of complete meals to order. Emphasizes cooking "center of the plate" items such as meat, fish, seafood, and poultry in a commercial kitchen. Prerequisites: CUAR 125, CUAR 129, and CUAR 145, or permission of instructor.

CUAR 255 Supervision in the Hospitality Industry (3)
Skills necessary for creating a goal-oriented environment utilizing management principles in the hospitality industry.

CUAR 256 Marketing in the Hospitality Industry (3)
Development and application of marketing concepts as applied to the food service industry.

CUAR 261 Cost Controls (3)
Explores the costs usually found in the food service industry and the techniques used to control them.

CUAR 262 Purchasing for the Hospitality Industry (3)
Explores the purchasing, selection, and procurement of food and supplies in the hospitality industry.

CUAR 281 Internship (2-6)
Places students in an actual work situation where they participate in the operation of a foodservice establishment.

CUAR 296 Topics: (1-3)

Dance: Academic (DANC)

DANC 115 Dance Appreciation-GTAH1 (3)
Exploration of the roots and trends of the art of dance from the primitive to the contemporary. Introduction of esthetic guidelines for looking at dance as it relates to America and the world.

DANC 160 Beginning Ballet (1)
Including terminology, theory, history & critical analysis of the Art Form. Corequisite: DANC 160L.

DANC 160L Beginning Ballet Lab (1)
Including alignment, balance, endurance, flexibility, and strength, in elementary technical proficiency. Corequisite: DANC 160. This course fulfills one KINA activity credit.

DANC 169 Beginning Modern Dance (1)
Including terminology, theory, history & critical analysis of the Art Form. Corequisite DANC 169L

DANC 169L Beginning Modern Dance Lab (1)
Alignment, balance, endurance, flexibility, and strength, in elementary technical proficiency. Corequisite: DANC 169. This course fulfills one KINA activity credit.

DANC 174 Beginning Jazz Dance (1)
Including terminology, theory, history & critical analysis of the Art Form. Corequisite DANC 174L.

DANC 174L Beginning Jazz Dance Lab (1)
Including alignment, balance, endurance, flexibility and strength in elementary technical proficiency. Corequisite: DANC 174. This course fulfills one KINA activity requirement.

DANC 177 Beginning Tap Dance (1)
Including terminology, theory, history & critical analysis of the Art Form. Corequisite DANC 177L.

DANC 177L Beginning Tap Dance Lab (1)
Including alignment, balance, endurance, flexibility and strength in elementary technical proficiency. Corequisite: DANC 177. This course fulfills one KINA activity credit.

DANC 180 Beginning Hip Hop Dance (1)
Fundamentals of Hip Hop. Prerequisite: DANC 174, 2 credit hours of jazz technique, or consent of instructor.

DANC 196 Topics (1-3)

DANC 219 Ballroom Dance (2)

DANC 225 The Healthy Dancer (3)
Exploration into conditioning, nutrition, injury prevention, basic anatomy and motivational techniques unique to the dance student.

DANC 250 Dance Improvisation (2)
Introduction to and application of basic theories of dance improvisation.

DANC 255 Dance Composition (3)
Introduction to and application of basic theories of choreography, including principles of critical analysis. Prerequisite: DANC 250 or consent of instructor.

DANC 280 Theory and Practice of Hip Hop (1)
Intermediate theory and practice of Hip Hop. Prerequisite: DANC 180 or consent of instructor.

DANC 296 Topics (1-3)

DANC 310 Dance Pedagogy (3)
Theory and application of methods of teaching dance techniques. Prerequisite: 4 semester hours of dance technique (ballet, jazz, modern and/or tap).

DANC 315 History and Philosophy of Dance I (3)
Cultural and historical exploration of dance, from its primitive roots to the 20th Century. Prerequisite: ENGL 112.

DANC 316 History and Philosophy of Dance II (3)
Cultural, historic, and aesthetic exploration of dance in the 20th Century. Prerequisite: DANC 315.

DANC 328 Music Analysis for Dance (3)
Exploration of rhythmic structure inherent in dance, including music notation, rhythmic coordination as it relates to dance and musicality of the body. Prerequisite: consent of instructor.

DANC 355 Advanced Dance Composition (3)
Advanced investigation and application of theories of choreography, including critical analysis of the art form. Prerequisite: DANC 255 or consent of instructor.

DANC 494 Senior Dance Capstone (1)
Exploration of and preparation for dance professions/careers for upper division dance students.

DANC 495 Independent Study (1-3)

Dance: Performing (DANP)

DANP 157 Repertory Dance (1)
Student participation in the production of a dance supervised by faculty or guest artist. Students must audition. Corequisite: one technique class.

DANP 257 Repertory Dance (1)
Student participation in the production of a dance supervised by faculty or guest artist. Students must audition. Corequisite: one technique class.

DANP 270 Modern IIA (2)
Intermediate modern dance technique. Prerequisite: DANC 169 and 169L, or consent of instructor.

DANP 271 Modern IIB (2)
Intermediate modern dance technique. Prerequisite: DANP 270 or consent of instructor.

DANP 274 Jazz IIA (2)
Intermediate jazz dance technique. Prerequisite: DANC 175 and 175L, or consent of instructor.

DANP 275 Jazz IIB (2)
Intermediate jazz dance technique. Prerequisite: DANP 274 or consent of instructor.

DANP 276 Ballet IIA (2)
Intermediate ballet technique. Prerequisite: DANC 160 and 160L, or consent of instructor.

DANP 277 Ballet IIB (2)
Intermediate ballet technique. Prerequisite: DANP 276 or consent of instructor.

DANP 278 Tap IIA (2)
Intermediate tap dance technique. Prerequisite: DANC 177 and 177L, or consent of instructor.

DANP 279 Tap IIB (2)
Intermediate tap dance technique. Prerequisite: DANC 278 or consent of instructor.

DANP 297 Choreography Practicum I (1)
Student practice in choreography and producing an original dancework. May be repeated once for credit.

DANP 357 Repertory Dance (1)
Student participation in the production of a dance work supervised by faculty or guest artist. Prerequisites: by audition, DANP 257, or consent of instructor. Corequisite: one technique class.

DANP 370 Modern IIIA (2)
Intermediate to advanced modern dance technique. Prerequisite: Consent of instructor.

DANP 371 Modern IIIB (2)
Intermediate to advanced modern dance technique. Prerequisite: DANP 370 or consent of instructor.

DANP 374 Jazz IIIA (2)
Intermediate to advanced jazz dance technique. Prerequisite: consent of instructor.

DANP 375 Jazz IIIB (2)
Intermediate to advanced jazz dance technique. Prerequisite: consent of instructor.

DANP 376 Ballet IIIA (2)
Intermediate to advanced ballet technique. Prerequisite: consent of instructor.

DANP 377 Ballet IIIB (2)
Intermediate to advanced ballet technique. Prerequisite: Consent of instructor.

DANP 378 Tap IIIA (2)
Intermediate to advanced tap dance technique. Prerequisites: Consent of instructor.

DANP 379 Tap IIIB (2)
Intermediate to advanced tap dance technique. Prerequisite: consent of instructor.

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DANP 397 Choreography Practicum II (1)
Student practice in choreography and producing an original dance work. May be repeated once for credit. Prerequisite: DANP 297 or consent of instructor.

DANP 457 Repertory Dance (1)
Student participation in the production of a dance work supervised by faculty or guest artist. Prerequisite: by audition, DANP 357, or consent of instructor. Corequisite: one technique class.

DANP 470 Modern IVA (2)
Intermediate/advanced modern dance technique. Prerequisite: Consent of instructor.

DANP 471 Modern IVB (2)
Advanced modern dance technique. Prerequisite: consent of instructor.

DANP 474 Jazz IVA (2)
Advanced jazz dance technique. Prerequisite: instructor consent.

DANP 475 Jazz IVB (2)
Intermediate to advanced jazz dance technique. Prerequisite: Consent of instructor.

DANP 476 Ballet IVA (2)
Intermediate to advanced ballet technique. Prerequisite: Consent of instructor.

DANP 477 Ballet IVB (2)
Advanced ballet technique. Prerequisite: consent of instructor.

DANP 478 Tap IVA (2)
Intermediate to advanced tap dance technique. Prerequisite: Consent of instructor.

DANP 479 Tap IVB (2)
Advanced tap dance technique. Prerequisite: consent of instructor.

DANP 497 Choreography Practicum III (1)
Student practice in choreography and producing an original dance work. May be repeated once for credit. Prerequisite: DANP 397 or consent of instructor.

Economics (ECON)

ECON 201 Principles of Macroeconomics-GTSS1 (3)
ECON 202 Principles of Microeconomics-GTSS1 (3)
Basic concepts of economics. Courses must be taken in sequence and are not open to freshmen.

ECON 301 Labor-Management Relations (3)
Organized labor movement, employer labor policies, collective bargaining, wages and wage regulation, social insurance, and public labor policy. Counts as management course for BBA candidates. Prerequisites: ECON 201, 202, or equivalent.

ECON 310 Money and Banking (3)
Monetary, credit, and banking systems in the United States. Counts as management course for BBA candidates. Prerequisites: ECON 201, 202, or equivalent.

ECON 312 Economic History of the United States (3)
Economic development of the United States and the nation's economic institutions from the colonial period to the present. Prerequisites: ECON 201, 202 or HIST 131, 132, or consent of instructor.

ECON 320 History of Economic Ideas (3)
Development of economic analysis, thought, theories, and doctrines from the ancient world to recent times. Prerequisites: ECON 201, 202, or equivalent.

ECON 342 Intermediate Macroeconomic Theory (3)
Factors determining the level and rate of growth of GDP, the inflation rate, and the employment rate. Policies that have been (or may be) used to influence these variables, and empirical evidences on the relationships among variables are also studied. Prerequisites: ECON 201, 202, or equivalent, or consent of instructor.

ECON 343 Intermediate Microeconomic Theory (3)
Problems of resource scarcity in a market economy. Emphasis is placed on an analysis of resource allocation under different forms of competition. Covers theory of the firm, theories of market structure, efficiency, equity, and the application of public policy. Prerequisites: ECON 201, 202, or equivalent, or consent of instructor.

ECON 395 Independent Study (1-3)

ECON 396 Topics (1-3)

ECON 401 Economic Organization and Public Policy (3)
Political economy of economic organization and public policy including analysis of the structure/conduct dimensions of industry and government institutions and their effects on resource allocation, income distribution, and economic performance. Antitrust, regulation, and other policies are treated concurrently. Counts as a management course for BBA candidates. Prerequisites: ECON 201, 202 or equivalent.

ECON 410 Public Sector Economics (3)
Political economy of government finance including analysis of the effects of government revenue and expenditure policies on resource allocation, income distribution, and economic performance. Counts as a management course for BBA candidates. Prerequisites: ECON 201, 202, or equivalent.

ECON 420 International Economics (3)
International trade theory and policy such as balance of payments analysis, international investment flows, and the position of the dollar in foreign exchange transactions. Prerequisites: ECON 201, 202, or equivalent.

ECON 495 Independent Study (1-3)

ECON 496 Topics (1-3)

ECON 530 Managerial Economics (3)
The focus of this course is the application of economic theory and its tools to everyday business activities. Topics to be covered include the analytical tools of economics, macro and micro economic theory, and factors that influence demand.

Education: Early Childhood Education (EDEC)

EDEC 102 Introduction to Early Childhood Professions Lab Experiences (3)
Hands-on field experience for the student, who will demonstrate knowledge of child growth and development, guidance techniques, planning and implementation of curriculum, assessment techniques, and application of laws and standards. Prerequisite: EDEC 220.

EDEC 148 Guidance Strategies for Children (3)
Techniques to enhance guidance strategies through positive social skills, violence prevention, and anger management. The importance of family and community resources will also be addressed.

EDEC 195 Independent Study (1-3)

EDEC 196 Topics (1-3)

EDEC 216 Early Childhood Education Administration: Human Relations (3)
The roles and relationships among children, families, early childhood professionals and community resources. Consideration will be given to family structures, communication skills, roles of support organizations, team building, evaluation tools and advocacy. Prerequisites: EDEC 220; EDEC 264 and 240 may be taken concurrently.

EDEC 220 Introduction to Early Care and Education (3)
An overview of history, philosophy, current and legal issues, licensing and health regulations, facilities, and programming for young children. Provides prospective teachers opportunity to assess roles played in dealing with children of diverse ethnic, cultural, and economic backgrounds. Field experience includes observation and participation in school settings three hours/week.

EDEC 230 Curriculum and Development: Infant/Toddler (3)
Curriculum for the age group birth-2 years. Content emphasis is on maintaining healthful, safe, environmental activities to stimulate language, social emotional, cognitive, and physical development.

EDEC 238 Early Childhood Development 0-8 Years (3)
Theories, current research and developmental ages and stages of children, conception to 8 years.

EDEC 240 Curriculum and Development: Early Childhood (3)
Methods of creating and implementing curriculum based on their understanding of developmentally appropriate practice for children, birth to age 8. Application of the teaching/learning process, and of managing the learning environment, will draw from research and practical application. Prerequisites: EDEC 220, and EDEC 238 or PSYC 233 (may be taken concurrently).

EDEC 250 Exceptionalities in Early Education (2)
Exploration of disabilities, assessment activities, and learning environments for children with diverse needs in the early years (birth-age 8). Prerequisites: EDEC 220, 230, 240, and EDEC 238 or PSYC 233.

EDEC 264 Administration in Early Education (3)
Overview of management concepts applicable in a variety of early education settings. Course content focuses on management of programs and personnel, program and staff development, fiscal administration, and evaluation. Prerequisites: EDEC 220, 230, 240.

EDEC 290 Early Literacy for the Young Child (2)
In-depth view of early literacy development in a changing, diverse society intended for the prospective early childhood teacher. Includes research about the language and literacy of young children. Explores how learners develop the ability to communicate and interact from birth to age 8. Prerequisites: EDEC 220.

EDEC 297 Practicum (1-2)
Supervised experience working with children and families in early care and education settings. Accepted by the State Department of Child Care Services for licensing purposes. Scheduling is flexible. Prerequisite: consent of instructor.

EDEC 299 Student Teaching in Early Education (5)
Full time supervised teaching experience which allows the student teacher the opportunity to apply developmentally appropriate, standards-based practice, theories, and philosophies acquired in coursework. Provides incremental responsibility for teaching, supervision, and management of young children birth to 6 years. A seminar is an integral part of the experience requirement. Prerequisites: EDEC 220, 230, 240.

Education: Teacher Licensure (EDUC)

EDUC 100 Introduction to Libraries (3)
Provides a general overview of libraries and their roles in schools and the community. The evolving role of libraries will be explored in the context of professional/school settings, different types of libraries, and the evolution of information, access, and distribution in a digital age.

EDUC 101 Information Literacy (3)
A theoretical approach to the flow of information and a practical introduction to the skills necessary to navigate information systems. Print and electronic resources; legal, economic, social and public aspects of information resources; strategies for critical evaluation of information resources; library services and resources.

EDUC 150 American Education: Past, Present, and Future (3)
An honors course that includes an historical view of public and private education; current challenges; demographic, sociological, technological, and economic trends and their effects on education; educational reform; comparative education systems; and future directions for public and private schooling in America.

EDUC 196 Topics (1-3)

EDUC 211 Foundations of Education (2)
Overview of the teacher education program and profession. Introduction to social, legal, historical, political, theoretical, and philosophical foundations of education. Course time will include school and educational services visitations. Prerequisites: ENGL 111, ENGL 112, SPCH 102, PSYC 233, all with a B or higher, MATH 105 for Elementary Education students or MATH 110 for Secondary/K12 Education students, declaration of a major in one of the approved courses of study at Mesa State College leading to licensure.

EDUC 340 Pedagogical and Assessment Knowledge for Teachers: Early Childhood, Birth - 8 years (3)
Exploration of age/grade level teaching strategies, motivation principles, informal and formal assessments, planning strategies, and classroom management techniques. Includes a minimum of 20 hours of field experience. Prerequisites: Admission to the Teacher Education Program or permission of the instructor, EDUC 211. May be taken concurrently with EDUC 341 and EDUC 343.

EDUC 341 Pedagogy and Assessment: K-6/Elementary (3)
Exploration of age/grade level teaching strategies, motivation principles, informal and formal assessments, planning strategies, and classroom management techniques. Includes a minimum of 20 hours of field experience. Prerequisite: EDUC 211 and admission to the Teacher Education Program. Corequisite: EDUC 343.

EDUC 342 Pedagogy and Assessment: Secondary and K-12 (3)
Exploration of age/grade level teaching strategies, motivation principles, informal and formal assessments, planning strategies, and classroom management techniques. Includes a minimum of 20 hours of field experience. Prerequisites: EDUC 211 and admission to the Teacher Education Program. Corequisite: EDUC 343

EDUC 343 Teaching to Diversity (3)
Study of differences in student development and approaches to learning. Addresses ethnic, linguistic, gender, sexuality, socioeconomic, ability/disability, and community diversity. Includes a minimum of 20 hours of field experience. Prerequisites: EDUC 211 and admission to the Teacher Education Program. Corequisites: EDUC 341 or EDUC 342.

EDUC 395 Independent Study (1-3)

EDUC 396 Topics (1-3)

EDUC 440 Methods of Teaching Language and Literacy: EC (4)
Survey of current research in early/emergent language and literacy, including language development and acquisition, family and community roles, teaching and learning strategies, literature in the curriculum, and

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

ongoing assessment in instruction. Includes a minimum of 50 hours of field experience. Prerequisites: Admission to the Teacher Education Program and EDUC 211; may be taken concurrently with EDUC 451.

EDUC 441 Methods of Teaching Language and Literacy: Elementary (6)
Exploration of student literacy development in multiple literacies, with a focus in emergent and content area literacy. Study and application of instructional strategies for the reading/ writing process, phonemic awareness, vocabulary, comprehension strategies, reading and writing workshops, literacy assessment, and integration of literacy across the curriculum, particularly in the social sciences. Field placements will be in a lab school environment for three mornings of school per week. Includes a minimum of 120 hours field experience. Prerequisites: Admission to the Teacher Education Program and EDUC 211, EDUC 340 and/or 341 and 343. Corequisites: EDUC 451 and EDUC 461.

EDUC 442 Integrating Literacy Across the Curriculum: Secondary and K-12 Art (5)
Exploration of multiple forms of student literacies. Study and application of instructional strategies for various literary genres across the middle school and high school curriculum with a focus in philosophical and theoretical perspectives from multicultural texts. Candidates develop a fully integrated unit to implement in field study. Includes a minimum of 60 hours of field experience. Prerequisites: Admission to the Teacher Education Program and EDUC 211, EDUC 342, EDUC 343; Corequisites: EDUC 497 and EDUC 497A, B, C, D, or E as appropriate to content area.

EDUC 451 Methods of Teaching Mathematics: Early Childhood/Elementary (3)
Prepares students to teach mathematics to elementary age students. Focus on major concepts, procedures, and reasoning processes that define number systems and number sense, geometry, measurement, statistics and probability, and algebra. Theoretical and practical approaches support learning about standards, content, delivery, and assessment. Field placements will be in a lab school environment for three afternoons of school per week. Includes a minimum of 60 hours of field experience.. Prerequisites: Admission to the Teacher Education Program, EDUC 211, EDUC 340 and/or 341, 343, MATH 105, MATH 205, and MATH 301. Corequisites: EDUC 441 and EDUC 461.

EDUC 461 Methods of Teaching Science and Social Studies: Early Childhood/Elementary (3)
Study and application of content standards in science, health, civics, geography, history, and economics for elementary age students. Develops teaching proficiency and an understanding of integration of these subjects across the content areas. Field experiences are incorporated into the math/literacy block during three school days per week. Prerequisites: Admission to the Teacher Education Program, EDUC 211, EDUC 340 and/or EDUC 341, EDUC 343. Corequisites: EDUC 441 and EDUC 451.

EDUC 485 Modes of Inquiry (2)
Science, social studies and the arts as modes of inquiry. Designing standards based instruction as guided and exploratory interdisciplinary inquiries. Integrating seven interdisciplinary compulsories across the curriculum. This course involves a minimum of forty-five hours of preparation/ online interaction and participation in 15 hours of classroom seminars within approximately four weeks. Prerequisite: Admission to the (cohort) PBL program. Corequisite: EDUC 491.

EDUC 486A Accommodating Diverse and Exceptional Needs K-6 (2)
Designing, developing, implementing and assessing the effectiveness of instruction differentiated for relevant student diversity and exceptionalities; teaming with specialists; current state and federal guidelines and mandates. Field-based with online and classroom components. This course involves a minimum of five hours of preparation/ online interaction per week and participation in three (Sept/Oct/Nov) six-hour classroom seminars. Prerequisites: EDUC 485 and EDUC 491. Corequisites: EDUC 492A, EDUC 487 and EDUC 488

EDUC 487 Literacy Education K-6 (2)
Designing, developing, implementing and assessing well-aligned, well-differentiated, discipline-specific curriculum, instruction, assessments and accommodations unique to K-6 Literacy Education. Field based with online and classroom components. This course involves a minimum of five hours of preparation/online interaction per week and participation in three (Sept/Oct/Nov) six-hour classroom seminars. Prerequisites: EDUC 485 and EDUC 491. Corequisites: EDUC 492A, EDUC 483 and EDUC 488.

EDUC 488 Math Education K-6 (2)
Designing, developing, implementing and assessing well-aligned, well-differentiated, discipline-specific curriculum, instruction, assessments and accommodations unique to K-6 Math Education. Field based with online and classroom components. This course involves a minimum of five hours of preparation/online interaction per week and participation in three (Sept/Oct/Nov) six-hour classroom seminars. Prerequisites: EDUC 485 and EDUC 491. Corequisites: EDUC 492A, EDUC 486 and EDUC 487.

EDUC 491 PBL I: Foundations of Curriculum, Instruction, and Assessment (9)
Designing cycles of instruction that are well-aligned (with standards and assessments); well-differentiated (for content, the learner and the situation): and support the development of self-directed learning. Course has online and classroom components. This June/July course involves a minimum of six hours of preparation/online interaction per day and participation in ten six-hour classroom seminars. Prerequisite: Admission to the (cohort) PBL program. Corequisite: EDUC 485.

EDUC 492A PBL 2: Directed Teaching - Elementary Education (12)
Full-time mentored August-December placement to develop accuracy, fluency and complexity in the design, implementation and assessment of instruction through observing, assisting, teaming (80%) and solo teaching. Prerequisites: EDUC 485 and EDUC 491. Corequisites: EDUC 486A, EDUC 487 and EDUC 488.

EDUC 495 Independent Study (1-3)

EDUC 496 Topics (1-3)

EDUC 497 Content Methodology Practicum (3)
Theory and practice of differentiated instruction, lesson study design and implementation, and basic concepts of Understanding by Design. Introduction to comprehensive school reform and curriculum design, as well as a focus on the improvement of teaching methodology across the curriculum. Includes a minimum of 80 hours of field experience. Prerequisites: Admission to the Teacher Education Program and EDUC 211, EDUC 342 and 343, and completion of all content area courses. Corequisites: EDUC 442 and EDUC 497A, B, C, D, or E as required by degree.

EDUC 497A Methods of Teaching Secondary English (1)
Theory and practice of teaching English language arts in middle and high schools. Current strategies, programs, materials, and media for the development of curriculum in reading comprehension, language,

linguistics, comprehension, and rhetoric. Lesson preparation and presentation required. Prerequisites: Admission to Teacher Education Program and EDUC 211, EDUC 342 and 343, and completion of all English content area courses required for degree. Corequisites: EDUC 442 and EDUC 497.

EDUC 497B Methods of Teaching Secondary Social Sciences (1)
Theory and practice of teaching history and the social sciences in middle and high schools. Current strategies, programs, materials, and media for the development of curriculum in United States history, world history, government, civics, political science, geography, economics, and behavioral science. Lesson preparation and presentation required. Prerequisites: Admission to Teacher Education Program and EDUC 211, EDUC 342 and 343, and completion of all history content area courses required for degree. Corequisites: EDUC 442 and EDUC 497.

EDUC 497C Methods of Teaching Secondary Mathematics (1)
Theory and practice of teaching mathematics in middle and high schools. Current strategies, programs, materials, and media for the development of curriculum in arithmetic, basic algebra, functions, graphing, probability, statistics, and integrated math. Lesson preparation and presentation required. Prerequisites: Admission to the Teacher Education Program and EDUC 211, EDUC 342 and 343, and completion of all math content area courses required for degree. Corequisites: EDUC 442 and EDUC 497.

EDUC 497D Methods of Teaching Secondary Science (1)
Theory and practice of teaching science in middle and high schools. Current strategies, programs, materials, and media for the development of curriculum in: scientific methodology, techniques, and history; physical, life, and earth sciences; and science and technology. Lesson preparation and presentation required. Prerequisites: Admission to Teacher Education Program and EDUC 211, EDUC 342 and 343, and completion of all science content area courses required for degree. Corequisites: EDUC 442 and EDUC 497.

EDUC 497E Methods of Teaching Secondary Spanish (1)
Theory and practice of teaching Spanish in middle and high schools. Current strategies, programs, materials, and media for the development of curriculum in: interpretive listening, structure of the language and grammatical accuracy, interpretive reading, and cultural perspectives. Lesson preparation and presentation required. Prerequisites: Admission to Teacher Education Program and EDUC 211, EDUC 342 and 343, and completion of all Spanish content area courses required for degree. Corequisites: EDUC 442 and EDUC 497.

EDUC 499A Teaching Internship and Colloquia: K-2 (6)
Available for students who are pursing ECE/ELED licensure and standards-based education: an eight-week experience. Colloquiums are included and required. Prerequisites: Formal admission to the Teacher Education Program; EDUC 211, 340 and/or 341, 343, 440 and/or 441, 451, 452, 453; all other coursework for bachelor's degree completed; 2.8 cumulative GPA, as well as 2.8 GPA in major and in 2.8 GPA in EDUC classes.

EDUC 499B Teaching Internship and Colloquia: 3-6 (6)
Available for students who are pursuing ECE/ELED licensure and standards-based education: an eight-week experience. Colloquiums are included and required. Prerequisites: Formal admission to the Teacher Education Program; EDUC 211, 340 and/or 341, 343, 440 and/or 441, 451, 452, 453; all other course work for bachelor's degree completed; 2.8 cumulative GPA, as well as 2.8 GPA in major and in 2.8 GPA in EDUC classes.

EDUC 499C Teaching Internship and Colloquia: Elementary (12)
Full-time (40 hrs min/week) supervised teaching experience designed to allow the intern the opportunity to apply standards- based education and theories and philosophies acquired in professional education coursework. Three required colloquia on Thursday evenings are included during this 15-week experience. Students must begin internship a minimum of one week prior to the beginning of the district school semester, regardless of the Mesa State start date. Prerequisites: Formal admission to the Teacher Education Program; EDUC 211, 341, 343, 441, 451, 461 and all other course work for bachelor's degree completed; as well as 2.8 GPA in major and 2.8 GPA in EDUC classes.

EDUC 499D Teaching Internship and Colloquia: Elementary for K-12 (6)
Full-time (40 hrs min/week) supervised teaching experience designed to allow the intern the opportunity to apply standards- based education and theories and philosophies acquired in professional education coursework. Required colloquia on Thursday evenings are included during this eight-week experience. Prerequisites: Formal admission to the Teacher Education Program; EDUC 211, 342, 343, 441 (except Music and HPW majors); appropriate content area methods course/s; all other coursework for bachelor's degree completed; 2.8 cumulative GPA as well as 2.8 GPA in major and 2.8 GPA in EDUC classes. Corequisite: EDUC 499H.

EDUC 499G Teaching Internship and Colloquia: Secondary (12)
Full-time (40 hours min/week) supervised teaching experience designed to allow the intern the opportunity to apply standards-based education and theories and philosophies acquired in professional education coursework. Three required colloquia on Thursday evenings are included during this 15-week experience. Students must begin internship a minimum of one week prior to the beginning of the district school semester, regardless of the Mesa State start date. Prerequisites: Formal admission to the Teacher Education Program; EDUC 211, 342, 343, 442, 497, and 497A, B, C, D, or E as appropriate for content area major; all other course work for bachelor's degree completed; 2.8 cumulative GPA, as well as 2.8 GPA in major and in 2.8 GPA in EDUC classes.

EDUC 499H Teaching Internship and Colloquia: Secondary for K-12 (6)
Supervised teaching experience at the secondary level for students who are pursuing K-12 licensure and standards-based education. Several colloquia are included in the eight-week experience. Prerequisites: Formal admission to the Teacher Education Program; EDUC 211, 342, 343, 442 (except Music and HPW majors); appropriate content area methods course/s; all other course work for bachelor's degree completed; 2.8 cumulative GPA, as well as 2.8 GPA in major and in 2.8 GPA in EDUC classes.

EDUC 499I PBL 3: Directed Teaching: Elementary Education (12)
Continued full-time mentored January-May placement to develop solo professional competence in instructional design, implementation and assessment; and document having had a positive effect on student learning, across fifteen weeks of full-time solo teaching. The colloquium is an integral part of the experience requirement. Prerequisites: Program continuance approval.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

Education: Master of Arts Academic Core (EDUC)

These core courses are required for the Master of Arts in either education cognate.

EDUC 500 Culture and Pedagogy (3)
This course centers on Pedagogy that explores the relationships between culture and learning as well as teacher ideology and belief systems. Examines critical pedagogy, pedagogies of resistance, and teaching for social justice. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 501 Educational Technology (1)
Introduction to instructional design; production and evaluation of computer-based instructional materials and software; selection, evaluation, and use of instructional media. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 502 Theory, Design & Assessment of Curriculum (3)
Historical and conceptual analyses of ways to design, organize, and integrate curricula across subject areas. Review of various instructional design models and fundamental design principles that guide the development of instructional materials. Students will create multimedia materials for incorporation into a final product. Critique of curriculum discourse, process, and product. Teachers' roles in site-based curriculum and staff development. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 503 Introduction to Educational Research and Design (3)
An analysis of differing orientations to evaluation and research. Emphasis on assumptions, attitudes, and expectation of what constitutes scientific knowledge and explanation; relationship of research orientation, methods of inquiry theory, and practice in both qualitative and quantitative research strategies. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

Education: Educational Leadership Cognate (EDLD)

Courses required for the Master of Arts or endorsement.

EDLD 504 Best Practices in Curriculum, Assessment, Instruction (3)
This class will focus on the best practices effective schools use in the areas of curriculum, assessment, and instruction. The alignment of these three areas is critical to the development and sustainability of an effective standards-based educational system that is equitable for all learners. Major topics include curriculum mapping, assessment for and of learning, quality assessment techniques, instructional strategies aligned to curriculum taught and monitored, and effective interventions and differentiated instructional practices. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor.

EDLD 505 Reform and Organizational Change in Education (2)
Social and political assumptions underlying current efforts towards curriculum and instructional reform in elementary and secondary schools. Study of planning and evaluation in schools and school districts including strategic planning, effectiveness and curriculum audits, facility planning, and program planning and evaluation. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDLD 515 Dynamic School Leadership in a Democratic Society: Introduction to School Administration (3)
Study of the nature of educational leadership, administration, and management with reference to current practice at the school building level. Attention will be given to administrative theory and practice, philosophy, and organizational development. Through the examination of leadership, organizational and change models, students will learn how to analyze their school or district using political, structural, human resources and cultural frames. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDLD 520A Principalship I (2)
This introductory course will engage students in developing a comprehensive understanding of the role of the principal as instructional leader and change agent in today's PK-12 schools. Students will be introduced to the skill set needed to be an effective instructional leader and the knowledge base outlined in the Colorado Standards for the licensure of school principals. The historical role of the school principal will be compared and contrasted with the current demands of the modern school principal. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDLD 520B Principalship II (1)
This introductory course will engage students in developing a comprehensive understanding of the role of the principal as instructional leader and change agent in today's PK-12 schools. Students will be introduced to the skill set need to be an effective instructional leader and the knowledge base outlined in the Colorado Standards for the licensure of school principals. The historical role of the school principal will be compared and contrasted with the current demands of the modern school principal. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDLD 530 Legal Aspects of School Administration: Educational Policy and the Law (2)
Study of the relationship between politics, policy and governance of schools, including political systems, inter-governmental relations, power and conflict, and policy development regarding equity, quality and efficiency. While statutory and case law serve as the reference points for study and discussion, the primary objective is to gain an understanding of the relationship between the legal issues of education and the implications for administrative leadership. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDLD 531 School Finance & Budgeting (1)
This course focuses on the role of leaders as orchestrators of business operations of the school and the guardian of business decisions that maximize instructional effectiveness and achievement of organizational goals. Advanced study of the financial structure of public schools, including equity issues, taxation, revenue generation (grants) and budget development. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDLD 535A Internship in EDLD: K-6 (1)
This practicum applies theory and research to the analysis and synthesis of field experiences in leadership. This practicum will be integrated into a concluding research project that structures students' reflections about their growth and vision as a leader. Through exploration of research and practicum methodology students will frame their capstone project proposals leading to final analysis and presentation following the course. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor.

EDLD 535B Internship in EDLD: K-6 (2)
This practicum applies theory and research to the analysis and synthesis of field experiences in leadership. This practicum will be integrated into a concluding research project that structures students' reflections about their growth and vision as a leader. Through exploration of research and practicum methodology students will frame their capstone project proposals leading to final analysis and presentation following the course. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor.

EDLD 540 School Improvement and Accountability (2)
Construction, administration and interpretation of educational assessments for the systematic analysis of student learning and teaching practice. Emphasis on the use and understanding of data analysis to improve teaching and learning in the classroom. Statistical analysis relating to education leadership decision-making applications. Prerequisites: Current teaching certificate, acceptance into M.A. program, and GRE, or permission of instructor if non-degree seeking.

EDLD 542 Instructional Supervision and Management/HR (3)
Study of effective human resources management, including recruitment, selection, induction, staff development, employee assistance, evaluation, contract negotiation and personnel management. The skills of conflict resolution and collaboration will be explored as well as ways to asses the learning organization needs. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDLD 544 Strategies in School Improvement (2)
This course focuses on strategies that lead to school improvement, and ultimately continuous student success. High Performing Schools use strategies that are intentional and well designed. They operate in a learning culture that is dedicated to learning for all. This course will enable the student to analyze the culture of high performing schools and engage in problem solving protocols related to improvement in their own settings. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDLD 545 The Internship Grades 7-12 (3)
This practicum applies theory and research to the analysis and synthesis of field experiences in leadership. This practicum will be integrated into a concluding research project that structures student' reflections about their growth and vision as a leader. Through exploration of research and practicum methodology students will frame their capstone project proposals leading to final analysis and presentation following the course. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor.

EDLD 545A Internship in EDLD: 7-12 (1)
This practicum applies theory and research to the analysis and synthesis of field experiences in leadership. This practicum will be integrated into a concluding research project that structures students' reflections about their growth and vision as a leader. Through exploration of research and practicum methodology students will frame their capstone project proposals leading to final analysis and presentation following the course. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor.

EDLD 545B Internship in EDLD: 7-12 (2)
This practicum applies theory and research to the analysis and synthesis of field experiences in leadership. This practicum will be integrated into a concluding research project that structures students' reflections about their growth and vision as a leader. Through exploration of research and practicum methodology students will frame their capstone project proposals leading to final analysis and presentation following the course. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor.

Education: English for Speakers of Other Languages Cognate (EDUC)

Courses required for the Master of Arts or endorsement.

EDUC 504 Methods of Teaching English as a Second Language (3)
Theory and practice of teaching English as a second language; techniques for teaching pronunciation, reading and writing in the context of communicative competence; analysis of resources available for ESL. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 510 ESL Strategies/Content Areas (3)
Strategies for assessing and teaching linguistically-diverse students in the content areas. Topics include role-playing, language dynamics, measurement, relevant research, and classroom practice. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 535 Internship in ESOL: K-6 (3)
This practicum applies theory and research to the analysis and synthesis of field experiences in ESOL. The practicum will be integrated into a concluding research project that structures students' reflections about their growth and vision as a leader. Through exploration of research and practicum methodology students will frame their capstone project proposals leading to final analysis and presentation following. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE.

EDUC 541 Exceptional Learners (3)
Study of exceptionality and special education, legislation, individualized education programs (IEP), planning and delivering services, multicultural and bilingual aspects of special education, classifications (Impairments), exceptionality and the family. 20-hour field experience required. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 543 Inclusion Methods/ Strategies (3)
Collaboration, community and families, legal aspects of placement, classroom management, and methods and strategies used in inclusive classrooms. Each student is required to complete a minimum of 20

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field experience hours. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 545 Internship in ESOL: 7-12 (3)
This practicum applies theory and research to the analysis and synthesis of field experiences in ESOL. The practicum will be integrated into a concluding research project that structures students' reflections about their growth and vision as a leader. Through exploration of research and practicum methodology students will frame their capstone project proposals leading to final analysis and presentation following. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE.

EDUC 554 Theories of Second Language Acquisition (3)
Research on second language acquisition, differences between first and second language acquisition, application of theories to classroom practice. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 555 Multicultural Narratives/K-12 (3)
Survey of multicultural literature suitable for the K-12 classroom. Cultural awareness, diversity, developmentally-appropriate materials, book and media selection for bilingual and English-language learners in grades K-12. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

EDUC 556 Assessment in English as a Second Language (3)
Assessment of linguistically-diverse students, developing instructional plans for linguistically-diverse students, measurement, relevant research, classroom practice, legal and social responsibilities. Prerequisites: Current teaching certificate, acceptance into M.A. program, GRE, or permission of instructor if non-degree seeking.

Electric Lineworker (ELCL)

ELCL 120 Fundamentals of Electricity (4)
Generation, transmission, and distribution of electricity beginning with the electron and its function of transporting electric power to homes and industry.

ELCL 125 Job Training and Safety (2)
Covers first aid, CDL, basic use and care of personal protective equipment use and care of climbing equipment, daily inspection and basic use of motorized equipment.

ELCL 131 Electrical Distribution Theory I (4)
Pole setting techniques, framing methods and specifications, climbing, sagging and splicing of conductors, energizing and de-energizing of lines, and installation of protective grounds.

ELCL 131L Electric Distribution Lab (4)
Examination of the National Electric Safety Code, equipment operation, material records, knot tying, installation of protective grounds, pole climbing, replace insulators, replacing crossarms, conductor ties, and overhead line construction.

ELCL 132 Electrical Distribution Theory II (4)
ELCL 132L Electrical Distribution Theory II Lab (2)
Installation and operation of protective equipment, transformer hookups, voltage regulation, hotstick maintenance, troubleshooting, and gloving from the pole. Four hours lecture, three hours laboratory per week. Prerequisite: ELCL 131.

ELCL 137 Advanced Electrical Distribution (2)
ELCL 137L Advanced Electrical Distribution Lab (4)
Meter safety, connector installation, street lighting, rubber cover up, and public relations. Two hours lecture, eight hours laboratory per week. Prerequisite: ELCL 136L.

ELCL 140 Underground Procedures (4)
ELCL 140L Underground Procedures Lab (2)
Safety practices, terminology, fault finding, cable locating, switching procedure, installation of terminal devices, splicing, and transformer application. Five hours lecture, four hours laboratory per week.

ELCL 145 Hot Line Procedures (1)
ELCL 145L Hot Line Procedures Lab (2)
Two weeks of training by outside specialists covering current hotline maintenance and underground installation methods. Eight hours lecture, twenty-four hours laboratory per week.

ELCL 195 Independent Study (1,2)

ELCL 196 Topics (1,2)

ELCL 199 Internship (6)
Opportunity for an individual to be employed for training by a utility company while maintaining his/her status as a Mesa State College student. Provides excellent on-the-job training benefits. Students usually selected for this course by formal interview. Prerequisite: consent of instructor. Eighteen hours per week, two semesters after completion of regular program.

Electronics Technology (ELCT)

ELCT 150 C Programming for Technology (3)
Introductory course in programming using the C language specifically directed toward the technology student solving technical problems. No mathematics beyond elementary algebra and right angle trigonometry are required. Prerequisites: TECI 117 & TECI 118.

ELCT 152 UNIX Operating System (3)
Covers the software that the majority of UNIX users work with on a daily basis. Prerequisites: TECI 132.

ELCT 196 Topics (1-3)

ELCT 257 Laser Technology (2)
ELCT 257L Laser Technology Lab (1)
Covers laser design, types and components, the effects and potential hazards of laser light and the effects of infrared radiation. Two hour lectures and one two-hour laboratory per week. Prerequisites: TECI 118, 164, 231 or consent of instructor.

ELCT 258 Fiber Optics (2)
Covers fiber types and the active devices used to generate and detect fiber optic transmission light. Prerequisites: TECI 118, 164, and 165 or consent of instructor.

ELCT 262 Personal Computer Networking (2)
ELCT 262L Personal Computer Networking Lab (2)
How to specify, install and maintain local area networks. Covers the basics and protocols of data communications and communication architectures. Two one-hour lectures and two two-hour laboratories per week. Prerequisites: TECI 132/132L, TECI 165/165L, and TECI 260/260L.

ELCT 266 Microprocessors I (3)
ELCT 266L Microprocessors I Lab (1)
Use of the microprocessor to teach machine language programming, computer arithmetic, organization of microprocessors, interfacing, and input/output operations. Three one-hour lectures and one and one-half laboratory per week. Prerequisite: consent of instructor.

ELCT 267 Microprocessors II (3)
ELCT 267L Microprocessors II Lab (1)
Using the microprocessor to do real world tasks of interfacing memory for program storage and I/O devices for systems

communication. Three one-hour lectures and one two-hour laboratory per week. Prerequisites: ELCT 266/266L.

ELCT 293 Cooperative Education (3-12)
Cooperative Education provides students an opportunity to put their education to practical use in the workplace under the joint supervision of an employer participating in the Cooperative Education program and a faculty member designated by the institution. (See 'Cooperative Education' in this catalog.)

ELCT 295 Independent Study (1,2)

ELCT 296 Topics (1,2)

Energy Management (EMGT)

EMGT 340 Energy Industry Fundamentals (3)
Provides energy literacy through a survey of the sources, distribution and uses of energy, including the evolution of energy from wood fires to coal to oil to the current mix of coal, oil, natural gas, nuclear, hydroelectric, wind, geothermal, biomass, solar and ocean currents and tides. Future energy policy, sources, uses and case studies will be discussed as well as alternative energy sources. Prerequisites: GEOL 111/111L, and CHEM 121/121L.

EMGT 350 Energy Development (3)
Overview of the energy industry domestic and worldwide. Basic energy industry drilling and production terminology, concepts and terms introduced and utilized throughout the course. Issues surrounding business models, upstream, midstream and downstream discussed in detail. Prerequisites: CHEM 121/121L, GEOL 111/111L, and EMGT 340.

EMGT 440 Energy Production and Markets (3)
Overview of the supply and demand for energy. The physical path of energy from source to user, transportation issues pertaining to energy, energy pricing methodologies, energy markets, and risk control through the use of derivatives in the energy industry. Prerequisites: EMGT 340 and FINA 301.

EMGT 450 Energy Land Practices (3)
Imparts mastery of the fundamental concepts and terminology related to real property law. Application of concepts to situations occurring in the energy environment as land is found, purchased and developed for use. Prerequisite: EMGT 340.

Emergency Medical Technician (EMTS)

EMTS 101 Emergency Medical Technician - Basic I (3)
Policies, rules and regulations of emergency medical services. Basic anatomy and physiology. Initial and focused assessment of patient in the field. Corequisites: EMTS 102 and EMTS 103.

EMTS 102 Emergency Medical Technician - Basic II (3)
Management of respiratory, cardiac, CNS, endocrine, behavioral, drug, alcohol, allergy and anaphylaxis emergencies. Airway management, CPR, AED and basic pharmacology. Corequisites: EMTS 101 and EMTS 103.

EMTS 103 Emergency Medical Technician - Basic III (4)
Management of MOI, head, spinal, abdominal, chest and extremity trauma. Basic management of pediatric, gynecologic, and geriatric emergencies. EMT safety, environmental emergencies, hazmat, triage, and incident command. Preparation for national registry written and practical examination. Corequisites: EMTS 101 and EMTS 102.

EMTS 130 Emergency Medical Technician - Basic IV Therapy (2)
Focuses on cognitive and skill practice as required by Colorado Prehospital Care program for EMT-Basic level IV approval. Examines criteria, procedures and techniques for IV therapy, discusses fluid and electrolyte balance and principles and treatment for shock.

EMTS 190 Emergency Medical Technician - Basic EKG Interpretation (2)
Interpretation of EKG strips, anatomy and physiology of the heart, using three-lead monitoring as a guide. Introduction to twelve-lead EKG.

EMTS 225 Fundamentals of Paramedic Practice (3)
First course of the National Standard Paramedic Curriculum as approved by the Colorado State Department of Health and Environment. Prerequisites: EMTS 130 and EMTS 190. Corequisites: EMTS 226, EMTS 227, EMTS 228, EMTS 229, and EMTS 230.

EMTS 226 Fundamentals of Paramedic Practice Lab (2)
The lab experience to coincide with EMTS 225. Prerequisites: EMTS 130 and EMTS 190. Corequisites: EMTS 225, EMTS 227, EMTS 228, EMTS 229, and EMTS 230.

EMTS 227 Paramedic Special Considerations (3)
Focuses on a comprehensive study of Advanced Life Support Practice. Prerequisites: EMTS 130 and EMTS 190. Corequisites: EMTS 225, EMTS 226, EMTS 228, METS 229, and EMTS 230.

EMTS 228 Paramedic Special Considerations Lab (2)
The lab for EMTS 227. Prerequisites: EMTS 130 and EMTS 190. Corequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, and EMTS 230.

EMTS 229 Paramedic Pharmacology (3)
Focuses on a comprehensive study of emergency pharmacology and medications used to treat common illnesses. Prerequisites: EMTS 130 and EMTS 190. Corequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, and EMTS 230.

EMTS 230 Paramedic Pharmacology Lab (2)
Required pharmacology lab course in the paramedic education program. Prerequisites: EMTS 130 and EMTS 190. Corequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, and EMTS 229.

EMTS 231 Paramedic Cardiology (5)
Cardiology topics as presented in the National Standard Curriculum for paramedics. Prerequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, EMTS 229, and EMTS 230. Corequisites: EMTS 232, EMTS 233, ETMS 234, EMTS 235, and EMTS 236.

EMTS 232 Paramedic Cardiology Lab (1)
Incorporates hands-on application of principles of cardiac care in hospital and pre-hospital environment. Prerequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, EMTS 229, and EMTS 230. Corequisites: EMTS 231, EMTS 233, EMTS 234, EMTS 235, EMTS 236.

EMTS 233 Paramedic Medical Emergencies (4)
A comprehensive study of adult medical emergencies. Prerequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, EMTS 229, and EMTS 230. Corequisites: EMTS 231, EMTS 232, EMTS 234, EMTS 235, and EMTS 236.

EMTS 234 Paramedic Medical Emergencies Lab (1)
The lab for EMTS 233. Clinical study of adult and pediatric medical emergencies. Prerequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, EMTS 229, and EMTS 230. Corequisites: EMTS 231, EMTS 232, EMTS 233, EMTS 235, and EMTS 236.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

EMTS 235 Paramedic Trauma Emergencies (4)
A comprehensive study of adult and pediatric trauma emergencies. Prerequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, EMTS 229, and EMTS 230. Corequisites: EMTS 231, EMTS 232, EMTS 233, EMTS 234, and EMTS 236.

EMTS 236 Paramedic Trauma Emergencies Lab (1)
Lab presenting various acute trauma scenarios. Prerequisites: EMTS 225, EMTS 226, EMTS 227, EMTS 228, EMTS 229, and EMTS 230. Corequisites: EMTS 231, EMTS 232, EMTS 233, EMTS 234, and EMTS 235.

EMTS 237 Paramedic Internship Preparation (2)
Reviews concepts and techniques used in the prehospital setting. Prerequisites: EMTS 231, EMTS 232, EMTS 233, EMTS 234, EMTS 235, and EMTS 236.

EMTS 280 Paramedic Internship I (6)
The preceptor/internship program for paramedic students. Prerequisite: EMTS 237.

EMTS 281 Paramedic Internship II (6)
Continuation of EMTS 280, preceptor program for paramedic students. Prerequisite: EMTS 280.

Engineering (ENGR)

ENGR 105 Basic Engineering Drawing (3)
Fundamentals of computer-aided drafting and design. This is a foundation course for engineering-oriented students. Current engineering practice is emphasized, and computers are introduced as a tool for modern engineering design and drawing.

ENGR 111 Engineering Graphics and Design (3)
Basic problem-solving techniques used in engineering and the sciences. Topics include graphics, modeling, experimental methods, data analysis, value judgments, design processes, and decision making in realistic engineering situations. Prerequisites: MATH 130 and ENGR 105 or equivalents.

ENGR 251 Circuit Analysis I (3)
ENGR 251L Circuit Analysis I Lab (1)
Circuit analysis and modern electronics practice. Fundamental principles are applied to linear, time-invariant, lumped-parameter circuits. Electromechanical, thermal, and optical sensors are used with operational amplifiers in a variety of signal processing and wave-shaping applications. Four lectures and one two-hour laboratory per week. Prerequisites: PHYS 132, 132L. Corequisite: MATH 253.

ENGR 252 Circuit Analysis II (3)
ENGR 252L Circuit Analysis II Lab (1)
RL, RC, and RLC networks is first examined, with particular attention given to their natural and step responses. Mutual inductance and transformers are studied. Finally, the Laplace transform is used in circuit analysis, along with frequency domain techniques for networks. Three lectures and one two-hour laboratory per week. Prerequisite: ENGR 251, 251L.

ENGR 255 Thermodynamics (3)
The laws of thermodynamics applied to bulk matter. Examples are drawn from engineering, chemistry, biology, and physics. The role of the Second Law is emphasized, and applications range from engine performance to chemical reactions and phase changes. Free energy concepts are introduced and used throughout the course. Prerequisites: PHYS 131, 131L, MATH 152.

ENGR 261 Statics and Dynamics I (3)
ENGR 262 Statics and Dynamics II (3)
A two-semester introduction to statics and dynamics for scientists and engineers. Newtonian mechanics is first used to study the static equilibrium of solids. The vector principles of statics are used to study forces, couples, and force systems. These principles are applied to the structural analysis of trusses, cables, joints, and frames. Frictional forces are examined. Centers of gravity, centroids, radii of gyration, and moments of inertia are utilized. The principle of virtual work is introduced. The kinematics and kinetics of particles, systems, and rigid bodies are investigated, along with the concept of impulse and the principles of momentum and energy conservation. Applications to rigid-body motion are emphasized. Vibrations of solid bodies are studied, along with resonance phenomena. Finally, the propagation of waves in simple mechanical systems is investigated. Prerequisites: PHYS 131, 131L for ENGR 261: ENGR 261 for ENGR 262. Corequisites: MATH 253 or ENGR 261.

English (ENGL)

ENGL 030 Basic Writing Skills (2)
Focuses on sentence and basic paragraph structure and development. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations. Prerequisite: Accuplacer below 50.

ENGL 060 Writing Fundamentals (3)
Focuses on paragraph structure and development and introduces the formal essay. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations. Prerequisites: ENGL 030 or Accuplacer score from 50 to 69.

ENGL 090 Basic Writing (3)
Basic writing skills for students who need more background for formal college writing or whose ACT score is lower than that required for admission to English 111. Prerequisite: ENGL 060 or Accuplacer score from 70 to 94.

ENGL 111 English Composition-GTCO1 (3)
Effective communication through writing. Prerequisite: A grade of "C" or better in ENGL 090 is recommended for students who do not meet placement criteria.

ENGL 112 English Composition-GTCO2 (3)
Critical writing about literature; research. Prerequisite: ENGL 111 with a grade of "C" or higher to fulfill English Competency requirement under General Education.

ENGL 129 Honors English-GTCO2 (3)
Examination of readings and creation of persuasive essays, research papers, and critical analyses. This course fulfills the composition requirements (ENGL 111 and ENGL 112) for baccalaureate students whose ACT or SAT scores are high and whose writing skills are strong. Permission to enroll is required. Students must pass ENGL 129 with a grade of "C" or higher to fulfill English competency requirement under General Education.

ENGL 131 Western World Literature I-GTAH2 (3)
Works from the Classical, Medieval, and Renaissance periods.

ENGL 132 Western World Literature II-GTAH2 (3)
Works from the late Renaissance, Neoclassic, Romantic, and Modern periods.

ENGL 150 Introduction to Literature-GTAH2 (3)
Study of major genres of literature.

ENGL 196 Topics (1-3)

ENGL 219 Introduction to Professional Writing (3)
Study of technical writing, public information and public relations writing, and free-lance nonfiction writing. Prerequisite: ENGL 112 or ENGL 129.

ENGL 222 Mythology-GTAH2 (3)
Basic myths of the Greeks and Romans, the cultures that produced them and/or the Northern and Medieval myths of Europe, their backgrounds in classical culture and native folklore.

ENGL 231 Non-Western World Literature I-GTAH2 (3)
Literature from cultures outside the Western tradition, from antiquity to approximately 1800. Texts, chosen by instructor, may include works from China, Japan, India, the Middle East, etc.

ENGL 232 Non-Western World Literature II-GTAH2 (3)
Nineteenth and twentieth century literature from Eastern, Indian, African, Asian and Latin American tradition.

ENGL 240 Children's Literature (3)
Survey of literature for children from birth to age 12, focusing on ways of reading texts.

ENGL 245 Imaginative Writing (3)
Introduction to the theory and practice of imaginative writing for young people. Prerequisite: ENGL 111 or ENGL 129.

ENGL 250 Introduction to Creative Writing (3)
An introduction to the theory and practice of producing original works of poetry, fiction, and non-fiction prose. Prerequisite: ENGL 111 or ENGL 129.

ENGL 254 Survey of English Literature I-GTAH2 (3)
English literature from its beginnings through the Enlightenment.

ENGL 255 Survey of English Literature II-GTAH2 (3)
English literature from the Romantics to the present day.

ENGL 261 Survey of American Literature I-GTAH2 (3)
American literature from the beginnings to the late 19th Century.

ENGL 262 Survey of American Literature II-GTAH2 (3)
American literature from the late 19th Century to the present.

ENGL 296 Topics (1-3)

ENGL 301 Classical Greek and Latin Literature (3)
Readings in English of Greek and Roman authors and major classical genres.

ENGL 311 English Medieval Literature (3)
Major works of Old and Middle English literature.

ENGL 313 English Renaissance Literature (3)
Major works of the 16th and 17th Centuries, including the Metaphysical and Caroline poets and John Milton.

ENGL 314 American Literature to 1830 (3)
An in-depth study of various significant texts of the period, as well as other relevant texts. Texts and authors are chosen by the instructor to provide a thorough study of selected important historical, philosophical and literary aspects of the period.

ENGL 315 American Literature 1830-1870 (3)
An in-depth study of various significant texts of the period, as well as other relevant texts. Texts and authors are chosen by the instructor to provide a thorough study of selected important historical, philosophical and literary aspects of the period.

ENGL 316 American Literature 1870-1900 (3)
An in-depth study of various significant texts of the period, as well as other relevant texts. Texts and authors are chosen by the instructor to provide a thorough study of selected important historical, philosophical and literary aspects of the period.

ENGL 320 Report and Proposal Writing (3)
Introduction to the theory and practice of preparing and analyzing reports and proposals intended for businesses, governmental agencies, and private and corporate foundations.

ENGL 330 Women in World Thought and Literature (3)
Readings in world literature by and about women; interdisciplinary study of feminist theories and women's contributions to world thought.

ENGL 335 The Bible as Literature (3)
The Old Testament as a literary masterpiece.

ENGL 343 Language Systems and Linguistic Diversity (3)
Introduction to the nature of language, first and second language acquisition, and issues relevant to linguistic diversity and multicultural literacies. Prerequisite: ENGL 111 or ENGL 129.

ENGL 355 Shakespeare (3)
Early and mature plays, including genres of comedy, history, tragedy, and romance, emphasizing close textual reading in conjunction with cultural and intellectual contexts.

ENGL 365 Literature for Young Adults (3)
Advanced study of major works for youth and adolescents throughout history, with an emphasis on contemporary authors.

ENGL 370 Major Author (3)
In-depth study of one or two important writers, with attention to the writer's distinctive style and subject matter, the range of the writer's career, and the influence of the writer's work.

ENGL 380 Creative Writing: Non-Fiction (3)
Theory and practice of the memoir and the personal essay. Emphasis on narrative craft, experiential expression, research, and interviewing. Prerequisite: ENGL 250.

ENGL 381 Creative Writing: Fiction (3)
Theory and practice of producing original works of fiction. Prerequisites: ENGL 250 or consent of instructor.

ENGL 382 Creative Writing: Character and Narrative (3)
Theory and practice of creating original characters and narratives. Prerequisites: ENGL 250 or consent of instructor

ENGL 383 Creative Writing: Poetry (3)
Theory and practice of producing original works of poetry. Prerequisites: ENGL 250 or consent of instructor.

ENGL 384 Expository and Persuasive Writing (3)
Theory and practice of objective non-fiction, including expository and persuasive writing. Emphasis on style, structure, and audience.

ENGL 385 Technical and Professional Writing (3)
Practice in writing and editing of workplace documents, including correspondence, reports and proposals.

ENGL 386 Roots of Modern Rhetoric (3)
A survey of the history of rhetoric from classical Greece to the present with emphasis on the Greco-Roman tradition.

ENGL 390 Introduction to Film Studies (3)
Introduction to film narrative, cinematography, and theory.

ENGL 394 Technical and Professional Writing Topics (3)
Topics at the discretion of the instructor, or to meet the needs of the department. Topics may include: grant writing for industry; professional editing; desktop publishing for professional writing; writing for online presentation; individual and team writing.

ENGL 395 Independent Study (1-3)

ENGL 396 Topics (1-3)

ENGL 397 Practicum (3)
Experience in a Basic Writing classroom helping the instructor with all phases of writing instruction. Prerequisite: permission of department head.

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ENGL 398 Practicum in Editing and Publishing (1-3)
Experience in editing and publishing one of Mesa State's journals. Credit hours contracted through advising instructor. Prerequisite: Consent of instructor.

ENGL 415 American Folklore (3)
American folklore with an emphasis on collecting Colorado and especially Western Colorado lore.

ENGL 421 Introduction to Literary Theory and Criticism (3)
Development and theory of literary criticism.

ENGL 423 Short Story (3)
History and development of short stories.

ENGL 425 Scientific Writing (3)
Theoretical and practical studies of writing in the sciences (science, medicine, and environmental writing). Addresses writing for both popular and professional audiences. Coverage of both print and online instructional materials. Safety, ethical and liability issues.

ENGL 427 Writing for Industry (3)
Theoretical and practical studies of writing for industrial fields. Addresses writing for both popular and professional audiences. Covers both print and online instructional materials. Safety, ethical, and liability issues.

ENGL 435 American Literature 1900-1945 (3)
An in-depth study of various significant texts of the period, as well as other relevant texts. Texts and authors are chosen by the instructor to provide a thorough study of selected important historical, philosophical and literary aspects of the period.

ENGL 436 American Literature 1945-Present (3)
An in-depth study of various significant texts of the period, as well as other relevant texts. Texts and authors are chosen by the instructor to provide a thorough study of selected important historical, philosophical and literary aspects of the period.

ENGL 438 Ethnic Experiences in U.S. Literature (3)
Survey of literary works written throughout United States history by African-American, Hispanic-American, Native American and Asian American authors, as well as by authors from other under represented cultural communities.

ENGL 440 History of the English Language (3)
Historical development of the English language; its internal formation as shaped by external political, social, and intellectual forces. Prerequisite: Junior or senior status or consent of instructor.

ENGL 451 Structure of the English Language (3)
Study of modern English through the use of structural techniques and linguistic principles. Prerequisites: Junior or senior standing or consent of the instructor.

ENGL 470 18th Century British Literature (3)
Conceptual framework of the Enlightenment in England's representative writers.

ENGL 471 British Romanticism (3)
Representative works of writers attempting to discover a higher reality than that offered by materialism or rationalism.

ENGL 475 Victorian Literature (3)
Representative works of post-Romantic British literature.

ENGL 478 20th Century British Literature (3)
Major works from 20th Century British writers.

ENGL 491 Composition Theory and Practice (3)
Theory and practice of composing as it applies to teaching English in the junior and senior high schools; historical context, contemporary theory, and current pedagogy in the field of composition studies. Prerequisites: senior standing in teacher certification program or consent of instructor.

ENGL 492 Seminar in Writing (3)
Capstone course focusing on genre choice (novel, short story, poetry, memoir, creative non-fiction, screenplay, playwriting). Research into professional and publishing considerations. Development of a creative portfolio. Prerequisite: ENGL 250.

ENGL 494 Seminar in Literature (3)
Analysis of an important literary work or works, requiring students to interpret, criticize, and present research. Prerequisite: Senior standing or consent of instructor.

ENGL 495 Independent Study (1-3)

ENGL 496 Topics (1-3)

ENGL 497 Internship in Business, Technical, and Professional Communication (3)
An opportunity to write, edit, and design business and technical documents in a professional setting. Projects may include reports, proposals, grants, manuals, brochures and newsletters.

ENGL 543 Language Systems and Linguistic Diversity (3)
Advanced study in the nature of language, first and second language acquisition, and issues relevant to linguistic diversity and multicultural literacies. Discussions will focus on education within and across home, community, and school contexts, including a focus on home-school-community relationships.

ENGL 596 Topics (1-3)

Environmental Science and Technology (ENVS)

ENVS 101 Introduction to Environmental Science-GTSC2 (3)
Impact of resource use and pollution on the earth's environment and biota. Scientific approach to solving environmental problems and the impacts of values upon global environmental decisions examined. General environmental awareness and literacy emphasized. Students may take either ENVS 101 or ENVS 103/103L for general education natural science credit, but not both.

ENVS 103 Field-Based Introduction to Environmental Science-GTSC1 (3)
ENVS 103L Field-Based Introduction to Environmental Science Lab-GTSC1 (1)
Examination of the effects of resource use and pollution on the earth's environment and biota. Integration of lecture with field and lab exercises to demonstrate scientific approach to solving environmental problems. Emphasis on environmental awareness and critical thinking. Students may take either ENVS 101 or ENVS 103/103L for general education natural science credit, but not both.

ENVS 104 Environmental Science: Global Sustainability (3)
Examination of local to global environmental issues. Includes human population dynamics and impact of agriculture on the environment, ecosystem function, energy use and sustainable development, air, water and soil pollution, climate change and environmental policy. Critical evaluation of readings from historical and modern environmental topics supplement lectures.

ENVS 110 Environmental Science and Technology I (3)
Introduction to the source, characteristics, and concerns surrounding hazardous and radioactive materials in environmental systems, with an emphasis on developing environmental literacy. A two-day field

trip on the second weekend of classes is required. Prerequisites: one year of high school chemistry and high school algebra or equivalent.

ENVS 196 Topics (1-3)

ENVS 204 Introduction to Ecosystem Management (3)
ENVS 204L Introduction to Ecosystem Management Lab (1)
Scientific management of natural resources in a changing environment. Problem solving emphasized in a case study approach to ecosystem management. Theories of ecology, economics, fisheries and wildlife management, biology, and sociology to solve problems using realistic and complex landscape scenarios. Prerequisite: ENVS 104 or consent of instructor.

ENVS 212 Environmental Health and Safety (2)
ENVS 212L Environmental Health and Safety Lab (1)
Examination of environmental health and safety issues, risk assessment, control strategies, and implementation. Includes basic toxicology, personal risk assessment, and meets 40- hour OSHA training requirements for working on hazardous waste sites. Requires development of a site safety plan and use of personal protective equipment. Two lectures and one two-hour laboratory per week. Prerequisites: ENVS 110; sophomore standing (AAS degree); senior standing (BS degree) or consent of instructor.

ENVS 214L OSHA Health and Safety Update (1)
Update of the 40-hour OSHA hazardous waste site certification and includes the OSHA supervisor training certification for hazardous waste sites. Prerequisites: ENVS 212L.

ENVS 221 Science and Technology of Pollution Control (3)
ENVS 221L Science and Technology of Pollution Control Lab (1)
Introduction to scientific, engineering, and technical elements of pollution control. Includes pollutant characteristics, investigation and cleanup of contaminated sites, waste treatment (air emissions, wastewater discharges, hazardous waste), waste minimization, life cycle analysis, and industrial ecology. Lab focuses on site investigation skills, design and operation of selected treatment technologies, and waste minimization audits. Prerequisites: ENVS 104; mastery of high school algebra; CHEM 121 or 131 recommended.

ENVS 296 Topics (1-3)

ENVS 301 Environmental Project Management (2)
Basic practices of effective project management, including proposal preparation, planning, scheduling, cost estimating, cost and progress tracking, and team building. Prerequisites: any one of the following: ENVS 221, ENVS 313, ENVS 331, ENVS 340.

ENVS 312 Soil Science and Sustainability (3)
ENVS 312L Soil Science and Sustainability Lab (1)
Physical, chemical and biological properties of soils. Function of soils emphasized. Application of soil science to sustainable use of soils in natural and agricultural settings. Prerequisites: CHEM 121 or higher and ENVS 204/204L, or consent of instructor.

ENVS 313 Characterization of Contaminated Sites (3)
ENVS 313L Characterization of Contaminated Sites Lab (1)
Principles and practices of site characterization. Includes contaminant transport in the environment, investigation strategies, sample collection, field instrumentation, health and safety considerations, analytical methods, quality assurance, data interpretation, regulations, and ASTM Phase I and Phase II assessments. Lab focuses on development of practical skills culminating in planning and implementing an investigation of a real site. Prerequisites: STAT 200, ENVS 221 and 221L; or consent of instructor.

ENVS 315 Mined Land Rehabilitation (2)
Principles and practices of mined land reclamation. Topics include mining techniques, disturbances caused by mining, regulations, closure of mine features, soil preparation, revegetation, and monitoring. Prerequisites: ENVS 455 or ENVS 312/312L (may be taken concurrently).

ENVS 321 Environmental Risk Analysis (3)
Assessment, management, and control of risk from toxic substances in the environment. Topics include basic elements of toxicity testing and epidemiology, chemical fate in the environment, exposure assessment, uncertainty in risk estimates, approaches to risk management, and risk communication. Prerequisites: ENVS 221, ENVS 221L, and MATH 113.

ENVS 331 Water Quality (3)
ENVS 331L Water Quality Lab (1)
Physical, chemical, and biological properties of aquatic systems. Includes movement of water in the watershed, stream classification and stability, lake circulation, aquatic ecology, chemistry and biology of natural and polluted waters, water quality monitoring, regulation and protection of surface water, and watershed assessment and management. Lab focuses on practical skills and field measurements culminating in an assessment of a local watershed. Prerequisites: CHEM 121 or 132, and STAT 200.

ENVS 332 Introduction to Geographic Information Systems (2)
ENVS 332L Introduction to Geographic Information Systems Lab (1)
Basic knowledge of the fundamentals of GIS with regard to theoretical, technical, and application issues. Prerequisites: GEOL 305 or GEOG 131.

ENVS 340 Applied Atmospheric Science (3)
Examination of the atmosphere and air pollution. Includes physical and chemical properties of the atmosphere, meteorology, air pollutant sources and effects, monitoring, pollutant dispersion, emission inventory, management of emissions, and regulation of air quality. Prerequisite: CHEM 121 or 132.

ENVS 350 Ecology and Management of Shrublands and Grasslands (3)
ENVS 350L Ecology and Management of Shrublands and Grasslands Lab (1)
Examination of ecological principles in determining the structure, function, and management of North American grasslands and shrublands. Three one-hour lectures and one three-hour lab per week. Two Saturday labs may be required. Prerequisite: STAT 200 and ENVS 204/204L.

ENVS 360 Fire Ecology (3)
Examination of the ecological effects of fire on forests, shrublands, and grasslands. Includes fire effects on plants, animals, soil, and water, as well as using fire as a restoration tool. Prerequisites: STAT 200 and ENVS 204/204L. Corequisite: ENVS 360L.

ENVS 360L Fire Ecology Lab (1)
Field experience examining the ecological effects of fire on forests, shrublands, and grasslands of the Colorado Plateau. Includes field and lab studies that test the effects of fire on plants, animals, soil, and water. One 3-hour lab per week. May require 2 Saturday labs. Prerequisites: STAT 200 and ENVS 204/204L. Corequisite: ENVS 360.

ENVS 395 Independent Study (1-3)

ENVS 396 Topics (1-3)

ENVS 410 Environmental Regulatory Compliance (3)
Examination of regulatory requirements pertaining to air pollution, water pollution, hazardous materials, and radioactive materials. Additional topics include enforcement, compliance management

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systems, compliance auditing, and innovative approaches to regulation. Prerequisites: ENVS 221, and junior or senior standing.

ENVS 413 Environmental Fate and Transport of Contaminants (3)
Physical, chemical, and biological factors influencing the persistence and migration of chemicals in the environment. Includes consideration of air, surface water, soil, and ground water. Emphasis on quantitative problem solving. Prerequisites: CHEM 121 or 132; and MATH 119, 146, or 151.

ENVS 420 Advanced Environmental Sampling and Analytical Methods (3)
ENVS 420L Advanced Environmental Sampling and Analytical Methods Lab (1)
Survey of field sampling and analytical methods for study of environmental systems. Topics include sampling design, regulatory issues, quality assurance, quality control, data interpretation, and reporting. Three one-hour lectures and one three-hour laboratory per week. Prerequisites: CHEM 122 or 132, STAT 200 or consent of instructor.

ENVS 430 Lab Methods for Environmental Science (3)
Study and application of methods used to understand environmental systems. Development of hands-on activities using simple materials and equipment which support interdisciplinary learning will be explored. Use of computer applications will also be examined. Lesson presentations and field trips will be required. Prerequisites: ENVS 104 and junior standing, or permission of instructor.

ENVS 431 Water and Wastewater Treatment (3)
Examination of water and wastewater treatment processes including physical, chemical, and biological treatment technologies. Emphasis on unit process design and modeling. Prerequisite: ENVS 331.

ENVS 433 Restoration of Aquatic Systems (3)
Principles and practices of restoring the functions and values of streams, ponds, and wetlands. Addresses physical, chemical, and biological aspects of these aquatic systems. Prerequisites: ENVS 331 and ENVS 331L.

ENVS 455 Restoration Ecology (3)
ENVS 455L Restoration Ecology Lab (1)
Examination of principles and techniques for restoration of community characteristics and ecosystem functions to disturbed lands. Lecture and lab emphasize practical application of ecological principles to restoration culminating in an independent project of designing a restoration plan for a local area. Prerequisites: ENVS 312, and ENVS 350 or ENVS 306; or consent of instructor.

ENVS 460 Fire Management (3)
Examination of principles and current topics in fire management, including fire behavior, prescribed fire/smoke management, fuels/fuels management, wildfire control, fire in the wildland-urban interface, and fire policy. Prerequisites: ENVS 360/360L, STAT 200, one semester of biology. Corequisite: ENVS 460L.

ENVS 460L Fire Management Lab (1)
Field, lab, and computer modeling experience in predicting fire behavior, planning prescribed burns, managing hazardous fuels, and assessing wildfire risk in the wildland-urban interface. Prerequisites: ENVS 360/360L, STAT 200, one semester of biology. Corequisite: ENVS 460.

ENVS 492 Capstone in Environmental Science and Technology (2)
Current environmental restoration/waste management issues. Refinement of students' communication skills. Intended to broaden students' perspectives and knowledge using guest speakers and class discussions. Requires independent study to be presented in class. Prerequisites: senior standing or consent of instructor.

ENVS 495 Independent Study (1-3)

ENVS 496 Topics (1-3)

ENVS 497 Structured Research (1-3)
Research in environmental science under the direct guidance of a faculty member. Designed for junior and senior level students. Prerequisite: permission of instructor.

ENVS 499 Internship (3-9)
Work experience on a job directly related to environmental restoration projects or hazardous waste management. Requires a term paper, oral presentation describing the experience and at least 225 contact hours. Prerequisites: junior or senior standing in the Environmental Restoration/Waste Management program or consent of instructor.

ENVS 596 Topics (1-3)

Finance (FINA)

FINA 301 Managerial Finance (3)
Acquisition, allocation, and management of funds within the business enterprise. Financial goals, funds flow, valuation, capital budgeting, and financing strategies. Prerequisite: ACCT 201, STAT 200.

FINA 320 Fundamentals of Investments (3)
Introduction to the theory and practices of investment valuation and management. Topics include risk and return, investor objectives and strategies, the types and characteristics of investment instruments, the process of buying and selling securities, investment valuation and yields, and portfolio management. Prerequisite: FINA 301.

FINA 395 Independent Study (1-3)

FINA 396 Topics (1-3)

FINA 401 Entrepreneurial Finance (3)
The theory and practices of financing for the entrepreneur. Topics include cash forecasting and financial planning, cash collection and disbursements, short-term investing and financing, inventory management, accounts receivable management, credit and collections policy, and payables and accruals management. Prerequisite: FINA 301.

FINA 420 Security Analysis and Portfolio Management (3)
Extension of the theory and practices of investment valuation and management. Topics include risk and return, market efficiency, economic and industry analysis, fundamental and technical analysis, bond analysis and management strategies, portfolio management and performance evaluation, and the characteristics and uses of options, rights, warrants, convertibles, and futures. Prerequisites: FINA 301 and FINA 320.

FINA 431 International Financial Management (3)
The theory and practices of financial management in an international product and capital marketplace. Topics include the international flow of funds, exchange rate determinants and risk hedging, international arbitrage and interest rate parity, purchasing power parity and the international Fisher effect, instruments of international trade financing, multinational capital budgeting, multinational costs of capital, and multinational capital structure. Prerequisite: FINA 301.

FINA 451 Financial Management: Theory and Applications (3)
Extension of the theory and practices of financial management using a case analysis approach. Topics include financial statement analysis, financial planning and forecasting, risk and return, capital budgeting, lease financing, cost of capital, capital structure, dividend policy, and risk management. Prerequisites: FINA 301; senior standing or consent of instructor.

FINA 495 Independent Study (1-3)

FINA 496 Topics (1-3)

FINA 500 Financial Strategy (3)
Introduction and development of analysis of the financial aspects of a corporation using both theory and application. Topics include capital markets, global economic factors that affect the corporation, capital asset pricing model, portfolio analysis and capital structure policy.

Fine Arts (FINE)

FINE 101 The Living Arts-GTAH1 (3)
An interdisciplinary survey of human creative efforts as they relate to each other. Art, drama, and music are compared with similarities stressed.

FINE 395 Independent Study (1-3)

FINE 396 Topics (1-3)

FINE 495 Independent Study (1-3)

FINE 496 Topics (1-3)

FINE 499 Internship (8,15)
Part or full-time work in various aspects of arts management. Sites may include galleries, musical, theatrical or other performing organizations, arts centers, or other situations that meet the instructor's approval. Half-time equals eight semester hours credit; full-time equals 15 semester hours credit. Prerequisite: junior standing in visual or performing arts. May also require selected courses in business, social science, etc. as appropriate to the internship sought.

Foreign Languages (FLAF, FLAG, FLAS, FLAV)

French

FLAF 111 First-Year French I (3)
FLAF 112 First-Year French II (3)
Introduction to the French language and culture.

FLAF 211 Second-Year French I (3)
FLAF 212 Second-Year French II (3)
Grammar review, vocabulary distinction, and readings in the French language. Prerequisites: two years of high school French, FLAF 111 and 112, or consent of instructor.

FLAF 290 Special Studies In French (1-3)
Study beyond the scope of the existing curriculum.

German

FLAG 111 First-Year German I (3)
FLAG 112 First-Year German II (3)
Introduction to the German language.

FLAG 211 Second-Year German I (3)
FLAG 212 Second-Year German II (3)
Grammar review, vocabulary distinction, and readings in the German language. Prerequisites: two years of high school German, FLAG 111 and 112, or consent of instructor.

FLAG 290 Special Studies In German (1-3)
Study beyond the scope of the existing curriculum.

Spanish

FLAS 111 First-Year Spanish I (3)
FLAS 112 First-Year Spanish II (3)
Basic competency in understanding, speaking, reading, and writing.

FLAS 114 Conversational Spanish I (3)
FLAS 115 Conversational Spanish II (3)
A beginning level class for adult students who wish to develop a basic vocabulary for speaking and understanding Spanish socially, on the job or south of the border.

FLAS 118 Career Spanish (3)
For students with a background in FLAS 111 and 112 [First Year Spanish I & II] or their equivalent who wish to perfect command of the language in a variety of workplaces and professional areas of interest. Prerequisites FLAS 111, FLAS 112 [or their equivalent].

FLAS 211 Second-Year Spanish I (3)
FLAS 212 Second-Year Spanish II (3)
Reinforces and expands the four basic language skills developed in the first-year course and provides exposure to a wider variety of cultural materials and situations. Prerequisites: two years of high school Spanish, FLAS 111 and 112, or consent of instructor.

FLAS 295 Independent Study (1-3)

FLAS 301 Advanced Spanish Grammar (3)
A thorough review and intensive practice of all the basics of Spanish grammar, including pronouns, verb tenses (both indicative and subjunctive), prepositions, and more. This course includes the writing of short compositions. Prerequisites: FLAS 212 or permission of instructor.

FLAS 302 Advanced Spanish Composition (3)
Writing of well-structured and clearly-planned compositions of varying length. Provides the opportunity for students to do research in Spanish and prepares them for the writing of regular term papers in Spanish. Prerequisite: FLAS 301.

FLAS 311 History and Culture of Spain (3)
History and culture of Spain from its early inhabitants through the twentieth century. Short written or oral reports in Spanish on a variety of topics are regularly assigned, with emphasis on improving speaking, reading, and writing skills. Prerequisites: FLAS 212, 301, 302, and 314 or permission of instructor.

FLAS 312 History and Culture of Latin America (3)
History and culture of Latin American from its early inhabitants through the twentieth century. Short written or oral reports in Spanish on a variety of topics are regularly assigned, with emphasis on improving speaking, reading, and writing skills. Prerequisites: FLAS 212, 301, 302, and 314 or consent of instructor.

FLAS 314 Advanced Spanish Conversation (3)
Conversational practice in Spanish over a wide range of topics, working towards a greater command of Spanish grammar, vocabulary, and Hispanic culture. Prerequisite: FLAS 212 and 301.

FLAS 321 Introduction to the Literature of Spain (3)
Introduction to the literature of Spain from the Middle Ages through the twentieth century, including excerpts from major works in poetry, narrative, and theater and by such authors as Cervantes, Perez-Galdos, and Garcia-Lorca. Prerequisites: FLAS 212, 301, 302, and 314 or permission of instructor.

FLAS 322 Introduction to the Literature of Latin America (3)
Introduction to the literature of Latin America from the colonial period through the twentieth century, including excerpts from major works in poetry, narrative, and theatre and by such authors as Sor Juana, Borges, Neruda, and Garcia- Marquez. Prerequisites: FLAS 111, 112, 211, 212, 301, 302, and 314.

FLAS 411 Spanish and the Nature of Language (3)
Introduction to the study of human language with Spanish as the primary source for description, exemplification and analysis. Prerequisites: FLAS 301, FLAS 302, and FLAS 314.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

FLAS 421 Hispanic Poetry (3)
Exploration of peninsular and/or Latin-American poetry, poets, and poetic forms. May include poetry written by Hispanic authors in the United States. Prerequisites: FLAS 212, 301, 302, 314, 321, and 322.

FLAS 422 Hispanic Prose (3)
Exploration of peninsular and/or Latin-American prose, including the novel, short story, and/or essay. May include prose written by Hispanic authors in the United States. Prerequisites: FLAS 212, 301, 302, 314, 321, and 322.

FLAS 423 Hispanic Drama and Film (3)
Exploration of peninsular and/or Latin American dramatic texts and/or cinema. May include plays and films by Hispanic authors in the United States. Prerequisites: FLAS 212, FLAS 301, FLAS 302, FLAS 314, FLAS 321, and FLAS 322.

FLAS 431 Spanish for Medical and Social Services (3)
Acquisition and refinement of superior linguistic and crosscultural skills for health care and social services settings in which Spanish is the predominant language of communication. Prerequisites: FLAS 212, 301, 302, and 314.

FLAS 433 Business Spanish (3)
Exploration of the linguistic and cultural aspects of conducting business in a Hispanic context as well as developing the skills necessary for professional correspondence. Prerequisites: FLAS 212, 301, 302, 311, 312, and 314.

FLAS 434 Translation (3)
Fundamentals of translation. Insights into and practice in the art of translation from its Biblical inception to the latest in machine-generated translation. Particular focus on the Spanish-English language pair. Prerequisites: FLAS 212, 301, 302, and 314.

FLAS 435 Interpreting (3)
Fundamentals of interpreting. Exploration and enhancement of linguistic and cross-cultural skills in the various venues and modes of Spanish-English interpreting. Prerequisites: FLAS 212, 301, 302, and 314.

FLAS 441 Spanish Phonetics and Phonology (3)
Theory and practice of Spanish phonetics and phonology, with focus on variation in the Hispanic world, Spanish and English in contrast, improvement of pronunciation, and enhancement of the ability to relate sounds to their spelling symbols. Prerequisites: FLAS 212, 301, 302, and 314.

FLAS 442 Methodology of Teaching Foreign Languages (3)
Examination of current trends, methods, and techniques in foreign language pedagogy, including "Standards for Foreign Language Learning: Preparing for the 21st Century," and "Proficiency Guidelines of the American Council on the Teaching of Foreign Languages (ACTFL)." Prerequisites: FLAS 212, 301, 302, 314, and 441.

FLAS 443 Spanish for Public School Teachers (3)
Intensive oral/written practice of Spanish for communication and dialogue between teachers and the Spanish-speaking community. Prerequisites: FLAS 212, 301, 302, and 314.

FLAS 444 Using Technology, Literature and Culture in the Spanish Language Classroom (3)
Examination of current trends and techniques in the use of literature and culture in teaching Spanish. This is based on "the need to integrate the teaching of culture in the language curriculum and the idea that language and culture are inseparably intertwined." (NSFLET, 1996) Prerequisites: FLAS 301, 302, 311, 312, 314, 321, 322, 3 credits each.

FLAS 498 Spanish Senior Practicum (3)
Faculty-coordinated internship consisting of work-oriented instruction in Spanish involving classroom or laboratory experiences and/or research. Prerequisites: FLAS 212, 301, 302, 311, 312, 321, and 322, plus at least nine credit hours completed in any one of the three Spanish major concentrations.

Other Languages

FLAV 196 Topics: (1-3)

FLAV 290 Special Studies in Foreign Languages (1-3)
These courses are currently offered through Outreach: Ancient Greek, Latin, Advanced French, German, Spanish and other Classical and Modern Languages as permitted by interest and instructor availability.

FLAV 296 Topics (1-3)

FLAV 390 Special Studies in Foreign Languages (1-3)
These courses are currently offered through Outreach: Ancient Greek, Latin, Advanced French, German, Spanish and other Classical and Modern Languages as permitted by interest and instructor availability.

FLAV 395 Independent Study (1-3)

FLAV 396 Topics (1-3)

FLAV 495 Independent Study (1-3)

FLAV 496 Topics (1-3)

Foreign Languages: American Sign Language (FLSL)

FLSL 111 American Sign Language I (3)
Basic receptive and expressive skill acquisition in American Sign Language (ASL) and other signing modes. Includes approximately 400 vocabulary items; the manual alphanumeric system; interrogatives; subject, object, possessive pronouns; simple present, past, and future verb tense formation.

FLSL 112 American Sign Language II (3)
Receptive and expressive skill practice in American Sign Language (ASL) and other signing modes. Includes approximately 800 vocabulary terms; classifiers; numeral incorporation; fingerspelling, loan signs, directional verbs; body and facial language. Prerequisite: FLSL 111.

Geography (GEOG)

GEOG 103 World Regional Geography-GTSS2 (3)
Survey of world geography by major world regions including an analysis of the physical elements, the inhabitants, and human occupancy patterns and an evaluation of the potential of each region for sustaining human populations.

GEOG 131 Introduction to Cartography (3)
Introduction to maps as tools for communication and analysis of locationally related information, including an introduction to concepts in Geographic Information Systems (GIS) and Global Positioning Systems (GPS).

GEOG 196 Topics (1-3)

GEOG 296 Topics (1-3)

Geology (GEOL)

GEOL 100 Survey of Earth Science-GTSC2 (3)
Physical makeup of the earth, its history, and geology. One field trip is required. Intended for students with majors other than one of the sciences.

GEOL 103 Weather and Climate-GTSC2 (3)
Non-mathematical introduction to elements of local and global weather: the atmosphere, cloud formation, precipitation, seasons, optical phenomena and violent storms. Students practice making 24-hour weather forecasts.

GEOL 104 Oceanography-GT-SC-2 (3)
Non-mathematical introduction to the scientific study of the ocean. While the course focuses on the hydrosphere subsystem of the Earth System, the atmosphere, cryosphere, lithosphere and biosphere interrelationship with the hydrosphere are also examined.

GEOL 105 Geology of Colorado-GTSC2 (3)
Introduction to minerals, rocks, geologic time scale and basic geologic terms, followed by geology of Colorado taught with the aid of movies and slides. A one-day field trip is required.

GEOL 106 Introduction to Dinosaurs-GT-SC2 (3)
Introduction to the study of dinosaurs, from geological, biological and historical perspectives. Intended for students interested in how different areas of science can be applied to a subject of strong human interest. Includes two full-day field trips to local dinosaur quarries and museums.

GEOL 107 Natural Hazards and Environmental Geology-GTSC2 (3)
Introduction to geologic aspects of our environment. Includes studies of natural hazards, global climate change, geologic resources and emphasizes human interactions with the environment.

GEOL 111 Principles of Physical Geology-GTSC1 (3)
GEOL 111L Principles of Physical Geology Lab-GTSC1 (1)
Materials that make up the earth and surface and interior processes that interact to produce the present features of the earth. Lab: minerals, rocks, topographic maps, earth quakes, and landforms. Three lectures and one two-hour laboratory per week.

GEOL 112 Principles of Historical Geology-GTSC1 (3)
GEOL 112L Principles of Historical Geology Lab-GTSC1 (1)
Origin of the earth and life, changes recorded in rocks and fossils using the geologic time scale and techniques of dating to place events in sequence. Lab: topographic and geologic maps, hand samples of rocks, reconstruction exercises, and fossils to interpret regional and general geologic history. One all-day field trip is required. Four lectures and one two-hour laboratory per week. Prerequisite: GEOL 111/111L or GEOL 113/113L or consent of instructor.

GEOL 113 Field-Based Introduction to Physical Geology-GTSC1 (3)
GEOL 113L Field-Based Introduction to Physical Geology Lab-GTSC1 (1)
Introduction to minerals, rocks, Earth structures, mountain building processes, and other elements of physical geology for science and non-science majors. A majority of class time will be spent in the field (including one Saturday) observing and mapping geological features of Western Colorado. There will be some indoor lectures and laboratory work. This course is recommended for prospective K-12 teachers.

GEOL 196 Topics (1-3)

GEOL 202 Introduction to Field Studies (3)
Mapping of several small areas using GPS, transit, and pace and compass methods. Profiles, cross-sections, and maps are prepared. Some unscheduled time is required to do mapping projects. Prerequisite: consent of instructor.

GEOL 204 Computer Applications in Geology (3)
Quantitative methods of geologic data analysis with the data manipulated on the computer. Methodical approach with limited theoretical emphasis; statistical concepts; special programs for graphical presentation and analysis. Three lectures per week and computer laboratory time to complete exercises are required. Prerequisites: GEOL 111/111L or GEOL 113/113L, and GEOL 112/112L, and STAT 200 (recommended but not required) or consent of instructor.

GEOL 250 Environmental Geology (3)
Geologic aspects of environmental problems involving natural processes and anthropogenic activities. Studies include landslides, earthquakes, flooding, coastal erosion, and land subsidence as well as environmental impacts of mineral resource extraction, soil erosion, fossil fuel consumption, and climate change. Prerequisites: GEOL 100 or 104 or 105 or 111 or 113.

GEOL 296 Topics (1-3)

GEOL 301 Structural Geology (3)
GEOL 301L Structural Geology Lab (1)
Stress and strain in rock bodies. Description and occurrence of both brittle and ductile rock structures. Lab: stereographic and graphical solution of structural problems, the study of maps and cross sections, and some field problems. Three lectures and one two-hour laboratory per week. Four one-day field trips are taken. Prerequisites: GEOL 202, 204, and 111/111L or 113/113L, and MATH 130.

GEOL 305 Cartography for GIS (1)
Introduction to maps as tools for communication and analysis of locationally-related information.

GEOL 321 Introduction to Remote Sensing (2)
GEOL 321L Introduction to Remote Sensing Lab (1)
Remote sensing systems and applications; characteristics of photographs, scanner and radar imagery interpretation. Two one-hour lectures and one two-hour laboratory per week. Prerequisites: GEOL 332/332L.

GEOL 325 Introduction to Engineering Geology (3)
Geologic principles applied to construction problems; case histories of major projects. Field trips and term project required. Prerequisite: GEOL 111/111L or GEOL 113/113L or consent of instructor.

GEOL 331 Crystallography and Mineralogy (3)
GEOL 331L Crystallography and Mineralogy Lab (1)
Morphology and classification of crystals; chemistry and genesis of minerals. Lab: identification of crystal systems and class, hand specimen identification of minerals, some X-ray diffraction work. Three lectures and one two-hour laboratory per week. Prerequisite: GEOL 202, 204, and CHEM 131 or consent of instructor.

GEOL 332 Introduction to Geographic Information Systems (2)
GEOL 332L Introduction to Geographic Information Systems Lab (1)
Basic knowledge of the fundamentals of GIS with regard to theoretical, technical, and application issues. Prerequisites: GEOL 305 or GEOG 131.

GEOL 333 Geology of the Canyon Country (1)
Three two-hour evening lectures with films and slides used to preview geology of the Colorado Plateau. A five-day field trip to the selected sites is conducted during spring break. Prerequisites: GEOL 100, 105 or 112.

GEOL 340 Igneous and Metamorphic Petrology (3)
GEOL 340L Igneous and Metamorphic Petrology Lab (1)
Origin, composition and classification of igneous and metamorphic rocks. Lab: identification of igneous and metamorphic rocks in hand specimens. Three lectures and one two-hour laboratory per week. Prerequisite: GEOL 331.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

GEOL 351 Applied Geochemistry (3)
Geochemistry and its relationship to weathering and soils, geochemical surveys and prospecting techniques, reactions of contaminants with earth materials, and methods of reducing environmental degradation. Prerequisites: CHEM 121/121L, CHEM 122/122L, and GEOL 111/111L or GEOL 113/113L.

GEOL 355 Basic Hydrology (3)
Introduction to physical hydrologic processes including precipitation, evapotranspiration, infiltration, runoff and subsurface flow. Examination of hydrologic modeling, problemsolving, and monitoring techniques as well as water resource management issues at both local and global scales. Prerequisite: MATH 113, or MATH 151 or consent of instructor.

GEOL 359 Survey of Energy-Related Natural Resources (3)
Origin, location, and economics of non-metallic geologic commodities, including phosphates, evaporites, oil, gas, coal, and sedimentary uranium deposits. Students give oral and written reports on two localities. Prerequisites: GEOL 111/111L or GEOL 113/113L; CHEM 131/131L, or consent of instructor.

GEOL 361 Survey of Mineral-Related Natural Resources (3)
The genesis, description, and exploitation of metallic and non-metallic natural resources consumed by modern society, such as base-metals, precious metals and gems, aggregates and construction materials, fertilizers, and chemical-industrial commodities. Environmental, economic, and socio-political issues associated with utilization of these resources will also be addressed. At least one field trip to a local resource area will be arranged. Three lectures per week. Prerequisites: GEOL 111/111L or GEOL 113/113L, and CHEM 131, 131L, or consent of instructor.

GEOL 375 Global Positioning Systems for GIS (2)
GEOL 375L Global Positioning Systems for GIS Lab (1)
GPS techniques and applications as they relate to GIS data collection. Prerequisites: GEOL 332 and 332L, or BIOL 332 and 332L, or ENVS 332 and 332L.

GEOL 393 Co-operative Education (3-12)

GEOL 395 Independent Study (1-3)

GEOL 396 Topics (1-3)

GEOL 402 Applications of Geomorphology (3)

GEOL 402L Applications of Geomorphology Lab (1)
Knowledge of landform genesis and shaping processes is applied to solve modern problems with emphasis on local soils, slopes, rivers, erosional surfaces, and structural framework. Lab and field studies used to explore frost, running water, slope movement, ground water, wind, and glaciers which have affected the local environment. Practical techniques of measurement and interpretation, including statistical and computer techniques, used to produce models of landscape development. A term project must be completed. Two major field trips are required. Four lectures and one two-hour laboratory per week. Prerequisite: GEOL 202 and GEOL 204 and consent of instructor.

GEOL 404 Geophysics (3)
GEOL 404L Geophysics Lab (1)
Exploration for mineral and petroleum and preliminary investigation of sites for engineering and environmental projects with emphasis on refraction and reflection seismic, gravity, magnetic, electrical, electromagnetic ground-penetrating radar and radioactive methods. Lab: interpretation of data, computer applications, and field trips. Four lectures and one two-hour laboratory per week. Prerequisites: GEOL 202 and GEOL 204, GEOL 111/111L or GEOL 113/113L, and GEOL 112/112L, and PHYS 112, (calculus is recommended but not required) or consent of instructor.

GEOL 405 Solid Earth Geophysics (3)
Classical physics applied to the study of the earth with emphasis on the origin of the earth, its gravitational, geomagnetic, and geothermal characteristics, seismicity, the dynamics of the earth's crust, plate tectonics, and continental drift. One field trip required. Prerequisites: GEOL 404 or consent of instructor.

GEOL 411 Paleontology (3)
GEOL 411L Paleontology Lab (1)
Taxonomy, morphology, ecology, and geologic range of most groups of invertebrate fossils. **Lab**: field identifications of guide fossils. A one-day field trip is required. Two lectures and one two-hour laboratory per week. Prerequisite: beginning Biology course or consent of instructor.

GEOL 415 Introduction to Ground Water (3)
GEOL 415L Introduction to Ground Water Lab (1)
Relationships of ground water to other water sources, hydrologic cycle, water balance, hydrologic characteristics of rocks, hydraulics and equations defining flow, ground water quality, and contamination, exploration and measurement techniques (including geophysical procedures), state and federal regulations, and computer modeling. Lab: Acquisition, analysis, and interpretation of ground water data. Prerequisites: GEOL 111/111L or GEOL 113/113L, and MATH 151, and at least high school level biology, chemistry and physics. Three lectures and one two-hour laboratory per week.

GEOL 432 Advanced Geographic Information Systems (2)
GEOL 432L Advanced Geographic Information Systems Lab (1)
Emphasis on the set of analytical operations provided by this technology and the specific conditions, requirements, and processing considerations surrounding effective GIS modeling and decision making. Prerequisites: GEOL 332 and 332L, or BIOL 332 and 332L, or ENVS 332 and 332L, or GEOL 375 and 375L, or ENVS 375 and 375L. GEOL 321 and 321L recommended.

GEOL 444 Sedimentology and Stratigraphy (3)
GEOL 444L Sedimentology and Stratigraphy Lab (1)
Physical, chemical, and biological characteristics of sedimentary rocks, with emphasis on depositional processes and environments, diagenesis, stratigraphic sequences, and correlation. **Lab** emphasis is on description and classification of sedimentary rocks, analysis of depositional environments, and stratigraphic problems. One weekend field trip is required. Prerequisites: GEOL 111/111L or GEOL113/113L, GEOL 112/112L, GEOL 202, GEOL 204, GEOL 331/331L, and CHEM 131/131L.

GEOL 445 Geospatial Database and Design (2)
GEOL 445L Geospatial Database and Design Lab (1)
Creating, editing, and managing geodatabases and working with topology for implementation with GIS. Term project is required. Two lectures and one two-hour lab per week. Prerequisite: GEOL 432/432L.

GEOL 455 River Dynamics (3)
GEOL 455L River Dynamics Lab (1)
Introduction to river forms and processes, including basic open-channel hydraulics, sediment transport, fluvial geomorphology and human interactions with river systems. Lab covers field, lab, and computer techniques to understand and model river forms and processes, including human interactions with river systems. Prerequisite: GEOL 355 or consent of instructor.

Certain courses are only offered during the fall or spring semesters, or may be available only in alternating years. It is the student's responsibility to meet with their advisor and/or check the two-year course planning calendar on the Mesa State College website for course availability. Learn more at **mesastate.edu/academics.**

GEOL 480 Summer Field Camp (6)
This course involves basic training in field geology. Students will perform a variety of geologic mapping exercises using topographic maps and air photos. Students will gain an appreciation of geologic maps - how they are made, the uncertainties and unknowns in mapping, and how mappers deal with them. Most mapping exercises are in deformed sedimentary strata and Quaternary surficial deposits. Some field exercises will involve collection and interpretation of hydrological data. The course is a six full weeks in duration, beginning immediately after conclusion of Spring Semester. Students should not expect to have weekends or holidays off. Students will also be camping out at least half the time or more during this course. Prerequisites: GEOL 111/111L or GEOL 113/113L, GEOL 112/112L, GEOL 301/301L. GEOL 444/444L recommended.

GEOL 490 Seminar (3)
Well logging techniques and characteristics of well logs; recent developments, concepts, and theories relating to petroleum, mineral deposits, tectonics; and other topics of current interest are discussed by students in a seminar setting. Prerequisites: upper division standing and consent of instructor.

GEOL 493 Co-operative Education (3-12)

GEOL 495 Independent Study (1-3)

GEOL 496 Topics (1-3)

History (HIST)

HIST 101 Western Civilizations-GTHI1 (3)
Political, social, economic, and cultural history of Western mankind from ancient times to modern times.

HIST 102 Western Civilizations-GTHI1 (3)
Political, social, economic, and cultural history of Western mankind from ancient times to modern times.

HIST 131 United States History-GTHI1 (3)
History of the United States from Colonial period to modern times.

HIST 132 United States History-GTHI1 (3)
History of the United States from Colonial period to modern times.

HIST 137 Latinos in the United States (3)
Survey of historical issues affecting people of Latino heritage in the United States.

HIST 202 Introduction to Historical Research (3)
An introduction to the methods and areas of historical research, with the intent of preparing students for research requirements of upper-division history courses. Prerequisites: 6 hours selected from HIST 101, 102, 131, and 132

HIST 225 History of Colorado (3)
History of the state from pre-historic to modern times.

HIST 296 Topics (1-3)

HIST 301 History of England Since 1485 (3)
England, Great Britain and the Empire/ Commonwealth from the first Tudor to the present. Prerequisites: HIST 101, 102.

HIST 302 History of Modern France (3)
France from the Revolution of 1789 to the present. Prerequisite: HIST 102 or consent of instructor.

HIST 303 History of Modern Germany (3)
Origins and development of the modern Germany nation-state from 1806 to the present. Prerequisite: HIST 102 or consent of instructor.

HIST 305 The Old South (3)
The uniqueness of the Antebellum South, the growth of Southern nationalism, and the politics of the Late National period. Prerequisite: HIST 131.

HIST 306 History of South and Southeast Asia (3)
History of those areas of Asia within the influence of Indic Civilization, with emphasis on the roles of Hindu, Buddhist, and Muslim religions. Prerequisites: HIST 101, 102.

HIST 310 Latin American Civilization (3)
Historical development of Latin America from pre-Columbian times to the present. Prerequisite: HIST 102 or consent of the instructor.

HIST 315 American Indian History (3)
American Indian history from pre-Columbian America to the present with an emphasis on federal Indian policy. Case studies will also address the adaptation of Indian people to changing social and economic conditions. Prerequisites: HIST 131 and 132.

HIST 316 American Slavery (3)
Exploration of the development of race slavery and an examination of slave life in colonial North America and the United States from colonization through reconstruction. Prerequisite: HIST 131.

HIST 320 The American West (3)
The American West from pre-Columbian times through the Twentieth Century with special emphasis on the diverse cultures and ecological factors that have defined the region. Prerequisites: HIST 131, 132, or consent of instructor.

HIST 330 History of 19th Century Europe (3)
Political, social, intellectual, and diplomatic forces operating in Europe between the French Revolution and World War I. Prerequisites: HIST 101, 102, or consent of instructor.

HIST 331 The 20th Century (3)
Investigation of the development of our modern world since World War I with emphasis on Europe and its role in that process. Prerequisites: HIST 101, 102 or consent of the instructor.

HIST 332 History of Modern Warfare (3)
War, its causes, consequences, and impact on history from the 18th century to the present. Prerequisites: HIST 101, 102.

HIST 340 History Of the Islamic World (3)
The origins, spread, and influence of the Islamic world, including the Middle East and North Africa with emphasis on its position in modern world affairs. Prerequisites: HIST 101, 102.

HIST 342 The Early American Republic (3)
The social, cultural, intellectual and political developments in America from 1783-1850. Prerequisites: HIST 131, 132, or consent of instructor.

HIST 344 The Age of Industry in America (3)
The social, intellectual, and political events in the United States from the end of the Civil War to the beginning of the Great Depression. Prerequisites: HIST 131, 132, or consent of instructor.

HIST 346 The United States in the 1950s and 1960s (3)
The social, intellectual, and political Events in the U.S. form the end of WWII through the 1960s. Prerequisites: HIST 131, 132, or consent of instructor.

HIST 347 Global America: 1970-2000 (3)
The political and social implications of America as the dominant global power, from 1970 to the present. Prerequisite: HIST 132.

HIST 350 Renaissance & Reformation (3)
Examines the political and social context of the Renaissance and Reformation. Prerequisites: HIST 101.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

HIST 355 Ancient & Medieval Cities (3)
The development (physical, social, political) of cities in the ancient and medieval periods and their role in early western civilization. Prerequisite: HIST 101.

HIST 360 Medieval Europe (3)
Examines the political, social, and religious institutions of Medieval Europe (300-1475). Prerequisites: HIST 101, 102.

HIST 370 Early United States Women's History (3)
Historical survey of cultural, economic, and political contributions of American women from colonization to Reconstruction. Prerequisites: HIST 131, 132.

HIST 371 20th Century United States Women's History (3)
Historical survey of cultural, economic, and political contributions of American women from Reconstruction to the present. Prerequisites: HIST 131, 132.

HIST 375 American Sport History (3)
An examination of American society from the Colonial era to the present through the lens of sport. Prerequisite: HIST 131 or 132. Both courses are recommended.

HIST 395 Independent Study (1-3)

HIST 396 Topics (1-3)

HIST 396E Topics (1-3)

HIST 400 The Soviet Union and Eastern Europe (3)
Imperial Russia, the Soviet Union, and Eastern Europe from 1900 to the present. Prerequisite: HIST 101, 102 or consent of instructor.

HIST 401 East Asia: The Formative Period (3)
China, Japan, Korea, and Vietnam before the coming of the West. Prerequisites: HIST 101, 102.

HIST 403 East Asia and the Modern World (3)
China, Japan, Korea, and Vietnam since 1840. Prerequisites: HIST 101, 102, or consent of instructor.

HIST 404 Senior Seminar in Historical Research (3)
History-specific research with emphasis on utilization of primary documents and practice in conducting research and reporting results. Prerequisites: HIST 202 and twelve hours of upper division History or consent of instructor.

HIST 405 Introduction to Public History (3)
Exploration of non-academic historical skills employed in museum work, archival management, and positions with historical societies and historic preservation agencies. Career opportunities will be examined. Prerequisites: HIST 131, 132, or consent of instructor.

HIST 406 History of the African Continent (3)
The development of African cultures from the ancient to modern periods, with particular attention to interaction with non-African cultures. Prerequisites: HIST 101 and HIST 102, or consent of instructor.

HIST 410 Environmental History of the United States (3)
The evolution of public attitudes and governmental policies and practices relative to the wilderness, natural resource development, and the natural environment from colonial times to the present. Prerequisites: HIST 131, 132, or consent of instructor.

HIST 415 Colonial America (3)
Examines the development of colonial society in North America and the tensions that arose between Native American, European, and African people and cultures. Prerequisite: HIST 131.

HIST 416 The American Revolution (3)
An overview of and perspectives on the causes and outcomes of the American Revolution. Prerequisite: HIST 131.

HIST 420 Civil War (3)
The causes and outcomes of the American Civil War. Prerequisites: HIST 131, or consent of instructor.

HIST 430 The Ancient Mediterranean World (3)
The Mediterranean world from pre-classical times to the fall of the Roman Empire. Prerequisites: HIST 101, 102, or consent of instructor.

HIST 435 Classical Archaeology (3)
Examines the archaeological evidence for some of the ancient Mediterranean civilizations and how the historian uses archaeology to better understand the ancient world. Prerequisite: HIST 101.

HIST 440 Early & Medieval Christianity (3)
Examines the historical development of Christianity through the middle ages, focusing on the social (marriage and family) and political (kingship) consequences of Christianity. Prerequisites: HIST 101.

HIST 495 Independent Study (1-3)

HIST 496 Topics (1-3)

HIST 496E Topics (1-3)

HIST 499 History Internship (1-3)
Experience with historical work in settings outside the college community, including museums, archives, and local, state, and federal agencies. Instructor permission required and internship must be arranged during the semester prior to the field experience. Prerequisites: Nine upper division hours in history and junior status.

Honors (HNRS)

HNRS 396 Topics (1-3)

HNRS 498 Honors Thesis (3)

Humanities (HUMA)

HUMA 196 Topics (1-3)

HUMA 201 Field Studies in Humanities (1-3)
Study/travel tours of varying lengths in the United States and foreign countries to acquaint students in some depth with particular aspects of world culture (language, the arts, literature, etc.) both contemporary and historical.

HUMA 296 Topics (1-3)

HUMA 300 History and Development of Books (3)
History and development of the book from the development of the alphabet to the present in the context of changing technologies and various social, cultural, and economic influences. Prerequisites: Junior or senior status, or consent of instructor.

HUMA 301 Field Studies in Humanities (1-3)
Prerequisite: junior or above standing.

HUMA 395 Independent Study (1-3)

HUMA 396 Topics (1-3)

HUMA 495 Independent Study (1-3)

HUMA 496 Topics (1-3)

HUMA 499 Internship (8)
See faculty advisor for details.

Interdisciplinary Studies (INTR)

INTR 400 San Juan Symposium (6)
An interdisciplinary study of regional biology, geology, and history, combining classroom study on campus with field study in the San Juan Mountains of Colorado. Elective credit

only; may not be used to meet requirements of a discipline in Mesa State College degree programs. Prerequisites: upper division standing and consent of instructors. Not open to freshmen and sophomores.

International Studies (INTS)

INTS 101 Introduction to International Studies (3)
Introduction to concepts, paradigms and theories used to describe and explain International Studies. Attention given to the interdisciplinary nature of academic disciplines, peoples in cultural context, environments, education systems, world resources, social and economic institutions.

Kinesiology: Activity (KINA)

The following courses meet the physical activity requirement for graduation. All students seeking a baccalaureate degree must take KINE 100 plus two courses from the activity list. All students seeking an associate degree must take KINE 100 plus one course from the activity list. Each activity course is scheduled for an eight-week module and includes lectures on the history, rules, and techniques of the activity and participation in the activity. Students are examined both on knowledge of the activity and proficiency in the activity. In addition to the required, up to six (6) KINA activity courses may be used as electives toward a bachelor's degree and three (3) toward an associate's degree.

KINA 101 Beginning Swimming (1)
KINA 102 Intermediate Swimming (1)
KINA 103 Diving (1)
KINA 104 Water Polo (1)
KINA 105 Water Aerobics (1)
KINA 106 Scuba I (1)
KINA 107 Scuba II (1)
KINA 108 Canoeing (1)
KINA 109 Kayaking (1)
KINA 110 River Rafting (1)
KINA 111 Rock Climbing (1)
KINA 112 Hiking (1)
KINA 113 Beginning Bowling (1)
KINA 114 Intermediate Bowling (1)
KINA 115 Beginning Golf (1)
KINA 116 Intermediate Golf (1)
KINA 117 Badminton (1)
KINA 118 Karate (1)
KINA 119 Archery (1)
KINA 120 Backpacking (1)
KINA 121 Beginning Tennis (1)
KINA 122 Intermediate Tennis (1)
KINA 123 Racquetball (1)
KINA 124 Intermediate Racquetball (1)
KINA 125 Handball (1)
KINA 126 Fitness Walking (1)
KINA 127 Physical Conditioning (1)
KINA 128 Intermediate Weight Training (1)
KINA 129 Weight Training (1)
KINA 130 Fitness (1)
KINA 131 Low-Impact Aerobics (1)
KINA 132 High-Impact Aerobics (1)
KINA 133 Downhill Skiing (1)
KINA 134 Snowboarding (1)
KINA 135 Telemark Skiing (1)
KINA 136 Body Shaping (1)
KINA 138 Step Aerobics (1)
KINA 139 In-Line Skating (1)
KINA 140 Snowshoeing (1)
KINA 141 Mountain Biking (1)
KINA 142 Self-Defense (1)
KINA 143 Orienteering (1)
KINA 144 Pilates (1)
KINA 145 Wrestling (1)
KINA 147 Track and Field (1)
KINA 148 Gymnastics (1)
KINA 150 Adaptive Aquatics (1)
KINA 151 Adaptive Physical Activity (1)
KINA 152 Softball (1)
KINA 153 Adaptive Aquatics II (1)
KINA 156 Soccer (1)
KINA 157 Adaptive Physical Activity II (1)
KINA 158 Speedball (1)
KINA 159 Aikido (1)
KINA 161 Two-Person Outdoor Volleyball (1)
KINA 162 Volleyball (1)
KINA 163 Intermediate Volleyball (1)
KINA 164 Beginning Basketball (1)
KINA 165 Intermediate Basketball (1)
KINA 166 Flag Football (1)
KINA 167 T'ai Chi (1)
KINA 168 Hatha Yoga & Relaxation I (1)
KINA 169 Hatha Yoga & Relaxation II (1)
KINA 172 Square Dance (1)
KINA 173 Folk Dance (1)
KINA 174 Social Dance (1)
KINA 179 Dance Performance Group (1)

Prerequisites for all "intermediate" or Part II courses; the corresponding course or consent of instructor.

KINA 180, 280, 380, 480
Varsity Football (1)

KINA 181, 281, 381, 481
Varsity Basketball (1)

KINA 182, 282, 382, 482
Varsity Baseball (1)

KINA 183, 283, 383, 483
Varsity Swimming (1)

KINA 184, 284, 384, 484
Varsity Tennis (1)

KINA 185, 285, 385, 485
Varsity Volleyball (1)

KINA 186, 286, 386, 486
Varsity Softball (1)

KINA 187, 287, 387, 487
Varsity Soccer (1)

KINA 188, 288, 388, 488
Varsity Golf (1)

KINA 189, 289, 389, 489
Varsity Cross Country (1)

KINA 190, 290, 390, 490
Varsity Track and Field (1)

KINA 191, 291, 391, 491
Varsity Wrestling (1)

Physical activity courses numbered 180-191 designate the first year of varsity athletics; 280-291, the second; 380-391, the third; and 480-491 the fourth. These courses must be taken in sequence.

In addition to the rules above for KINA courses, the following apply:

Only one varsity sport activity course, numbered KINA 180-191, may be used to meet the College physical activity requirement.

A student may elect to register for a particular varsity sports class for credit as many as four times (once at each level).

Varsity sports activity credit at the 300 and 400 levels may not be counted towards the forty (40) credit hour upper division requirement for graduation unless they are a required part of a degree program.

Kinesiology: Academic (KINE)

KINE 100 Health and Wellness (1)
The presentation of information concerning the benefits, positive effects, assessment, and implementation of healthy life styles.

KINE 200 History and Philosophy of Sport and Physical Education (3)
Discusses the breadth, scope, and nature of the profession. Orientation to the history and philosophy of physical education and the factors that influence its evolution. Special consideration is given to the history of sport from antiquity to the present, particularly the Olympic Games.

KINE 205 Introduction to Sport Management (3)
Survey and introduction to the field of sport management.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

KINE 211 Methods of Lifetime Activities (3)
Prerequisite: KINE 200 or consent of instructor.

KINE 212 Methods of Individual Activities (3)
Prerequisite: KINE 200 or consent of instructor.

KINE 213 Applications of Physical Fitness and Exercise Prescription (3)
Prerequisite: KINE 100.

KINE 214 Methods of Team Activities (3)
Prerequisite: KINE 200 or consent of instructor.

KINE 220 Methods of Dance and Gymnastics (3)

KINE 230 Methods of Aerobics Training (1)

KINE 234 Prevention and Care of Athletic Injuries (3)
Procedures and techniques involved in preventing and treating common injuries associated with competitive athletics.

KINE 240 Introduction to Clinical Athletic Training (2)
Introduction to fundamental athletic training skills, policies and procedures. Required for admission into the Athletic Training Education Program. Prerequisite: KINE 234, may be taken concurrently.

KINE 250 Lifeguard Training (3)
An American Red Cross course leading to certification of qualified students.

KINE 251 Water Safety Instructor Course (3)
An American Red Cross course leading to certification of qualified students.

KINE 256 Creative Play and Literacy (3)
Acquaints students with instructional content, including proper content, progression, and literary integration that is appropriate for elementary physical education.

KINE 260 School and Personal Health (3)
School and personal health problems with emphasis on the development of proper health attitudes and practices, and application of health knowledge and practice in school situations. Prerequisite: KINE 100.

KINE 265 First Aid and CPR for the Professional Rescuer (3)
Knowledge and skills required to meet the needs of first aid and CPR situations that lead to obtaining valid First Aid and CPR for the Professional Rescuer cards.

KINE 296 Topics: (1-3)

KINE 297 Practicum (1-2)
Supervised assistantship with physical educators or recreation practitioners.

KINE 301 Tests and Measurements in Sport and Physical Education (3)
Modern testing and evaluation methods applied to the field of HPW, including the areas of biological, neuromuscular, cognitive, social and affective development. The selection of appropriate measuring devices and their interpretation is an integral part of the course. Prerequisite: KINE 200.

KINE 303 Physiology of Exercise (3)
KINE 303L Physiology of Exercise Lab (1)
The effects of various types of exercise upon human body structure and function. Three one-hour lectures and one two hour laboratory per week. Prerequisites: KINE 213 and BIOL 209, 209L.

KINE 307 Philosophy and Psychology of Coaching (3)
Fundamental philosophical and psychological principles related to coaching competitive athletic teams.

KINE 309 Anatomical Kinesiology (3)
A comprehensive study of the musculature of the human body. Analysis of joint movement and muscular involvement in various physical activities will be emphasized in this course. Corequisite: KINE 309L. Prerequisites: BIOL 209, 209L, KINE 200.

KINE 309L Anatomical Kinesiology Lab (1)
A comprehensive study of the musculature of the human body. Analysis of joint movement, muscular involvement, and the application of mechanics, physics, mathematics, and motion analysis in various physical activities. One two-hour laboratory per week. Corerequisite: KINE 309.

KINE 320 Methods of Teaching Physical Education in Elementary Schools (3)
Information for classroom and physical education teachers that examines the teaching process, classroom management, and physical education content that is developmentally appropriate for elementary school education.

KINE 333 Community Health (3)
Introduction to the areas of epidemiology, disease prevention and control, environmental health, health care, injury prevention, and safety education.

KINE 335 Sport in Society (3)
The sociology of sport, covering the cultural traditions, social values, and psychosocial experiences of sport from antiquity to today.

KINE 342 Sport Law and Risk Management (3)
Legal duties, responsibilities, rights, duties and risk management techniques involved in sport.

KINE 345 Survey of Economics and Finance in Sport (3)
The economic, financial, and managerial accounting concepts for sport. Prerequisite: ECON 201.

KINE 350 Leadership and Ethics in Sport (3)
This course is designed to give individuals an understanding of the various aspects of leadership as well as a survey course of the development and application of moral and ethical values in sport administration settings.

KINE 360 Motor Learning (3)
Foundations of motor learning and the relation of motor performance to other aspects of behavior. Prerequisite: KINE 200.

KINE 365 First Responder (3)
Advanced knowledge and skills required to meet the needs of most emergency situations. Includes monitoring vital signs, CPR for professional rescuer, childbirth, triage, and transport of victims.

KINE 367 Field Experiences in Athletic Training I (2)
Athletic training field experiences. Concentration on Pre-Participation Considerations and Acute Injury Management. Prerequisite: Admission into the Athletic Training Education Program.

KINE 368 Clinical Experiences in Athletic Training I (2)
Athletic training clinical experiences. Concentration on injury care and prevention. Prerequisite: KINE 367 and admission into the Athletic Training Education Program.

KINE 373 Upper Body Injury Assessment (3)
Evaluation techniques and care of athletic injuries to the head, face and upper extremities. Integration of anatomical structures, physiology principles, and evaluative techniques to provide a basis for critical decision-making in an injury management environment. Prerequisite: KINE 234.

KINE 374 Lower Body Injury Assessment (3)
Evaluation techniques and care of athletic injuries to the trunk and lower extremities. Integration of anatomical structures, physiology principles, and evaluative techniques to provide a basis for critical decision-making in an injury management environment. Prerequisite: KINE 234.

KINE 378 Clinical Experiences in Athletic Training II (2)
Athletic training clinical experiences. Concentration on injury rehabilitation, nutrition, and psychology. Prerequisite: KINE 368.

Certain courses are only offered during the fall or spring semesters, or may be available only in alternating years. It is the student's responsibility to meet with their advisor and/or check the two-year course planning calendar on the Mesa State College website for course availability. Learn more at **mesastate.edu/academics.**

KINE 380 Adapted Physical Education (3)
Study of physical activity, its modification and adaptation for individuals with disabilities. Prerequisites: KINE 200 or consent of instructor.

KINE 395 Independent Study (1-3)

KINE 396 Topics (1-3)

KINE 401 Organization/Administration/ Legal Considerations in Physical Education and Sports (3)
Organizational structures, administrative techniques, and legal considerations in physical education and sports.

KINE 402 Sport Marketing (3)
The application of the principles of promotion and marketing to the sport and fitness industry including the areas of professional sports, corporate fitness, college/high school athletics, clubs and resorts, and others. Prerequisite: MARK 231.

KINE 403 Preparation for Strength and Conditioning Certification (3)
Emphasis on strength and conditioning techniques and program design. Prerequisites: KINE 303 and 303L, or consent of instructor.

KINE 404 Preparation for ACSM Health Fitness Instructor Certification (3)
Emphasis in fitness testing, designing and executing an exercise program, leading exercise, organizing and assisting with operation of fitness facilities. In addition, consultation practices for lifestyle change through multiple intervention strategies will be covered. Prerequisites: KINE 303, 303L.

KINE 405 Sports Nutrition (3)
In-depth study of macronutrient metabolism as it relates to sport. Practical consideration in the use or non-use of carbohydrate supplements, vitamins, and/or other ergogenic aids. Three one-hour lectures per week. Prerequisites: KINE 303, KINE 303L.

KINE 406 Governance and Communication in Sport (3)
The laws and rules governing various sport organizations from interscholastic to professional sport as well as the major means of sport communication.

KINE 408 Methods of Teaching Physical Education in Secondary Schools (3)
Instructional strategies on a practical application level for prospective secondary physical education teachers preparatory to entry into student teaching. Field experiences are required to supplement lectures and discussions. Prerequisites: completion of at least half of all physical education course-work required for certification.

KINE 410 Rehabilitative Exercises (3)
Review of the theoretical and scientific basis for, and the practical use of, traditional and recently emerging rehabilitative techniques utilized in the rehabilitation of acute, post acute, and chronic musculoskeletal injuries. Prerequisite: KINE 234.

KINE 411 Worksite Health Promotion (3)
Covers worksite health promotion: its description, planning, implementation, marketing, and evaluation. Prerequisite: KINE 401.

KINE 415 Physical Activity and Aging (3)
The study of the dynamic relationship between physical activity and the aging process. Course focuses on the impact of physical activity on the physiological, psychological, and social well-being of older adults. Prerequisites: KINE 303, 303L.

KINE 420 Therapeutic Modalities (3)
Review of the theoretical and scientific basis for, and the practical use of, contemporary therapeutic modalities and techniques utilized in the treatment of acute and chronic musculoskeletal injuries. Prerequisite: KINE 234.

KINE 430 Medical Conditions and Pharmacology in Sports (3)
An overview of the effects on physical activity resulting from the pre-existence of selected medical conditions and the use of pharmacological agents.

KINE 467 Field Experiences in Athletic Training II (2)
Athletic training field experiences. Concentration on Injury Prevention, Acute Injury Management and Health Care Administration. Prerequisite: KINE 378 and admission into the Athletic Training Education Program.

KINE 468 Clinical Experiences in Athletic Training III (2)
Athletic training clinical experiences. Concentration on injury and illness evaluation. Prerequisites: KINE 467.

KINE 478 Clinical Experiences in Athletic Training IV (2)
Athletic training clinical experiences. Concentrations on administration and professional development. Capstone course for the Athletic Training Education Program. Prerequisite: KINE 468.

KINE 480 Special Populations - Psychomotor Disabilities and Implications (3)
Designed to provide student with advanced knowledge concerning the relationship between disabilities and physical activity. A multidisciplinary approach to the etiology and functional implications of psychomotor disabilities. Prerequisites: KINE 303 and 303L.

KINE 487 Structured Research (1-3)
A formal research project undertaken with the guidance of a faculty member. The results will be presented as a formal presentation and/or paper. Prerequisite: Senior standing.

KINE 494 Senior Seminar (1)
Opportunity for senior students to contribute and participate in discussion and research of current issues.

KINE 495 Independent Study (1-3)

KINE 496 Topics (1-3)

KINE 497 Pre-Internship in Physical Education (3)
Provides an opportunity for K-12 physical education majors to research and study teaching and standard-based education in a physical education setting. Sixty laboratory hours required. Prerequisite: KINE 320, 408.

KINE 499 Internship (3-12)
Work experience obtained on a job where assignments are related to the student's specific concentration area within the Kinesiology degree. Prerequisites: Kinesiology major, senior standing.

KINE 500 Facility and Equipment Management in Sport and Fitness (3)
Provides an in-depth study of the facilities and equipment used in a variety of sport and fitness settings, from public to private organizations, educational settings, athletics (interscholastic, intercollegiate, and professional sports) as well as commercial and corporate fitness centers. The focus is on designing, planning, funding, and maintaining a facility as well as the equipment necessary for its successful operation.

KINE 510 Event and Program Management in Sport and Fitness (3)
Duties and responsibilities of sport and fitness managers in creating policies, conducting events, and developing programs for sport or fitness organizations. Includes extensive examination of the topics and issues involved in the planning, funding, promotion, implementation, and evaluation of events and programs.

KINE 520 Management Policies and Regulations in Sport and Fitness (3)
Study of managerial policies and regulations to specific sport and fitness organizations to include educational , athletic, commercial

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and corporate entities. Topics will include the following: human resource management; labor relations; policy issues; sponsorship; budgeting; federal, state, and local statues; CHSAA and NCAA rules and guidelines; and professional organization policies. Specific attention will be given to compliance strategies.

KINE 530 Advanced Coaching for Basketball (1)
Examination of the trends, techniques, methods and philosophies in coaching basketball at skilled levels. Specific attention is given to video analysis and game management.

KINE 534 Advanced Athletic Training for Coaches (1)
Specialized procedures and techniques involved in the prevention and management of common athletic injuries.

Machine and Manufacturing Trades (MAMT)

MAMT 101 Introduction to Manufacturing (2)
The course is designed to give the student a broad overview of the world of manufacturing. The course will include people, materials, machines, design, organization, waste, quality, and other subjects which effect society and production of a product.

MAMT 102 Machine Shop Theory (3)
Concentrated unit dealing with speeds and feeds of machines, materials, tooling, tapping, boring, and manufacturing processes.

MAMT 105 Print Reading & Sketching (2)
Reading of blueprints and process sheets as used in industry, application of that information to various manufacturing processes.

MAMT 106 Geometric Tolerancing (1)
Identification, interpretation, and application of the blueprint symbols (referred to as Geometric Tolerancing symbols) in machining and inspection operations. Corequisite: MAMT 105 or consent of instructor.

MAMT 110 Gauging & Measuring Tools (1)
Uses and techniques of inspection including micrometers, Vernier scales, instruments, hole gauges in surface plate work, finish of parts and overall inspection techniques. Prerequisite: MAMT 106 or consent of instructor.

MAMT 115 Introduction to Machine Shop (3)
Safety procedures: using bench tools, layout tools, power saws, and taps; sharpening general purpose drills, grinding lathe bits; and identifying and operating basic machines such as the bench grinder, drill press, band saw, and others. One hour lecture and three hours laboratory per week.

MAMT 120 Machine Technology I (4)
Operation of engine lathes, milling machines and surface grinders. One hour lecture and five hours laboratory per week. Prerequisite: consent of instructor.

MAMT 125 Machine Technology II (4)
Further development of skills acquired in MAMT 120. Emphasis will be placed on technical aspects of tooling and machining tolerances. One hour lecture and five hours laboratory per week.

MAMT 130 Machine Technology III (4)
Advanced machine operations including O.D. grinding, cutter tool grinding, gear cutting, indexing, and rotary table work with emphasis on accuracy, inspection, and workmanship. One hour lecture and five hours laboratory per week.

MAMT 135 Job Shop Machining I (3)
Production of machined parts from a shop blueprint, writing process sheets, and estimating machine time. Machining of parts may involve one or more machine operations. Machine time, paperwork, inspection, and accuracy will be emphasized. One hour lecture and three hours laboratory per week. Prerequisite: consent of instructor.

MAMT 140 Job Shop Machining II (3)
Further development of writing process sheets, estimating machine time, performing final inspection of finished parts and using all machines in the shop including the numerical control machines. One hour lecture, three hours laboratory per week. Prerequisite: MAMT 130 or consent.

MAMT 145 Machine Maintenance (2)
Maintaining, lubricating, and repairing machinery including making gib adjustments, selecting and using proper lubricants and selecting or manufacturing parts of making repairs with emphasis on workmanship and inspection. One hour lecture, one and one-half hours laboratory per week. Prerequisite: consent of instructor.

MAMT 148 CNC Applications (3)
Introduction to Computer Numerical Control programming basics, CAM software and tooling used in today's manufacturing CNC Milling machines and CNC lathes.

MAMT 150 Introduction to Numerical Control (1)
Numerical control/computerized numerical control machining, its advantages and how it operates. The course is designed as an informational unit for customized pre-employment training.

MAMT 151 Numerical Control Machining I (3)
Computerized and numerical control machining operations, including control of functions, programming format, machine setup, and operation. Two hours lecture and three hours laboratory per week. Prerequisite: consent of instructor.

MAMT 155 Numerical Control Machining II (3)
Further development of concepts introduced in MAMT 151 with emphasis on setup and operation of N.C./C.N.C. machines. Two hours lecture and three hours laboratory per week. Prerequisite: consent of instructor.

MAMT 160 Properties of Materials (2)
Descriptions of smelting and refining various types of metals. Discussions and demonstrations on various methods of heat treating, hardness testing, and cutting chip theory. One one hour lecture and one one and one-half hour laboratory per week.

MAMT 170 Practical Applications (3)
Students will gain a working knowledge in manufacturing through Co-op, internship, work experience or required lab work in industrial study if outside work cannot be acquired. Prerequisite: Instructor permission.

MAMT 196 Topics (1-3)

MAMT 207 Introduction to Statistical Process Control (2)
Introduction to the philosophical and economic bases for statistical process control and its use; mathematical and nonmathematical SPC techniques with emphasis on application.

MAMT 250 Process Systems Technology (2)
MAMT 250L Process Systems Technology Lab (2)
Advanced concepts of the philosophical and economic bases for statistical process control and its uses; mathematical and non-mathematical SPC techniques with emphasis of application.

MAMT 295 Independent Study (1-3)

MAMT 296 Topics (1-3)

Management (MANG)

MANG 121 Human Relations In Business (3)
Human side of organizations: morale, motivation, human needs, minorities as working partners, leadership styles, organizational environment, and other human forces having an impact on business structures.

MANG 201 Principles of Management (3)
Management as the process of achieving organizational goals or objectives by and through others. Emphasizes functions performed by managers and how they are influenced by forces both within and outside the organization. Managers' use of resources will be investigated.

MANG 221 Supervisory Concepts and Practices (3)
For practicing or potential supervisors and managers who hold or will hold first-line to middle-level management positions. Focuses on the management functions of planning, organizing, staffing, directing, and controlling and their relation to the daily job of the supervisor.

MANG 299 Internship (3-6)
Practical workplace experience under the joint supervision of the employer and the internship coordinator. Designed for business majors working in the business environment. Prerequisites: ACCT 201, BUGB 101, BUGB 211, and CISB 101.

MANG 300 Small Business Management (3)
Aspects of management uniquely important to small business firms; the economic and social environment in which they function. Prerequisite: MANG 201 or consent of instructor.

MANG 301 Organizational Behavior (3)
Human behavior, its causes and effects in organizational settings. Description of and development of an understanding of human behavior in such settings. Prerequisite: MANG 201 or consent of instructor.

MANG 341 Quantitative Decision Making (3)
Application of inferential statistics to realistic business situations; use of quantitative tools to enhance business decision-making ability. Descriptive statistics for data summarization, probability theory, distributions, estimation, and index numbers with emphasis on hypothesis testing, analysis of variance, regression/correlation, time series, and introduction to operations research and linear programming. Prerequisites: MATH 113 or higher, and STAT 200.

MANG 343 Evaluating Entrepreneur Opportunities (3)
Introduction to Entrepreneurship including development of business ideas, business model creation and business feasibility analysis. Prerequisite: BUGB 340.

MANG 371 Human Resource Management (3)
Principles and applications of basic human resource management (HRM). Survey of the HRM functions in organizations. Topics include staffing, training and development, compensation, saftey and health, employee and labor relations, and employee performance management. Prerequisites: MANG 201, junior or senior standing, or consent of instructor.

MANG 372 Employment Assessment (3)
Knowledge and skills necessary to effectively analyze and forecast organizational staffing requirements, assess, recruit and select candidates, and effectively retain employees in today's complex organizations. Legal aspects of staffing process emphasized. Prerequisite: MANG 371.

MANG 373 Human Resource Management, Leadership, Ethics, and Social Responsibility (3)
Review of literature related to Human Resource Management (HRM) and leadership, ethics, and corporate social responsibility. Review articles and books related to the responsibility of HRM leaders and their significant influence on organizational practices, leadership, ethical behavior and corporate social responsibility. Prerequisite: MANG 371 or consent of instructor.

MANG 395 Independent Study (1-3)

MANG 396 Topics (1-3)

MANG 401 Small Business Consulting (3)
Students are placed in the role of consultant for an area business furnishing management assistance to the small business community. Businesses benefit from the insight of student recommendations. Provides students practical training, supplementing academic theory by handling problems in a real business environment. Prerequisite: Consent of instructor.

MANG 402 Advanced Problems in Small Business Operations II (6)
Continuation of MANG 401. Prerequisites: MANG 302 and/or consent of instructor. (Not necessary to complete MANG 401 before 402.)

MANG 410 Effective Workplace Communication (3)
Application of communication methods including: personal selling, negotiation, interviewing, and individual and group presentations. Emphasis placed upon application of effective practices used in communicating in today's business world. Prerequisites: Junior/Senior standing, or permission of the instructor.

MANG 421 Credit and Collection Management (3)
Consumer and commercial credit in relationship to the management of credit by business firms, legal aspects of credit extension and current legislation. Information on credit operations of business for both students of business and practicing businessmen. Prerequisites: ACCT 202, MANG 201 or consent of instructor.

MANG 450 Entrepreneurship (3)
Analysis of managerial problems of small business, preparing a business plan, case studies, and individual reports of local small business enterprises. Understanding of elementary accounting, finance, and business law required. Prerequisites: ACCT 201, MANG 201, MARK 231, FINA 301, and students choose either MARK 350, MANG 341, or CISB 341, or consent of instructor.

MANG 451 Career Research and Development (3)
Principles and techniques involved in a job search with emphasis on conducting career research, identification of goals, preparing a job campaign, and elements of a job interview. Preparation of a job kit including a prospect list, resume, cover letter, advertisements, prospect letters, and sales and follow-up letters which can be used in a job search. Prerequisite: senior standing or consent of instructor.

MANG 471 Operations Management (3)
The use of resources in producing goods and services; concepts of planning, scheduling, and controlling productive activities and physical resources. Prerequisites: FINA 301, Senior standing.

MANG 475 Compensation and Reward Systems (3)
Designing strategic compensation systems. Seniority, merit, incentive pay, person-focused pay. Job evaluation, internal and external equity. Benefits administration. International, executive, and flexible workforce compensation systems. Diversity and ethical considerations. Prerequisites: MANG 371, and MANG 372 (may be taken concurrently with instructor's permission).

MANG 478 Advanced Human Resource Management (3)
Capstone course for HRM concentration.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

Expanded examinations of human resource topics such as performance appraisal, sexual harassment, religion and spirituality in the workplace, compensation, and labor relations. Reviews current topics in HRM providing a practical application of topics covered in other HRM courses as well as current issues. Prerequisites: MANG 371, MANG 371, MANG 373, MANG 475 and senior status.

MANG 491 Business Strategy (3)
Duties and responsibilities of decision makers in analyzing the organization, its operating environment and the subsequent development of objectives, policies, and long term planning for organizations. Includes complex cases taken from actual experiences in situations involving analysis, planning, and decision making. Required of all BBA and BS Accounting students. To be taken last semester of program. Prerequisites: ACCT 201, ACCT 202, BUGB 105, BUGB 349, CISB 101, FINA 301, MANG 201, MARK 231, or permission of the instructor.

MANG 495 Independent Study (1-3)

MANG 496 Topics (1-3)

MANG 499 Internship (3-9)
Provides BBA students with an opportunity to learn more about management functions and activities through exposure to an actual business or agency environment. Observation and participation in management activities enable students to relate classroom theory to on-the-job experiences. Prerequisites: BBA major, second semester junior or senior, written consent of instructor prior to registration.

MANG 500 Advanced Management Theory (3)
Designed to advance the student's understanding of management theories and the application of these theories to the business world. Contemporary issues will be discussed.

MANG 501 Production and Operations Management (3)
Competitive strategies and strategic impact of the transformation process in a global economy. Operations management issues including quality, inventory management, management of technology, manufacturing planning and control, just-in-time manufacturing and optimized production technology. Impact of business system on productivity and profits.

MANG 510 Organizational Theory and Behavior (3)
Designed to encourage the application of diverse conceptual and theoretical perspectives to the analysis and control of behavior in organizations. Practice in diagnosing organizational problems is gained by combining the use of theories, texts, readings, cases and exercise. The course focuses on problems related to perception, motivation, leadership, cultural diversity, interpersonal and group conflict, stress, work-family conflict, influence, decision-making, ethics, international management issues and change.

MANG 520 Human Resource Management (3)
Provides an in-depth study of the effective use and adaptation to the human resources of an organization through the management of people-related activities. The focus is on the core responsibilities and activities of the HR manager. Also included is a detailed review of current statues and regulations affecting the HR field.

MANG 540 Advanced Quantitative Methods (3)
Analytical models to support decision making. Topics include linear optimization, sensitivity analysis, linear regression, decision making under uncertainty, decision making under risk, project management, transportation and assignment methods, and forecasting.

MANG 550 Entrepreneurship (3)
Takes the student through activities that an entrepreneur would encounter in the small business start-up process. Topics will center around marketing, managerial, legal, financial and informational needs of the new venture. The use of cases, real life projects and Internet resources will be used extensively during the course.

MANG 590 Business Strategy (3)
The capstone course in the MBA program. The purpose of this course is to develop an understanding of strategic management and the "how" and "why" of strategic decisions. Emphasis is also placed on how the manager goes about translating strategy into action and achieves integration in the organization. Integration involves the functional areas of management and how to balance the trade-offs from the perspective of strategic decision making at the top management level.

Marketing (MARK)

MARK 231 Principles of Marketing (3)
Use and development of marketing strategy and the effects of buyer motivation. Major functions of marketing, buying, selling, distribution, pricing, advertising, and storage are studied. A contrast is made between the two marketing institutions: wholesaling and retailing.

MARK 325 Consumer Behavior (3)
Overview of the processes involved when individuals or groups select, purchase, use or dispose of products and services to satisfy needs and desires. Prerequisite: MARK 231.

MARK 332 Promotion (3)
Overview of the many ways in which goods, services, and ideas can be promoted to consumers and businesses through advertising, public relations, and publicity. Prerequisite: MARK 231.

MARK 335 Sales & Sales Management (3)
The salesperson as a counselor whose role is to help buyers make better decisions. Professional salesmanship is recognized as an integral function in modern society, with basic sales techniques studies and practiced in sales presentations. The course is taught from a management perspective. Prerequisite: MARK 231.

MARK 340 Creating Marketing Materials (3)
Overview and process development for creating marketing materials for all supply chain stakeholders. Development and analysis of multi-faceted levels of business marketing. Prerequisites: MARK 231, MARK 332, and MARK 325.

MARK 350 Marketing Research (3)
Marketing research theory and techniques designed to educate the student in the use of the scientific method, develop analytical ability, present basic marketing research tools, and develop proficiency in the art of writing research reports. Cases and actual research projects will be utilized. Prerequisites: STAT 200 and MARK 231.

MARK 360 Services Marketing (3)
Application of marketing concepts and strategies for addressing marketing problems and opportunities in the service sector (Finance, Hospitality, and Healthcare). Prerequisite: MARK 231, MARK 350 or permission of the instructor. Course will utilize case problems and an actual research project.

MARK 395 Independent Study (1-3)

MARK 396 Topics (1-3)

MARK 402 Sport Marketing (3)
The application of the principles of promotion and marketing to the sport and fitness industry including the areas of professional sports, corporate fitness, college/high school athletics, clubs and resorts, and others. Prerequisite: MARK 231.

MARK 432 Advanced Marketing (3)
In-depth complex marketing problems confronting modern business. Development

of marketing strategy to allow the firm to progress toward its corporate objectives. Prerequisites: MARK 231, 350.

MARK 495 Independent Study (1-3)

MARK 496 Topics (1-3)

MARK 500 Marketing Strategy (3)
Examines the state-of-the-art in marketing strategy from both a practical and theoretical perspective. Focusing on integrating a broad range of marketing concepts, the emphasis is on setting realistic marketing objectives, understanding marketing research concepts, demographic market segmentation, and current marketing topics.

Mass Communication (MASS)

MASS 110 Mass Media: Impact and History-GTAH2 (3)
Role played by media in everyday life and media's social, economic, and historical influence on society.

MASS 196 Topics (1-3)

MASS 201 Writing and Reporting for the Media (3)
Fundamentals of news gathering and writing, interviewing, reporting and writing of newsworthy events and personalities, using computers and the internet. Stories are submitted for publication and broadcast. Prerequisite: MASS 110 or consent of instructor.

MASS 250 Radio and TV Announcing (3)
Exploration of the art and science of announcing for the media. The importance of and use of spoken language in persuasive messages. Prerequisite: MASS 110.

MASS 260 Audio Production (3)
Approaches to digital audio production. Students will create original programs and formats for radio distribution.

MASS 296 Topics (1-3)

MASS 301 Broadcast Journalism Writing (3)
Techniques and practice in writing broadcast scripts, including news and documentary. Prerequisite: MASS 201 or consent of instructor.

MASS 303 Public Affairs (3)
Practice in advanced reporting techniques, with students alternating from broadcasting style to print style on a variety of exercises. Examination of gathering and presenting information involving public information officers, public relations officials, and government agencies. Prerequisite: MASS 201 and MASS 301 or consent of instructor.

MASS 304 Editorials & Commentaries (3)
Practice in researching, interviewing, and writing editorials and commentaries for the media. Techniques will include writing persuasive articles on a variety of subjects by supporting beliefs with analysis and documentation, and then presenting them in both broadcast and print style.

MASS 305 Magazine & Feature Writing (3)
Practice in researching, interviewing, and writing feature articles for magazines and newspapers. Techniques will include freelancing and submitting non-fiction articles to publications, and using on-line computer services. Prerequisite: MASS 201 and MASS 301 or consent of instructor.

MASS 306 Sports Reporting & Casting (3)
Practice in researching, interviewing, writing and reporting on sports. Techniques will include both print and broadcast sports reporting, as well as examining sports information directors' responsibilities. Prerequisite: MASS 201 or permission of instructor.

MASS 320 Fundamentals of Photojournalism (3)
Exploration of photojournalism techniques. Students create portfolios demonstrating a variety of photography skills. Students provide their own supplies and an adjustable camera (35mm or digital) with manual controls for shutter speeds and f/stops. Prerequisite: MASS 110 or permission of instructor.

MASS 330 Editing and Publication Design (3)
Editing articles and photos, and designing publications. Students create designs for magazines, newspapers, brochures and newsletters by using computers, scanners, and modern software. Prerequisite: MASS 201 or consent of instructor.

MASS 340 Mass Media Advertising (3)
Designed to acquaint students with principles of mass media advertising. Study of advertising in perspective, advertising barriers, propaganda techniques, layout and design, and actual production for major media: newspapers, radio, and television. Includes work on computers. Prerequisite: MASS 110 or consent of instructor.

MASS 350 Public Relations Concepts (3)
Historical and theoretical approach to contemporary public relations with emphasis on the persuasion process and ethics, propaganda, and advertising techniques in the mass media. Prerequisite: MASS 201 or consent of instructor.

MASS 360 Television Production (3)
Studio and control room operation as well as out-of-studio production, emphasizing video console equipment, cameras, microphones, and video editing. Prerequisite: MASS 201 and MASS 260.

MASS 395 Independent Study (1-3)

MASS 396 Topics (1-3)

MASS 397 Practicum (1)
Experience with campus media including publications and/or radio station under faculty supervision. Prerequisite: MASS 110, or consent of instructor.

MASS 401 Commercial Copy Writing (3)
Exploration of the art of script writing for radio and television commercials. A variety of time formats is considered. Prerequisites: MASS 110 and 301.

MASS 402 Writing for Public Relations and Advertising (3)
Emphasizes the copywriting function in public relations and advertising for organizations and agencies. Prerequisites: MASS 340 and 350.

MASS 410 Content Development for Web Pages (3)
Developing content for the World Wide Web for small businesses, non-profit organizations and media from a public relations perspective. Development of content for public relations, advertising, marketing and sales, academic and news web sites. Electronic publications and on-line publishing policies and procedures. Methods of electronic journalism. Prerequisite: MASS 201.

MASS 420 Digital Photography (3)
Experience with photojournalism by using digital still images through the use of cameras and computer hardware and software. Students will shoot their own photojournalism pictures to build a portfolio demonstrating a variety of skills, especially in the areas of digital darkroom techniques necessary for modern publications. Student will provide his/her own supplies, such as a 35mm SLR camera, color film, processing, disks, etc. Prerequisite: MASS 320, or consent of instructor.

MASS 430 Desktop Publishing (3)
Experience with advanced layout and design techniques on computers, including producing brochures, organization newsletters, magazines, and newspapers. Techniques will include using a variety of hardware and software, digital photography, graphics, and producing a web page as a

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public relations tool. Prerequisite: MASS 201 and MASS 330 or consent of instructor.

MASS 440 Media Management and Promotions (3)
Study of techniques for managing today's electronic and print media. Theory and practical application in advertising and sales, laws, rules and regulations, audience research, programming, and making a profit. Prerequisites: MASS 110, MASS 201

MASS 450 Public Relations Campaigns (3)
Campaigns and case histories presenting the scope of PR, research methodology, and audience targeting. Practical application of PR theory. Prerequisite: MASS 350 or consent of instructor.

MASS 460 Advanced Television Production (3)
Advanced techniques in television production with an emphasis on using ENG/EFP cameras in out-of-studio situations and in video editing. Production of short videos as well as studio productions required. Prerequisites: MASS 201 and MASS 360.

MASS 470 Advanced Producing Techniques (3)
Study of the techniques of the video and television producer with "hands-on" experience in producing industry videos as well as programs for public and commercial television. Prerequisite: MASS 460 or consent of instructor.

MASS 480 Journalism Law and Ethics (3)
Ethical principles and state and federal laws affecting the reporting of news, expression of opinion, news photos, advertising, and publication of newspapers. Prerequisite: upper class standing or consent of instructor.

MASS 490 Theory and Research (3)
Exploration of mass communication theories and constructs. Considerations and executions of research via qualitative and quantitative methodologies. Prerequisite: MASS 480.

MASS 494 Seminar (3)
Major issues of the media in modern culture and media criticism. Prerequisite: Upper division standing.

MASS 495 Independent Study (1-3)

MASS 496 Topics (1-3)

MASS 497 Practicum (1)
See MASS 397 course description.

MASS 499 Internship (5-12)
Work in newspapers, radio, television, advertising or public relations positions, or other situations that meet instructor's approval. Prerequisite: At least junior standing with at least half of major requirements completed; MASS 201, MASS 480.

Mathematics (MATH)

Graphic calculator is recommended or required for several mathematics courses. See department for recommended models. In order to take any of the following mathematics courses, each listed prerequisite (or an equivalent course) must be completed with a grade of "C" or better. The instructor may waive the prerequisite.

MATH 030 Fundamentals of Mathematics (2)
Includes the vocabulary, operations and applications of whole numbers, decimals and basic fractions and mixed numbers. Prerequisite: Accuplacer score below 57 AR.

MATH 060 Pre-Algebra (3)
Furthers the study of fractions and mixed numbers. Also included are vocabulary, operations and applications of ratio, integers, and an introduction to algebraic expressions and the solution of basic first-degree equations. Prerequisites: MATH 030; or Arithmetic test score must be greater than 56 and Arithmetic test should be considered only when Elementary Algebra score is less than 45.

MATH 090 Introductory Algebra (3)
Introduction to algebra with a review of basic arithmetic. Includes decimals, fraction, percentage, ratio, proportion, signed numbers, algebraic expressions, factoring, exponents and radicals, linear equations, functions and graphs. Prerequisite: MATH 060 or Accuplacer score EA from 45 to 60.

MATH 091 Intermediate Algebra (3)
Further study in topics of algebra. Includes properties of real and complex numbers; laws of exponents and radicals; factoring polynomials; solving linear and quadratic equations and inequalities; rational expressions and complex fractions; introduction to functions and relations; applications. Prerequisites: MATH 090 or equivalent, or appropriate mathematics placement test score.

MATH 105 Elements of Mathematics I (3)
Mathematics for the prospective elementary teacher with an emphasis on understanding mathematical reasoning and processes. Topics include problem solving, set theory, number theory, numeration systems, the integers and rational numbers. Prerequisites: Appropriate mathematics placement test score and interview, and consent of instructor.

MATH 108 Technical Mathematics (4)
Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs, and/or finance. These are presented on an introductory level and the emphasis is on applications. Prerequisite: MATH 060.

MATH 110 College Mathematics-GTMA1 (3)
Essential mathematical concepts for B.A. students. Topics include logic, set theory, solving equations, basic inequalities, combinatorics, probability, descriptive statistics, geometry, consumer mathematics and the appropriate use of calculators. Prerequisites: two years of high school math at the algebra level or higher, or MATH 091 or equivalent or appropriate mathematics placement test score.

MATH 113 College Algebra-GTMA1 (4)
A college-level treatment of algebra. Topics include algebraic properties of the integers, rationals, real and complex numbers; techniques for manipulation of expressions; techniques for solving linear, non-linear, absolute value equations, and inequalities; techniques for solving systems of equations; the Cartesian plane, relations and functions; properties and graphs of polynomial, rational, exponential, logarithmic and inverse functions; conic sections. Prerequisite: MATH 091 or equivalent, or appropriate mathematics placement test score.

MATH 119 Precalculus Mathematics-GTMA1 (5)
An in-depth treatment of the mathematics essential to Calculus. Topics include the Cartesian plane, functions; polynomial, rational, exponential, logarithmic, inverse, circular and trigonometric functions; solving inequalities and systems of equations Additional topics may include matrices, determinants and vectors. Prerequisite: MATH 113 or equivalent, or appropriate mathematics placement test score.

MATH 121 Calculus for Business (3)
An introduction to calculus with an emphasis on applications to business and economics. Topics include linear and quadratic functions, limits, continuity, differentiation, integration, the logarithmic and exponential functions, and applications. Computer algebra systems will be used where applicable. Current college algebra skills and graphic calculator are required. Prerequisite: MATH 113 or equivalent, or appropriate mathematics placement test score.

MATH 127 Mathematics of Finance (3)
Simple interest, simple discount, compound interest, continuously compounded interest,

annuities, perpetuities, capitalization, determining payment size, determining outstanding principal, and constructing amortization schedules, including the derivation of mathematical formulae and the methods for solving many financial problems. Prerequisites: MATH 113 or consent of instructor.

MATH 130 Trigonometry (3)
A college-level treatment of trigonometry. Topics include the Cartesian plane, functions, inverse functions, the circular function, trigonometric functions, graphs of trigonometric functions, trigonometric identities, solving trigonometric equations, inverse trigonometric functions, triangle solution techniques and vectors. Prerequisite: MATH 113 or equivalent, or appropriate mathematics placement test score.

MATH 141 Analytical Geometry (3)
A college-level treatment of analytic geometry. Topics include Cartesian coordinate systems, distance, parallel and perpendicular lines and planes, the locus of a condition, generalizations of lines, planes and parabolas, polar coordinates and vectors in two and three dimensions. Prerequisites: MATH 130 or consent of instructor.

MATH 146 Calculus for Biological Sciences (5)
An introduction to calculus with an emphasis on applications to biology. Topics include functions, properties and graphs of polynomials, rational functions, the trigonometric, inverse, exponential and logarithmic functions, limits, continuity, differentiation, related rates, min-max problems, integration and applications of biology. Prerequisite: MATH 113 or consent of instructor.

MATH 147 Introduction to Computer Algebra Systems (1)
Introduction to computer algebra using an appropriate computer algebra system (CAS) such as Maple, Mathematica, Derive, etc. Topics will include the syntax and simple programming of the CAS used. Assignments and projects will emphasize applications in Calculus. Prerequisite: MATH 119. Corequisite: MATH 151.

MATH 149 Honors Mathematics-GTMA1 (3)
An in-depth exploration of mathematical concepts, with an emphasis on the process of mathematical discovery. Topics are left to the discretion of the instructor, and typically include an introduction to more advanced topics such as group theory or graph theory. This course fulfills the general education requirement for students in the Honors Program. Prerequisite: Permission to enroll is required.

MATH 151 Calculus I (5)
An introduction to differentiation and integration of functions of a single variable. Topics include functions, limits, continuity, differentiation, related rates, min-max problems, graphing, integration and applications. Prerequisite: MATH 119 or MATH 130, or appropriate mathematics placement test score.

MATH 152 Calculus II (5)
A continuation of MATH 151 Calculus I. Topics include techniques of integration, trigonometric and hyperbolic functions, inverse, logarithmic and exponential functions, sequences, series, conic sections, polar coordinates and parametric equations. Prerequisite: MATH 151.

MATH 196 Topics (1-3)

MATH 205 Elements of Mathematics II (3)
Decimal numbers, probability, statistics, geometry, and the metric system. A continuation of MATH 105 designed for the prospective elementary teacher. Prerequisite: MATH 105 or consent of instructor.

MATH 225 Computational Linear Algebra (3)
A computational approach to matrices, determinates, systems of equations, vector spaces, linear transformations, eigenvectors and eigenvalues, as well as their applications. Computational methods will be used to explore and investigate the traditional subjects of linear algebra. Prerequisite: MATH 253.

MATH 240 Introduction to Advanced Mathematics (4)
An introduction to writing mathematical proofs. This course is designed to provide students with a transition from computationally-based lower level classes to proof-based upper level classes. The primary goal of the course is to train students to construct and analyze rigorous mathematical proofs. Topics include introductory logic, set theory, relations, functions, induction, equivalence relations, partitions and combinatorics. Prerequisites: MATH 152.

MATH 253 Calculus III (4)
Vectors in three-dimensional space, vector functions, partial derivatives, directional derivative and multiple integrals. Prerequisite: MATH 152.

MATH 260 Differential Equations (3)
Techniques of solving differential equations of order one, linear differential equations, linear equations with constant coefficients, non-homogeneous equations, variation of parameter techniques, and Laplace transform methods. Prerequisite: MATH 152.

MATH 296 Topics (1-3)

MATH 301 Mathematics for Elementary Teachers (3)
A selection of mathematics topics addressing content and standards for elementary education. Strong emphasis on written and oral communication. Prerequisite: MATH 205 and formal acceptance into the Teacher Education Program, or consent of instructor.

MATH 305 Euclidean Geometry (3)
Development of Euclidean Geometry. Topics include basic concepts of logic, axiomatic proofs, inductive reasoning, analytic geometry, applications of technology, and van Hiele levels of learning. Intended for students seeking elementary teacher licensure. Prerequisites: MATH 151 or 146.

MATH 310 Number Theory (3)
Classical number theory including the fundamental theorem of arithmetic, congruences, and linear diophantine equations. Prerequisite: MATH 240.

MATH 325 Linear Algebra I (3)
Matrices, solving systems of equations, determinants, vectors, vector spaces, linear transformations and eigenvalues. Prerequisite: MATH 240 or MATH 369 or consent of instructor.

MATH 340 Ethnomathematics (3)
Study of mathematics within cultures, especially small-scale indigenous cultures. Through the lens of culture, students can compare/contrast mathematics systems, their logical structures, and their modes of expression. Prerequisite: MATH 240 or MATH 301 or permission of instructor.

MATH 352 Advanced Calculus (3)
A rigorous and thorough treatment of differential and integral Calculus of one real variable. Topics include construction of the real numbers, limits, continuity, derivatives, integration, and series.

MATH 360 Methods of Applied Mathematics (3)
Selection of techniques in applied mathematics of particular use to scientists and engineers. Topics include vector analysis, partial differential equations and transform techniques. Applications are stressed. Prerequisite: MATH 253 and 260.

MATH 361 Numerical Analysis (4)
Elementary numerical analysis using the hand-held programmable calculator including Taylor's theorem, truncating errors, iteration processes, least squares methods, numerical

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solution of algebraic and transcendental equations, systems of equations, ordinary and partial differential equations, integral equations, interpolation, finite differences, eigenvalue problems, relaxation techniques, approximations, and error analysis. Prerequisites: MATH 152.

MATH 365 Mathematical Modeling (3)
A bridge between calculus and the application of mathematics. Investigation of meaningful and practical problems chosen from experiences, encompassing the disciplines of mathematical sciences, operations research, engineering, management sciences and life sciences. Prerequisites: STAT 200, MATH 152, and one of the following: MATH 240, 253, 260, 325, or consent of instructor.

MATH 369 Discrete Structures I (3)
Elementary logic, induction, recursion, recurrence relations, sets, combinatorics, relations, functions, graphs, trees, and elementary abstract structures. Prerequisites: MATH 152, CSCI 111.

MATH 370 Discrete Structures II (3)
Applications of logic, Boolean algebra and computer logic, abstract structures, coding theory, finite-state machines, and computability. Prerequisites: MATH 369 or both MATH 240 and CSCI 111.

MATH 380 History of Mathematics (3)
History of mathematics from antiquity to the present with emphasis upon the development of mathematics concepts and the people involved. Prerequisite: MATH 152.

MATH 386 Geometries (4)
A study of Euclidean and non-Euclidean geometries. This course examines the differences in their axiom systems and their models, and how notions in Euclidean geometry are interpreted in non-Euclidean systems. Prerequisite: MATH 240.

MATH 394 Mathematics Colloquium (1)
A weekly series of talks on a wide range of contemporary mathematics will be given by local faculty and others. Students must provide written commentary on these talks. Prerequisite: Permission to enroll is required.

MATH 395 Independent Study (1-3)

MATH 396 Topics (1-3)

MATH 397 Structured Research (1-4)
Mathematical research under the direct guidance of a faculty member. Designed for junior and senior level students. May be repeated for up to 12 credit hours. Prerequisite: Permission of instructor.

MATH 420 Introduction to Topology (3)
Important as preparation for graduate work in many areas of mathematics and theoretical physics. Introduction to general topology, topics normally covered include: metric spaces, connectedness, compactness, the separation axioms and the Tychonoff theorem. Intended for mathematically mature students. Prerequisite: MATH 325 or consent of instructor.

MATH 425 Computational Abstract Algebra (3)
Introduction to abstract algebra, typically groups and rings, from a computational perspective. Computation will be used to help explore and verify the properties of some algebraic structures. Prerequisites: MATH 253, MATH 225 or 325.

MATH 430 Mathematical Logic (3)
Introduction to the classical areas of mathematical logic (model theory, proof theory, the theory of computation, complexity theory and set theory), the relationships these sub-disciplines have with each other and their relationships to the foundations of mathematics, computational science, computer science and the philosophy of mathematics. Prerequisite: MATH 240 or 369.

MATH 450 Complex Variables (3)
Algebra of complex numbers, analyticity, differentiation and integration of complex functions, Cauchy's integral formulae, and series. Prerequisite: MATH 240.

MATH 452 Intro to Real Analysis I (3)
An in-depth and rigorous treatment of the theory of calculus, with an introduction to real analysis. Topics for MATH 452 and MATH 453 include number systems, cardinality, point set topology; open and closed sets, metric spaces, completeness, compactness and connected sets; sequences, series, limits, continuity, differentiation, integration, sequences and series of functions, and Euclidean spaces. Prerequisite: MATH 240, 253.

MATH 453 Intro to Real Analysis II (3)
A continuation of MATH 452. Topics include number systems, cardinality, point set topology; open and closed sets, metric spaces, completeness, compactness and connected sets; sequences, series, limits, continuity, differentiation, integration; sequences and series of functions, and Euclidean spaces. Prerequisite: MATH 452.

MATH 460 Linear Algebra II (3)
Characteristics and minimal polynomial, Cayley-Hamilton Theorem, invariant subspaces, bilinear forms, primary decomposition theorem, dual vector spaces. Prerequisite: MATH 325.

MATH 484 Senior Seminar I (2)
An introduction to conducting mathematical research with discussion of various research topics, including how to read and analyze articles in mathematics. Presentations and papers will be required. Prerequisite: consent of instructor.

MATH 490 Abstract Algebra I (3)
An introduction to the theory of algebraic structures. Topics include groups, subgroups, cyclic groups, groups of permutations, homomorphisms, isomorphisms, the order of group elements, cosets, quotient structures, isomorphism theorems and an introduction to rings and fields. Prerequisite: MATH 240.

MATH 491 Abstract Algebra II (3)
A continuation of MATH 490 Abstract Algebra I. Topics include properties of rings, subrings, ideals, quotient structures; ring homomorphisms and isomorphisms, integral domains, polynomial rings, properties of fields, subfields, field extensions, finite fields and Galois Theory. Prerequisites: MATH 490.

MATH 494 Senior Seminar II (2)
Capstone course, with discussion of specialized topics and analysis of mathematical results, requiring students to interpret and present research. Subject matter will vary. Presentations and/or written research papers will be required. Prerequisite: Consent of instructor.

MATH 495 Independent Study (1-3)

MATH 496 Topics (1-3)

MATH 596 Topics (1-3)

Multimedia Animation (MGDA)

MGDA 106 Creativity & Visual Thinking (3)
Introduction to visual and oral skills necessary to analyze works of art and design, articulate complex ideas, and then present solutions cogently in 2-D and 3-D projects and presentations.

MGDA 111 Adobe Photoshop I (3)
Concentrates on high-end capabilities of raster photo-editing software as an illustration, design and photo retouching tool. Explores a wide range of selection and manipulation techniques applied to photos, graphics and videos.

MGDA 112 Adobe Illustrator I (3)
Introduces the processes of a vector drawing program. Tools used to create digital artwork used in web design, print media and digital screen design.

MGDA 152 Digital Animatics (3)
Introduces steps used by professional animators and game designers for producing media in a digital environment. Foundational skills of planning, organizing, storyboarding and pre-visualization techniques necessary to create animated stories emphasized. Study of the history of animation and game design.

MGDA 153 3D Animation I (3)
Encompasses all major aspects of creating 3D characters using animation software. Use of developed characters to learn how to animate for personality.

MGDA 163 Sound Design I (3)
Use of sound in multimedia production and audio storytelling. Examination of the principles of recording. Focus on enhanced interactive productions and improved computer presentations. Using a computer for full audio editing studio.

MGDA 164 Digital Video Editing I (3)
Introduction to digital editing. Capturing, compressing, editing, and manipulating video images. Techniques including media management, editing tools, titles, and motion control, transitions and filters, and special effects explored.

MGDA 253 3D Animation II (3)
Advanced aspects of creating 3D characters on a computer. Examination of facial animation, lip synchronization, scene design and lighting set-ups.

MGDA 257 Animation Production (3)
Examines development of 3D animation from a production standpoint. Process of transforming conceptual designs into actual projects explored. Management function of tasks associated with the business end of development studied. A 3D animation project will be produced.

MGDA 292 Capstone (3)
Demonstrated culmination of learning within given program of study. Taking an animation from beginning concept, storyboard to end of production.

Music: Academic (MUSA)

MUSA 111 Music Technology (1)
Introduction to computer applications in music. The course begins with a focus on basic computer operation and the installation of the various software programs that will be used in the course. The course will include an overview of the three basic music applications for computers: notation software, Computer Assisted Instruction (CAI) software, and sequencing software (including digital audio). Corequisite: MUSA 114.

MUSA 113 Fundamentals of Theory (3)
Required theory course for music minor and music theatre students. Harmonic principles of music, including scales, intervals, triads, and chords. Concurrent enrollment in MUSA 130 or prior knowledge of the keyboard required.

MUSA 114 Theory I-Introduction (3)
Harmonic principles of the "common-practice" period including scales, intervals, triads and 7th chords. Introduction to part writing and voice leading. Prerequisite: satisfactory score on theory placement examination; concurrent enrollment in MUSA 116; concurrent enrollment in MUSA 130 or prior knowledge of the keyboard.

MUSA 115 Theory II-Diatonic Concepts (3)
Continuation of MUSA 114, extending to all types of diatonic 7th chords, and their usages. Includes advanced rules of tonal harmonization. Prerequisite: MUSA 114 or consent of instructor; concurrent enrollment in MUSA 117. Concurrent enrollment in MUSA 131 or prior knowledge of the keyboard is required.

MUSA 116 Ear Training & Sightsinging I (1)
Skills developed in reading rhythms, sightsinging, and listening. Emphasis on beginning melodic, harmonic, and rhythmic dictation. To be taken concurrently with MUSA 114.

MUSA 117 Ear Training & Sightsinging II (1)
Further development of skills in sightsinging, rhythmic recognition, advanced listening abilities, including dictation of melodic and harmonic intervals, chord progressions, and two, three, and four-part chorales. To be taken concurrently with MUSA 115. Prerequisite: MUSA 116.

MUSA 128 Workshop In Music (1-3)
Consists of specialized workshops in various aspects of music made possible by visiting artists and/or lecturers.

MUSA 130 Class Piano I (2)
For major and non-major students. Application of scales, chords and elements of music at the keyboard and development of repertoire. Recommended for all elementary, early childhood majors and music theatre majors. Prerequisite: MUSA 110 (music majors only).

MUSA 131 Class Piano II (2)
The student gains further expertise at the keyboard. Prerequisite: MUSA 130 or consent of instructor.

MUSA 137 Class Voice (1)
Fundamentals of singing, interpretation, phonetics, language (diction for singers), and solo repertoire for beginning voice students.

MUSA 214 Theory III - Chromatic Concepts (3)
The full use of chromaticism through secondary dominants, altered chords, Neapolitan and augmented sixth chords, and modulation techniques. Continues into 20th Century including the use of advanced chromaticism, serialism, and atonality. Includes advanced development of ear training and sightsinging. Emphasis on harmonic and rhythmic dictation. Continuation of MUSA 115 and 117. Prerequisites: MUSA 115 and 117.

MUSA 215 Theory IV - Twentieth Century Form and Analysis (3)
Study of various compositional approaches and techniques of the 20th Century, correlated with the study of musical form. Includes advanced development of ear training and sight singing. Emphasis on harmonic and rhythmic dictation. Continuation of MUSA 214. Prerequisite: MUSA 214.

MUSA 216 Keyboard Harmony (2)
Keyboard and theory skills applied to perform harmonization of a given line, transposition at sight, and open score realization and sightreading at the keyboard. Prerequisite: MUSA 214 and 230.

MUSA 220 Music Appreciation-GTAH1 (3)
Masterpieces of music, composers, and performers useful for the music student who has a weak background in the Masters.

MUSA 228 Workshop In Music (1-3)
Consists of specialized workshops in various aspects of music made possible by visiting artists and/or lecturers.

MUSA 230 Class Piano III (2)
A concentrated study of repertoire in preparation for the piano proficiency exam. Maximum keyboard time will develop coordination and flexibility. Prerequisites: MUSA 130, 131, or consent of instructor.

MUSA 231 Class Piano IV (2)
A continuation of the concepts introduced in MUSA 230. Reinforcement and new concepts of keyboard skills including minor scales and arpeggios, triad inversions, cadence progressions, harmonization, transposition, repertoire pieces to develop technical facility and knowledge of musical style. Prerequisites: MUSA 230 or consent of the instructor.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

MUSA 232 String Instrument Techniques and Materials (1)
Study of violin, viola, cello, and string bass in a class situation. Emphasis is on fundamentals of playing techniques at an elementary level.

MUSA 233 Woodwind Pedagogy and Materials (1)
Study of flute, oboe, clarinet, bassoon, and saxophone in a class situation. Emphasis is on fundamentals of playing techniques at an elementary level.

MUSA 234 Brass Instrument Techniques and Materials (1)
A concentrated course to develop a knowledge of the brass instruments and to acquire sufficient skill to demonstrate good tone, technique, and breath control.

MUSA 235 Percussion Instrument Techniques and Materials (1)
The study of methods and materials for teaching beginning percussion in the public school. Includes practical instruction on the instruments utilized in the marching band, orchestra, and stage band.

MUSA 236 Electronic Instrument Techniques and Materials (2)
The study of methods and materials for the introduction to the use of electronic instruments, including the areas of sound reinforcement (microphones and amplification) and sound generation (synthesis) by electronic means.

MUSA 240 History and Philosophy of Music Education (2)
Examination of the history and philosophies of music education in the United States. Investigates music education practices in the schools and helps students discover and define their own personal philosophy which can serve as a foundation for their career in music education. Includes 15 hours of field experience. Prerequisites: MUSA 115, 117.

MUSA 241 Music and Methods in Early Childhood Education (2)
For students who will be working with preschoolers and kindergarten-age students. Through the creative process students develop simple tunes and gain knowledge and appreciation of music.

MUSA 250 Beginning Conducting (2)
Basic concepts and techniques necessary to conduct music. Students will be expected to master patterns, fermatas, dynamics, etc. Observation of other conductors and score study is included. Required of all music majors. Prerequisites: MUSA 214, 217. Corequisites: MUSA 215, 218.

MUSA 266 History of Popular Music-GTAH1 (3)
Differences in style, musical elements, lyrical content, and outstanding artists/writers in the areas of popular, rock, Country Western, and jazz idioms. Evolutionary aspects and social significance are introduced as background references. Guest lectures, class listening sessions, film strips, and music video augment the lecture sessions. Open to all students.

MUSA 268 Beginning Jazz Improvisation (1)
Materials and techniques for improvisation, including chord and scale construction, modality, harmonic patterns, linear concepts, with emphasis on technique, style and idiomatic usage. Prerequisites: MUSA 115 or consent of instructor. Corequisites: MUSA 214 or consent of instructor.

MUSA 296 Topics (1-3)

MUSA 302 Keyboard Literature I (3)
Survey of keyboard literature from Elizabethan music through Mendelssohn. Prerequisites: MUSA 230 or consent of instructor, MUSL 230.

MUSA 303 Symphonic Literature (3)
Survey of music from early instrumental to present-day compositions. Emphasis on composers' styles, orchestras, conductors; chamber orchestra music also included. Prerequisites: MUSA 215.

MUSA 304 Keyboard Literature II (3)
Survey of keyboard literature from Chopin to the present day. Prerequisites: MUSA 231, MUSL 230, or consent of instructor.

MUSA 310 Accompanying Techniques (2)
Development of accompanying proficiency, including listening skills, form, and analysis of the music to be performed; rehearsing techniques; accompanying repertoire for vocal; instrumental; and ensemble playing. Prerequisites: MUSA 214, 216 or consent of instructor.

MUSA 311 Advanced Music Technology (1)
Application of advanced technological tools in music recording, editing, composition, and production, including audio components and connections; digital audio multi-track recording, synthesis, sequencing, sampling, and editing; and microphone techniques. Prerequisite: MUSA 111.

MUSA 317 Orchestration (2)
Choral and instrumental arranging; instrumentation, scoring, and analysis of harmonic styles of various composers. Students are required to compose and arrange original works. Prerequisite: MUSA 215.

MUSA 318 Vocal Literature (3)
Follows the changing patterns, styles, and fashions of the secular art-song from medieval Europe to Europe and America of the day. Prerequisites: MUSA 137 or previous enrollment in private vocal studies.

MUSA 319 Choral Literature (3)
Historical, analytical, and interpretive study of choral literature spanning the Renaissance through the 20th Century. Important course for those planning to direct choirs. Prerequisite: previous or concurrent enrollment in a Mesa State choir or consent of the instructor.

MUSA 326 Music History and Literature I (3)
Literature and styles of the master composers of music through the Ancient, Medieval, Renaissance, and Baroque periods. Course work is designed for the music major, utilizing a lecture and listening laboratory format and one scholarly research paper of the student's choice. Prerequisite: MUSA 114.

MUSA 327 Music History and Literature II (3)
Literature and styles of the master composers of music through the classic, romantic, and modern ages. Coursework is designed primarily for the music major, utilizing a lecture and listening laboratory format and one scholarly research paper of the student's choice. Prerequisite: MUSA 114.

MUSA 328 Workshop In Music (1-3)
Consists of specialized workshops in various aspects of music made possible by visiting artists and/or lecturers.

MUSA 337 Diction For Singers (2)
Pronunciation of Italian, German, and French as applied to the performance of vocal literature.

MUSA 340 Teaching Elementary and General Music: Methods, Principles, and Materials (3)
For Music Education Majors: The course is designed for standards- based curriculum for elementary and general music classes. Weekly laboratory experiences focus on course content dealing with teaching competencies in elementary and general music. Also addresses how to teach literacy in the music classroom. Includes 30 hours of field experience. Prerequisites: MUSA 215, 218, 240, 250.

MUSA 350A Advanced Conducting: Choral (2)
More difficult techniques such as advanced meters, advanced score study, interpretive conducting and ensemble rehearsal techniques. Required of all music education majors. Prerequisites: MUSA 250.

MUSA 350B Advanced Conducting: Instrumental (2)
More difficult techniques such as advanced meters, advanced score study, interpretive conducting and ensemble rehearsal techniques. Required of all music education majors. Prerequisites: MUSA 250.

MUSA 363 Music Industry & Marketing (3)
Exploration of business aspects of the music industry, with an emphasis on careers and music marketing.

MUSA 368 Advanced Jazz Improvisation (2)
Advanced Improvisation is the continuation of Beginning Improvisation. Advanced theoretical concepts will be addressed with expansion of repertoire and improvisational patterns. Prerequisites: MUSA 268, MUSA 215, Class Piano IV/piano proficiency, or permission of instructor.

MUSA 395 Independent Study (1-3)

MUSA 396 Topics (1-3)

MUSA 410 Vocal Pedagogy (3)
The physiology of the human vocal mechanism, various teaching styles, vocal problems related to various age groups, and vocal repertoire pertinent to all age groups and levels of development. Prerequisites: MUSA 137 or previous or concurrent enrollment in private vocal studies.

MUSA 411 Piano Pedagogy (3)
Introduction to the field of piano teaching and learning/teaching theories with application to piano teaching. Survey of methods and literature. Instructional techniques for group and individual lesson settings. Prerequisites: MUSA 231, MUSL 230 or consent of instructor.

MUSA 426 The Music of World Cultures (2)
An exploration of music outside the Western Classical music tradition. Musical traditions include music of the Orient, Africa, India, and North and South American ethnic music. The course will also examine ethnic music from other world cultures such as Afro Cuban and Brazilian as well as blues and jazz music developed in the United States. Prerequisite: MUSA 215, MUSA 231 or piano proficiency, or permission of the instructor.

MUSA 428 Workshop In Music (1-3)
Consists of specialized workshops in various aspects of music made possible by visiting artists and/or lecturers.

MUSA 440 Teaching Vocal Music K-12: Methods, Principles, and Materials (3)
Standards-based instruction of elementary and general music classes for Music Education majors. Training in concepts, methodology, and materials necessary to teach standards-based vocal music in public/private schools. Includes 30 hours of field experience. Prerequisites: MUSA 137, MUSL 137, or MUSP 150, MUSA 350A or 350B.

MUSA 441 Teaching Instrumental Music K-12: Methods, Principles and Materials (3)
Designed for standards-based music curriculum for teaching instrumental music in the public schools. Activity will be centered on developing teaching competencies, administration of the music program, and methods, materials, equipment and technology needed for the instrumental music program. Includes 30 hours field experience. Prerequisites: MUSA 350A or 350B.

MUSA 442A Teaching Special Ensembles: Choral (2)
Practical knowledge and methodology in the teaching of (A) Show/Jazz Choirs and (B) Marching/Jazz Bands. Students will learn the skills necessary to direct these ensembles. Includes 30 hours of field experience. Prerequisites: MUSA 215, 218, 240 and 250. Corequisites: MUSA 350A or 350B if not completed.

MUSA 442B Teaching Special Ensembles: Instrumental (2)
Practical knowledge and methodology in the teaching of (A) Show/Jazz Choirs and (B) Marching/Jazz Bands. Students will learn the skills necessary to direct these ensembles. Includes 30 hours of field experience. Prerequisites: MUSA 215, 218, 240 and 250. Corequisites: MUSA 350A or 350B if not completed.

MUSA 495 Independent Study (1-3)

MUSA 496 Topics (1-3)

MUSA 499 Internship (1-4)
Work experience obtained on a job in the music industry. Prerequisites: Senior status, MUSA 363, and consent of instructor.

Music: Applied Music Lessons (MUSL)

Applied music lessons for credit are available to all students and may be used as an elective choice to students concurrently enrolled in a MUSP course. Students meet weekly with an individual specialist assigned by the Music Department. An instructional fee is required, and accompanist remuneration is necessary if you perform in a formal recital. Lessons may be taken twice at each level. Music majors are required to attend and perform at weekly recitals as a component of applied music lessons.

Applied music lessons are offered in the following:

MUSL 130, 230, 330, 430 Piano (1,2)

MUSL 131, 231, 331, 431 Guitar (1,2)

MUSL 132, 232, 332,432 Strings (1,2)

MUSL 133, 233, 333, 433 Woodwinds (1,2)

MUSL 134, 234, 334, 434 Brass (1,2)

MUSL 135, 235, 335, 435 Percussion (1,2)

MUSL 136, 236, 336, 436 Electronic Instruments (1,2)

MUSL 137, 237, 337, 437 Voice (1,2)

MUSL 138, 238, 338, 438 Composition (1,2)

MUSL 350, 450 Conducting (1-2)

Music: Performing (MUSP)

Performance ensembles may be taken twice at each level for credit.

MUSP 140, 240, 340, 440 Wind Symphony (1)
A symphony comprised of serious wind and percussion students, including music majors and non-music majors, who perform a wide variety of standard and current literature. Audition with conductor required.

MUSP 141, 241, 341, 441 Symphony Orchestra (1)
Ensemble designed to rehearse and perform symphonic literature as well as choral, opera and concerto repertoire. Audition required.

MUSP 144, 244, 344, 444 Jazz Ensemble (1)
A group utilizing stage band instrumentation and performing many local and required concert engagements. By audition; preference given to members of Symphonic Band.

MUSP 145, 245, 345, 445
(Section A)
Instrumental Ensemble - Woodwinds (1)

(Section B)
Instrumental Ensemble - Brass (1)

(Section C)
Instrumental Ensemble - Strings (1)

(Section D)
Instrumental Ensemble - Percussion (1)

(Section E)
Instrumental Ensemble - Guitar (1)

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(Section F)
Instrumental Ensemble - Piano (1)
Groups organized upon the talents and interests of the members. Specified ensembles may be offered from time to time in the format of String Quartets, Woodwind, and Brass Choirs, etc. A minimum of one public performance per each term of enrollment is required. Prerequisite: MUSP 145, 245, 345, 445 require audition by the band director.

MUSP 146, 246, 346, 446 Community Performance Organizations (1)
Opportunity for students and other musicians in the community to participate in various community musical groups, such as the Grand Junction Symphony. Audition with conductor is required.

MUSP 148, 248, 348, 448
Chamber Orchestra (1)
Ensemble designed to rehearse and perform chamber orchestra works. This ensemble will involve strings as well as woodwind and brass instruments. Audition required.

MUSP 149, 249, 349, 449
Young Artist Orchestra (1)
Instrumental music students are provided the opportunity to perform baroque, classical, romantic and 20th century full orchestra repertoire. One rehearsal per week and at least one formal concert per semester featuring a talented soloist. Membership is by audition.

MUSP 150, 250, 350, 450
Concert Choir (1)
The major large choir, open to all students and staff who enjoy singing, with final membership approved by the director. Concert Choir performs great choral literature of all types representing Mesa State College in formal concerts both on and off campus including concert tours, performing large-scale masterworks with orchestra.

MUSP 156, 256, 356, 456
Chamber Choir (1)
An advanced smaller choral ensemble which performs vocal literature from Renaissance to Contemporary art music including jazz. Chamber Choir performs on and off campus, on concert tours, and at the annual Madrigal Dinners. Staff and students are eligible by audition; membership in Concert Choir generally a prerequisite.

MUSP 157, 257, 357, 457 Male Choir (1)
Campus-wide chorus open to all interested students and faculty. Performs all types of music written for combined men's voices. Concertizes in conjunction with other college choral ensembles and in separate performances on-off campus. Prerequisites: Taken in sequence. Members must perform a brief audition with instructor.

MUSP 158, 258, 358, 458
Women's Chorus (1)
Performances include the complete range of music written for combined women's voices, both on and off-campus, and in conjunction with the other college choral ensembles in Music Department concerts. Prerequisites: consent of director.

MUSP 159, 259, 359, 459
Vocal Jazz Ensemble (1)
Exploration of wide range of vocal literature. Performances given, both on and off campus. Prerequisites: consent of instructor.

MUSP 162, 262, 362, 462 Combo (1)
Interested students team up with a rhythm section in learning tunes and "head" charts.

MUSP 395 Independent Study (1-3)

MUSP 396 Topics (1-3)

MUSP 420 Senior Recital (1,2)
Preparation for senior level recital in the student's performance medium with recital approved by the music faculty and recital given during the semester in which the student is registered for this course. Scholarly program notes covering historical aspects, theoretical issues, and/or performance considerations of the recital repertoire are required for the official printed senior recital program. Music Education majors take this course for one credit; Performance majors take this course for two credits.

MUSP 465 Opera Scenes (1)
Provides upper division vocal performance majors and minors with an ensemble to develop and hone their vocal performance skills, in both the musical and theatrical sense. Operatic scenes will be selected for class and individual study, eventually to be presented in a public performance. Audition techniques will also be presented and practiced as part of this class, including resume construction, repertoire selection, monologues, and mock auditions. Prerequisites: Completion of Sophomore Review, MUSA 117, MUSA 215, and piano proficiency (4 semesters). Corequisites: MUSL 337 or MUSL 437.

MUSP 495 Independent Study (1-3)

MUSP 496 Topics (1-3)

Nurse Aide Training (NURA)

NURA 101 Nurse Aide Healthcare Skills (4)
Fundamental skills of the nurse aide. Basic nursing skills, communication skills, restorative services, personal care skills, safety and emergency care covered. Includes knowledge and/or principles of asepsis, OSHA and HIPAA regulations. Ethical behaviors, cultural sensitivity, principles of mental health, patient/resident rights addressed.

NURA 170 Nurse Aide Clinical Experience (2)
Applies knowledge and skill gained in NURA 101 to patient care. Independent functioning within the nurse aide scope of practice in applying knowledge and skills gained in Nurse Aide Healthcare Skills. Enhanced communication, cultural competency, end of life care, critical thinking and organizational skills emphased. Prerequisite: NURA 101.

Nursing (NURS)

NURS 101 Pharmacology Calculations (1)
Course introduces the concepts and techniques of dosage calculations and medication administration by a variety or routes. Application of basic math concepts to complex conversion of dosages between and among various systems of weights and volumes, and application of critical thinking skills to the calculation and administration of medications by oral and parenteral (including intravenous) routes of administration. Prerequisites: BIOL 209/209L, BIOL 210/210L, ENGL 111, ENGL 112, PSYC 233.

NURS 106 Fundamental Medical Surgical Concepts I (3)
NURS 106L Fundamental Medical Surgical Concepts I Lab (2)
Course introduces the role of the nurse in assessing and meeting the medical and surgical needs of adults across the lifespan in various health care settings. Knowledge from foundations of nursing, the sciences, pharmacology, and nutrition provide foundations for nursing care for medical/surgical clients. Prerequisites: BIOL 209/209L, BIOL 210/210L, ENGL 111, ENGL 112, PSYC 233.

NURS 107 Foundations of Nursing (3)
NURS 107L Foundations of Nursing Lab (2)
Course introduces the applications of critical thinking and the nursing process to clients in a variety of community and acute care settings. Emphasis is in holistic health care wellness - illness continuum. Prerequisites: BIOL 209/209L, BIOL 210/210L, ENGL 111, ENGL 112, PSYC 233.

NURS 108 Foundations of Nursing II (3)
Introduces more complex concepts and

behaviors of nursing roles within the cohort of the nursing process, holistic care, and health care. Emphasizes theoretical and practical aspects of more complex nursing skills required to meet the needs of clients in a variety of settings. Prerequisites: BIOL 209/209L, BIOL 210/210L, ENGL 111, ENGL 112, and PSYC 233. Corequisite: Successful completion of concurrent nursing program.

NURS 108L Foundations of Nursing II Lab (1)
This is the companion lab to NURS 108. Provides opportunity to practice more complex nursing skills required to meet the needs of clients in a variety of settings. Prerequisites: BIOL 209/209L, BIOL 210/210L, ENGL 111, ENGL 112, and PSYC 233. Corequisite: NURS 108.

NURS 112 Basic Concepts of Pharmacology (2)
Course introduces the basic concepts of pharmacology related to actions, therapeutic and adverse effects, interactions of drugs, drug classification and the basic pharmacology of commonly used medications. Emphasis is placed on nursing considerations and client education. Prerequisites: BIOL 209/209L, BIOL 210/210L, ENGL 111, ENGL 112, PSYC 233.

NURS 117 Nursing Care of the Childbearing Family (2)
NURS 117L Nursing Care of the Childbearing Family Lab (1)
Fundamental course in the nursing care of the childbearing family. Focus on normal pregnancy, physiologic and psychological changes experienced, and care of the normal newborn. Prerequisites: NURS 101, NURS 106/106L, NURS 107/NURS107L, NURS 112.

NURS 118 Nursing Care of Children (2)
NURS 118L Nursing Care of Children Lab (1)
Course introduces the role of the nurse in meeting the individual needs of the child from infancy through adolescence in health and illness. Beginning assessment and use of the nursing process, basic growth and development, pathophysiology, nutrition, and relevant emotional, cultural, and family concepts are integrated throughout. Prerequisites: NURS 101, NURS 106/106L, NURS 107/107L, and NURS 112. Corequisites: NURS 117/117L, NURS 118L, NURS 156, and NURS 172L.

NURS 156 Socialization into Practical Nursing (1)
Introductory concepts for first time management. Examines legal and ethical responsibilities of the practical nurse. Emphasis is given to the Colorado Nurse Practice Act. Job seeking skills are discussed. Prerequisites: Must be eligible for graduation during semester in which NURS 156 is taken - completion of NURS 101, NURS 106/106L, NURS 107/107L, NURS 112. Corequisites: NURS 117/117L, NURS 118/118L, and NURS 172/172L.

NURS 172 Fundamental Medical-Surgical Concepts II (3)
Continues to introduce the student to advancing medical-surgical nursing concepts. Integrates knowledge from foundational nursing, the sciences, pharmacology, and nutrition along with the integration of mental health and cultural concepts. Provides foundations for nursing care planning for medical and surgical clients. Prerequisites: NURS 101, NURS 106/106L, NURS 107/107L, NURS 108/108L, and NURS 112. Corequisites: NURS 117/117L, NURS 118/118L, and NURS 156.

NURS 172L Fundamental Medical-Surgical Concepts II Lab (4)
Course offers the clinical practicum to apply the related nursing theory in medical surgical nursing using the nursing process to assist clients with more complex health care needs. Prerequisites: NURS 101, NURS 106/106L, NURS 107/107L, and NURS 112. Corequisites: NURS 117/117L, NURS 118/118L, and NURS 156.

NURS 200 LPN to RN Role Transition (1)
Prepares the advanced placement student to enter the Nursing Program through orientation to the program, review of the nursing process and exploration of the role change from practical to professional nursing. Introduction to selected concepts related to the role of the Associate Degree nurse as a provider of care, teacher, manager, client advocate and member of the profession. Emphasis placed on critical thinking in providing and managing comprehensive care in a variety of health care settings with clients across the lifespan. Course is designed to assist the Licensed Practical Nurse with the transition into the practice of professional nursing. Prerequisites: All general education and program prerequisites.

NURS 201 Nursing Fundamentals (4)
NURS 201L Nursing Fundamentals Lab (3)
Introduction to the theoretical foundations of nursing in the areas of communication, assessment and critical thinking. Economic issues influencing the professional nurse are examined and important interpersonal and psychomotor skills are developed. Three one-hour lectures and three three-hour laboratories per week. Prerequisite: acceptance into BSN program. Corequisites: NURS 202/202L, 203, 204.

NURS 202 Health Assess/Promotion (3)
NURS 202L Health Assessment/ Promotion Lab (1)
Development of the knowledge necessary for completing an adult health assessment. History taking and physical assessment skills are utilized to develop appropriate interventions designed to assist clients with health promotion and lifestyle changes. Students explore principles of health promotion through the life span in a variety of settings. Three one-hour lectures and one three-hour laboratory per week. Prerequisites: acceptance into BSN program. Corequisites: NURS 201/201L, 203, 204.

NURS 203 Pharmacology I (2)
Introduction to drug therapy with the study of specific classifications, terminology, theories and techniques of safe administration. Using the nursing process, the toxicity of major drug classifications is investigated, as well as principles of pharmacokinetics, pharmacodynamics, and pharmacotherapeutics. Prerequisites: acceptance into BSN program. Corequisites: NURS 201/201L, 202/202L, 204.

NURS 204 Nursing Theory/Foundations (1)
Examination of the history of professional nursing as a scientific discipline. Critical thinking and reasoning are utilized to evaluate selected nursing theories. The language and process of nursing research are introduced as a framework for making sound clinical judgments. Professional networking and legal/ethical issues will be examined. Prerequisites: acceptance in BSN program. Corequisites: NURS 201/201L, 202/202L, 203.

NURS 206 Advanced Concepts of Medical-Surgical Nursing I (3)
NURS 206L Advanced Concepts of Medical-Surgical Nursing Lab (2)
Role of the registered professional nurse as care provider, teacher, manager, professional and advocate in meeting the nursing care needs of adults across the life span experiencing illness to wellness. The clinical lab provides opportunity for the student to utilize the nursing process and integrate previous learning to assist the patient and family in achieving optimal functioning in the various health care settings. Corequisites: NURS 206 and NURS 288.

NURS 210 Nursing Care of Complex Obstetrical and Pediatric Clients (3)
[AAS Program only] Prepares the professional nurse to comprehend and apply advanced concepts in care of the high-risk child bearing family and for children with complex health

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problems from birth through adolescence. Emphasizes special needs and complications during the perinatal experience and altered functioning, special needs, and disease processes manifested in children. The nursing process is used as a framework to attain optimal levels of maternal-newborn and pediatric health and wellness. Legal and ethical accountability are integrated throughout the course. Critical thinking skills are utilized throughout. Prerequisites: All general education and prerequisites, NURS 288 and 200. Corequisite: NURS 210L

NURS 210L Nursing Care of Complex Obstetrical and Pediatric Clients Lab (2)
Prepares the professional nurse to comprehend and apply advanced concepts in the care of the high-risk child bearing family and for children with complex health problems from birth through adolescence. Emphasizes special needs and complications during the prenatal experience and altered functioning, special needs and disease process manifested in children. The nursing process is used as a framework to attain optimal levels of maternal-newborn and pediatric health and wellness. Legal and ethical accountability and critical thinking skills are integrated throughout the course. Theoretical content is applied in acute care and community clinical settings. Prerequisites: NURS 200 and NURS 288. Corequisite: NURS 210.

NURS 211 Nursing Care of the Psychiatric Client (3)
NURS 211L Nursing Care of the Psychiatric Client Lab (2)
Develops concepts of psychosocial integrity and emphasizes the function and responsibility of nursing in promoting and maintaining mental health of individuals and families. This course emphasizes communication and caring through the application of the therapeutic relationship and nursing process in the care and treatment of common clinical conditions/disorders. In the clinical lab students will develop proficiency in working with psychiatric clients in various settings in the community. Prerequisites: NURS 200 and NURS 288. Corequisite: NURS 211.

NURS 216 Advanced Concepts of Medical Surgical Nursing II (2)
[AAS Program only] Continues to focus on the role of the registered professional nurse as care provider, teacher, manager, professional, and advocate in meeting the complex medical and surgical health care needs of adult clients. Utilizing the nursing process, the student is expected to integrate previous learning to assist the patient and family in achieving optimal functioning in various complex health care situations and settings. Prerequisites: All general education and prerequisites, NURS 206, NURS 288, and NURS 200. Corequisite: NURS 216L

NURS 216L Advanced Concepts of Medical Surgical Nursing II Lab (2)
Continues to focus on the role of the registered professional nurse as care provider, teacher, manager, professional, and advocate in meeting the complex medical and surgical health care needs of adult clients. Utilizing the nursing process, the student is expected to integrate previous learning to assist the patient and family in achieving optimal functioning in various complex health care situations and settings. In addition to inpatient acute care patient units the student will rotate through the critical care areas of the health care facility. Prerequisites: NURS 206, NURS 206L, NURS 288, and NURS 200. Corequisite: NURS 216.

NURS 217 Leadership for Professional Nursing Practice (2)
[AAS Program only] Socializes the student into the graduate registered nurse role. The focus is on the exploration and analysis of contemporary nursing practice, current trends and issues impacting nursing care delivery. Advanced leadership and management concepts are discussed as part of the nursing role. Prerequisites: All general education and prerequisites, and NURS 200.

NURS 288 Health and Physical Assessment for Nursing (2)
[AAS Program only] Development of the knowledge necessary for completing health assessment across the life span. History taking, physical assessment skills, and principles of health promotion are utilized to develop appropriate interventions designed to assist clients with health promotion and life style changes. Prerequisites: All general education and prerequisites. Corequisite: NURS 206 and 200.

NURS 289 Capstone: Comprehensive Nursing Internship (1)
Facilitates transition from student to graduate nurse through application of nursing principles and skills in an area of health care delivery. Critical thinking, life long learning, nursing process, caring, collaboration, and health teaching and promotion are emphasized. Prerequisites: All prerequisites for the AAS program, NURS 200, NURS 206, NURS 288, NURS 211, NURS 217. Corequisites: NURS 210 and NURS 216.

NURS 300 Professional Transitions and Development (3)
Introduction to selected concepts related to care of the adult client, the childbearing and childbearing families. Designed to facilitate the transition of the diploma and associate degree graduate to the professional practice of nursing at the baccalaureate level. Credit for previous completed nursing courses (with grades of C or better) will be held in escrow until this course has been successfully completed.

NURS 301 Medical Surgical Process (4)
NURS 301L Medical Surgical Process Lab (4)
Application of the nursing process in the care of individuals and their families experiencing deviations from their usual levels of wellness from onset to resolution. Pathophysiological problems of moderate intensity and relative stability are explored. The nursing process is used to support the coping mechanisms of individuals and their families to assist in the regaining and maintaining of optimal wellness. Three one-hour lectures and four three-hour laboratories per week. Prerequisites: NURS 201/201L, 202/202L, 203, 204. Corequisites: NURS 302, 303, 304.

NURS 302 Family Nursing Through the Lifespan (3)
Theory of family-centered practice in nursing. Utilizing the nursing process, students gather and analyze data to formulate and evaluate interventions with families from diverse backgrounds. Selected learning experiences provide opportunities for the student to develop cognitive, psychomotor and affective competencies essential to the care of both healthy and high-risk families through the lifespan. Three one-hour lectures and one three-hour laboratory per week. Prerequisites: NURS 201/201L, 202/202L, 203, 204. Corequisites: NURS 301/301L, 303.

NURS 303 Professional Development (2)
Introduction to basic knowledge and skills related to organizational structure, systems of patient care delivery and communication within the health care team. Principles of time management, teaching-learning theories, and the role of the professional in nursing are explored. Clinical experience will be incorporated into the medical-surgical clinical lab. Awareness of the patient care environment, as well as the organization of health care delivery, will be documented through journaling. Prerequisites: NURS 201/201L, 202/202L, 203, 204. Corequisites: NURS 301/301L, 302, 304.

NURS 304 Pharmacology II (2)
Continuation of Pharmacology I covering the nursing process, principles of pharmacokinetics, pharmacodynamics, pharmacotherapeutics and toxicity of major drug classifications. Prerequisites: NURS 201/201L, 202/202L, 203, 204. Corequisites: NURS 301/301L, 302, 303.

NURS 313 Mental Health (3)
NURS 313L Mental Health Lab (2)
Development of a knowledge base of mental health and illness, emphasizing the development of interpersonal skills in the use of the therapeutic relationship. Specific learning experiences provide opportunities for the student to develop proficiency in the practice of psychiatric mental health nursing with diverse populations. Two one-hour lectures and two three-hour laboratories per week. Prerequisites: NURS 301/301L, 302, 303, 304. Corequisites: NURS 314/314L, 315/315L.

NURS 314 The Childbearing Family (3)
NURS 314L The Childbearing Family Lab (2)
Study of the competencies needed to care for the diverse childbearing family through the trimesters of pregnancy. High risk and complications of pregnancy are addressed as well as critical issues of women's health care. Theoretical content is applied in acute care and community settings. Two one-hour lectures and two three-hour laboratories per week. Prerequisites: NURS 301/301L, 302, 303, 304. Corequisites: NURS 313/313L, 315/315L.

NURS 315 Pediatrics (2)
NURS 315L Pediatrics Lab (1)
Emphasis on use of the nursing process in the care of children and adolescents experiencing alterations in wellness. The clinical component provides experience with clients in acute care and community settings. Two one-hour lectures and one three-hour laboratory per week. Prerequisites: NURS 301/301L, 302, 303, 304. Corequisites: NURS 313/313L, 314/314L.

NURS 395 Independent Study (1-3)

NURS 396 Topics (1-3)

NURS 403 Community Health Nursing (4)
NURS 403L Community Health Nursing Lab (2)
Theoretical basis for the practice of public health nursing. Students investigate the principles and practice of public health nursing including epidemiological investigation, environmental health issues, methods of community health assessment. And interventions with selected population groups. Application of course content is demonstrated in the concurrent clinical course. One one-hour lecture and two three-hour laboratories per week. Prerequisites: NURS 312, 313/313L, 314/314L, 315/315L. Corequisites: NURS 406/406L and NURS 407.

NURS 406 Advanced Medical/Surgical (3)
NURS 406L Advanced Medical/ Surgical Lab (3)
Advanced medical-surgical concepts essential for nursing care of adults requiring intervention in relation to complex multi system illness or injury. The clinical practicum provides opportunity for application of nursing care in institutional and community settings. Three one-hour lectures and three three-hour laboratories per week. Prerequisites: NURS 312, 313/313L, 314/314L, 315/315L. Corequisites: NURS 403/403L, 407, 415.

NURS 407 Nursing Research (3)
Research with an emphasis on the assessment of the outcomes of health promotion and health care interventions. Research questions relevant to clinical practice are developed, with projects being completed the following semester. Prerequisite: STAT 200. Corequisites: NURS 403/403L, NURS 406/406L, NURS 415.

NURS 411 Leadership (2)
NURS 411L Leadership Lab (1)
Use of personal characteristics of the nurse in development of leadership and management strategies. Leadership and management theory are presented. The role of the professional nurse as change agent in shaping health care for the future is explored. Two one-hour lectures and one three-hour laboratory per week. Prerequisites: NURS 403/403L, 406/406L, 407. Corequisite: NURS 412L.

NURS 412L Senior Specialty Lab (4)
Development of specialty-focused knowledge and skills in a specified area of interest. Knowledge and skills from basic and upper-division general education and nursing disciplines are integrated when implementing increasingly complex roles to deliver quality nursing care to individuals and groups in a focused clinical area. Prerequisites: NURS 403/403L, 406/406L, 407. Corequisites: NURS 411/411L, 415, 416.

NURS 415 Business of Health Care (2)
Appraisal of socio-economical factors as they challenge the health care professional's ability to provide quality care. Prerequisites: NURS 403/403L, 406/406L, 407.

NURS 417 Forensic Science: The Human Interface (2)
Introduces the principles of forensic science as they related to care of individuals experiencing events which require intervention from both the legal and health care systems. Integrates concepts from health care, psychology, sociology, criminology used to clinically investigate crimes against humans. Focuses on the unique knowledge and attributes that health care professionals contribute to multidisciplinary forensic investigation. Addresses various aspects of forensic investigation including role of the forensic scientist in working with the victim and the perpetrator, wound identification and collection of evidence. Specific areas of domestic violence, sexual assault, elder abuse, gang behavior, death investigation, victims' advocacy and courtroom dynamics are included. Students will experience forensic investigation in clinical areas. Prerequisite: Acceptance into the B.S.N. program, or consent of instructor.

NURS 450 Intensive Care Areas Specialty Practice Preparedness (3)
Overview of the dynamics of the collaborative and independent nature of nursing practice within critical care, perioperative, and emergency nursing. Commonalities of practice areas will be explored within the context of the nursing process. Includes recognizing and analyzing pertinent diagnostic data and physical and psychosocial assessment data; identifying common patient health problems and interventions; and determining patient outcomes. Prerequisite to the in-depth specialty practice courses.

NURS 480 Basic Concepts in Palliative Care (3)
Provides basic theory about the practice of hospice and palliative care with focus on the consequences of progressive, predictable disease, providing attention to the whole person and family, and using scientific practice in developing treatment for pain and symptoms. Explores assessment, advanced communication skills, responses to loss, advance care planning, symptom management, and cultural and ethical issues.

NURS 495 Independent Study (1-3)

NURS 496 Topics (1-3)

Office Technology – Administrative (OFAD)

OFAD 101 Office Bookkeeping (3)
Keeping records in a professional office or bookkeeping in a small retail firm. Fundamental bookkeeping principles including a strong basic knowledge of terms, concepts, and procedures. Includes opening through closing a set of books for both service and merchandising industries.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

OFAD 103 Keyboarding (1)
For students who have minimal (less than 30 wpm) or no keyboarding skills. Introduces the touch method of keyboarding Emphasizes learning the alpha numeric keyboard, proper technique, and speed control.

OFAD 105 Ten Key (2)
Introduction to numeric input in the fields of data entry, bookkeeping, accounting, administrative assisting, insurance, banking, finance, and other areas. Teaches the numeric keyboard while focusing on touch control. Emphasizes the development of speed and accuracy using proper technique.

OFAD 147 Medical Terminology (3)
Basic medical terminology as applied to major systems of the body and related diseases. Includes special applications related to medical practice with emphasis on spelling.

OFAD 153 Word Processing I (3)
Instruction in the preparation of business documents for the modern office using current software and learning software commands and functions. Includes beginning to intermediate word processing techniques. Includes creating, processing, and editing documents. Prerequisite: the ability to keyboard at a minimum of 30 wpm.

OFAD 201 Office Procedures (3)
Presents new developments, technology, procedures, organization, and contemporary terminology used in effective office management. Emphasizes decision making and application of office administration skills. Includes personnel problems, costs, control and management of office work, methods of recognizing and solving communication problems, ethics, human relations, time management, conflict management, and multitasking techniques.

OFAD 202 Records Management (3)
Lecture/lab designed to provide instruction, principles, organization and procedures for alphabetic, numeric, subject, and geographic records management systems. Covers both manual and computerized methods for classifying, indexing, coding, storing, and retrieving records. Emphasizes hands-on records management through the use of simulations.

OFAD 206 Computerized Bookkeeping (3)
Essential coverage of computerized bookkeeping using current software applications. Introduction to software and basic accounting principles are included along with vendor and customer transactions. Online banking features, creation of customer files from inception, physical inventory, payroll, and sales tax are covered. Management of other current assets and long-term liabilities; preparation of estimates, use time tracking features, and classification/organization of data. General journal entries as well as report and template customization are covered. Prerequisite: OFAD 101.

OFAD 208 Spreadsheets (3)
Introduction to skills required to create and use effective and professional looking spreadsheets in a business environment using a spreadsheet application. Topics include fundamentals of spreadsheet design, application toolbars, creating and saving worksheets and workbooks, entering and using formulas and functions, formatting and printing, working with multiple workbooks, creating charts, managing lists (spreadsheet databases), creating and using templates, an introduction to simple macros, security, importing and exporting, and sharing spreadsheet information.

OFAD 221 Transcription Machines (3)
Proficiency in transcribing memos, letters and other business documents. Exercises to aid in improving spelling, word usage, punctuation, sentence and paragraph structure, and the ability to edit properly using standard proofreader's marks. Prerequisite: ability to keyboard at a minimum of 40 wpm.

OFAD 244 Legal Office Procedures (3)
Procedures found in legal offices either in the private or public sectors. Fundamental office procedures found in both general and specialized law offices. Simulates a typical legal office with the tasks and responsibilities performed in a legal office environment and shows how these tasks relate to the court system.

OFAD 248 Coding & Insurance Billing (3)
Introduces coding with an ultimate goal to present a clear picture of medical procedures and services performed (CPT codes), correlating the diagnosis, symptom, complaint or condition (ICD-9 codes), thus establishing the medical necessity required for third-party reimbursement. Covers how to abstract information from medical records and code for insurance billing purposes. Focuses on health insurance claim form CMS-1500 insurance billing requirements for private insurance and managed care, Medicaid, Medicare, and Worker's Compensation. Includes credit and collection practices as well as tracking reimbursement. Prerequisites: OFAD 147 and OFAD 153, sophomore standing, or consent of instructor.

OFAD 249 Medical Office Procedures (3)
Introduction to office administration duties specifically used in medical offices. Ethical issues related to a medical office setting, interpersonal communications, appointment scheduling, patient reception and registration, health information and management, medical billing, health insurance, financial management, and human resource management. Prerequisites: OFAD 153 and OFAD 253, sophomore standing, or consent of instructor.

OFAD 253 Word Processing II (3)
Lecture/lab provides instruction in intermediate to advanced word processing techniques. Continuation of OFAD 153 and provides more hands-on experience with the more advanced features of word processing. Reviews and expands word processing knowledge to increase proficiency and includes merging, sorting, tables, forms, outlines, tables of contents, graphics, charts, newsletters, document enhancements, reports, styles, macros, templates, and wizards. Prerequisite: OFAD 153.

OFAD 267 Presentation, Publishing, and Desk Top Management Software (3)
Focuses on delivery and integration of presentation software. Introduces the development of presentation graphics materials including graphs, charts, illustrations, and diagrams. Emphasizes effective communication through computerized presentations. Covers features of software and effective presentation techniques. Concepts and applications for desktop publishing emphasizing page layout and design with techniques for incorporating text and graphics and final production of printed documents. Introduces the functions used in desktop management software including e-mail, calendaring, contacts, tasks, journals, and notes. Prerequisite: OFAD 153.

OFAD 269 Database Management (3)
Introduction to skills required to create and use effective databases in a business environment using a database application. Topics include definition of databases, basics of relational database design, designing a relational database, and using a database application to implement a database.

OFAD 293 Cooperative Education (3-12)
Practical uses of educational training through the joint supervision of a participating employer and a designated faculty member. Provides the opportunity to supplement course work with practical work experience related to educational program and occupational objectives. Prerequisite: sophomore standing.

OFAD 295 Independent Study (1-3)

OFAD 296 Topics (1-3)

Certain courses are only offered during the fall or spring semesters, or may be available only in alternating years. It is the student's responsibility to meet with their advisor and/or check the two-year course planning calendar on the Mesa State College website for course availability. Learn more at **mesastate.edu/academics.**

Philosophy (PHIL)

PHIL 105 Critical Thinking-GTAH3 (3)
An introduction to the basic skill of critical reading, writing, and thinking needed for the intelligent, responsible, and ethical construction of one's worldview, conduct of one's life, and execution of one's civic duties. Topics include: argument identification, analysis, and construction; avoidance of common fallacies of reasoning; common deceptive and manipulative uses of language; writing clear and convincing argumentative essays.

PHIL 110 Introduction to Philosophy-GTAH3 (3)
Includes an orientation to the discipline's concerns, branches, major schools of thought, and its relationship to other disciplines; a selection of readings from philosophers of all historical periods concerning major philosophical issues; practice in the process of philosophical reasoning, the critical analysis of philosophical writings, and the most basic rules of logic.

PHIL 275 Introduction To Logic (3)
Forms of reasoning, valid versus fallacious inferences, strong versus weak arguments. Designed to increase the ability to reason clearly and correctly and follow and critically evaluate the reasoning of others.

PHIL 296 Topics (1-3)

PHIL 320 Philosophy of Religion (3)
Exploration of fundamental issues regarding religion and examination of the principles of inquiry involved in dealing with such issues philosophically. Issues include the concept of God, arguments for the existence of God, the relationship between faith and reason, the validity of religious experience, pluralism in world religions, etc. Prerequisites: PHIL 110 or 275, or consent of instructor.

PHIL 352 Ethics (3)
Introduction to theoretical and applied Ethics. Major moral philosophers and moral theories are surveyed; a general approach to moral reasoning is developed. This is then applied to the discussion of recent writings on such issues as euthanasia, abortion, war, capital punishment, affirmative action, etc. Prerequisites: PHIL 110, or 275 or consent of instructor.

PHIL 373 History of Philosophy I (3)
Philosophical problems including relation of the individual to the state, death and the afterlife, the physical universe, and existence of God, as seen through Greek and Medieval thinkers such as Plato, Aristotle, Augustine, and Thomas Aquinas. Prerequisites: PHIL 110, or 275, or consent of instructor.

PHIL 374 History of Philosophy II (3)
Continuation of PHIL 373, with topics as seen through thinkers of the modern period, such as Hobbes, Berkeley, Kant, Nietzsche, and the Existentialists. Prerequisites: PHIL 110, or 275, or consent of instructor.

PHIL 375 Twentieth-Century Philosophy (3)
The main philosophical themes and schools of recent philosophy. Characteristic methods and positions of such schools as Pragmatism, Phenomenology, Existentialism, and various Analytic Movements - especially as they bear on central philosophical problems regarding truth, meaning, knowledge of the external world, and the relationship between language and reality. Prerequisites: PHIL 110, or 275, or consent of instructor.

PHIL 395 Independent Study (1-3)

PHIL 396 Topics (1-3)

PHIL 495 Independent Study (1-3)

PHIL 496 Topics (1-3)

Physics (PHYS)

PHYS 100 Concepts of Physics-GTSC2 (3)
Introduction to physics. Emphasis on basic conceptual aspects described in everyday language. Elementary mathematics introduced when necessary. Survey of topics such as Newtonian mechanics, heat and energy, electricity and magnetism, light, relativity and quantum theory. The course is designed for majors outside of the sciences.

PHYS 101 Elementary Astronomy-GTSC2 (3)
A nonmathematical introduction to modern stellar and extragalactic astronomy. Topics include planetary exploration, stellar evolution, galaxies, and the big-bang cosmology. Current research results are discussed. Evening observing will be scheduled when possible.

PHYS 105 Physics by Inquiry-GTSC1 (2)
PHYS 105L Physics by Inquiry Lab-GTSC1 (1)
Lab-based introduction to physics and the physical sciences. Starting from their own observations, students develop basic physical concepts, use and interpret different forms of scientific representations, and construct explanatory models with predictive capabilities. Topics include properties of matter, heat and temperature, magnets, electric circuits, motion, and astronomy. Recommended for prospective K-12 teachers.

PHYS 111 General Physics-GTSC1 (4)
PHYS 111L General Physics Lab-GTSC1 (1)
A survey of physics fundamentals. Topics include mechanics, electricity, magnetism, thermodynamics, sound, optics, and modern physics. Problem solving is emphasized. Prerequisite: a mastery of algebra and trigonometry. PHYS 111, 111L is a prerequisite for PHYS 112, 112L. Four lectures and one two-hour laboratory per week.

PHYS 112 General Physics-GTSC1 (4)
PHYS 112L General Physics Lab-GTSC1 (1)
A survey of physics fundamentals. Topics include mechanics, electricity, magnetism, thermodynamics, sound, optics, and modern physics. Problem solving is emphasized. Prerequisite: a mastery of algebra and trigonometry. PHYS 111, 111L is a prerequisite for PHYS 112, 112L. Four lectures and one two-hour laboratory per week.

PHYS 131 Fundamental Mechanics (4)
PHYS 131L Fundamental Mechanics Lab-GTSC1 (1)
First of a foundation series of three physics courses for scientists and engineers. The Newtonian dynamics of matter is presented, along with the laws of momentum and energy conservation. Specific force laws are used to analyze problems drawn from engineering, biology, astronomy, and physics. Galilean relativity is discussed, and cultural as well as philosophical and practical aspects of physics are studied. The language of calculus and vector spaces is used throughout the course. Prerequisite: MATH 151 (may be taken concurrently). Four lectures and one two-hour laboratory per week.

PHYS 132 Electromagnetism and Optics-GTSC1 (4)
PHYS 132L Electromagnetism and Optics Lab-GTSC1 (1)
The second foundation physics course for scientists and engineers. The field is introduced with static electric and magnetic fields, both in free space and in matter. Electrodynamics is developed, including a discussion of Kirchoff's laws and circuit concepts. Maxwell's equations are presented and electromagnetic radiation discussed. The course concludes with an introduction to optics. Both geometric and the wave model for light are studied. The associated laboratory course will include experiments on fields, circuits, and optical systems. Prerequisites: PHYS 131, 131L, and MATH 152 (may be taken concurrently). Four lectures and one two-hour laboratory per week.

PHYS 196 Topics (1-3)

PHYS 231 Modern Physics (3)
The third foundation physics course for scientists and engineers. Relativity and quantum theory are the themes of this course. Relativistic kinematics and dynamics

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are studied. Quantum theory is introduced in the examination of black-body radiation, the photoelectric effect, and the energy quantization of atoms. The Schrodinger wave equation is used to analyze simple quantum systems. The course concludes with applications drawn from such topics as atomic and molecular physics, solid-state physics, nuclear and high-energy physics, and astrophysics. Prerequisites: PHYS 132, 132L, and MATH 253 (may be taken concurrently).

PHYS 232 Modern Physics II (3)
A continuation of Modern Physics I. This course emphasizes applications of quantum mechanics to atoms and molecules, metals and semiconductors, and nucleus. The course will also provide an introduction to statistical and thermal physics and high energy particle physics. Prerequisite: PHYS 231.

PHYS 251 Electronics for Scientists (3)
Laboratory-based introduction to electric circuits and electronic instrumentation for scientists. The course will emphasize a practical approach, with students learning about electronic devices and how they work by building working circuits. Topics explored include passive circuits with resistors and capacitors, including applications in electric filtering; diodes; transistors; op-amps; timing circuits; feedback and amplification; and digital circuits. Prerequisites: PHYS 132 or PHYS 122.

PHYS 252 Intermediate Lab (2)
Students will perform experiments in optics, acoustics, and modern physics. Experiments will include measuring the speed of light, measuring the wavelength of atomic discharge lines, X-ray diffraction, and measuring h/e among others. Emphasis will be on experimental design, use of modern instrumentation, preparation of lab reports, and data analysis. Prerequisite: PHYS 231.

PHYS 296 Topics (1-3)

PHYS 300 New Directions in Science (3)
A survey of recent developments in science. This course is open to qualified students in liberal arts as well as the sciences. Faculty from various disciplines will participate. Topics will be drawn from astronomy, biology, chemistry, geology, physics, engineering, and applied mathematics. Permission of instructor required.

PHYS 301 Introduction to Space Science (3)
The history and technology of space and space exploration. Designed for all non-science majors, particularly prospective K-12 teachers. Topics include: the solar system, space environments, space travel, satellite communication and design. Prerequisites: junior or senior status, or consent of instructor.

PHYS 311 Electromagnetic Theory I (3)
A mature study of electromagnetic fields. The course begins with a review of Maxwell's equations. Static fields are analyzed and multipole expansion techniques exploited. Fields in dielectric and magnetic materials are then examined, and capacitance and inductance introduced. Electrodynamics is developed, along with concepts of field momentum and energy. Prerequisites: PHYS 132, PHYS 132L, MATH 260, MATH 360 (may be taken concurrently).

PHYS 312 Electromagnetic Theory II (3)
A continuation of PHYS 311. Electromagnetic waves are studied. Wave propagation in conducting and nonconducting media is examined, along with dispersion phenomena. Waveguides are examined. Electromagnetic field radiation is studied, both for point charges and for arbitrary charge distributions. The course concludes with a reformulation of electromagnetism in the language of special relativity. Prerequisite: PHYS 311.

PHYS 321 Quantum Theory I (3)
Foundation course in quantum physics. Includes quantum states, measurements and time evolution using Dirac formalism for both discrete and continuous systems. Connection between Dirac formalism and wave mechanics established and the Schrodinger equation solved in various contexts. Coverage of particles in piecewise square potentials, tunneling, the harmonic oscillator, angular momentum and the hydrogen atom. Introduces linear algebra for describing quantum physics and uses techniques for solving differential equations. Prerequisite: PHYS 232.

PHYS 331 Advanced Lab I (2)
A course in experiment design and technique. Lab investigations provide experience in instrumental methods, planning of laboratory experiments, data analysis, preparation of reports according to professional standards, and training in the use of computers for data acquisition and processing. The experiments to be performed are selected from electromagnetism, atomic, nuclear, and solid-state physics. Prerequisite: PHYS 252.

PHYS 342 Advanced Dynamics (3)
An in-depth survey of classical mechanics. Topics include Newtonian dynamics, conservation laws, oscillating systems, gravitation, the Lagrangian and Hamiltonian formulation of mechanics, orbital and central force motion, systems of particles, non-inertial reference frames, rigid bodies, coupled oscillations, and waves on a string. Prerequisites: PHYS 131 and MATH 260

PHYS 352 History and Philosophy of Physics (3)
Material varies from year-to-year. The course addresses problems in the interpretation and development of physics. Case studies of crucial experiments are analyzed. The interaction of physics with other philosophical and cultural pursuits is discussed. Prerequisite: one year of physics or consent of instructor.

PHYS 362 Statistical & Thermal Physics (3)
A study of the physics of bulk matter. Beginning with fundamental principles of quantum mechanics, statistical methods are employed to explain the macroscopic laws of thermodynamics and to make detailed predictions about the large-scale behavior of solids, liquids, and gases. Applications include the specific heat of solids, thermal radiation, magnetic susceptibilities, stellar equilibrium and chemical reactions. Prerequisite: PHYS 231, MATH 260.

PHYS 395 Independent Study (1-3)

PHYS 396 Topics (1-3)

PHYS 422 Quantum Theory II (3)
Continuation of PHYS 321. Central forces, complete derivation of hydrogen atom energy levels and eigenstates. Perturbation theory and other approximately techniques. Other selected topics include: multiple quantum systems, scattering, quantum foundations. Prerequisite: PHYS 321.

PHYS 432 Nuclear and High-Energy Physics (3)
An introduction to the structure and interactions of nuclear and subnuclear particles. Topics include a survey of the intrinsic properties of nuclei, descriptions of various nuclear models, studies of radioactivity and nuclear reactions, and an overview of the technologies of high-energy accelerators and detectors. The course concludes with an introduction to the properties and structures of elementary particles and discussions of current developments in unified theories of force. Prerequisite: PHYS 322.

PHYS 441 Solid State Physics (3)
The structure and properties of solids. This course is a study of the crystalline state of matter, including crystal classifications, vibrational specific heats, electronic structures and conductivities, cohesive energies, magnetic susceptibility, and optical properties. Prerequisite: PHYS 321.

PHYS 471 Computational Physics I (3)
A foundation course in Computational Physics which requires skills of both theoretical and experimental physics. This is a modern field in which computers are used to solve physics problems whose complexity places them

beyond analytic solution. Topics discussed include Fitting and Experimental Spectrum, Random Walk Simulation, Monte Carlo Applications to Radioactive Decay, Quantum Eigenvalues, Particle in a Box. Prerequisites: CSCI 112, PHYS 231. Corequisite: MATH 369

PHYS 472 Computational Physics II (3)
A continuation of PHYS 471. Computers are used to solve more complex problems in physics. Topics include anharmonic oscillations, nonlinear systems, matrix computing, kspace Schrodinger equation, quantum scattering in k-space, thermodynamic simulations, the Ising Model, electrostatic potentials. Prerequisites: PHYS 321, PHYS 471.

PHYS 473 Modern Optics (3)
Modern principles and applications of optics. Models for light are reviewed and extended. Interferometry and coherence theory are studied. The Fourier transform description of images is introduced and optical systems analyzed. Diffraction theory is used in a number of applications. Anisotropic media and polarization phenomena are studied. Radiometry, light sources, and optical detectors are discussed. The course concludes with an introduction to quantum optics and a survey of optical processes in semiconductors. Prerequisite: PHYS 321.

PHYS 482 Senior Research (1)
An individual research project, supervised by a faculty advisor. The project may be selected from experimental or theoretical topics. The research concludes with a formal report written in accordance with The American Institute of Physics Style Manual. This course is normally taken twice in the senior year.

PHYS 487 Structured Research (3)
Physics research under the direct guidance of a faculty member. Designed for advanced junior and senior level students. Prerequisite: permission of instructor.

PHYS 494 Seminar (1)
A forum for topical physics. In this seminar, faculty and students of physics participate in both informal discussions and formal oral presentations of selected topics of scientific interest, including significant current advances and crucial historical developments. The course may be repeated for a maximum of four semester hours of credit. Prerequisite: upper division standing and consent of instructor.

PHYS 495 Independent Study (1-3)

PHYS 496 Topics (1-3)

PHYS 596 Topics: (1-3)

Political Science (POLS)

POLS 101 American Government-GTSS1 (3)
Structures and functions of the American political system and the constitutional development of federalism and separation of powers. Also, citizen participation and influence in politics, the congress, presidency and the supreme court, and public policy including civil rights and liberties.

POLS 236 State & Local Government (3)
Theories of state formation and constitutional development, city charters, county government, and intergovernmental relations with emphasis on Colorado. Prerequisites: POLS 101 or consent of instructor.

POLS 261 Comparative Politics-GTSS1 (3)
Introduction to conceptual models and approaches utilized in the comparative study of nations and their politics. Application of these theories to selected democratic, communist, and developing political systems.

POLS 310 Development of the American Constitution (3)
A study of the historical development of the U. S. Constitution. Particular emphasis will be placed on the ideological and political origins of the constitution and constitutional change through formal amendments, judicial interpretation, and the political process. Prerequisite: POLS 101 or consent of instructor.

POLS 324 The Legislative Process (3)
A study of the legislative process emphasizing the U.S. Congress. Attention will be given to the development of legislative systems, the operation of legislatures, the election of legislators, and a comparison with legislatures in other national states. Prerequisites: POLS 101 or consent of instructor.

POLS 325 The American Presidency (3)
A study of the American chief executive, emphasizing the historical development of the office, the various functions of the modern chief executive and a brief comparison with the executive officer of other national states. Prerequisites: POLS 101 or consent of instructor.

POLS 328 The American Court System (3)
The American court system; local, state, and national, including consideration of the impact of prosecutors, defense personnel, judges, and other factors on court decisions and the criminal justice system. Prerequisites: POLS 101 or ADJU 201.

POLS 342 Public Administration (3)
Historical development of public administration including organizational structure and theory, management, personnel administration, fiscal administration, and administrative responsibility. Prerequisites: POLS 101 or consent of instructor.

POLS 352 Religion and Politics (3)
The interactions of religion and politics in the United States, several liberal democracies and within international relations.

POLS 355 Politics in the Information Age (3)
Study of the impact of the 'information' age on American politics and democracy. Prerequisites: POLS 101 or consent of instructor.

POLS 365 European Government and Politics (3)
Study of the political systems of Great Britain, France, Federal Republic of Germany, Russia and other European nations. Emphasized political development, the sources, processes and evaluation of policy making, and contemporary challenges facing these countries. Prerequisites: POLS 261 or HIST 102.

POLS 370 World Politics (3)
Introduction to the structures, processes, and behaviors shaping the world political configuration. Emphasis on states and their interactions as well as non-state actors and the cultural, economic and environmental forces, issues, and resources influencing an emerging world community. Prerequisites: POLS 261 or HIST 102.

POLS 395 Independent Study (1-3)

POLS 396 Topics (1-3)

POLS 412 Constitutional Law (3)
An analysis of American constitutional theory as articulated by the U. S. Supreme Court. Specific topics include the nature of judicial review, the powers of the President and Congress, federalism, the regulation of commerce and the development of substantive due process. Prerequisite: POLS 101 or consent of instructor.

POLS 413 Civil Liberties (3)
A study of the constitutional relationship between the individual and the state. Particular emphasis will be placed on First Amendment freedoms of speech, press, and religious belief, as well as theories of due process and equal protection. Prerequisite: POLS 101 or consent of instructor.

POLS 452 Political Theory: Classical and Medieval (3)
POLS 453 Political Theory: Modern (3)
Study of the development of political theory in the Western tradition. Emphasizes the teaching of main thinkers: Socrates,

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Plato, Aristotle, Augustine, Aquinas, More, Machiavelli, Hobbes, Locke, Rousseau, Mill, and Marx. Develops ideas in relation to historical and cultural contexts, textual consistency, and the evolving tradition of political discourse in Western civilization.

POLS 475 American Foreign and National Security Policy (3)
American foreign and national security policy with emphasis on 1945 to the present and beyond. Foreign and domestic factors shaping policy, the mechanisms and dynamics of policy making, the role of perception and motives underlying decision and action, and case studies of historical crises and contemporary debates are examined.

POLS 488 Environmental Politics and Policy (3)
An introduction to the political issues and problems associated with patterns of socio-economic growth and its environmental impact at both domestic and global levels of analysis. Prerequisites: POLS 101 or consent of instructor.

POLS 490 Senior Seminar for Political Science (3)
Arranged tutorials and seminars with political science faculty and students, design and execution of a research project, and submission of a senior thesis. Prerequisites: STAT 200, SOCI 310, and senior standing.

POLS 495 Independent Study (1-3)

POLS 496 Topics (1-3)

POLS 499 Internship (1-15)
May be performed in areas relating to Political Science, such as civic, political, or legal. Internships will be conducted in Mesa County, the Denver legislature, or in Washington, D.C. Prerequisites: junior or senior standing.

Process Technology (PROS)

PROS 100 Introduction to Process Technology (3)
Provides an overview or introduction into the field of Process Operations within the process industry. The course will introduce the roles and responsibilities of process technicians, the environment in which they work, and the equipment and systems in which they operate.

PROS 110 Safety, Health, and Environment (3)
Provides an introduction to the field of safety, health, and environmental concerns within the process industry. Within this course, you will be introduced to various types of plant hazards, safety and environmental systems and equipment, and the regulations under which processing plants are governed.

PROS 117 DC Circuits (3)
Introduces the basic skills needed for many careers in electronics and related fields. Covers the operations and applications of basic DC and AC circuits consisting of resistors, capacitors, inductors, transformers and diodes. Emphasizes the use of common test instruments in troubleshooting.

PROS 118 AC Circuits (3)
Introduces the basic skills needed for many careers in electronics and related fields. Covers the operations and application of basic DC and AC circuits consisting of resistors, capacitors, inductors, transformers and diodes. Emphasizes the use of common test instruments in troubleshooting.

PROS 120 Process Technology I: Equipment (4)
Provides an overview or introduction into the field of equipment within the process industry. This course will introduce many process industry-related equipment concepts including purpose, components, operation, and the Process Technician's role for operating and troubleshooting the equipment.

PROS 130 Instrumentation (3)
Provides an introduction to the field of instrumentation and covers process variables and the various instruments used to sense, measure, transmit and control these variables. This course also introduces control loops and the elements that are found in different types of loops, such as controllers, regulators and final control elements. The course concludes with a study of instrumentation drawings and diagrams and a unit on troubleshooting instrumentation.

PROS 210 Process Technology II: Systems (4)
Studies the interrelationship of process equipment and process systems: arranging process equipment into basic systems; describing the purpose and function of specific process systems; explaining how factors affecting process systems are controlled under normal conditions; and recognizing abnormal process conditions. In addition, it introduces the concept of system and plant economics.

PROS 220 Process Technology III: Operations (4)
Provides an introduction to the field of operations within the process industry. Students will use existing knowledge of equipment, systems, and instrumentation to understand the operation of an entire unit. Students study concepts related to commissioning, normal startup, normal operations, normal shutdown, turnarounds, and abnormal situations, as well as the Process Technician's role in performing the tasks associated with these concepts within an operating unit.

PROS 230 Quality in Process Technology (3)
Provides an introduction to the field of Quality within the Process Industry. This course will introduce many process industy-related quality concepts including operating consistency, continuous improvement, plant economics, team skills and statistical process control (SPC).

PROS 292 Capstone (4)
Knowledge to articulate the tactical planning functions performed within field projects. Access and apply the various tactical planning tools and data elements to supporting documentation including troubleshooting. Economic principles in costing, value, capital investment, profitability and inventory.

Psychology (PSYC)

PSYC 150 General Psychology-GTSS3 (3)
Examines the fundamental principles of psychology.

PSYC 200 Psychology of Human Adjustment (3)
Problems of mental health and the strategies useful in the pursuit of effective living in today's society. Introduces abnormal psychology, emphasizing prevention of serious problems through understanding change and growth in the modern world.

PSYC 233 Human Growth and Development-GTSS3 (3)
Developmental principles, ages and stages of the life span, and adjustment techniques. Not intended for behavioral science majors.

PSYC 296 Topics (1-3)

PSYC 310 Child Psychology (3)
A study of the principles of human development and psychology from conception to puberty. Prerequisites: PSYC 150.

PSYC 311 Quantitative Research Methods (3)
Application of statistics in psychological research with an emphasis on the selection of appropriate quantitative techniques, computer analysis of data, and interpretation of statistical results within the context of the research endeavor. Topics to be covered include descriptive statistics, hypothesis testing, parametric and non-parametric statistics. Prerequisites: PSYC 150 and STAT 200.

PSYC 312 Experimental Psychology (3)
PSYC 312L Experimental Psychology Lab (1)
Fundamentals of experimental methodology. Application of principles of laboratory research in areas of psychophysics, learning and memory. Formal reports of projects required. Three lectures and two one-hour laboratories per week. Prerequisites: PSYC 150 and STAT 200.

PSYC 314 Psychology Of Learning (3)
PSYC 314L Psychology of Learning Lab (1)
Classic and modern explanations of the phenomena of learning in both lower animals and humans. Lab experiments in classical and operant conditioning with formal scientific reports required. Three lectures and one two-hour laboratory per week. Prerequisites: PSYC 150 and STAT 200.

PSYC 320 Social Psychology (3)
Social influences upon behavior with consideration given to topics such as: social perception, attitude formation and change, communication, and leadership. Prerequisites: PSYC 150.

PSYC 325 Environmental Psychology (3)
Presentation and discussion of ways in which psychology can redefine and help solve some current environmental problems. Prerequisites: PSYC 150 or consent of instructor.

PSYC 330 Psychology of Adolescents and Young Adults (3)
Study of principles of human development (biological, cognitive, and social/emotional) from puberty through young adulthood. Prerequisites: PSYC 150.

PSYC 332 Individual and Group Differences (3)
The ways and extent to which individuals and groups differ from one another and the factors responsible for those differences. Prerequisite: PSYC 150.

PSYC 335 Psychology of Women (3)
A brief account of the role of women in mythology and history will be followed by coverage of women's heritage in psychology. Then gender specific aspects of physical, psychological and social development will be covered. Current areas of interest will be included, e.g., communication, work related issues, relationships. Prerequisites: PSYC 150.

PSYC 340 Abnormal Psychology (3)
Concepts related to psychopathology and personality disorders including functional causation, general psychological theory, and behavior deviation patterns. Prerequisite: PSYC 150, or consent of instructor.

PSYC 350 Psychology Of Adulthood (3)
Study of principles of human development (biological, cognitive, and social/emotional) from the latter part of young adulthood through late adulthood. Prerequisite: PSYC 150.

PSYC 360 Sport Psychology (3)
Introduction to the theories and research in Sport Psychology, including topics such as aggression and violence in sports, psychological characteristics of participants, sexual identity and motivation. Prerequisites: PSYC 150.

PSYC 370 Cross-Cultural Psychology (3)
Survey of theory and methods in cross-cultural psychology. Prerequisite: PSYC 150.

PSYC 380 Comparative Psychology (3)
Study of animal behavior. Topics will include communication, learning, memory, intelligence and social behavior in various animal populations. Prerequisite: PSYC 150.

PSYC 395 Independent Study (1-3)

PSYC 396 Topics (1-3)

PSYC 400 Psychological Testing (3)
Theory, problems, methods, and content of psychological measurement, including concepts of the purpose of testing, test administration and scoring, standardization, reliability, validity test evaluation, and a survey of the major tests used in educational and psychological testing. Prerequisites: PSYC 150 and STAT 200.

PSYC 410 Drugs & Human Behavior (3)
Study of pharmacological effects and behavioral consequences of self-administered depressants, stimulants, and euphoriants, of marijuana, alcohol and tobacco, and of medicines. Prevention of drug-related problems is considered briefly. Prerequisite: PSYC 150.

PSYC 412 Industrial and Organizational Psychology (3)
Psychological principles applied to formal, productive organizations such as businesses, governments, and schools. Personnel selection, placement, training, evaluation, motivation to work, job satisfaction, and morale are examined. Counts as a management course for BBA candidates. Prerequisites: PSYC 150, or consent of instructor.

PSYC 414 Systems and Theories of Psychology (3)
Systems and theories of modern psychology and the development of scientific psychology since 1879. Prerequisite: Senior status, or consent of instructor.

PSYC 416 Memory and Cognition (3)
Study of the mental processes that underlie our abilities to recognize stimuli, think, remember, learn language, and solve problems. Current research in each of these areas will be discussed. Includes a research paper written in APA style. Prerequisite: PSYC 150.

PSYC 420 Personality (3)
Examination of personality psychology from the time of Freud through the present. Theories and various approaches to understanding the development and functioning of both the general and the unique in personality are emphasized. Prerequisite: PSYC 150, recommend PSYC 400.

PSYC 422 Sensation and Perception (3)
Study of the human senses, especially vision and hearing, and of people's meaningful organization of sensory information. Prerequisites: PSYC 150, or consent of instructor.

PSYC 425 Forensic Psychology (3)
Introduction to the production and application of psychological knowledge to the current legal systems. Prerequisite: PSYC 150, or consent of instructor.

PSYC 430 Biopsychology (3)
The biological bases of the behaviors of the organism, emphasizing the structure and function of the nervous system. The role of biological factors in such behaviors as sleep, sexual behavior, drug addiction, emotion, etc. will be examined. Prerequisites: PSYC 150 and junior/senior status; biology course recommended.

PSYC 495 Independent Study (1-3)

PSYC 496 Topics (1-3)

Psychology – Counseling (PSYP)

PSYP 320 Career Development (3)
Theories of, and factors influencing, career development such as assessment, career maturity, decision making, problem solving, and planning. Current developments in adult career and life development will be discussed including life stages, transitions, midlife crisis, stress, and adjustments necessary for career development effectiveness. Prerequisites: PSYC 150 or consent of instructor.

PSYP 324 Career Counseling (3)
Types and sources of career information and its various uses in career counseling with special emphasis on decision making theories and processes. Prerequisites: PSYC 150 or consent of instructor.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

PSYP 396 Topics (1-3)

PSYP 410 Introduction to Marriage and Family Counseling (3)
Key theories and approaches for diverse problem areas in Marriage and Family Counseling, including domestic violence and substance abuse. Explore career options and training for counselors. Prerequisite: PSYC 150 or SOCO 144.

PSYP 420 Counseling Processes and Techniques (3)
Counseling principles and practices which facilitate interpersonal communication and effective personal and social development. Counseling skills in attending behavior, listening, problem exploration, responding, understanding, and modes of action are examined, discussed and applied in classroom counseling situations. Prerequisites: PSYC 150 or 340; or consent of instructor.

PSYP 422 Psychological Interviewing (3)
Psychological interviewing techniques, methods, and interpretation will be examined using the DSM-IV-TR. Interview types will include counseling, intake, assessment, and diagnosis. Prerequisites: PSYC 150, 340 and 400.

PSYP 424 Group Processes (3)
Dynamics, procedures and processes of the group. Focus will be on understanding self and learning how to help others develop self-understanding as well as personal and social skill. Prerequisites: PSYP 420.

PSYP 496 Topics (1-3)

PSYP 497 Practicum I (4)
Interpersonal training and counseling practice under professional supervision. A typed paper/journal must be submitted for approval and course credit. Prerequisite: senior status and consent of instructor. Practicum must be arranged for the semester prior to enrollment.

PSYP 499 Practicum II (4)
Counseling experience in external field locations according to needs and career goals of the student. A typed paper/journal must be submitted for approval and course credit. Prerequisite: consent of instructor. Practicum must be arranged for the semester prior to enrollment.

Public Administration (PADM)

PADM 314 Public Organization Theory (3)
Examination of the historical development of organizational theory. Focuses on various theoretical approaches to the study of organizational structure and human behavior in public sector organizations. Prerequisite: POLS 101 or consent of instructor.

PADM 315 Public Management (3)
Exploration of the concepts and skills essential to successful management in public organizations. Focuses on the management functions critical for success of the organization and how these functions are affected by operating in the public sector. Prerequisite: POLS 101 or consent of instructor.

PADM 442 Public Budgeting (3)
Examines the principles and practices of resource allocation and the role of the budget in policy development and implementation focusing primarily on state and local government. Focuses on the relationship of the budget to strategic planning, policy implementation and performance measures. Prerequisite: POLS 101 or consent of instructor.

PADM 446 Public Personnel Management (3)
Examination of the major issues and components of public personnel systems. Special focus will be placed on the role of the first line government supervisor or middle manager in all facets of personnel administration. Prerequisite: POLS 101 or consent of instructor.

Radiologic Technology (RTEC)

RTEC 114 Radiographic Clinical Experience I (2)
Introduces the clinical education experience in both the laboratory and at the clinical education center. This course is divided into two eight-week sessions. The first portion will be spent in the Autotutorial Lab on campus and the second portion will be spent at an assigned clinical education site. Corequisites: RTEC 121, 121L, 122, 122L, 120, 125. Prerequisites: BIOL 209, 209L, acceptance into the Radiologic Technology Program.

RTEC 120 Introduction to Radiologic Technology and Patient Care (3)
Introduction to radiologic technology with emphasis on the education program, the profession, and the health-care delivery system. Fundamentals of patient care including ethics, professional conduct, communication, radiation protection and patient management. Study of medical terminology is included. Corequisites: RTEC 114, 121, 121L, 122, 122L, and 125. Prerequisites: BIOL 209, 209L, acceptance into the Radiologic Technology program.

RTEC 121 Radiographic Anatomy and Positioning I (2)
RTEC 121L Radiographic Anatomy and Positioning I Lab (1)
Instruction in every phase of radiography in an integrated coverage of appendicular skeletal system, abdomen, thoracic viscera and body systems. Radiographic anatomy and positioning are discussed and applied in the energized laboratory. Corequisites: RTEC 114, 120, 122, 122L, and 125. Prerequisites: BIOL 209, 209L, acceptance into the Radiologic Technology program.

RTEC 122 Principles of Radiographic Exposure (2)
RTEC 122L Principles of Radiographic Exposure Lab (1)
Fundamental factors which govern and influence the radiographic image including equipment, accessory devices, exposure mathematics, and processing. Technical and prime exposure factors are discussed and applied in the energized laboratory. Corequisites: RTEC 114, 120, 121, 121L, and 125. Prerequisites: BIOL 209, 209L, acceptance into the Radiologic Technology program.

RTEC 124 Radiographic Clinical Experience II (4)
Continues clinical education and introduces additional concepts correlating skills with academic courses. Includes one hour a week of film critique provided by the clinical instructor. Corequisites: RTEC 131, 131L, 132,132L, 135. Prerequisite: RTEC 114 or consent of the instructor.

RTEC 125 Radiologic Science (2)
Basic physics, fundamentals of x-ray generating equipment, x-ray production and interaction, beam characteristics and units of radiation measurement. Corequisites: RTEC 114, 120,121, 121L, 122, and 122L. Prerequisites: BIOL 209, 209L, acceptance into the Radiologic Technology program.

RTEC 131 Radiographic Anatomy and Positioning II (2)
RTEC 131L Radiographic Anatomy and Positioning II Lab (1)
Continuation of RTEC 121 with instruction in every phase of radiography of the axial skeleton, digestive system, urinary system, cranium, spinal column and facial bones. Corequisites: RTEC 124, 132, 132L and 135. Prerequisites: RTEC 120, 121, 121L, 122, 122L, and 125.

RTEC 132 Radiographic Equipment and Special Imaging (2)
RTEC 132L Radiographic Equipment and Special Imaging Lab (1)
Continuation of RTEC 122 including equipment utilized to produce diagnostic images, recording media and techniques, quality assurance and computer applications in diagnostic radiology. Advanced imaging modalities of computed tomography, MRI, cardiovascular imaging technology, ultrasound and mammography are also presented. Applied practice of quality assurance, technique charts and mammographic demonstrations are performed in the laboratory. Corequisites: RTEC 124, 131, 131L, and 135. Prerequisites: RTEC 120, 121, 121L, 122, 122L, and 125.

RTEC 135 Radiation Biology and Protection (2)
Principles or radiation interaction in cells and the effect and factors affecting cell response to radiation, acute and chronic effects or radiation, dose equivalent limits, and regulatory involvement. Responsibility by the radiographer to patients, personnel, the public and self are also discussed. Corequisites: RTEC 124, 131, 131L, 132, 132L. Prerequisites: RTEC 120, 121,121L, 122, 122L, 125.

RTEC 214 Radiographic Clinical Experience III (6)
Continues clinical education and introduces additional concepts correlating skills with academic courses. Includes film critique provided by the clinical instructor. Prerequisite: completion of all 100 level radiologic technology courses or permission of the instructor.

RTEC 224 Radiographic Clinical Experience IV (8)
Continues clinical education and introduces additional concepts correlating skills with academic courses. Corequisites: RTEC 251, 255. Prerequisite: RTEC 214 or consent of the instructor.

RTEC 234 Radiographic Clinical Experience V (8)
Continues clinical education and introduces additional concepts correlating skills with academic courses. Corequisites: RTEC 261, 265. Prerequisites: RTEC 224, 251, 255 or consent of instructor.

RTEC 251 Radiographic Pathology (3)
Radiographic and advanced modality equipment, radiographic anatomy and pathology involved in specialized and highly technical procedures. Contrast media, pharmacology and venipuncture are also covered. Corequisites: RTEC 224, 255. Prerequisite: All RTEC 100 level courses.

RTEC 255 Radiographic Assessment I (1)
Radiographic film quality critique and patient care assessment. Utilizes previous knowledge of film quality factors and patient care techniques as well as an understanding of pathology demonstrated on radiographs. Corequisites: RTEC 224, 251. Prerequisite: all RTEC 100 level courses, RTEC 214 or consent of instructor.

RTEC 261 Radiographic Review (3)
Departmental administrations, radiologic records and job seeking skills are discussed. The major portion of this course is devoted to compiling a portfolio of radiographic fundamentals in all aspects of the program; and reviewing in preparation for the national registry examination. Corequisite: RTEC 234,265. Prerequisites: All RTEC 100 level courses and RTEC 224, 251 and 255.

RTEC 265 Radiographic Assessment II (1)
Continuation of RTEC 255. Radiographic film quality critique and patient care assessment. Corequisites: RTEC 234, 261. Prerequisites: RTEC 214, 224, 251, 255 or consent of instructor.

RTEC 320 Informatics in Radiologic Science (2)
Technical, organizational, and cost-benefit issues related to health care information systems. Includes decision making in radiology, integrated networking and distributed computing technologies. Confidentiality issues with patient records discussed.

RTEC 325 Cross-Sectional Anatomy I (2)
Critical ability to locate and identify structures in the axial (transverse), sagittal, coronal and orthogonal (oblique) planes. Volumetric data sets and three-dimensional reconstruction of body structures. This section will focus on the head, neck, chest, and thorax.

RTEC 327 Cross Sectional Anatomy II (2)
Continuation of RTEC 325. Includes study of the abdomen, extremities and joints, pelvis and whole body imaging. Prerequisite: RTEC 325.

RTEC 365 Advanced Patient Care (3)
Skills required to handle patients with acute and chronic disabilities in the advanced technology areas. Includes an understanding of multiskilled areas such as EKG, pharmacology, venipuncture and phlebotomy. Medical and legal implications as well as patient well being discussed. Sterile technique related to cardiovascular procedures and biopsy also studied.

RTEC 450 Specialization: Mammography I (2)
Study of mammography pertaining to diagnostic imaging. Topics include principles, physics, image reconstruction, equipment, and image quality.

RTEC 452 Specialization: C/V Interventional Technology I (2)
Study of cardiac or vascular interventional technology pertaining to diagnostic imaging. Topics include principles, physics, image reconstruction, equipment, image quality.

RTEC 454 Specialization: Computed Tomography I (2)
Study of computed tomography pertaining to diagnostic imaging. Topics include principles, physics, image reconstruction, equipment and image quality.

RTEC 456 Specialization: Magnetic Resonance I (2)
Study of magnetic resonance imaging pertaining to diagnostic imaging. Topics include principles, physics, image reconstruction, equipment and image quality.

Reading (READ)

READ 030 Basic Reading (2)
Focuses on strategies for word attack, vocabulary development, stages of reading and basic reading comprehension. Prerequisite: Accuplacer score below 40.

READ 060 Foundations of Reading (3)
Focuses on strategies for vocabulary development, improved reading comprehension, and enrichment. Prerequisites: READ 030 or Accuplacer score from 40 to 61.

READ 090 College Preparatory Reading (3)
Introduction to strategies necessary for college level content reading. Includes how to read textbooks more effectively, locate main ideas and supporting details, develop literal and critical comprehension, and improve vocabulary development. Emphasizes applying these strategies to content area courses. Prerequisites: READ 060 or Accuplacer score from 62 to 79.

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

Real Estate Broker (REEB)

REEB 201 Real Estate Broker I (6)
Taught in conjunction with REEB 202 - Real Estate Brokers II, to meet the educational requirements of the Colorado Real Estate Commission for a Colorado Real Estate Broker's license. Includes Real Estate Law and Practice, practical applications, and Current Legal Issues.

REEB 202 Real Estate Broker II (6)
Taught in conjunction with REEB 201 - Real Estate Broker I, to meet the educational requirements of the Colorado Real Estate Commission for a Colorado Real Estate Broker's License. Includes Colorado Contracts and Regulations, Closings, and Recordkeeping and Trust Accounts. Prerequisite: REEB 201.

Social Science (SOCI)

SOCI 110 simThinking: Modeling the Social and Natural World (6)
Students study the uses of modeling as a foundational part of all sciences. simThinking is organized around the course's guiding principle of using models to understand the fundamentals of complex adaptive systems in the social, natural, and physical world. Using the tools of agent-based modeling, students examine systems "from the bottom up" by identifying the component parts of a system and discovering the rules of interaction between component parts (agents) and their emergent properties. The class is interdisciplinary, team-taught, and technologically-enriched. Students learn academic content through a series of projects, and develop strong critical thinking and teamwork skills.

SOCI 121 Americorps Field Placement I (3)
Exploration of the practice and theory of community service. Prerequisites: enrollment in a national Service Program, approval of AmeriCorps Directors.

SOCI 122 Americorps Field Placement II (3)
In-depth analysis, strategic planning, implementation and evaluation of community projects. This class shall give the students an opportunity to examine real issues in the community and become a part of the problem-solving process. Prerequisite: SOCI 121.

SOCI 136 The African-American Experience (3)
An introduction to the experience of African-Americans from the perspective of the Social Science disciplines.

SOCI 196 Topics (1-6)

SOCI 296 Topics (1-3)

SOCI 310 Methods of Social Research (3)
Research methods and their application to the social sciences. Prerequisites: PSYC 150 or SOCO 260 and STAT 200.

SOCI 340 Methods of Teaching Social Studies: Secondary Schools (4)
Examination and comparison of the social studies, exploring both new and traditional curricula, philosophies, and teaching methods. 75 hours of field work required. Prerequisites: upper division status and 21 semester hours of social sciences.

SOCI 351 History of Ideas: Ancient and Medieval Periods (3)
The major ideas of man and society in ancient Greece and Rome with attention to social conditions influencing their development and transmission into the social thought of Medieval Europe.

SOCI 395 Independent Study (1-3)

SOCI 396 Topics (1-3)

SOCI 495 Independent Study (1-3)

SOCI 496 Topics (1-3)

SOCI 497 Structured Research (1-3)
Social or behavioral science research under the directed guidance of a faculty member. Designed for junior and senior level students.

Sociology (SOCO)

SOCO 144 Marriage & Families-GTSS3 (3)
Marriage and families in social, historic, institutional, theoretical, and gendered contexts. Includes family formation, family problems, and alternative intimate relationships.

SOCO 260 General Sociology-GTSS3 (3)
An overview of sociological concepts, terminology, basic principles, and important theories; introduction to substantive areas of the field.

SOCO 264 Social Problems-GTSS3 (3)
Major contemporary social problems including crime, race relations, war, educational systems, unequal distribution of wealth, and political apathy.

SOCO 296 Topics (1-3)

SOCO 300 Political Sociology (3)
The interactions and interrelationships between social and political forces. Topics covered include state and society, the social bases of power, ideology, and the media. Prerequisite: SOCO 260, or POLS 101 or consent of instructor.

SOCO 301 Introduction to Human Services (3)
Exploration of human services agencies, programs, funding, philosophies, history, and career opportunities. Prerequisite: SOCO 260, or SOCO 264 or consent of instructor.

SOCO 305 Environmental Sociology (3)
An overview of the interrelations among the physical environment, population, and technology; the origin and basis of environmental social movement organizations; the social construction of environmental issues. Prerequisites: SOCO 260 or consent of the instructor.

SOCO 310 Sociology of Religion (3)
Sociological aspects of religion, including the social function of religion, religious traditions in the global village, and the rise of new religious movements. Prerequisite: SOCO 260 or consent of instructor.

SOCO 312 Social Movements (3)
Sociological study of historical and contemporary social movements. Overview of the literature on social movement development, organization, participation and outcomes. Prerequisite: SOCO 260 or consent of instructor.

SOCO 314 Population (3)
Basic concepts of population studies in international context. Demographic trends including fertility, mortality and migration, as well as the causes and consequences of those trends. Prerequisites: SOCO 260 or consent of instructor.

SOCO 316 Social Inequality (3)
Causes and effects of inequality, especially social class, with consideration of race and gender. Prerequisites: SOCO 260, or SOCO 264 or consent of instructor.

SOCO 320 Life Course Sociology (3)
Investigation of the social factors influencing human lives, emphasizing the connection between individual lives and social change. Prerequisites: SOCO 144 or SOCO 260 or consent of instructor.

SOCO 325 Racial & Ethnic Relations (3)
Sociological perspectives on racial and ethnic relations in the United States. Prerequisites: SOCO 260 or consent of instructor.

SOCO 330 Crime and Delinquency (3)
Crime, delinquency, and deviance in social and theoretical context. Prerequisite: SOCO 260 or SOCO 264 or consent of instructor.

SOCO 340 Sex and Gender (3)
Perspectives on the social organization of sex and gender. Prerequisites: SOCO 260; or consent of instructor.

SOCO 350 Sociology of Death & Dying (3)
A critical review of concepts and findings of social scientists and a semi-scientific review of literature dealing with death. Prerequisite: SOCO 260 or SOCO 264 or consent of instructor.

SOCO 360 Social Influences of Small Groups (3)
Small-group processes in schools, peer groups, industry, and other selected institutions; small groups as related to the larger social system; group structure, communications, and the dynamics of social interaction.

SOCO 395 Independent Study (1-3)

SOCO 396 Topics (1-3)

SOCO 400 Classical Social Theory (3)
The development of social theory from the Enlightenment through early twentieth century, with emphasis on Marx, Weber, and Durkheim. Prerequisite: SOCO 260 or consent of instructor.

SOCO 410 Contemporary Social Theory (3)
Twentieth century sociological theories and their historical links to classical thought. Prerequisite: SOCO 400.

SOCO 420 Field Studies (6)

SOCO 495 Independent Study (1-3)

SOCO 496 Topics (1-3)

SOCO 499 Internship (4)

Speech (SPCH)

SPCH 101 Interpersonal Communications (3)
Language, listening, response, defense of statement, and nonverbal communication between two or more people.

SPCH 102 Speechmaking (3)
The preparation, organization, and delivery of a speech.

SPCH 112 Voice and Diction (3)
The use of the speaking voice emphasizing voice placement, speech sounds, breath control, projection, and the phonetic alphabet. Recommended for theatre majors, teachers, prelaw, ministers and business majors.

SPCH 196 Topics (1-3)

SPCH 203 Persuasion (3)
Open discussions on the ethics, process, and application of everyday use of persuasion; how it applies to our advertisements, politics, and friendships; preparation for debate. Prerequisite: SPCH 102.

SPCH 241 Oral Interpretation (3)
The reading aloud of prose, poetry, and essays with the intention of conveying the author's ideas to a listening audience.

SPCH 296 Topics (1-3)

SPCH 303 Nonverbal Communication (3)
The opportunity to observe, record and interpret the nonverbal dimensions of communication behavior and the opportunity to enhance awareness and skill in nonverbal communication behavior in mass media, law, theatre, group dynamics, etc.

SPCH 304 Communication & Conflict (3)
The nature of conflict, conflict structure, conflict styles, and the use of power in conflicts. Application of theories to analyze and set goals to plan strategies and tactics. Study of intervention principles and practices. Prerequisites: upper division standing.

SPCH 305 Communication: Culture, Diversity and Gender (3)
Research and practical application to facilitate constructive relationships with individuals from other countries, with individuals from sub-cultures within our culture, and with individuals of the opposite sex. Prerequisite: SPCH 101.

SPCH 306 Communication and Leadership (3)
Study of communication styles of great leaders from every field of endeavor to determine the sources of their influence over the behaviors, thoughts, and feelings of their followers. Included will be study of the historical environments that gave rise to each leader's style. Prerequisite: SPCH 101.

SPCH 308 Argumentation & Debate (3)
Research and development of various types of debate such as student congress, mock trial, value debate, etc., using national and international topics of current interest. Prerequisites: SPCH 102 OR SPCH 203 OR consent of instructor.

SPCH 395 Independent Study (1-3)

SPCH 396 Topics (1-3)

SPCH 495 Independent Study (1-3)

SPCH 496 Topics (1-3)

Statistics (STAT)

Graphic calculator is recommended or required for several statistics classes. See department for recommended models.

In order to take any of the following statistics courses, each listed prerequisite must be completed with a grade of "C" or better. The instructor may waive the prerequisite.

STAT 200 Probability and Statistics (3)
Descriptive statistical methods, elementary probability, sample distribution, binomial, normal, t, and F distributions, parameter estimation, one and two sample tests of hypothesis, simple correlation and regression analysis, one-way analysis of variance, nonparametric inference, time permitting. Introduction to statistical software. Prerequisites: MATH 110 or 113 or consent of instructor.

STAT 311 Statistical Methods (3)
Power of statistical tests, categorical data techniques, inference about population means and variances, nonparametric methods, simple and multiple linear regression and correlation, analysis of variance, multiple comparisons, introduction to some experimental designs. Use of statistical software. Prerequisites: STAT 200.

STAT 313 Sampling Techniques (3)
Methodology of simple random sampling, stratified, systematic cluster, and two-stage sampling is developed. Estimation of sample size determination, and minimized costs of sampling are discussed. Use of resampling statistical software. Prerequisite: STAT 200.

STAT 350 Mathematical Statistics I (3)
Calculus based mathematical development of discrete and continuous random variables. Topics include probability axioms and rules, Bayes' Theorem, discrete and continuous distributions, expectation, variance, moment generating functions, marginal and conditional distributions, bivariate distributions, transformations, sampling distributions and the central limit theorem. Prerequisites: STAT 311 and MATH 253 (may be taken concurrently).

STAT 351 Mathematical Statistics II (3)
This course is a continuation of STAT 350 Mathematical Statistics I. This course is a calculus-based theoretical study of point estimators by method of moments and maximum likelihood, confidence intervals, hypothesis testing, simple linear regression, analysis of variance, and nonparametric methods. Additional topics may include experimental design, quality control, multiple

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linear regression, and survival analysis. Prerequisite: STAT 350.

STAT 395 Independent Study (1-3)

STAT 396 Topics (1-3)

STAT 412 Correlation and Regression (3)
Graphical, numerical, and theoretical least-squares analysis for simple and multiple regression and correlation, including inference methods, diagnostics and remedial measures, simultaneous inference methods, the matrix approach to regression and correlation analysis, stepwise regression procedures. Use of statistical software. Prerequisites: STAT 311, and MATH 121 or MATH 146 or MATH 151.

STAT 425 Design and Analysis of Experiments (3)
Design and analysis of single and multiple factor experiments, fixed, mixed and random effects designs including multiple comparison procedures, transformations, fixed, mixed and random effects designs, completely randomized designs, randomized block designs, Latin square designs, and nested designs. Prerequisite: STAT 412.

STAT 494 Seminar (1)
Discussions of specialized topics by students, faculty, or visiting professors. One-hour meeting per week.

STAT 495 Independent Study (1-3)

STAT 496 Topics (1-3)

Supplemental Courses (SUPP)

SUPP 101 Introduction to Higher Education (1-3)
Assistance and guidance for students in maximizing their potential for success in college by promoting their academic growth. Emphasizes test taking, reading techniques, note taking, and memory as well as the following: critical thinking, stress management, utilization of campus resources, goal setting, relationship of academic planning to career goals, career exploration and other topics.

SUPP 201 Theory and Practice of College Peer Tutoring (3)
General and specific training for college level peer tutoring. Readings, discussion, experiential exercises expose students to contemporary learning theories, learning enhancement techniques, and effective applications to group and individual learning situations. Supervised tutoring practicum applies theories and concepts to actual tutoring sessions. Prerequisite: permission of instructor; 2.5 GPA; recommendation by instructor in subject area.

Technology Integration (TECI)

TECI 110 Applied Physics (3)
Instruction and application of physics in relation to technical education. One hour lecture and laboratory objectives.

TECI 117 DC Passive Circuits (3)
DC circuits including resistors, capacitors, inductors, applications of Ohm's and Kirchhoff's laws, and use of standard test equipment.

TECI 118 AC Passive Circuits (3)
Analysis of AC circuits including resistors, capacitors, inductors, and use of standard test equipment.

TECI 121 Electronic Design & Layout (2)
Fundamentals of CAD design for electronic projects. Emphasis on the creation of electronic schematics and necessary artwork to fabricate a printed circuit board. Prerequisites: Student must be in his/her 4th semester and/or have instructor approval.

TECI 132 Introduction to IT Hardware and System Software (3)
Basic hardware and software study of stand-alone or local/wide-area computers. Hands-on experience using 5x or above architecture.

TECI 164 Electronic Circuits I (3)
TECI 164L Electronic Circuits I Lab (1)
Analysis of solid state diodes and bipolar transistor amplifier circuits. Prerequisites: TECI 118 or consent of instructor. Three one hour lectures and one two-hour laboratory per week.

TECI 165 Applied Digital Circuits (2)
TECI 165L Applied Digital Circuits Lab (2)
Logic gates, Boolean algebra, flip-flops, registers, memory, karnaugh mapping, machine programming, and construction of a microcomputer using TTL devices. Prerequisites: TECI 164, 164L. Two one-hour lectures and two two-hour laboratories per week.

TECI 170 Introduction to Communications (3)
Overview of communication systems that include both central office based and premise based platforms. The switching and service components of RBOC and inter-exchange providers will be examined and discussed. Characteristics, advantages, and disadvantages of the various systems will be compared and contrasted. Architecture and design of switching infrastructures and components will also be covered.

TECI 180 Cisco Networking I (3)
The first of four semester courses in Cisco's Networking Academy curriculum. Concepts covered are: OSI model, internetworking devices, IP addressing, LAN media & topologies, structured cabling, electronics.

TECI 185 Cisco Networking II (4)
The second of four semester courses in Cisco's Networking Academy curriculum. Concepts covered are: Safety; Networking; Network terminology and protocols; Network standards; LANs, MANs, SANs, WANS; OSI model; Ethernet; Token ring; FDDI; TCP/IP addressing protocol; Dynamic routing; the Network Administrator's role and function. Prerequisite: TECI 180.

TECI 196 Topics: (1-3)

TECI 220 Regulations and Standards (2)
Overview of the regulations and standards that pertain to technicians in the communications industry. Regulated as well as unregulated business operations will be discussed.

TECI 230 Cisco Networking III (4)
The third of four semester courses in Cisco's Networking Academy curriculum. Concepts covered are: LAN switching; VLANs; LAN design; IGRP; Access lists; IPX/SPX; with concepts applied through design of a Threaded Case Study (TCS). Prerequisites: TECI 180 and 185.

TECI 231 Electronic Circuits II (3)
TECI 231L Electronic Circuits II Lab (1)
Differential and operational amplifier circuitry, feedback configurations, op-amps errors, compensations, and applications. Prerequisite: consent of instructor. Three one-hour lectures and one two hour laboratory per week.

TECI 235 Cisco Networking IV (4)
The fourth of four semester courses in Cisco's Networking Academy curriculum. Concepts covered are: WANs, SANs design; PPP; ISDN; Frame relay; Master documentation skills; with concepts applied through design of a Threaded Case Study (TCS). Prerequisites: TECI 180, 185, and 230.

TECI 240 VoIP Fundamentals (3)
Covers the components of engineering the telephone outside plant, fundamentals of transmission, resistance design, and distribution cable design in serving a customer area.

TECI 256 Electronic Communication (3)
TECI 256L Electronic Communication Lab (1)
Introduction to the field of communications. Covers am, fm, stereo, television, antennas, digital communication, radar, lasers, and fiber optics. Three one-hour lectures and one two hour laboratory per week. Prerequisite: consent of instructor.

TECI 260 Information Technology Hardware and System Software (3)
TECI 260L Information Technology Hardware and System Software Lab (1)
Use of an internal systems approach to building and maintaining stand-alone or local/wide area computers utilized in networking. Hands on experience using 5x or above architecture. Electronics Technology Majors Only: Co-requisite TECI 260L, prerequisite TECI 132.

TECI 265 Advanced IT Hardware and System Software (2)
TECI 265L Advanced IT Hardware and System Software Lab (2)
An internal systems approach to building and maintaining computers that can be used as stand-alone or on a local/wide area network. An advanced study of networking and software projects. The computers are 5x and above architecture. Electronics Technology Majors Only: Co-requisite 265L, prerequisites TECI 260, 260L.

TECI 290 Certification: (2)
A capstone certification preparation course specifically addressing each emphasis and the associated certifications.

TECI 292 Capstone in Technical Engineering Planning and Economics (4)
Knowledge to articulate the tactical planning functions performed within capacity provisioning. Access and apply the various tactical planning tools and data elements to supporting documentation. Economic principles in costing, value, capital investment, profitability and inventory.

Theatre (THEA)

THEA 114 Summer Theatre (3)
Professional summer theatre experience. The student is expected to participate in all phases of the theatre operation including acting, technical work, directing, box office management, etc. It is advisable for a student enrolled in summer theatre not to enroll in any other class. Five plays are presented in a seven-week period.

THEA 117, 118* Play Production (1)
A practical course in stagecraft concerned with the production of plays. The student works in all phases of production. Students will work three hours per week unless other arrangements are made with the instructor.

THEA 119, 120 Technical Performance (1)
Direct participation in the technical aspects of various productions. Grade will depend upon the preparatory work involved and upon the final technical production. Students must work a minimum of two productions in order to receive credit.

THEA 128, 129 Theatre Forums (1)
Specialized workshops in various aspects of theatre made possible by visiting artists and/or lecturers or by attending seminars or workshops. Papers and discussions are used for evaluation.

THEA 130 Script Analysis (3)
Introduction to practical analysis for enhancing the move from script to performance. Familiarizes students with script analysis techniques useful to the collaborative theatrical team.

THEA 141 Theatre Appreciation-GTAH1 (3)
Examination of basic presentation techniques and history of theatre.

THEA 142 Make-up (3)
All types of make-up for the stage. Students examine straight and character make-up techniques and learn the use of crepe hair, prosthetics, and other material.

THEA 143 Costuming (3)
Costume design and the history of costume.

THEA 145 Introduction to Dramatic Literature-GTAH1 (3)
Dramatic literature from classical Greeks to modern dramatists.

THEA 147 Drama Performance (1-2)
THEA 148 Drama Performance (1-2)
Requires a student to appear in a major production on campus. The grade will depend upon the preparatory work on the play's character and upon the final performance. Prerequisite: consent of instructor.

THEA 150 Fundamentals of Acting (3)
This course will introduce non-theatre majors to the basic components of the acting process, including scene work, improvisation, and audition techniques.

THEA 153 Acting I: Beginning Acting (3)
Fundamentals of Acting via improvisation and scene study. Students perform in solo, duo and/or group scenes. Prerequisite: Theatre Arts major or minor in good standing.

THEA 154 Acting II: Auditions (3)
Resume writing. Choice and preparation of effective audition pieces. Prerequisite: THEA 153 or consent of instructor.

THEA 196 Topics (1-3)

THEA 213 Creative Play Activities-Drama (2)
Creative dramatics in a learning situation. Includes subject matter of interest to anyone in early childhood education, general education, social work, religious education, and/or recreation.

THEA 214 Summer Theatre (3)
See THEA 114.

THEA 217, 218* Play Production (1)
See THEA 117, 118. Prerequisites: courses must be taken in sequence or by consent of the instructor.

THEA 219, 220 Technical Performance (1)
See THEA 119, 120.

THEA 228, 229 Theatre Forums (1)
See THEA 128, 129.

THEA 243 Theatre Practice: Scene Construction, Painting, and Design (3)
Techniques of construction; painting of scenery; properties for the theatre and basic principles of scene design.

THEA 244 Theatre Practice: Beginning Lighting (3)
A basic course in the use of light and instrumentation in various stage productions, including plays, dance concerts, and music programs.

THEA 247 Drama Performance (1-2)
THEA 248 Drama Performance (1-2)
See THEA 147, 148. Prerequisite: consent of instructor.

THEA 253 Acting III: Stage Movement (3)
Basic techniques of gesture, movement styles, and combat. Developing an awareness of the use of the body as a means of expression is emphasized. Prerequisites: THEA 153 and THEA 154, or consent of instructor.

THEA 254 Acting IV: Dialects (3)
This course introduces students to the fundamentals of acting while using common stage dialects. Prerequisites: SPCH 112, THEA 153, THEA 154, and THEA 253, or consent of instructor.

THEA 255 Musical Theatre Techniques (3)
Exploration of solo song interpretation. Emphasis on basic mechanical, analytical, and physical skills needed to perform musical theatre. Building on an acting foundation,

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issues of range and vocal support as well as style and repertory will be emphasized. Prerequisites: THEA 150 or THEA 153; MUSA 137, or one semester of private vocal study, or by consent of instructor.

THEA 260 Costume Construction I (3)
Introduction to sewing skills, commercial patterns, distressing garments, and creative problem solving. Prerequisite: THEA 143.

THEA 296 Topics (1-3)

THEA 314 Summer Theatre (3)
See THEA 114.

THEA 317, 318* Play Production (1)
See THEA 117,118. Prerequisites: courses must be taken in sequence or by consent of the instructor.

THEA 319, 320 Technical Performance (1)
See THEA 119, 120.

THEA 322 Stage Management (3)
Theory and principles of human resources management, theatre technical production and actual stage management situations. Prerequisites: THEA 153 or THEA 243 or THEA 244 or consent of instructor.

THEA 328, 329 Theatre Forums (1)
See THEA 128, 129.

THEA 331 Theatre History I: 400 B.C. to 1642 (3)
History of theatre as an institution and its relationship to the other arts and to the social and economic environment, from 400 B.C. to 1642 A.D.

THEA 332 Theatre History II: From 1642 to the Present (3)
Major world theatre events from 1642 to the present day.

THEA 341 Musical Theatre History and Literature (3)
In-depth study of the literature and styles of the master composers of music theatre from its beginnings through the present day. Course work is designed for the Musical Theatre major, utilizing lecture and listening lab format and a research paper on a subject of the student's choice.

THEA 343 Scene Design (3)
Experience in the designing of scenery and props for various types of productions with emphasis on research, acquisition, drafting, perspective, and rendering techniques. Prerequisite: THEA 243 or consent of instructor.

THEA 344 Advanced Stage Lighting (3)
Advanced training in the design and execution of lighting for the stage. Prerequisite: THEA 244 or consent of instructor.

THEA 345 World Drama (3)
Students will examine the richness and diversity of contemporary world theatre and drama from a global context.

THEA 347 Drama Performance (1-2)
THEA 348 Drama Performance (1-2)
See THEA 147, 148. Prerequisite: consent of instructor.

THEA 353 Advanced Acting: Styles in Acting (3)
Various styles of acting used for the Classical, Elizabethan, Romantic, 19th century Melodrama and Realistic periods. Prerequisites: THEA 153, THEA 154, THEA 253, and THEA 254, or consent of instructor.

THEA 354 Advanced Acting: The Meisner Approach (3)
An examination of the Meisner Approach, the "film industry standard" technique that actors use to explore the Realistic/Naturalistic genre of plays and screenplays. Prerequisites: THEA 153

THEA 360 Costume Construction II (3)
An introduction to developing period patterning, interpreting a rendering into finished garment, investigating ethnic styles and refining creative problem-solving skills. Prerequisite: THEA 260.

THEA 376 World's Greatest Films (3)
Aesthetics and elements that qualify film as an important art form as seen through the major contributors from three important culturally diverse areas of the world: Europe, Asia and America.

THEA 380 Playwriting I (3)
Fundamentals of playwriting through a systematic, textual approach, the proper format of scriptwriting, and the writing of short scripts based on common thematic elements.

THEA 381 Directing I (3)
The fundamentals of directing culminating in the direction of a scene or short play for public viewing. Prerequisites: Junior or senior level Acting/Directing major, or consent of instructor.

THEA 382 Directing II (3)
Advanced directing techniques and production of a one-act play for public viewing. Prerequisite: THEA 381 or consent of instructor.

THEA 395 Independent Study (1-3)

THEA 396 Topics (1-3)

THEA 401 Performing Arts Management (3)
An introduction to the administrative and business aspects of the performing arts. Prerequisites: Senior standing or consent of instructor.

THEA 403 Methods of Teaching Drama and Speech (3)
Teaching communication, speechmaking, debate and discussion, creative drama, oral interpretation, play selection and direction in the public schools. Prerequisites: junior standing in English education or speech/theatre programs.

THEA 411 American Drama (3)
The study of American drama and theatre trends from the first American playwright to the current trends of today.

THEA 412 Contemporary Drama (3)
A study of contemporary drama from the advent of Realism to the present day.

THEA 414 Summer Theatre (3)
See THEA 114.

THEA 417, 418* Play Production (1)
See THEA 117, 118. Prerequisites: courses must be taken in sequence or by consent of the instructor.

THEA 419, 420 Technical Performance (1)
See THEA 119, 120.

THEA 428, 428 Theatre Forums (1)
See THEA 128, 129.

THEA 445, 446 Senior Tech/Design Capstone (3)
Work experience in various aspects of theatre tech/design. Prerequisites: Senior standing or consent of instructor.

THEA 447 Drama Performance (1-2)
THEA 448 Drama Performance (1-2)
See THEA 147, 148. Prerequisite: consent of instructor.

THEA 453 Advanced Acting: Acting for the Camera (3)
The transition from stage acting techniques to camera acting techniques. Students will have the opportunity to work on camera with simplified sets and properties. Prerequisites: THEA 153, THEA 154, THEA 253, THEA 254, and THEA 354, or consent of instructor.

THEA 454 Advanced Acting: Elizabethan Acting Techniques (3)
An in-depth exploration of acting approaches to the verse drama of Shakespeare. Prerequisites: THEA 153, THEA 154, THEA 253, and THEA 254, or consent of instructor.

THEA 459 Advanced Acting: Chekhov Technique (3)
Introduction and exploration of the Michael Chekhov Acting technique. Prerequisites: THEA 153, THEA 154, THEA 253, and THEA 254, or consent of instructor.

THEA 494 Performance Seminar: Acting/ Directing and Musical Theatre Capstone (3)
Exploration of theories of audition, rehearsal and performance for upper division performance majors.

THEA 495 Independent Study (1-3)

THEA 496 Topics (1-3)

THEA 499 Internship (3-9)
Work in acting/directing, design/tech, music theatre and theatre management, or other situations that meet the instructor's approval. Prerequisites: senior standing and consent of the instructors.

Transportation Services Cluster – Automotive (TSTA)

TSTA 245 Manual Drive Trains (4)
Standard repair practices for drive train components to include: clutch, transmission, transaxle, drive axle, driveline, c-v and R & R procedures. Prerequisites: TSTC 100, 101, 140.

TSTA 247 Automatic Drive Train Service (4)
Standard repair practices for automatic drive trains to include: diagnosis, testing, R & R, and servicing of transaxles/rear wheel drive transmissions. Prerequisites: TSTC 100, 101, 140.

TSTA 265 Engine Control Services (2)
Repair and diagnosis of engine control systems with an emphasis on scan tool diagnosis and live hands on repair of systems. Prerequisites: TSTC 100, 101, 160.

TSTA 267 Body and Chassis Controls (2)
Theory, repair, and diagnosis of body accessories including air bags, electronic monitors, power seats, windows and wipers. Prerequisites: TSTC 100, 101, 160.

TSTA 275 Alignment and Suspension Service (3)
Repair of suspension systems to include: alignment (2 and 4 wheels), R & R component parts, and pre-alignment inspections. Prerequisites: TSTC 100, 101, 170.

TSTA 287 Engine Performance and Emissions (2)
Diagnosis and repair of engine performance and emissions-related failures. Emphasis on strategy based diagnostics through the use of exhaust gas analysis. Prerequisites: TSTC 160, TSTC 180, TSTA 265.

Transportation Services Cluster - Core

TSTC 100 Introduction to Transportation Services (1)
Introduction to procedures, tool usage, basic shop safety, and equipment.

TSTC 101 Vehicle Service & Inspection (2)
Introduction to vehicle systems, maintenance, and inspection. Service of the vehicle stems with emphasis on inspection and observation.

TSTC 110 Engine Fundamentals (1)
Introduction to Internal Combustion Engine theory, systems diagnosis, fundamentals and evaluation.

TSTC 130 Electrical Fundamentals (2)
Introduction to electrical theory, circuits, components, testing and use of test equipment.

TSTC 140 Drive Train Fundamentals (1)
Introduction to drive train components, diagnosis, light repair, and adjustment. Prerequisites: TSTC 100, 101.

TSTC 160 Electronic Control Systems (2)
Study of electronic control systems applied to today's modern vehicles. Emphasis on sensors, actuators, and diagnostic techniques.

TSTC 170 Chassis Fundamentals (1)
Theory and operation of front and rear suspension systems, including steering front end geometry and component nomenclature.

TSTC 171 Brake System Fundamentals (2)
Theory, components, general repair practices and diagnosis of current brake systems. Prerequisites: TSTC 100, 101.

TSTC 180 Fuel System Fundamentals (1)
Theory of gas and diesel injection, combustion process, delivery systems and general service techniques.

TSTC 190 Climate Control Fundamentals (1)
Theory of operation, nomenclature, identification, safety and environmental impact factors of air conditioning. Also covers heating and ventilation systems. Prerequisites: TSTC 100, 101.

Transportation Services Cluster – Diesel (TSTD)

TSTD 177 Air Systems Repair and Service (2)
This course studies the air systems on the heavy duty truck. the brakes, transmission shift, seats, and rear axle shift will be covered, to include, service and repair of components and systems. Repair of foundation brakes will also be included. Co-requisites: UTEC 150.

TSTD 215 Diesel Engine Reconditioning (5)
Industry standard rebuild practices for diesel engines. R & R of engine, complete disassembly, assembly and running of engine is covered. Tune-up and fuel system adjustment are covered. Prerequisites: TSTC 100, 101, 110 and TSTG 115.

TSTD 265 Diesel Engine Controls (1)
Repair and diagnosis of engine control systems with an emphasis on scan tool diagnosis and live hands-on repair of systems. Prerequisites: TSTC 100, 101, 160.

TSTD 275 Heavy Duty Suspension (2)
Types of on-road suspensions, tires, repair of components, diagnosis, measurements, and adjustments to front and rear suspensions. Prerequisites: TSTC 100, 101, 170.

TSTD 285 Diesel Fuel Injection (4)
Theory, diagnosis, and repair of diesel fuel injection systems. Emphasis on the adjustment and repair of injectors, filters, governors, blowers and turbos. Electronic systems, pump timing and pump replacement will also be covered. Prerequisites: TSTC 100, 101, 180.

Transportation Services Cluster – General (TSTG)

TSTG 115 Gas Engine Reconditioning (4)
Industry standard rebuild practices for gas engines. R & R of engine, complete disassembly, assembly and running of engine is covered. Prerequisites: TSTC 100, 101, 110.

TSTG 135 Electrical Component Repair (2)
Electrical component repair to include: alternators, starters, wiring, and other electrical components. Prerequisites: TSTC 100, 101, 130.

TSTG 140 Job Shop (4)
Designed to obtain a working knowledge of the industry job standards, through use of lab work projects performed in house, when internships or co-op cannot be found. Prerequisites: TSTC core courses and second year status.

TSTG 170 Practical Applications (4)
Designed to gain a working knowledge of a particular field of study through co-op, internships, work experience or related lab work in industry. Prerequisites: TSTC core courses and second year status.

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TSTG 175 Hydraulic Brake Service (2)
Repair of brake systems to include: shoes, pads, cylinder reconditioning, machining rotors and drums, diagnosis, bleeding, R & R components, parking brakes and anti-lock systems. Prerequisites: TSTC 100, 101, 171.

TSTG 195 Climate Control Service (2)
Repair, diagnosis, R & R of components, charging, recycling and testing of heating and air conditioning systems of over the road vehicles. Prerequisites: TSTC 100, 101, 130, 190.

TSTG 240 Advanced Job Shop (4)
Application of workplace skills in a controlled shop environment, through the use of real-life lab work projects, performed in house, when internships or co-op opportunities are not available. Prerequisite: TSTG 140.

TSTG 270 Advanced Practical Applications (4)
Designed to increase student competency through the use of internships or co-op training and real-life shop experiences in their chosen area specialty. Prerequisite: TSTG 170.

TSTG 296 Topics (1,2)

Travel, Tourism, and Recreation Management (TRAV)

TRAV 101 Travel Industry I (3)
Introduction to tourism and its relationship to the business world, an overview of all sectors of business and the components of the travel, tourism, and hospitality industry. Travel methods, destination resorts, and other businesses which serve the traveler are evaluated. A requirement for all Travel, Tourism, and Commercial Recreation Management students.

TRAV 102 Travel Industry II (3)
Evaluation of job opportunities in the travel, recreation, and hospitality fields. Travel trends, feasibility studies, and marketing techniques are analyzed. Students are provided an opportunity to make preparations and acquire skill instructions for work in the student's career objective. Field trips and visiting lecturers are included. Prerequisite: TRAV 101 or consent of instructor.

TRAV 103 Travel and Tourism Marketing Techniques (3)
Interpretation of marketing problems, strategies, and techniques of industries engaged in serving the traveler, methods of identifying potential markets, preferences, and likely responses to promotional programs of private and governmental travel entities. Required of all Travel, Tourism, and Commercial Recreation Management students. MARK 231 recommended for baccalaureate students. Prerequisite: TRAV 101 or consent of instructor.

TRAV 199 Employment Concepts (1)
Introduction of the concepts of employment in conjunction with the internship experience. It will provide students with an opportunity to share their concerns with the instructor and other students, allow employers to discuss the internship with students and assist the student in developing his or her career goals. The student will enroll in this course the spring semester immediately preceding the summer they intend to do their TRAV 299 Internship. Prerequisites: TRAV 101.

TRAV 201 Management in the Travel Industry I (3)
An opportunity to explore operating techniques and problems of the major industries involved in tourism, travel, and hospitality through the eyes of the operating manager. Specific skills used within various industries are developed. Prerequisite: TRAV 102 or consent of instructor.

TRAV 211 Travel Destinations (3)
For the individual who plans to work, study, or travel internationally including the professional who is, or plans to be, part of the travel industry. Life styles and current local aspects in foreign destinations are considered and guest lecturers are included. Open to all students but strongly recommended for Travel, Tourism, and Commercial Recreation Management students.

TRAV 215 Computerized Reservations (3)
An introductory course providing an overview of operation of a computerized reservations system. Prerequisites: TRAV 101 and 102.

TRAV 217 Hotel Operations (3)
Introductory course providing an overview of the operation of a hotel front office. This will include the use of the personal computer and state-of-the-art software for reservations, check-in, check-out and creating the daily report. Prerequisite: TRAV 101.

TRAV 295 Independent Study (1-3)

TRAV 296 Topics (1-3)

TRAV 299 Internship (12)
Classroom studies combined with salaried work in an experience which relates to the student's career goal. Only for, and required of, Travel, Tourism, and Commercial Recreation Management students. Credit not available through competency or challenge. Prerequisite: TRAV 102, GPA of 2.00 or higher, or consent of instructor.

TRAV 310 Travel and Tourism Marketing Techniques (3)
Interpretation of marketing problems, strategies, and techniques of industries engaged in serving the traveler. Study will include advanced methods of identifying potential markets, preferences and likely responses to promotional programs of private and public travel entities. Required of all TRAV majors. Prerequisites: TRAV 101, MARK 231 or consent of instructor.

TRAV 350 Private and Commercial Recreation Systems (3)
Profit-based recreation industry, including managing the recreation enterprise, economic feasibility studies, small business entrepreneurship, market characteristics, professional opportunities, and trade association research and publications. Prerequisites: TRAV 101, MANG 201.

TRAV 351 Community Tourism Systems (3)
Community as a tourist destination area with concentration on identification of linkages between tourism industries and local economies, and the process of developing and managing park and recreation resources to serve the tourist. Prerequisites: TRAV 101, TRAV 102, MANG 201.

TRAV 352 Public Recreation Systems (3)
National and state outdoor recreation resource management systems including a variety of administrative tools applicable to operation and maintenance as well as comprehensive discussion of legislation, land use policy, forest recreation planning, and governmental designation programs. Prerequisites: TRAV 101, TRAV 102, MANG 201.

UTEC

UTEC 107 Mathematics for Technology (4)
Designed to provide students with a practical application to mathematics. Topics include common fractions and decimals, fundamentals of algebra, plane geometry, and introduction to trigonometric functions. (Hand held calculator required).

UTEC 120 Industrial Safety Practices (3)
Overview of current OSHA and EPA general industry regulations with an emphasis on hazardous materials, right-to-know, record keeping, and worker role in safety.

UTEC 150 Fluid Power (3)
Principles of hydraulics and pneumatic system including the construction, application, repair, maintenance and troubleshooting of components and systems.

UTEC 220 Industry Employment Practices (3)
Employment skills encompassing leadership, goal setting, personal traits, conflict resolution, quality, time management, life-long learning, written and oral communication, and customer relations.

UTEC 251 Personal and Professional Leadership Development (2)
Personal and professional leadership skills used to aid in the transition from worker, to a supervisory position.

Welding (WELD)

WELD 110 Shielded Metal Arc Welding (3)
Safe use of equipment in shop practice; covers shielded metal arc welding mild steel in all positions. One hour lecture, plus laboratory objectives.

WELD 115 Welding & Structural Theory (2)
Classroom instruction in the core and use of welding equipment, selection of the proper rods and processes, and safety as it applies to welding and welding equipment. Four hours per week.

WELD 117 Oxy-Fuel Cutting and Welding I (3)
Shop practice and skill development in safe use of Oxy-Fuel Welding/Cutting equipment. Basic Oxy-Fuel welding on mild steel in flat and vertical positions is covered with some emphasis on oxy-fuel cutting of various thicknesses of mild steel plate. One hour lecture, one and one-half hours laboratory per week.

WELD 118 Oxy-Fuel Welding and Cutting II (1)
WELD 118L Oxy-Fuel Welding and Cutting II Lab (1)
Continuation of WELD 117 with increased emphasis on shop practice in safe use of Oxy-Fuel Welding/Cutting equipment. Oxy-fuel welding and brazing, both ferrous and non-ferrous, on both pipe and plate in all practical thicknesses. One hour lecture, one and one-half hours laboratory per week. Prerequisites: WELD 117 or equivalent and consent of instructor.

WELD 120 Shielded Metal Arc Welding II (1)
WELD 120L Shielded Metal Arc Welding II Lab (5)
Pipe welding in all positions utilizing mild steel and other alloys as necessary. One hour lecture plus laboratory objectives. Prerequisite: WELD 110 or consent of instructor.

WELD 133 Fabrication Layout (2)
Basic layout techniques from shop drawings to fabrication of sheet metal, plate, structural shapes, and pipe. Six hours per week; seven and one-half weeks.

WELD 140 Job Shop (3)
Development of written process sheets and prints, estimation of manufacturing time, completion of project to specifications including performance of final inspection. Utilization of all manufacturing processes required. Prerequisites: consent of instructor. Practical Applications may be substituted with consent of instructor.

WELD 151 Industrial Welding (2)
Introductory level mild steel shielded metal arc welding and oxy/fuel processes. Includes safety, equipment use, SMAW, GMAW, oxyacetylene welding in the flat, horizontal and vertical positions. Some brazing, soldering, air arc, plasma arc, slice torch, build up and surfacing are included. Five hours per week.

WELD 170 Practical Applications (3)
Opportunity to apply skills and knowledge gained in earlier courses. The student will work on manufacturing projects related to their career field of interest and advice of faculty. Job Shop may be substituted with approval of instructor.

WELD 211 Gas Metal Arc/Flex Core Arc Welding (5)
Shop practice and skill development in the safe set-up, maintenance and use of GMAW and FCAW wire-fed processes. All position welding of ferrous metals.

WELD 230 Gas Tungsten Arc Welding (4)
Safe use of Gas Tungsten Arc Welding (GTAW) equipment and associated shop practices, related to the GTAW of mild and stainless steels in flat and horizontal positions. One hour lecture and four hours laboratory per week.

WELD 235 Adv Gas Tungsten Arc Welding (3)
Safe use of Gas Tungsten Arc Welding (GTAW) equipment and associated shop practices, related to the GTAW of Alloy metals in all positions. Prerequisite: WELD 230.

WELD 240 Pipe Welding (1)
WELD 240L Pipe Welding Lab (7)
Continuation of WELD 120 emphasizing pipe welding. One hour lecture, eleven hours laboratory per week. Prerequisite: WELD 120 or consent of instructor.

WELD 261 Testing and Inspection (3)
An advanced course covering testing and inspection of welds to determine soundness; visual, destructive, and nondestructive testing; and a study of codes and welder certification.

WELD 295 Independent Study (1,2)

WELD 296 Topics (1,2)

WELD 299 Internship (1-14)

✓ This course is approved by the Colorado Department of Higher Education for statewide guaranteed transfer as part of the gtPathways program. For more information please see page 47.

Administration

Mesa State College Board of Trustees

(Date indicates year term expires.)

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Mesa State College Administrative Officers

TIMOTHY FOSTER (2004), President; B.A., Kenyon College; J.D., University of Denver.

CAROL FUTHEY (2004), Vice President, Academic Affairs; B.S.Ed., Slippery Rock State College; M.A., Southern Illinois University - Edwardsville; Ph.D., University of Cincinnati.

PATRICK DOYLE (2004), Vice President, Finance and Administrative Services; B.S., University of Detroit; M.A., Eastern Michigan University.

MARSHA ARZY (2007), Vice President, Community College Affairs; B.S.Ed, University of Wyoming; M.Ed., Eastern Montana College, Ph.D., Colorado State University.

ANDREW BRECKEL, III (2004), Vice President, Student Services and Outreach; B.A., Union College; M.A., University of Denver.

CATHY BARKLEY (1995), Assistant Vice President, Academic Affairs and Professor of Mathematics; B.S., Southern Nazarene University; M.S., Purdue University; Ph.D., University of Denver.

ANDREW RODRIGUEZ (1989), Assistant Vice President, Auxiliary Services; B.S., University of Northern Colorado.

JAMIE HAMILTON (2006), Acting Director, Intercollegiate Athletics; B.S., Mesa State College.

JOHN MARSHALL (2007), Director, Development; B.A., Mesa State College; M.P.A., University of Colorado-Denver.

Mesa State College Administrative Personnel

RICK ADLEMAN (2001), Director, Alumni Relations; B.B.A., M.B.A., Mesa State College.

DIANA ALPERT (2006), Acting Professional Staff Assistant to the President; A.A., Institute of Merchandising; B.S., Colorado Christian University.

ROBERT ANTHONY (1984), Director, Intramural Sports; B.S., M.S., Southern Illinois University.

BRIAN ARCAND (2005), Associate Director, Telecommunications; A.A.S., Mesa State College; B.S., Colorado State University; M.S., University of Colorado.

PAUL ARNHOLD (1997), Facilities Services Administrator.

BREANNE BAPTISTA (2005), Assistant Director, College Center; B.S., M.B.A. Mesa State College.

MARY BARNETT (2006), Professional Staff Assistant to the Director of Development; B.A., Mesa State College.

KEVIN BATES (2005), Information Technology Administrator; B.S.E.E., Utah State University.

TERESE BATES (2005), Records Management and Imaging Coordinator; B.S., M.A., Colorado Christian University.

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VICTOR BELLAVIA (2006), Professional Staff Assistant to the Vice President for Student Services and Outreach; B.A., Mesa State College.

ANGIE BERTRAND (2000), Acting Assistant Project Director, AmeriCorps.

MARIA BEST (2008), Acting Admissions Counselor-Processing; A.A., B.A., Mesa State College.

BARBARA BORST (1981), Librarian, Head, Research Services and Interlibrary Loan; B.A., Sterling College; M.L.S., Indiana University.

KATIE BOSIO (2006), Assistant Director, Housing; B.A., Mesa State College; M.S., Western Illinois University.

JON BOYER (2006), Acting Assistant Football Coach, Athletics; B.S., M.S., University of Northern Colorado.

BRENDA BRADY (2005), Assistant Athletic Trainer, Athletics; B.S., M.S., University of Montana- Missoula.

SONIA BRANDON (2004), Director, Institutional Research and Assessment; B.A., M.A., University of Colorado-Colorado Springs.

ELIZABETH BRODAK (1988), Director, Tomlinson Library; B.A., Carthage College; M.L.S., University of Hawaii.

TRACY BRODRICK (2004), Bookstore Manager; B.A., Chadron State College.

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TIMI BROWN (2004), Head Women's Basketball Coach; B.A., University of Arizona; M.A., University of Northern Colorado.

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NANCY CONKLIN, (2002) Coordinator, Educational Access Services; B.A., M.A., University of Colorado.

JESSICA COWDEN (2003), Music and Theatre Publicity Coordinator; B.A., Mesa State College.

LOIS DAVIDSON (2003), Coordinator, Chemistry Laboratories; B.S., Oregon State University.

DOREEN DEMOND (2004), Budget Services Coordinator; A.A., Lansing Community College; B.A., Michigan State University; C.P.A.

PATTY DIEKMAN (2008), Financial Aid Counselor; A.S., Suny Agricultural & Technical College; B.S., Colorado State University.

VALERIE DOBBS (2008), Interim Director, Center for Teacher Education; B.A., The Ohio State University; M.A., Virginia Tech University.

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JEFFREY DOYLE (2006), Fiscal Analyst; B.B.A., Western Michigan University.

LINDA DU (1995), Associate Director, Banner Systems; B.A., Beijing College of Economics; M.B.A., State University of New York-Buffalo.

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SYNDEE GARLAND (2007), Academic Advisor/Testing Services Assistant; B.A., University of California-Riverside; M.A., Adams State College.

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BENJAMIN KEEFER (1991), Director, Extended Campus Program and Mesa State College Montrose Center; A.A.S., Northeastern Junior College; B.S., M.Ed., Ph.D., Colorado State University.

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FRANCESCA MORALES (2005), Acting Mentor for First Generation Students.

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DANA NUNN (2005), Director, Media Relations.

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DARIN ROBIDOUX (2001), Assistant Football Coach; B.B.A., Mesa State College; M.A., University of Northern Colorado.

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ROBERT RYAN (1992), Program Director, Athletic Training Education Program and Visiting Professor of Kinesiology; B.A., University of Colorado; M.A., University of Northern Colorado.

JANE SANDOVAL (2005), Coordinator, Entrepreneurial Business Institute.

GENE SEITZ (2006), Associate Director, Computing and Networking Systems; B.A., Mesa State College.

ANDREW SHANTZ (2000), Acting Assistant Basketball Coach; B.A., Mesa State College.

ERIN SHARPE (2008), Acting Head Women's Soccer Coach, Athletics; B.S., Santa Clara University.

JEREMY SMITH (2007), Acting Publicity Coordinator; B.A., Mesa State College.

WILLIAM STAFFORD (2003), Assistant Football Coach, Athletics; B.A., Colorado State University.

RON STANDING (1997), Technical Director; B.A., Mesa State College.

WHITNEY SUTTON (1997), Director of Budgeting; B.S., Mesa State College.

JOSEPH TAYLOR (2005), Controller; B.A., Fort Lewis College.

HOLLY TEAL (1997), Associate Registrar; B.S., Mesa State College.

CHAD THATCHER (2002), Outdoor Program Coordinator; A.A., Clark College; B.A., M.E., Portland State University.

KATRICE THOMAS (2007), Head Coach, Track and Field; B.A., Colorado State University.

RICHARD THOMAS (1996), Director, Housing and Residence Life; B.S., M.S., Colorado State University.

ANN TILLERY (2007), Director, Marketing and Publications; B.S., Bellevue University

PATRICIA VERSTRAETE (1999), Director, AmeriCorps Project; B.A., University of Pittsburgh; M.A., Western State College; Ed.D., Nova University.

JAMES WALKER (2006), Head, Technical Services, Library; B.M.M.Ed., M.S., Loma Linda University; M.S.L.S., University of Southern California.

ERIN WARREN, (2006) Coordinator, Tutorial Services; B.A., Mesa State College.

NATHAN WATCHMAN (2006), Senior Admissions Counselor; A.S., B.A.S., B.B.A., Mesa State College.

THOMAS WATSON (2002), Information Technology Specialist; B.S., U.S. Coast Guard Academy.

THOMAS WHALEN (2006), Assistant Coordinator, Educational Access Services; B.A., Mesa State College.

TERRI WISE (1993), Coordinator, Testing Services; A.A., Mesa State College, B.S., Colorado Christian University.

LYNN WOELLHOF (1998), Director of Instruction, Western Colorado Community College; B.A., University of Northern Colorado; M.A.Ed., University of Phoenix.

KENNILYN WRIGHT (1998), Manager, Student Diversity and Advocacy; A.A., Eastern Arizona College; B.A., Mesa State College.

MIRL WYTHE (2007), Admissions Counselor-Processing; B.S., University of Maryland; M.A., Institute of Transpersonal Psychology; Ph.D., Summit University.

Mesa State College Faculty

(Date in parenthesis indicates year of tenure-track appointment to Mesa State College faculty or faculty appointment to Western Colorado Community College. Prior temporary or part-time service is not indicated. Faculty with a temporary appointment do not have a year listed)

THOMAS ACKER (1999), Professor of Spanish; B.S., Kutztown University; M.A., Ph.D., Temple University.

TYLER ANDERSON (2006), Assistant Professor of Spanish; A.A., Ricks College; B.A., M.A., Brigham Young University; Ph.D., Pennsylvania State University.

ANDRES ASLAN (1999), Professor of Geology; B.S., Brown University; M.S., Ph.D., University of Colorado.

MONTE ATKINSON (1985), Professor of Music; A.S., Snow College-Utah; B.F.A., Utah State University; M.M., D.M.A., University of Illinois.

JAMES AYERS (2007), Assistant Professor of Chemistry; B.S., University of Texas-Austin; Ph.D., Stanford University.

DEBRA BAILEY, R.N. (2006), Assistant Professor of Nursing; A.S., B.S.N., Mesa State College; M.S., University of Colorado; M.S.F.N.P., University of Colorado.

ADAM BALLIF (2005), Assistant Professor of Music; B.M., Brigham Young University; M.M., D.M.A., Arizona State University.

JULIE BARAK (1997), Professor of English; B.A., M.A., Creighton University; Ph.D., University of Nebraska.

DANIEL BARELA, Director of Emergency Medical Services; A.A., Colorado Mountain College.

CATHY BARKLEY (1995), Assistant Vice President, Academic Affairs and Professor of Mathematics; B.S., Southern Nazarene University; M.S., Purdue University; Ph.D., University of Denver.

BRUCE BAUERLE (1972), Professor of Biology; B.A., University of Kansas; M.S., University of Missouri; D.A., University of Northern Colorado.

MADELINE BECKER (2005), Assistant Professor of Teacher Education; B.A., Webster University; M.A., Ed.D., Northern Arizona University.

ROBERT BECKER, Lecturer of Mathematics; B.A., College of Santa Fe; M.C.S., University of Mississippi.

SUSAN BECKER (1996), Professor of Psychology; B.A., Reed College; M.A., University of Colorado-Colorado Springs; Ph.D., University of Arizona.

MARGOT BECKTELL (2008), Assistant Professor of Biology; B.S., Mesa State College; Ph.D., Cornell University.

RICHARD BELL, Lecturer of Kinesiology; B.S., Clemson University; M.A., The Citadel; J.D., University of South Carolina; Ed.D., United States Sports Academy.

RICHARD BERKEY (1969) Associate Professor of English; B.A., M.A., Fort Lewis College.

BLAKE BICKHAM (2007), Assistant Professor of Teacher Education; B.A., M.A., Texas A & M University; Ed.D., University of Houston.

BRUCE BISHOP (2006), Assistant Professor of Psychology; B.A., Colorado State University; M.S., Ph.D., University of Arizona.

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EDWARD BONAN-HAMADA (1997), Associate Professor of Mathematics; B.A., University of Rochester; M.A., University of Hawaii; Ph.D., University of Colorado.

ATHENA BORGIALLI (2007), Technical Instructor of Marketing Education; B.S., University of Wyoming.

CLARE BOULANGER (1993), Professor of Anthropology; B.A., State University of New York-Plattsburgh; M.A., Ph.D., University of Minnesota.

STEVEN BRADLEY (2004), Assistant Professor of Art; B.A., University of Colorado-Boulder; M.A., Ph.D., Northwestern University.

MORGAN BRIDGE (1995), Professor of Business and Department Head of Business; B.B.A., M.A, Chadron State; Ph.D., University of Wyoming.

JAMES BROCK (1998), Associate Professor of Physical Sciences; B.S., M.S., University of Illinois.

JUDITH BROCK, R.N. (2006), Assistant Professor of Nursing; B.A., University of Illinois; B.S.N., Texas Women's College; M.P.H., University of Northern Colorado.

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BRAD BUCHHOLZ (1987), Technical Instructor of Transportation Services; A.A.S., Mesa State College.

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FRANK CARDOZA (2006), Technical Instructor of Manufacturing Technology-Machining; A.A.S., Mesa State College.

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PAULA CASEY, Lecturer of Speech; B.S., M.A., Northern Arizona University.

TIMOTHY CASEY (1998), Professor of Political Science; B.S., Northern Arizona University; M.A., University of San Francisco; Ph.D., Arizona State University.

TONYA CHAPIN (2006), Technical Instructor of Medical Preparation; B.S.N., Mesa State College.

THEA CHASE (2006) Assistant Professor of Business; B.A., American University; M.B.A., University of Colorado-Denver.

CYNTHIA CHOVICH (2007), Assistant Professor of Teacher Education; B.A., California State University,-San Marcos; M.A., Grand Canyon University.

PHYLLIS CHOWDRY (1976), Professor of Biology; B.S., University of Denver; M.N.S., Arizona State University; D.A., University of Northern Colorado.

CAROL CHRIST, Lecturer of English; B.A., Mesa State College; M.F.A., Colorado State University.

REX COLE (1995), Professor of Geology; B.S., Colorado State University; Ph.D., University of Utah.

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JILL CORDOVA (1992), Professor of Kinesiology and Department Head of Kinesiology; B.A., M.A., Humboldt State University; Ph.D., University of New Mexico.

RICHARD COWDEN (2001), Associate Professor of Theatre and Department Head of Theatre; B.A., Mesa State College; M.F.A., Ohio University.

DAVID COX (1981), Professor of Theatre; B.A., Mesa State College; M.F.A., University of Utah.

BLAKE CROSSLEY, Lecturer of Spanish; B.A., M.A., Brigham Young University.

ADELE CUMMINGS (1996), Professor of Sociology; B.A., M.S., Florida State University; Ph.D., Duke University.

JAMES CURTSINGER, Lecturer of Geography; B.A., M.A., Colorado State University.

HAROLD DAVENPORT (1988), Professor of Mathematics; B.S., University of Tennessee; M.S., Texas A & M University; Ph.D., University of Alabama.

FORBES DAVIDSON (1995), Professor of Biology; B.S., Oregon State University; Ph.D., University of Texas.

JACK DELMORE (1992), Professor of Music; B.M., University of Massachusetts-Lowell; M.M., New England Conservatory of Music; D.M.A., University of Arizona.

RICHARD DUJAY, Lecturer of Biology; B.S., M.S., Ph.D., Colorado State University.

KRISTY DURAN (2006), Assistant Professor of Biology; B.S., University of New Mexico; M.S., Colorado State University; Ph.D., University of Colorado.

ARUN EKTARE (1986), Professor of Computer Science; Ph.D., University of Roorkee (India).

CARLOS ELIAS (2000), Associate Professor of Music; B.M., Biola University; M.M., University of Cincinnati; Artist Diploma, Duquesne University.

BYRON EVERS (1989), Associate Professor of Mass Communication; B.S., M.S., Murray State University.

SEAN FLANIGAN (2006), Assistant Professor of Music; B.S., M.M., University of Illinois; D.M.A., University of North Texas.

DANIEL FLENNIKEN (2005), Assistant Professor of Mass Communication; B.A., M.A., University of Colorado.

KAREN FORD (1984), Professor of Psychology; B.A., Mississippi College; M.A., Northeast Louisiana; Ph.D., University of Mississippi.

SANDY FORREST, R.N. (1980), Professor of Nursing; B.S.N, Florida International University; M.S.N., University of Miami; Ph.D., University of Texas.

CRAIG FOSSETT (2004), Assistant Professor of Accounting and Faculty Athletic Representative; B.A., University of Missouri; M.B.A., Western State College.

JEREMY FRANKLIN , Lecturer of Music Theatre; B.A., Ouachita Baptist University.

TRACII FRIEDMAN (2002), Professor of Mathematics; B.S., Saint Joseph's University-Philadelphia; M.S., Ph.D., Lehigh University.

LISA FRIEL (1998), Professor of Teacher Education; B.A., University of California-Santa Barbara; M.Ed., Ed.D., Northern Arizona University.

KEITH FRITZ (1997), Associate Professor of Kinesiology; B.S., Oregon State University; M.S., Ph.D., University of New Mexico.

CHARLES GAINS, Assistant Professor of Construction Management and Program Coordinator; A.S., Waubonsee Community College; B.S., Southern Illinois University; M.B.A., Boise University.

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SUZIE GARNER (1995), Professor of Art and Department Head of Art; B.F.A., M.A., Stephen F. Austin State University; M.F.A., West Texas A&M.

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PHILIP GUSTAFSON (1998), Professor of Mathematics; B.S., State University of New York-Oneonta; M.S., Ph.D., Washington State University.

KURTIS HAAS (1999), Associate Professor of English and Department Head of Languages, Literature, and Mass Communication; B.A., M.A., Truman State University; Ph.D., University of Nebraska.

KRISTEN HAGUE (2001), Associate Professor of English and Director of Honors Program; B.A., Providence College; M.A., Ph.D., University of New Mexico.

MICHELE HANSON, Lecturer of English and French; B.A., University of California, Santa Barbara; M.A., University of New Hampshire; M.L.S., University of Arizona.

CATHY HARTT, R.N., C.N.M., (2005), Assistant Professor of Nursing; A.A.S, A.A.S, B.S.N., Mesa State College; M.S., University of Utah.

HAROLD HASE, Lecturer of Geology; B.S., University of Wisconsin-Milwaukee; M.S., Michigan Tech University.

TIMOTHY HATTEN (1995), Professor of Business; B.A., Western State College; M.S., Central Missouri State; Ph.D., University of Missouri.

MYRA HEINRICH (1983), Professor of Psychology; B.S., M.A., Ph.D., University of North Dakota.

JESSICA HERRICK (1996), Professor of Psychology; B.A., M.S., Ph.D., University of Wyoming.

PENNEY CHAPIN HILLS, Lecturer of English; B.A., University of Chicago; M.A., Graduate Faculty New School for Social Research.

CALVIN HOFER (1998), Professor of Music and Department Head of Music; B.A., South Dakota State University; M.M.E., University of Wisconsin; D.M.A., University of Northern Texas.

BETHANY HOFFMAN, R.N. (1994), Associate Professor of Nursing; B.S.N., University of Cincinnati; M.S., University of Colorado.

CONSTANCE HOLLAND, Lecturer of Sociology; B.A., M.A., University of Denver.

ARTHUR HOULE (2006), Associate Professor of Music; B.M., University of Massachusetts-Lowell; M.M. New England Conservatory; D.M.A., University of Iowa.

JEANINE HOWE (2006), Assistant Professor of Theatre; B.F.A., Otterbein College; M.F.A., Carnegie-Mellon University.

PETER IVANOV (1995), Professor of Theatre; A.A., Manatee Community College; B.A., Western Illinois University; M.F.A, Florida State University.

ALMA JACKSON (2008), Assistant Professor of Nursing; B.S., Loretto Heights College (Regis University); M.S., California College for Health Sciences; Ph.D., Capella University.

ROBERT JOHNSON (1962), Professor of English; B.A., M.A., Western State College; Ph.D., University of Northern Colorado.

VERNER JOHNSON (1989), Professor of Geology; B.A., M.S., Southern Illinois University; Ph.D., University of Tennessee.

GEORGANN JOUFLAS, Lecturer of Business; B.A., University of Colorado; M.B.A., George Washington University.

DARIN KAMSTRA (2004), Assistant Professor of Music; B.A., B.M., Eastern Washington University; M.M., University of Northern Colorado; D.M.A., University of Illinois at Urbana-Champaign.

PHILIP KAVANAGH (1994), Associate Professor of Mathematics; B.Sc., M. Sc., University College Dublin, National University of Ireland; Ph.D., University of Wisconsin.

DEBORAH KENNARD (2005), Assistant Professor of Environmental Science; B.A., Trinity University; M.A., Ph.D., University of Florida.

SUZANNE KENNEY, Lecturer of Chemistry; B.S., M.S., Clarkson University.

KEVIN KERN (2002) Technical Instructor of Manufacturing Technology-Welding.

DAN KIRBY (1999) Assistant Technical Professor and Program Coordinator of Culinary Arts; A.A.S., Mesa State College.

GORDON KOCH (2001) Assistant Technical Professor of Technology Integration; B.S., Kearney State College; M.S., University of Nebraska.

AGIM KUKELI (2007), Assistant Professor of Business; B.S., University of Korca; M.A., Ph.D., Colorado State University.

BARRY LAGA (1997), Professor of English; B.A., M.A., Brigham Young University; Ph.D., Purdue University.

SUZANNE LAY (2006), Assistant Professor of Accounting; B.S., Norfolk State University; M.B.A., University of Missouri-Kansas City; M.S.Ed., Emporia State University.

ANN LEADBETTER (1993), Lecturer of English; B.A., University of Utah; M.A., University of New Mexico.

GUY LEADBETTER (1993), Professor of Kinesiology and Head Coach, Women's Cross Country; B.A., Bowdoin College; M.S., University of Montana; Ph.D., University of New Mexico.

RICHARD LEONARD (2007), Technical Instructor of Construction Technology.

MATTHEW LINDSTROM (2007), Assistant Professor of Dance; B.S. Ed, State University of New York- Geneseo; M.F.A., University of Iowa.

RICHARD LIVACCARI (1997), Professor of Geology; B.S., University of New Mexico; M.S., State University of New York-Albany; Ph.D., University of New Mexico.

GARY LOOFT (1985), Technical Instructor of Transportation Services.

LONGINO LUIS LOPEZ, Lecturer of English; B.A., Spring Hill College; M.A., St. John's College; Ph.D., The University of New Mexico, Albuquerque.

DONN LORHAMMER, Lecturer of Mathematics and Geology; B.S., University of Utah; M.S., Naval Postgraduate School.

WARREN MACEVOY (2001), Associate Professor of Computer Science; B.S., Mesa State College; M.S., Ph.D., University of Arizona.

BRUCE MANCHEE (1996) Assistant Technical Professor of Graphic Communications; B.A., University of Houston.

FRANK MARKHAM (2001), Associate Professor of Business; B.S.M., Embry Riddle Aeronautical University; M.B.A., Troy State University; D.B.A., Louisiana Technical University.

STEPHANIE MATLOCK-COOLEY, Lecturer of Biology; B.A., University of Colorado-Boulder; M.S., Montana State University-Bozeman.

ROBERT MAYER (1987), Associate Professor of Business; B.A., M.S., University of Northern Colorado.

GABRIELE MAYER-HUNKE, Lecturer of English and German; B.S., M.S., B.A., M.A., University of Wuerzburg (Germany).

GARY MCCALLISTER (1973), Professor of Biology; B.S., M.S., Brigham Young University; D.A., University of Northern Colorado.

DANIEL MCCLINTOCK (2007), Technical Instructor of Media Technology; B.A., Mesa State College.

WILLIAM MCCRACKEN, JR. (2002) Assistant Technical Professor of Manufacturing Technology-Machining; A.A.S., Mesa State College.

DENISE MCKENNEY (1996), Professor of Biology and Department Head of Biological Sciences; B.S., New Mexico State University; Ph.D., North Carolina State University-Raleigh.

KYLE MCQUADE (2006), Assistant Professor of Biology; B.S., Millikin University; Ph.D., University of Wisconsin.

BARRY MICHRINA (1990), Professor of Anthropology; B.S., St. Francis College; M.S., Colorado State University; Ph.D., Pennsylvania State University.

CHAD MIDDLETON (2006), Assistant Professor of Physics; B.S., Eastern Illinois University; Ph.D., University of Tennessee, Knoxville.

LES MILLER (2005) Assistant Professor of Philosophy; B.A., Mesa State College; M.A., Ph.D., Claremont Graduate University.

TAMERA MINNICK (2002), Associate Professor of Environmental Science and Technology; B.S., University of Nebraska; Ph.D., Colorado State University.

JERRY MOORMAN (1990), Professor of Business; M.Ed., Delta State University; B.S., Ed.D., Mississippi State University.

LAVERNE MOSHER (1990), Professor of Art; B.A., University of Northern Colorado; M.F.A., Arizona State University.

MELONIE BUCHANAN MURRAY (2005), Assistant Professor of Dance; B.F.A., Friends University; M.F.A., University of California, Irvine.

SANDRA MURRAY, Lecturer of Teacher Education; B.A., M.A., Adams State College.

STEVEN ROSS MURRAY (1998), Professor of Kinesiology; B.S., University of North Alabama; M.S., D.A., Middle Tennessee State University.

MAUREEN NEAL (1995), Professor of English; B.A., University of Denver; M.A., Western State College; Ph.D., Texas A&M University.

JOHN NIZALOWSKI, Lecturer of English; B.A., Binghamton University; M.A., University of Delaware.

DOUGLAS O'ROARK (1994), Professor of History; B.A., M.A., Ph.D., The Ohio State University.

TED OKEY, Lecturer of Teacher Education; B.A., University of California-Fullerton; M.Ed., University of Missouri-St. Louis; Ph.D., Michigan State University.

RICHARD OTT (2006), Assistant Professor of Statistics; B.S., St. Mary's University; M.S., University of Missouri-Rolla; Ph.D., Rice University.

ERIK PACKARD (1996), Associate Professor of Mathematics; B.S., M.S., Ph.D., Texas Tech University.

APARNA PALMER (1999), Associate Professor of Biology; B.A., B.S., Colorado State University; Ph.D., Washington State University.

DEBORAH PARMAN, Lecturer of Business; B.A., Colorado State University; M.A.M., University of Redlands.

VINCENT PATARINO, JR., Lecturer of History; B.A., B.S., M.A., Ph.D., University of Colorado-Boulder.

LORI PAYNE (1996), Professor of Mathematics and Computer Science and Department Head of Computer Science, Mathematics and Statistics; B.A., Mesa College; M.S., New Mexico Institute of Mining & Technology; Ph.D., University of Northern Colorado.

STEVE PETERSON (2006), Technical Instructor of Construction Technology.

RANDY PHILLIS (1993), Professor of English; B.A., M.F.A., Wichita State University; Ph.D., Oklahoma State University.

ELIZABETH PROPES (2004), Assistant Professor of History; B.A., Ph.D., University of Mississippi; M.A., University of Illinois.

JOSEPH QUESENBERRY (2004), Technical Instructor of Applied Mathematics; B.S., Mesa State College.

CAROLYN QUINN-HENSLEY (2000), Professor of Art; B.F.A., M.F.A., University of Hawaii.

GARY RADER (1995), Professor of Computer Sciences; B.A., M.A., Ph.D., University of Pennsylvania; M.B.A., University of Phoenix.

PAUL REDDIN (1970), Professor of History; B.A., Adams State College; M.A., Ph.D., University of Missouri.

JOHN REDIFER (1994), Professor of Political Science and Department Head of Social and Behavioral Sciences; B.A., University of Maryland; M.A., Ph.D., Colorado State University.

JOHN REECE (2006), Assistant Professor of Criminal Justice; Program Coordinator of P.O.S.T. program; B.A., Mesa State College; M.P.A., University of Colorado-Denver.

MARKUS REITENBACH (2006), Assistant Professor of Mathematics; M.S., University of Ulm; Ph.D., Syracuse University.

KRISTINE REUSS, R.N. (1990), Professor of Nursing and Director of Health Sciences; B.S., M.S.N., Ph.D., University of Colorado.

JAMES REXROAD, Lecturer of Mathematics; B.S., M.A.T., Northern Arizona University.

GIGI RICHARD (2002), Associate Professor of Geology; B.S., Massachusetts Institute of Technology, Cambridge; M.S., Ph.D., Colorado State University.

JOSEPH RICHARDS (1995), Professor of Chemistry; B.A., University of San Diego; Ph.D., University of North Carolina.

PATRICK ROARK (2005), Technical Instructor of Electric Lineworker.

DAVID ROGERS, C.P.A. (1975), Professor of Accounting; B.A., University of New Mexico; M.B.A., Golden Gate University.

MARK ROGERS, Lecturer in Mathematics Education; B.S., B.A., M.S., University of Mississippi.

CHERYL ROY, R.N. (1992), Associate Professor of Nursing; B.S., University of Iowa; M.S.N., University of Colorado.

ROBERT RYAN, Program Director, Athletic Training Education Program and Visiting Professor of Kinesiology; B.A., University of Colorado; M.A., University of Northern Colorado.

ERIC SANDSTROM, Lecturer of Mass Communication; B.A., M.A. Miami (Ohio) University.

BETTE SCHANS (1994), Professor of Radiologic Technology; B.S., Metropolitan State College; M.S., University of Colorado; Ph.D., Colorado State University.

STEVEN SCHULTE (1989), Professor of History; B.A. University of Wisconsin-River Falls; M.A., Colorado State University; Ph.D., University of Wyoming.

DANIEL SCHULTZ-ELA (2006), Assistant Professor of Mathematics Education; B.A., Carleton College; M.S., Brown University; Ph.D., University of Minnesota.

PATRICK SCHUTZ (2004), Assistant Professor of Business; B.S., Eastern Michigan University; M.S., University of Utah; Ph.D., Colorado State University.

DEBORAH SHARPE, R.N., Lecturer of Nursing; A.D.N., Arapahoe Community College; B.S.N., Mesa State College.

BERNADINE SHERMAN, Lecturer of Mathematics Education; A.S., B.A., Mesa State College; M.A., University of Northern Colorado.

LUIS SILVA-VILLAR (2000), Professor of Spanish; M.A., Real Conservatorio Superior De Musica de Madrid; M.A., Ph.D., University of California - Los Angeles.

GAYLA JO SLAUSON (1993), Associate Professor of Computer Information Systems; B.A., Mesa State College; M.B.A., University of Southern Colorado.

JOHN SLUDER (1998), Assistant Technical Professor of Technology Integration.

WAYNE SMITH (1998), Assistant Technical Professor of Culinary Arts; A.A.S., Mesa State College.

DEBORAH SNIDER (2008), Assistant Professor of Art; B.A., Western Michigan University; M.A., University of Colorado at Boulder; M.F.A., Goddard College.

JOHNNY SNYDER (2005), Associate Professor of Computer Information Systems; B.A., Fort Lewis College, M.A., Ph.D., University of New Mexico; M.S., Nova Southeastern University.

MELANIE SNYDER (2003), Technical Instructor of Manufacturing Technology-CAD; A.A.S., Mesa State College.

ANNE SPALDING (2001), Associate Professor of Computer Science; B.S., M.S., Ph.D., University of Colorado-Denver.

JONATHAN ST. PETER (2004), Technical Instructor of Culinary Arts A.A.S., Colorado Mountain College.

TORU SUGITA (2007), Assistant Professor of Art; B.Ed., Kyoto University; M.F.A., San Francisco State University.

SARAH SWEDBERG (1999), Associate Professor of History; B.A., State University of New York - Plattsburgh; M.A., Ph.D., Northeastern University, Boston.

DENIS THIBODEAU (1999) Technical Instructor of Manufacturing Technology-CAD; A.A.S., Rogue Community College.

CINDY THOMAS, R.N. (1999), Associate Professor of Nursing; B.S.N., University of Utah; M.S., University of Colorado; Ph.D., University of Colorado.

HARRY TIEMANN, JR. (1962), Professor of Psychology; B.A., M.A., University of Colorado; Ph.D., Colorado State University.

WILLIAM TIERNAN (1999), Professor of Physics; B.A., Colby College; Ph.D., University of Massachusetts.

REGIS TUCCI (1999), Assistant Professor of Mass Communication; B.A., M.A., Marshall University.

RICHARD VAIL (1997), Professor of Business; B.S., University of California-Davis; M.S., University of Colorado; Ph.D., Oxford.

MAYELA VALLEJOS-RAMIREZ (2003), Associate Professor of Spanish; B.A., Universidad de Costa Rica; M.A., West Virginia University; Ph.D., University of Nebraska.

HEATHER WAGGONER (1998), Professor of Theatre; A.A., B.A., Indiana State University; M.F.A., Illinois State University.

RUSSELL WALKER (1993), Professor of Environmental Science and Technology and Department Head of Physical and Environmental Sciences; A.B., Oberlin College; Ph.D., Iowa State University.

THOMAS WALLA (2001), Associate Professor of Biology; B.A., University of California - San Diego; Ph.D., University of Oregon - Eugene.

PATRICE WARD (1998), Professor of Radiologic Sciences; B.S., Colorado Christian University, M.Ed. Lesley University

CARRIE MCVEAN WARING (1996), Professor of Biology; B.S., D.V.M., Colorado State University.

STEVEN WERMAN (1990), Professor of Biology; B.S., M.S., California State University - Long Beach; Ph.D., University of Miami.

BRENDA WILHELM (2000), Associate Professor of Sociology; B.A., University of Minnesota; M.A., Ph.D., University of Arizona.

BRIGITTE WILSON, (2001) Assistant Technical Professor of Manufacturing Technology-CAD; B.S., Colorado State University; M.B.A., University of Phoenix.

SANDRA WOODWORTH, Lecturer of Speech; B.A., M.A., Fort Hays State University.

ALANE WOOSTER, (2001), Assistant Technical Professor of Administrative Office Technology; A.A.S., Colorado Northwestern Community College; B.S., Colorado Christian University.

MARILYN WOUNDED HEAD (1993), Professor of Art; B.F.A., Minneapolis College of Art/Design; M.F.A., University of South Dakota.

KEITH WRIGHT (2006), Technical Instructor of Transportation Services.

WILLIAM WRIGHT (1998), Professor of English; B.A., Linfield College; M.A., University of New Hampshire; Ph.D., University of Arizona.

Z. WU (1989), Professor of Mathematics; B.S., China University of Science and Technology; Ph.D., University of Cambridge.

SUSAN YEAGER (1988), Professor of Kinesiology; B.A., Luther College; M.S., South Dakota State; P.E.D., Indiana University.

JACK YON (2003), Technical Instructor of Technology Integration.

JENNIFER ZADROZNY, R.N., Lecturer of Nursing; B.S.N. Mesa State College; M.S.F.N.P., University of Colorado Health Sciences Center.

Mesa State College Recent Emeritus Faculty

(Date in parentheses indicates year of retirement. In accord with Faculty Senate action, this list includes only faculty awarded emeritus status in the past ten years.)

CHARLES BAILEY, B.A., M.A., Professor of Mathematics (2005).

RICHARD BALLARD, B.A., M.S., Ph.D., Professor of Biology (2007).

JEFF BRIGHAM, B.A., M.A., Ed.D., Professor of Teacher Education (2003).

ESTHER BROUGHTON, B.A., M.S., Ph.D., Professor of English (2007).

JAMES BUCKLEY, C.P.A., B.A., M.S., Professor of Accounting (2006).

TENNIE ANN CAPPS, B.S., M.Bus.Ed., Associate Professor of Business (1999).

TESS CARMICHAEL, B.A., M.A., Assistant Professor of Speech and Mass Communication (2003).

DALE DICKSON, B.A., B.A., M.Ed., Ed.D., Professor of Business Management (1999).

MATTS DJOS, B.A., M.A., Ph.D., Professor of English (2006).

CHARLES FETTERS, B.S., M.A., Associate Professor of Applied Technology (2001).

D'ANN FUQUAY, B.A., M.A., M.S., D.A., Professor of Computer Science (2001).

JOSE GALLEGOS, B.A., M.A., Ph.D., Professor of English (1999).

MICHAEL GERLACH, B.S., M.A., Ph.D., Professor of Theatre (2002).

GORDON GILBERT, B.S., M.S., Ph.D., Professor of Physics (2006).

CHAD LEE GRABOW, B.S., M.S., M.A., Ph.D., Professor of Computer Information Systems (2006).

THOMAS GRAVES, B.A., M.A., Ed.D., Professor of Psychology (2007).

RAY GREB, B.A., M.A., Professor of Machining (2000).

DONNA HAFNER, B.A., M.A.T., Associate Professor of Mathematics (2001).

CHARLES HARDY B.A., M.F.A., Professor of Art (2006).

BETTY HARRIS, B.S., M.S., Professor of Accounting (2004).

EDWIN HAWKINS, B.A., M.A., Professor of Mathematics (2000).

FORREST HOLGATE, B.A., Assistant Professor of Applied Technology (2001).

EDWARD HURLBUT, B.A., M.S., Ph.D., Professor of Biology (1999).

SUZANNE JANDRIES, B.A, M.F.A., Professor of Art (2004).

JAMES JOHNSON, B.A., M.S., Ph.D., Professor of Geology (1999).

WALTER KELLEY B.A., M.S., Ph.D., Professor of Biology (2006).

CARL KERNS, B.A., M.S., Ed.D., Professor of Mathematics (2000).

DENISE MCGINNIS, B.Ed., M.B.A., Ph.D., Professor of Computer Information Systems, Business (2005).

BETSY MCLOUGHLIN, B.A., M.A., Ph.D., Associate Professor of Spanish (2006).

PRASANTA MISRA, B.S., M.S., Ph.D., Professor of Physics (2005).

TIMOTHY NOVOTNY, B.A., B.S., M.A., M.S.B.A., Ph.D., Professor of Mathematics and Statistics (2008).

KAREN PERRIN, B.S., M.S., Associate Professor of Physical Education (2002).

DAVID REES, B.S., M.S., Ph.D., Professor of Economics (2004).

JANINE RIDER, ; B.A., M.A., Ph.D., Professor of English (2007).

MARGARET ROBB, B.A., M.A., Associate Professor of Speech (2000).

JAMES RYBAK, B.S.E.E., M.S., Ph.D., Professor of Engineering and Mathematics (2005).
ANN SANDERS, B.A., M.A., Associate Professor of Theatre and Dance (2006).

DOUGLAS SCHAKEL, B.A., M.A., Assistant Professor of Physical Education (2001).

PAUL SCHNEIDER, B.A., M.A., Associate Professor of Music (2000).

ROBERT SOWADA, B.A., M.A., Associate Professor of Foreign Language (2002).

GENE STARBUCK. B.A., M.A., Ph.D., Professor of Sociology (2006).

BARRY THARAUD, B.A., M.A., Ph.D., Professor of English (2002).

KATHLEEN R. TOWER, B.M.E., M.A., Ph.D., Professor of Library Science (2006).

KAREN TUINSTRA, B.A., M.S., Ph.D., Professor of Teacher Education (2000).

MARY ZIMMERER, B.A., M.S., Ph.D., Professor of Business (2007).

Mesa State College Visiting Professors

Aspinall Professors

CARL ABBOTT (1985), Aspinall Professor of History; B.A., Swarthmore College; M.A., Ph.D., University of Chicago.

STEPHEN BENNET (1995), Aspinall Professor of History; B.S., M.S., Illinois State University, Normal; Ph.D., University of Illinois, Urbana-Champaign.

WILLIAM BEEZLEY (2008), Aspinall Professor of History; B.A., Chico State College; M.A., Ph.D., University of Nebraska.

ALAN BLOCK (1996), Aspinall Professor of History, Political Science, and Public Affairs; A.B., Ph.D., University of California-Los Angeles; M.A., California State University.

PETER BOYLE (1989), Aspinall Professor of History and American Studies; M.A., Glasgow University, Scotland; Ph.D., University of California, Los Angeles.

GEORGE BROWDER (2001), Aspinall Professor of History; B.S., Memphis State University; M.A., Ph.D., University of Wisconsin at Madison.

JOANNE CARLSON BROWN (1988), Cosmicos Professor of Religious Studies; A.B., Mount Holyoke College; M. Div., Garrett Theological Seminary; Ph.D., Boston University.

WALKER CONNOR (1992), Aspinall Professor of Political Science; John R. Reitmayer Professor of Political Science, Trinity College, Hartford, Connecticut.

THOMAS DAVIS (2007), Aspinall Professor of History; A.B., Fordham University; M.A., Ph.D., Columbia University in the City of New York; J.D. State University of New York at Buffalo.

ROGER DINGMAN (1991), Aspinall Professor of History; B.A., Stanford University; M.A., Ph.D. Harvard University.

RICHARD FUNSTON (1987), Aspinall Professor of Political Science; B.A., M.A., Ph.D., University of California - Los Angeles; J.D., University of San Diego.

ANDREW GULLIFORD (1997), Aspinall Professor of History; B.A., M.A.T., Colorado College; Ph.D., Bowling Green State University.

GORDON MARTIN, JR. (1998), Aspinall Lecturer of Political Science, History, and Public Affairs; A.B., Harvard College; J.D., New York University.

THOMAS MILLINGTON (2002), Aspinall Professor of Political Science; B.A., Williams College; M.A., Ph.D., Johns Hopkins School of Advanced International Study.

ROBERT MORTIMER (1986), Aspinall Professor of Political Science; B.A., Wesleyan University; M.A., Ph.D., Columbia University.

WILLIAM PARRISH (2000), Aspinall Professor of History, Political Science and Public Affairs; B.S., Kansas State University; M.A., Ph.D., University of Missouri.

EDWIN PERKINS (2003), Aspinall Professor of History, Political Science, and Public Affairs; B.A., College of William and Mary; M.B.A., University of Virginia; Ph.D., Johns Hopkins University.

GLENDA RILEY (1993), Aspinall Professor of History, Political Science and Public Affairs; Ph.D., University of Ohio.

PAMELA RINEY-KEHRBERG (1999), Aspinall Professor of History; B.A., Colorado College; M.A., Ph.D., University of Wisconsin.

WILLIAM ROBBINS (1990), Aspinall Professor of History; B.S. Western Connecticut; M.A., Ph.D., University of Oregon.

JEROME STEFFEN (1988), Aspinall Professor of History; B.S., University of Wisconsin, Madison; M.A., Eastern Michigan University; Ph.D., University of Missouri.

JOHN WILLS, JR. (2005), Aspinall Professor of History; B.A., University of Illinois; M.A., Ph.D., Harvard University.

ROBERT WESTBROOK (2004), Aspinall Professor of History; B.A., Yale University; Ph.D., Stanford University.

Cosmicos Professors

EMMANUEL FELDMAN (1987 and 1991), Cosmicos Professor of Religious Studies; B.S., M.A., Johns Hopkins University; Ph.D., Emory University.

DENIS HINE (1985), Cosmicos Professor of Religious Studies; A.B., St. Benedict's Seminary; S.T.L., S.E.O.L., Oriental Institute, Rome.

DAN MCGILL (1995), Cosmicos Professor of Religious Studies; B.A., Metropolitan State College; M.A., St. Thomas Seminary.

FR. THOMAS MUNSON (1990; 1992), Cosmicos Professor of Theology; A.B., Loyola University; Ph.L., S.T.L. West Baden College; Ph.D., University of Louvain, Belgium.

MORT PERRY (1996), Cosmicos Professor of Religious Studies; B.A., Rutgers University; M.A., University of Wyoming; M.Phil., Syracuse University.

FRANK ROSENTHAL (1994), Cosmicos Professor of Theology; Ph.D., University of Pittsburgh.

ZACHARY SMITH (1994), Aspinall Professor of History, Political Science and Public Affairs; B.A., California State University, Fullerton; M.A., Ph.D., University of California, Santa Barbara.

Other

ALLAN DUFFUS (1989), Professor of Accounting; Charles Stuart University, Australia.

Mesa State College Main Campus

Map Legend

- **Parking**
- **Campus Buildings**
- **Construction**

1. Bergman Practice Field
2. Elliott Tennis Complex
3. Soccer Stadium
4. Softball Stadium
5. Truf Practice Field
6. Saunders Field House (S) and Student Recreation Center
7. Saunders Field House Renovation and Expansion (Complete Winter 2009)
8. Parking Structure
9. Walnut Ridge Apartments
10. Pinon Residence Hall
11. Tolman Residence Hall
12. Rait Residence Hall
13. Housing and Residence Life Center
13. Outdoor Program Office
14. Admission Welcome Center (AO)
15. Monument Residence Hall
16. Albers Residence Hall
17. W. W. Campbell College Center (CC)
17. Parking Services
18. Elm Residence Hall
18. Early Childhood Education Center (ECEC)
19. MSC Foundation and Alumni Association
20. Campus Services
21. Academic Classroom Building (ACB)
22. Fine Arts Building (FA)
23. Science Center Expansion (Complete Winter 2009)
24. Science Center (SL)
25. Wubben Hall (W)
26. Lowell Heiny Hall (LLH)
27. Grand Mesa Residence Hall
28. Tomlinson Library (L)
29. Moss Performing Arts Center (MPAC)
30. New Residence Hall (Complete Summer 2009)
31. Development Center (DEVCTR)
31. Grand Junction Police Substation
32. Houston Hall (H)
33. Stocker Stadium
34. Suplizio Field

Mesa State College Facilities

Academic Classroom Building (2008), houses state-of-the-art classrooms, lecture auditoriums, extended learning environments, study carrels, small breakout rooms for student collaboration, faculty offices and features an outdoor patio as well as a coffee bar.

Houston Hall (1940), the first permanent building on the campus was totally remodeled in 1979-80 and includes classrooms and computer laboratories where a variety of subject areas are taught such as business, humanities, and social and behavioral sciences.

Wubben Hall (1962) contains classrooms, laboratories, offices and storage areas for physical and life sciences, mathematics, and computer sciences. A special feature is an octagonal lecture hall that seats one hundred persons. This building was completely remodeled in 1998 and connected to the new Science Center.

The Science Center (1996) contains modern laboratories for biology, chemistry, geology, and environmental sciences. This building also contains an electron microscopy laboratory, and an herbarium. A special feature is the Saccomanno Lecture Hall that seats 120 and has full multimedia capabilities. An attractive courtyard between this building and Wubben Hall provides space for outdoor lectures and study.

The **Moss Performing Arts Center** (2002), added a 300-seat recital hall, a 150-seat experimental theatre, choral and instrumental rehearsal rooms, dressing rooms, offices, and music practice rooms to the former Walter Walker Fine Arts Center (1969). The south side of the building is home to classroom, office, and performance space for drama programs. This portion of the building features a 605-seat theatre with fly loft and modern drama lighting systems.

The **Fine Arts Building** (2002), provides studio laboratories, offices, and classrooms for Studio Art, Graphic Design, and Mass Communication. This facility has large covered outdoor work areas for ceramics kilns and a bronze foundry. A state-of-the-art television production studio is part of the Mass Communication facilities. The building design allows viewing of the studio laboratories activities from the hallways.

William A. Medesy Hall (1969, remodeled in 1992, 1996), houses offices, classrooms, and laboratories for Health Sciences programs, and the Little Mavericks day care.

Roe F. Saunders Physical Education Center (1968, 1996), provides facilities for a variety of physical education and recreation activities. Major features include an all-purpose gymnasium, swimming and diving pools, locker and shower rooms, classrooms, and office space for the Kinesiology faculty. Physical education and practice athletic fields are located immediately west of the center with tennis courts to the north of the facility.

The **W. W. Campbell College Center** (1962, remodeled 1990-91), houses the bookstore, Johnson Art Gallery, Outdoor Program office, student government offices, MAVCard office, KMSA radio station, the *Criterion* student newspaper, the Bookcliff Cafe, an information desk, dining hall, student lounges, cultural diversity center, a Wells Fargo® Customer Service branch, meeting rooms, and Liff Auditorium. Liff Auditorium is the location of many of the entertainment programs organized by the student-run activities council.

The **Student Recreation Center** (1996), consists of two basketball courts, volleyball, badminton, team handball and indoor soccer areas. A large fitness area is equipped with weights and cardiovascular machines. An indoor track and a 28-foot high climbing wall are also part of the 33,000 square-foot facility.

Five 200-student residence halls—**Tolman, Rait, Pinon, Monument, and Grand Mesa Halls** (1966, 1967, 1997, 2006), provide comfortable living quarters for students. Most of the rooms are doubles, but a few single rooms are available. All rooms are furnished with modern, wall-hung furniture.

Walnut Ridge Apartments (1978), are available to sophomores, juniors, and seniors. Furnished two- and three-bedroom units include housekeeping facilities.

Lowell Heiny Hall (1967), a four-level building housing faculty and administrative offices, was totally remodeled in 1986-87.

The **John U. Tomlinson Library** (1986), expands the traditional library concept to include storage and circulation for all commonly used forms of information such as microfilm, microfiche, audio tapes, video tapes, slides, films, records and computer disks.

The **Industrial Energy Training Center** (1982), houses staff offices, training areas and classrooms. The Colorado Environmental Education and Training (CEET) Laboratory and the lineworker program are at this site (located at 29 and D Roads in Grand Junction, CO.)

The **Tilman M. Bishop Campus** (1992) houses Western Community College Campus (WCCC) staff, offices, shops, a computer laboratory, training areas and classrooms. WCCC serves college, continuing education, and high school students. Additionally, the facility is available on a contract basis for use by area business and industry. The Bishop campus of WCCC is located on Blichmann Avenue in the Foresight Industrial Park in Grand Junction, CO.

The Mesa State College **Montrose Campus** (1998) contains classrooms, a computer lab, a telecommunications lab, and staff offices. Located on S. Cascade in Montrose, the facility serves college and continuing education students.

Glossary of Terms

ACADEMIC PROBATION - The failure of a student to meet the standards required for good standing. Student will be placed on academic probation for one semester and must maintain a 2.00 GPA or higher to avoid academic suspension.

ACADEMIC RENEWAL - Following an absence from the college of at least five years, a student may apply for "academic renewal." If approved, none of the course credits and grades earned at Mesa State College prior to the five-year minimum absence will be used for meeting graduation requirements or in determining the student's grade point average.

ACADEMIC RESIDENCY - A specified minimum number of credit hours that must be earned at Mesa State College to receive a degree.

ACADEMIC SUSPENSION - Denial of all registration privileges for a specified period of time (minimum one full semester) because of failure to meet minimum academic standards. Suspended students must be readmitted to the college before continuing enrollment.

ACADEMIC TERM - A period of instruction. During the fall and spring, the term is a standard 15-week semester. During the summer, various length periods of instruction are offered. The term regular semester refers to fall or spring semester.

ACADEMIC YEAR - The traditional cycle of academic terms: fall and spring.

ACCREDITATION - Certification that the college or program has met established standards and is recognized by appropriate accrediting agencies.

ADD/DROP - A period of time when students can alter class schedules by adding or dropping classes or changing sections of a course. Prior to the first day of the semester, schedule changes can be processed via the Web. Instructor signatures must be obtained beginning the first day of the classes through the specified ending date each semester.

ADMISSION - Status of students who have applied and have been accepted to the college.

ASSOCIATE'S DEGREE - Degree awarded upon satisfactory completion of a prescribed, planned program of approximately 60 credit hours. This can be completed in two years of study with an average of 15 semester hours per semester in the fall and spring terms.

AUDIT - A registration status which allows a student to attend and to participate in a course without benefit of a grade or academic credit. The "audit" status must be recorded in the Registrar's Office within the add/drop deadlines.

BACCALAUREATE DEGREE - Bachelor's degree: the traditional undergraduate degree. Awarded for completion of an undergraduate program of study, usually of 120 semester hours. This can be completed in four years of study with an average of 15 semester hours per semester in the fall and spring terms. Bachelor's degrees are comprised of general education courses, a major, and elective courses.

CAPSTONE - A course, project, paper, presentation, event, or exhibit that must be completed, usually in the senior year, before graduation. A capstone demonstrates in an integrated way everything that has been learned while pursuing a particular major.

COLLEGE OPPORTUNITY FUND (COF) - The method of funding state tax dollar support for students enrolled in Colorado public higher education via a voucher. Implemented in fall 2005, qualifying students create an account at the College Access Network into which the voucher is deposited and, upon registration by the student at a participating institution, then is transferred to the college.

CONCENTRATION - An area of interest within a major that is defined by a group of courses. Number of hours will vary by major.

CONCURRENT STUDENT - A high school student who is registered for a college class.

CONTACT HOURS - The number of weekly hours student meets in a class, lab, studio, clinical, or class/lab.

COREQUISITE - Course(s) that must be taken concurrently with one or more additional courses. Subject matter often is similar or complementary.

COURSE LEVELS -
The numbering system of courses:

Developmental/Preparatory:
099 and lower
Lower Division:
100 - 199 Freshman
200 - 299 Sophomore
Upper Division:
300 - 399 Junior
400 - 499 Senior
Graduate:
500 and above

COURSE LOAD - The total number of semester hours registered for in a given academic term.

CUMULATIVE GRADE POINT AVERAGE - An average GPA calculated by dividing the total number of quality points/grade points obtained (credit hours X grade points) by the number of credit hours attempted during all academic sessions at Mesa State. Grades from other institutions are not included in the calculation.

DEAN'S LIST - Recognition of students who achieve a grade point average of between 3.50 and 3.99 while enrolled for a minimum of 12 semester hours in a fall or spring semester.

DEGREE - A title which the college confers on a student who has satisfactorily completed a required course of study. Degree requirements are established by the college and departments, and are approved by the college's faculty, administration, and authorized by the Colorado Commission on Higher Education. The college offers degrees at three levels: associate, baccalaureate, and master's.

DEGREE DISTINCTION - Six credit hours earned beyond general education requirements that differentiate baccalaureate degrees in arts, science, and business administration.

DISCIPLINE - A recognized subject area or field of study within which courses are structured.

DISTANCE LEARNING - Courses offered for credit by an alternative means of delivery for students who need college credit but are unable to travel to campus on a regular weekly basis (e.g. telecourses, interactive video, or online).

DOUBLE MAJOR - Completing the requirements of more than one major within the same degree designation (e.g., a Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration). A student could earn one baccalaureate degree with multiple majors (e.g., Bachelor of Arts with a double major in Psychology and Sociology). Students must meet all the requirements for the degree and for each major.

DUAL/DOUBLE BACCALAUREATE DEGREE - Completing the requirements of more than one major with different degree designations (e.g., a Bachelor of Arts, Bachelor of Science, Bachelor of Business Administration). A student earning two baccalaureate degrees (e.g., Bachelor of Arts in History and a Bachelor of Science in Mathematics) must meet all the requirements for each degree, each major, and additional requirements found in the "Undergraduate requirements section" for the second baccalaureate.

EARNED HOURS - Credit hours earned for college-level courses (numbered 100 and above) with a passing grade.

ELECTIVES - Courses selected at a student's discretion. Electives may be partially restricted, such as a selection from a specified group of courses identified to fulfill a particular requirement or they may be "free" electives which may be selected from any course for which the student has proper prerequisites. Electives provide opportunities for students to pursue personal interest and to gain general knowledge.

ENROLLMENT - Registration for course work and payment of fees constitutes official enrollment. For financial aid purposes, a student must enroll for 12 credit hours to be classified full-time; for other purposes, the minimum may be higher. For graduate students, a nine-hour load is typical for full-time classification.

GENERAL EDUCATION - A college-wide requirement of basic courses that form the foundation of all undergraduate degree programs.

GENERAL EDUCATIONAL DEVELOPMENT (GED) DIPLOMA - Award granted upon passing tests that measure student learning normally acquired by completing a typical high school program of study.

GOOD STANDING - A sliding scale of academic status achieved by students for semester hours attempted. Determines eligibility of students to continue to register for college course work.

GRADE IMPROVEMENT - Repeat of any course more than once for academic credit at Mesa State College done so only for "grade improvement." Academic credit is awarded only once and the last grade received is the one used to compute the student's cumulative grade point average and to fulfill requirements for the degree. Some exceptions to this policy apply.

GRADE POINT AVERAGE (GPA) - A measure of a student's academic performance which is computed by dividing credit hours attempted into grade points earned to determine the mean average grade of all courses taken for credit. Does not include courses taken as pass/fail.

GRADUATE STUDENT - A student who has earned a baccalaureate degree and who is pursuing a master's degree program.

GRADUATION HONORS - Recognition of graduating students who meet the following academic criteria:

- With Distinction - Associate degree graduates with cumulative grade point averages of 3.50 to 3.74.
- With High Distinction - Associate degree graduates with cumulative grade point averages of 3.75 to 4.00.
- Cum Laude - Baccalaureate degree graduates with cumulative grade point averages of 3.50 to 3.74.
- Magna Cum Laude - Baccalaureate degree graduates with cumulative grade point averages of 3.75 to 3.89.
- Summa Cum Laude - Baccalaureate degree graduates with cumulative grade point averages of 3.90 to 4.00.

HIGHER EDUCATION ADMISSION REQUIREMENTS (HEAR) (also referred to as the pre-collegiate curriculum) - Requirements established by the Colorado Commission on Higher Education for students graduating from high school in spring 2008 or later and seeking admission to a Colorado public four-year college or university.

INDEPENDENT STUDY - An upper-division course designated by a special number within a discipline. Allows a student to pursue an individual project independently, for credit, under the supervision of an instructor. Requires consent of the instructor.

LEVELING COURSES - A set of equivalent courses for graduate students who have not completed specific undergraduate courses prior to beginning graduate study.

LOWER LEVEL COURSE - A course that carries a 100 - 199 or 200 - 299 number.

MAJOR - A set of required courses from one or more departments in a subject chosen as the student's principal field of study. Designed to provide students with the knowledge, skills, and experiences necessary to pursue a specific career and/or advanced study.

MASTER'S DEGREE - A post-baccalaureate degree. All master's degree candidates must maintain a 3.00 GPA to remain in good academic standing.

MATRICULATION - Enrollment as an admitted, degree-seeking student.

MINOR - An officially-recognized secondary field of study requiring fewer units than the major. A minor must be in an approved subject area and is less comprehensive than the major.

MULTIPLE CONCENTRATIONS - Completing the requirements of more than one concentration within the same major (e.g., Bachelor of Arts in Mass Communication with a double concentration in Print Media and Public Relations). Students must meet all the requirements for the degree, major, and each concentration.

PREREQUISITE - Requirement(s) that must be taken and passed before a higher level course may be taken. Sometimes, permission of the instructor or another requirement (such as graduate status) may be a prerequisite for a course. Prerequisites may include: (1) Course or courses that must be completed before a higher-level course may be taken, sometimes allowed by the instructor to be taken concurrently; (2) Courses outside the major department that must be completed before admission to the major; (3) Successful completion of high school courses (as in languages); (4) Minimum SAT or ACT scores or sub-scores; (5) Minimum placement test scores; or (6) Acceptance into a certain program.

PRESIDENT'S LIST - Recognition of students who achieve a grade point average of 4.00 while enrolled for a minimum of 12 semester hours in a fall or spring semester.

PROGRAM SHEET - A document listing degree requirements for graduation.

PRIORITY REGISTRATION - Designated period of early registration for currently enrolled students.

QUALITY POINTS -The number points attributed to a grade (A=4, B=3, C=2, etc.) times the number of credit hours in the course.

REGISTRAR - Office responsible for registering students into classes, maintaining academic records, and certifying degree requirements for graduation.

STUDENT CLASSIFICATION - Student level based on the number of semester hours successfully completed as follows:

0 - 30	Freshman
31 - 60	Sophomore
61 - 90	Junior
91 - above	Senior

TECHNICAL CERTIFICATE - Award for the completion of technical coursework designed to train students for specific skills required for employment in various vocational occupations.

TOPICS COURSES - Courses offered from time to time that contain material of special interest within a specific discipline not considered elsewhere in the curriculum. Prerequisites vary with course material, and enrollment requires consent of the instructor.

TRANSCRIPT - An official document issued by the Registrar that lists the entire academic record of a student at the college.

TRANSFER CREDIT - Course work completed at another institution that is accepted for credit toward a degree at the college. Grades from these courses are not included in calculation of a student's cumulative GPA.

UPPER LEVEL COURSE - A course that carries a 300 - 399 or 400 - 499 number.

UNDERGRADUATE - A student working toward a technical certificate, an associate degree, or a baccalaureate degree.

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Campus Directory

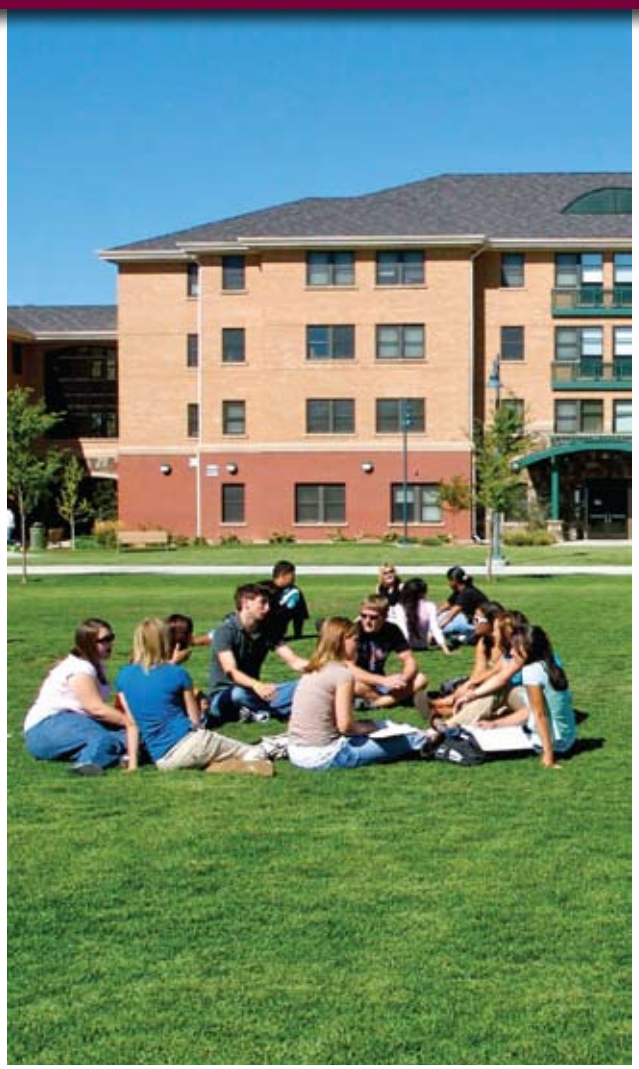
The campus operator can be reached during business hours at 970-248-1020 or toll-free 800-982-MESA.

OFFICE	LOCATION	EXTENSION
Academic Affairs	LHH 209	248-1881
Academic Departments		
Main Campus:		
Art	FA200	248-1833
Biological Sciences	W 238	248-1993
Business	H 100	248-1087
Computer Science, Mathematics, & Statistics	W 155	248-1407
Health Sciences	M 142	248-1398
Kinesiology	S 125	248-1635
Languages, Literature, & Mass Communication	LHH 445	248-1687
Music	MPAC 113	248-1233
Physical & Environmental Sciences	W238	248-1993
Social & Behavioral Sciences	LHH 411	248-1696
Teacher Education	A205	248-1786
Theatre Arts	MPAC 113	248-1233
Montrose Campus	MC	970-249-7009
Bishop Campus		
Western Colo Comm Collge	2508 Blichmann	255-2600
Academic Services	LHH 127	248-1304
Advising & Career Center	LHH 127	248-1177
Accounting Office	LHH 101	248-1567
Admissions Office	AO	248-1875
Alumni Association	1450 N 12th	248-1525
AmeriCorps	H 127	248-1196
Associated Student Government	CC	248-1762
Athletics	S 125	248-1503
Behavioral Clinical Services	2004 N 12th #47	241-6500
Bookstore	CC	248-1422
Box Office	MPAC	248-1604
Campus Dining	CC	248-1742
College Center Information Desk	CC	248-1758
Community Education Center	BISH B 185	255-2800
Computer Lab, Library	L 120	248-1885
Criterion Newspaper	CC	248-1255
Educational Access Services	H 100	248-1856
Entrepreneurial Business Institute	ACB	248-1778
Extended Campus Program	LHH 107	248-2398
Facilities Services	FS	248-1465
Financial & Administrative Svcs	LHH 252	248-1804

OFFICE	LOCATION	EXTENSION
Financial Aid	LHH 116	248-1396
MSC Foundation	1450 N 12th	248-1295
MA in Ed Program	ACB	248-1786
MBA Program	ACB	248-1778
Graduation Information	LHH 121	248-1555
Honors Program	LHH453	248-1385
Housing and Residence Life	SLC	248-1536
Residence Halls:		
Grand Mesa		248-3000
Mary Rait		248-2151
Monument Hall		255-2595
Pinon Hall		248-1793
Tolman Hall		254-4377
Walnut Ridge Apartments		254-4282
Human Resources	LHH 237	248-1820
Industrial Education Training Cntr	2980 D Rd.	248-1372
Institutional Research & Assessment	LHH 221	248-1884
KMSA/91.3FM	CC	248-1240
Library	L	248-1862
Little Mavs Learning Center	M	248-1318
Toddler Tech	M	248-1086
MAVCard Office	CC	248-1059
Media Services	L 132	248-1734
Mesa@Night	LHH 107	248-1384
Outdoor Program		248-1428
Parking Services	DEVCTR	248-1919
Police/Public Safety, Non-Emergency (GJPD Substation)	DEVCTR	242-6707
President's Office	LHH 301	248-1498
Public Relations, Mrktg/Publications	LHH 205	248-1412
Recreation Center	S 136	248-1592
Regional Outreach	LHH 107	248-1942
Registrar's Office	LHH 121	248-1555
Student Services and Outreach	LHH 107	248-1366
Student Orientation	AO	248-1875
Student Health Center	1060 Orchard, Ste O	256-6345
Testing Center	BISH B117	255-2750
Transcript Request	LHH 121	248-1555
Transfer Services	AO	248-1232
Tuition Classification Officer	AO	248-1458
Tutoring Program	H 110	248-1392
WCCC Student Services	BISH B	255-2670

Building Legend

A ..... Albers Hall
ACB ..... Academic Classroom Bldg
AO ..... Admissions Office
CC ..... Campbell College Center
DEVCTR ..... Development Center
FA ..... Fine Arts
FS ..... Facilities Services
H ..... Houston Hall
IETC ..... Industrial Educ Training Center
L ..... Tomlinson Library
LHH ..... Lowell Heiny Hall
M ..... Medesy Hall
MC ..... Montrose Campus
MPAC ..... Moss Performing Arts Center
S ..... Saunders Field House
SHC ..... Student Health Center
SL ..... Science Lab Building
SLC ..... Student Life Center
BISH ..... Tilman M. Bishop Campus
W ..... Wubben Hall



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