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SUMMER 2018
Priority registration Mon., April 16
SFCC students who are New Mexico residents; earned more than 30 credit hours taken at SFCC and have declared a degree.
Registration begins (NM residents) Tues., April 17
Payment arrangements are due by 4:30 p.m. on Wed., May 16.
After Wed., May 16, payment is due upon registration.
Memorial Day — college closed Mon., May 28
Open registration — open to all Fri., June 1
Deadline to petition to graduate summer 2018 Fri., June 29
Independence Day — college closed Wed., July 4

Eight-Week Session
Classes begin Mon., June 4
Schedule changes (drop/add) Mon.-Tues., June 4-5
Deadline to drop without a grade and obtain a refund Fri., June 15
Deadline to change audit/credit status Fri., June 29
Deadline to withdraw from class(es) Fri., July 6
Final examinations Mon.-Sat., July 23-28
Session ends Sat., July 28
Final grades due to Registrar’s Office by 5 p.m. Mon., July 30

First Four-Week Session
Classes begin Mon., June 4
Schedule changes (drop/add) Mon.-Tues., June 4-5
Deadline to drop without a grade and obtain a refund Wed., June 6
Deadline to change audit/credit status Fri., June 15
Deadline to withdraw from class(es) Wed., June 20
Final examinations Mon.-Fri., June 25-30
Session ends Sat., June 30
Final grades due to Registrar’s Office by 5 p.m. Mon., July 2

Second Four-Week Session
Classes begin Mon., July 2
Schedule changes (drop/add) Mon.-Tues., July 2-3
Independence Day — college closed Wed., July 4
Deadline to drop without a grade and obtain a refund Fri., July 6
Deadline to change from audit/credit status Fri., July 13
Deadline to withdraw from class(es) Wed., July 18
Final examinations Mon.-Sat., July 23-28
Session ends Sat., July 28
Final grades due to Registrar’s Office by 5 p.m. Mon., July 30

Registration and payment are available at www.sfcc.edu 24/7, including weekends and holidays.
Failure to arrange payment by the deadline could result in losing your place in class.
**FALL 2018**

Priority registration ........................................ Mon., April 23

*SFCC students who are New Mexico residents; earned more than 30 credit hours taken at SFCC and have declared a degree*

Registration — NM residents .......................... Tues., April 24

*Payment arrangements are due by 4:30 p.m. on Wed., July 25.*

After July 26, payment is due upon registration.

Open registration — open to all ..................... Fri., Aug. 17

Full-time faculty return ................................. Thurs., Aug. 9

Convocation *(services available at 10 a.m.)* Mon., Aug. 13

Classes begin ........................................... Mon., Aug. 20

Schedule changes (drop/add)

*(16-week courses)* ............................... Mon.–Tues., Aug. 20-21

Deadline to drop first 8-week courses

without grade and obtain refund .......... Fri., Aug. 31

Labor Day — college closed

Sat. classes are in session ................. Mon., Sept. 3

Deadline to drop without grade and

obtain a refund (16-week courses) ........ Fri., Sept. 7

Deadline to petition to graduate fall 2018 .... Fri., Sept. 7

Deadline to change

audit/credit status (16-week courses) .... Fri., Oct. 5

Midterm examinations ......................... Mon.–Sat., Oct. 8-13

Midterm grades due to Registrar’s Office

by 5 p.m. ................................................ Mon., Oct. 15

Deadline to register for

second 8-week courses ..................... Tues., Oct. 16

Faculty and staff in-service

*(no services available — college closed)* Fri., Oct. 19

Deadline to withdraw from class(es)

*(16-week courses)* .......................... Fri., Oct. 26

Deadline to drop second 8-week courses

without a grade and obtain a refund . Fri., Oct. 26

Priority registration — spring 2019 .... Mon., Nov. 12

Registration — spring 2019 ............. Tues., Nov. 13

Thanksgiving Break —

college closed .......................... Thurs.-Sun., Nov. 22-25

Final examinations ................................. Mon.-Sat., Dec. 3-8

Last day faculty advisers are on campus .... Fri., Dec. 7

Semester ends ................................. Sat., Dec. 8

Fall Commencement ............................ Sat., Dec. 8

Final grades due to Registrar’s Office

by 5 p.m. ................................................ Mon., Dec. 10

Winter Break —

college closed ....................... Mon., Dec. 17–Mon., Jan. 1

SFCC opens ............................................ Wed., Jan. 2

*Late registration into courses that have started is not permitted after the first week of the semester. This does not apply to courses that have not yet started — only courses that are already underway.*

*NOTE: The college academic calendar does not reflect transaction deadlines for alternate scheduled course offerings.*

**SPRING 2019**

Priority Registration ...................................... Mon., Nov. 12

*SFCC students who are New Mexico residents; earned more than 30 credit hours taken at SFCC and have declared a degree*

Registration — NM residents .................... Tues., Nov. 13

*Payment arrangements are due by 4:30 p.m. on Tues., January 8.*

After Tues., Jan. 8, payment is due upon registration.

Open registration — open to all ............ Fri., Jan. 18

Full-time faculty return .......................... Thurs., Jan. 10

Spring meeting —

*(services available at 10 a.m.)* .......... Mon., Jan. 14

Dr. Martin Luther King Jr. Day —

college closed ............................... Mon., Jan. 21

Classes begin ...................................... Tues., Jan. 22

Schedule changes (drop/add) ....... Tues.-Wed., Jan. 22-23

Deadline to drop first 8-week course(s)

without grade and obtain refund .......... Fri., Feb. 1

Deadline to petition to graduate spring 2019 .... Fri., Feb. 8

Deadline to drop without grade

and obtain a refund (16-week courses) .... Fri., Feb. 8

Faculty and staff in-service —

*(no services available — college closed)* Fri., March 8

Deadline to change

audit/credit status (16-week courses) .... Fri., March 8

Midterm examinations ..................... Mon.-Sat., March 11-16

Midterm grades due to Registrar’s Office

by 5 p.m. ........................................ Mon., March 18

Spring break (week nine of semester)

*college closed* ............................... Mon.-Sun., March 18-24

Deadline to drop second 8-week course(s)

without grade and obtain refund .......... Fri., March 29

Deadline to withdraw from class(es)

*(16-week courses)* .......................... Fri., March 29

Priority Registration for summer 2019

begins ........................................ Mon., April 15

Registration for summer 2019 begins .... Tues., April 16

Spring holiday — college closed .... Fri.-Sun., April 19-21

Priority Registration for Fall 2019 begins ... Mon., April 22

Registration for fall 2019 begins ......... Tues., April 23

Final examinations .............................. Mon.-Sat., May 6-11

Deadline faculty advisers on campus .... Fri., May 10

Semester ends ........................... Sat., May 18

Commencement ............................. Sat., May 18

Final grades due to Registrar’s office

by 5 p.m. ........................................ Mon., May 20

Memorial Day — college closed ............ Mon., May 28
ABOUT SFCC
Santa Fe Community College provides the gateway to success for individuals and the community through affordable, high-quality educational programs that serve the social, cultural, technological and economic needs of a diverse community. SFCC is a designated Hispanic Serving Institution, “Best for Vets” and “Military Friendly” school. Established in 1983, the college serves more than 15,000 students per year in its credit, noncredit, workforce and community programs.

Situated on 366 acres in New Mexico’s vibrant capital city, a beautiful campus and supportive community provide an ideal learning environment. A signatory of the American College and University Presidents Climate Commitment, the college practices and teaches sustainability, energy efficiency and conservation. Courses and programs train workers for local jobs as well as for global competition.

SFCC students work with advisers to map out a pathway to success. Free tutoring, academic resources, flexible scheduling and online classes position students to achieve their academic goals while balancing family and work obligations. SFCC students receive support from exceptional faculty, dedicated staff, financial and academic advisers, counselors, librarians, career service professionals, and much more.

The college is an associate degree and certificate granting institution. Certificates prepare students for entry-level work and supplement their skills for job advancement opportunities. Associate degree programs prepare students for a career or transfer to a bachelor’s degree program, while saving thousands of dollars by starting at SFCC. Many students simultaneously earn multiple credentials. Dual credit courses allow high school students to receive academic credit from both the high school and the college.

Throughout its history, voters have supported SFCC whether to build state-of-the-art facilities, to house new programs in response to growing job demand or to open the Santa Fe Higher Education Center in Midtown so students can earn bachelor’s and advanced degrees from four-year colleges and universities without leaving Santa Fe.

RIGHT TO INSPECT PUBLIC RECORDS
Any member of the public has the right under New Mexico law to inspect and make copies of the public records of SFCC. To make a request, or for more information, contact the Marketing and Public Relations Department at 505-428-1217 or in the West Wing, Room 210.

STUDENTS WITH DISABILITIES
Students with disabilities are requested to inform Student Accessibility Services if they need to access the information in this publication in an alternative format. For more information, call 505-428-1711.

EQUAL EDUCATIONAL OPPORTUNITY POLICY
SFCC is committed to providing a working and learning environment that provides equal opportunity to all current and prospective employees and students regardless of race, religion, color, national origin, ancestry, gender, sexual orientation, gender identity, age, physical or mental disability or handicap, serious medical condition, veteran’s status, spousal affiliation, and any other basis prohibited by
law. Equal educational opportunity applies to admission, recruitment, extracurricular programs and activities, access to course offerings, counseling, testing, financial assistance and employment.

**ACCREDITATION**

Accreditation is the formal process by which colleges and universities are authorized to award college credit and degrees. SFCC is accredited by the Higher Learning Commission. In 2007, the college was accepted as an Academic Quality Improvement Program institution. AQIP is based on the principles of continuous quality improvement. The college is committed to creating and operating within sustainable systems that best meet the needs of the community it serves.

The Higher Learning Commission can be reached at 312-263-0456 or www.hlcommission.org. More information on SFCC’s AQIP accreditation is available online at www.sfcc.edu/about.

Additionally, several SFCC programs are accredited by national/professional organizations. Those programs and their accrediting bodies are:

- The Nursing Program is accredited by the Accreditation Commission for Education in Nursing, Inc., 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, 404-975-5000.
- Kids Campus is accredited by the National Association for the Education of Young Children, 800-424-2460 or www.naeyc.org.
- The Dental Assisting Program is accredited by the Commission on Dental Accreditation. The commission is a specialized accrediting body recognized by the U.S. Department of Education. Contact the Commission on Dental Accreditation at 312-440-4653 or at 211 East Chicago Ave., Chicago, IL 60611, www.ada.org/100.aspx.
- The Teacher Certification Program is accredited by the New Mexico Public Education Department www.ped.state.nm.us.
- The Paramedic Program has been issued a Letter of Review by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions. This letter is not a CAAHEP accreditation status. It is a status signifying that a program seeking initial accreditation has demonstrated sufficient compliance with the accreditation standards through the Letter of Review Self Study Report and other documentation. The Letter of Review is recognized by the National Registry of Emergency Medical Technicians for eligibility to take the NREMT’s Paramedic credentialing examination(s). The letter is not a guarantee of eventual accreditation. Contact CoAEMSP at 214-703-8445, www.coaemsp.org, or 8301 Lakeview Parkway, Suite 111-312, Rowlett, TX 75088.
- The Medical Assisting Program is accredited through the Medical Assisting Education Review Board, 800-228-2262 or www.maerb.org.
- The Respiratory Care A.A.S. Degree Program number 200549 is accredited by the Commission on Accreditation for Respiratory Care, www.coarc.com, 1248 Harwood Road, Bedford, TX 76021-4244, 817-283-2835.
- The New Mexico EnergySmart Academy is accredited by the Interstate Renewable Energy Council at www.irecusa.org.

**MISSION, VISION AND VALUES**

SFCC is the gateway to individual and community success by providing affordable, high-quality educational programs that serve the social, cultural, technological and economic needs of the diverse Santa Fe community.

**Mission**

Empower students, strengthen community.
Empoderar a los estudiantes, fortalecer a la comunidad.

**Vision**

SFCC is a recognized leader in fulfilling its community’s dreams, one student at a time.

**Values**

We value STUDENT LEARNING and demonstrate our commitment through innovative, high-quality programs, empowerment of students and accountability for systematic learning assessment.

We value EXCELLENCE and demonstrate our commitment through continuous organizational improvement, transparent and effective systems and responsible stewardship of taxpayer dollars.

We value PEOPLE and demonstrate our commitment through building a community of collaboration and trust, celebrating diversity and fostering a vibrant system of shared governance.

We value SOCIAL RESPONSIBILITY and demonstrate our commitment through leadership in sustainability programs and practices, accessible and affordable education and ongoing service to and partnerships with our community.

We value INTEGRITY and demonstrate our commitment by modeling respect, honesty and principled decision-making throughout the organization.
COMMON STUDENT LEARNING OUTCOMES

Student learning is the central mission of SFCC. Learning that enhances students’ ability to interact effectively in diverse environments and use appropriate resources and technologies is integrated throughout courses and degree programs at the college. SFCC measures three outcomes across the general education curriculum. These outcomes, known as common student learning outcomes because of their broad value across the curriculum, consist of:

Communication: Students will be able to respond to a diverse range of situations and texts with appropriate written, oral, visual and other forms of communication using a variety of media.

Critical Thinking: Students will be able to delineate a problem or question, acquire evidence, evaluate evidence, and develop reasonable conclusions.

Information and Digital Literacy: Students will be able to engage in a thoughtful research process including evaluating and communicating information. Students will be able to use digital tools to complete academic and professional tasks.

Personal and Social Responsibility: Students will be able to interact and collaborate with others in ethical and culturally appropriate ways. Students will demonstrate an understanding of the relationship among environmental, socio-cultural, political, and/or economic systems as they interact with and affect the sustainability of the natural and human worlds.

Quantitative Reasoning: Students will be able to represent and communicate quantitative information, analyze and formulate quantitative arguments, and solve quantitative contextual problems.

ACADEMIC FREEDOM AND RESPONSIBILITY

SFCC is dedicated to promoting responsible academic freedom for faculty and students, including the right of faculty members to evaluate student academic performance and to control classroom presentations and discussion of subject matter within the expressed and recognized goals, objectives and standards of the college and the course, as announced to students through the catalog or other public literature. Conjoined with this dedication is an ongoing commitment by the college to enlist faculty who subscribe to high standards of professional conduct, who are knowledgeable in their fields, who are fair and constructive in presenting ideas and issues, and who encourage students to respect differing points of view, to discriminate between fact and fiction and to think reflectively rather than reactively.

While academic freedom implies the right and responsibility to present as many sides of controversial subjects as is reasonable and proper for the process of teaching and learning, it also implies the responsibility of all representatives of the college to respect the dignity of others, to acknowledge their right to express differing opinions when and where appropriate and to foster and defend intellectual honesty and freedom of inquiry.

INSTITUTIONAL EFFECTIVENESS

SFCC uses many forms of data to analyze and improve its effectiveness. Evaluation and assessment are key components of accountability to taxpayers, funders, students and college employees. As such, it is the responsibility of all students, faculty and staff to comply with reasonable data collection efforts including, but not limited to, campus climate and student engagement surveys, faculty, course and program evaluations, assessment activities and examinations, as well as student government requests for feedback. These activities are not meant to detract from instructional time but are designed to assist the college in developing and enhancing services, programs and instruction that will help students succeed. (SFCC Policy 3-14 Academic Freedom)

THE SFCC DISTRICT

The boundaries of the Santa Fe Community College District are identical to those of the Santa Fe Public School District map. The outlying communities of Cerrillos, Galisteo, Glorieta, La Cienega, Lamy, Madrid and Tesuque are included in the college's service area.

CAMPUS CRIME STATISTICS

A campus crime statistics report is prepared annually and includes security incidents reported during the three preceding years. The report contains information about criminal activities involving murder, sex offenses (forcible and non-forcible), robbery, aggravated assault, burglary and motor vehicle theft, as well as information on arrests resulting from liquor and drug abuse violations and weapons possession on campus. The report is available at www.sfcc.edu.

DRUG-FREE WORKPLACE AND CAMPUS

SFCC is committed to providing an environment that supports educational pursuits and promotes the health and welfare of all persons on campus. To this end, the college has established and enforces Policy 4-17 Drug-Free Workplace and Campus, based on federal and state laws, that prohibits the manufacture, use, purchase or sale
of drugs or alcohol on all college property and at off-campus locations where college-sponsored events are taking place, unless the use of alcohol is specifically authorized by the President. All students and employees are required to abide by this policy as a condition of enrollment or employment. For more information contact the Office of Human Resources at 505-428-1228.

SEXUAL HARASSMENT POLICY
No employee or student shall be subject to sexual harassment (Policy 4-10 Sexual Harassment). This applies to acts of sexual harassment of one sex against a member of the opposite or same sex at all levels of the college community. The college is committed to creating and maintaining a community in which students and employees may share, learn and work together in an atmosphere that enhances productivity and draws on the diversity of its members in an atmosphere free from all forms of disrespectful conduct, harassment, exploitation or intimidation, including conduct of a sexual nature. Allegations of sexual harassment shall be investigated promptly, thoroughly, impartially and confidentially. For more information, contact the Office of Human Resources at 505-428-1228.

ADMISSION
OPEN ADMISSION STATEMENT
SFCC maintains an open-admission policy to maximize community members’ opportunities to participate in the college’s programs, services and activities. Anyone may be enrolled in the college's credit programs, though some restrictions based on age may apply to specific courses or certain facilities that require designated levels of physical maturity. Also, some courses carry prerequisites that must be completed successfully before a student may enroll in a course. The College does not discriminate on the basis of race, color, religion or creed, national origin or ancestry, gender, gender identity, sexual orientation, age, physical or mental disability, serious medical condition, spousal affiliation, veteran status, pregnancy, genetic information, citizenship, and any other basis prohibited by law.

ENROLLMENT STATUS
A student's enrollment status is determined by their primary objective in taking courses. Enrollment in certain courses and programs is limited by available physical facilities, clinical spaces, student/faculty ratio, an applicant's academic preparation (completion of prerequisites), age or other factors. Certain programs have competitive entrance requirements and selective admission criteria.

Nondegree status
Nondegree status is granted to applicants who wish to take courses for their own purposes without intending to seek a degree or certificate. SFCC students who enter the college in nondegree status may subsequently declare degree status and apply appropriate credits earned toward the selected degree or certificate program. Note that nondegree status does not satisfy eligibility requirements for scholarships, financial aid, veterans’ educational benefits or other assistance programs.

Degree Status
Degree status is granted to students who have declared an intention to pursue a particular degree or certificate by following a prescribed program and sequence of study. In addition, students who wish to transfer credits from another college or colleges must request that official transcripts be sent directly to the SFCC Registrar's Office. SFCC accepts college transcripts directly from students only in sealed envelopes marked official transcript. The Registrar's Office determines which courses qualify for transfer to SFCC. Deans and/or faculty chairs evaluate transcripts by appointment and determine which courses will apply to SFCC degrees.

Declaring a Major
Students may declare a major when completing the admissions application through the Welcome and Advising Center. If a change of major or change to degree status is requested, a student must fill out a Declaration of Major form in the Welcome and Advising Center or request the form online.

The catalog that is in effect on the date that a student declares their major determines which degree or certificate requirements apply. The student must either complete those requirements within five years of the date of declaration, or elect to meet the requirements of any subsequent catalog published during the five-year period. Such an election must be made when the student files a petition to graduate. If more than five years have passed since the date of declaration, the student must re-declare a major under the current catalog. If the college discontinues a degree or certificate program in which students have declared majors, every attempt will be made to redirect those students' credits toward alternative degrees.
SPECIAL ADMISSION REQUIREMENTS

High School Students Seeking Dual Credit

The Dual Credit Program provides advanced learning opportunities to motivated high school students who are ready for college-level work. Courses are offered on the SFCC campus, onsite at the high schools or through distance learning. Students who would like to enroll for dual credit must meet with their high school counselor to determine appropriate courses. Students intending to register for courses with prerequisites must take SFCC’s placement test(s) or submit other approved test results to establish that prerequisites have been met. Dual credit enrollment requires parent/guardian approval as well as that of the high school representative. Dual credit students must abide by SFCC’s course requirements and Policy 2-1 Student Code of Conduct. Tuition for dual credit courses is waived by the college and textbook and course-specific material costs are paid for by the high school and/or school district. Students are responsible for course-specific fees. For more information, contact your high school counselor or the Dual Credit Office at 505-428-1002 or 505-428-1604 or visit www.sfcc.edu/offices/dual-credit.

International Student Applicants

SFCC is authorized under federal law to enroll non-immigrant students. Legal residents are not classified as international students. Refer to the open admission statement on Page 4. An international student with a non-immigrant visa seeking an F-1 visa must apply for admission on a full-time, degree-seeking basis and must provide the following:

1. International Application
   To avoid delays, complete all sections of the application form. If you plan to bring a spouse and/or children with you, spelling of names and birth date information must be the same as shown in their passports. This application is available at www.sfcc.edu/registration/international_students (paper application required).

2. Official School Records
   First-time college students must provide an official high school transcript. Applicants who have attended a university must provide foreign and U.S. academic records/transcripts sent directly by the schools. (Documents submitted in any other form will not be considered “official” and may delay your application processing.) Acceptable official translations include those certified by your country’s Ministry of Education, the educational section of a U.S. Embassy or a professional translator.

3. Official TOEFL Scores (ETS Code: 4816)
   International applicants must submit scores from the Testing of English as a Foreign Language examination. These scores are to be sent directly from the testing services to the Welcome and Advising Center. The minimum acceptable TOEFL iBT total score is 66. This test is not required of students from countries where English is the native language. However, you will be required to submit ACT or SAT scores demonstrating college readiness as indicated: 19 (ACT) on both English and Reading sections, or 450 (SAT) on the Critical Reading section. You will need to have official score reports sent directly from the testing agency to the International Student Adviser. Transfer students who have successful completion of two college-level English Composition courses with a C (2.0) or higher grade at a U.S. school and ESL center students who have successfully completed a test of English as a Foreign Language are exempt from having to provide a TOEFL score.

4. Proof of Financial Ability
   A recent (six months or less) financial statement regarding the resources provided for the student while the student is in the United States must be submitted. Each student must be able to meet all financial obligations while attending SFCC. (There is no housing available on campus.) You are required to present a statement from your bank on official bank letterhead as proof of available funds in the amount of at least $24,000 in U.S. dollars. This is an estimated amount based on expected tuition and living expenses for a 24-month period. (If an extension is requested, documentation of required funds will need to be resubmitted). Listed costs will increase with each dependent added to your I-20. (Tuition and fee charges for international students on F-1 visas are the same as for nonresident students.) Applicants who are sponsored by a government agency or private company must submit verifying documentation. Download the financial form at www.sfcc.edu/registration/international_students.

5. A Letter of Intent
   A Letter of Intent written in your handwriting is required in which you state your intended program of study, educational goal and how the program selected will fulfill that goal.

6. Transfer Students
   If you are transferring from a U.S. university and wish to have credits transferred, an official transcript must be sent directly from the university. A letter from your designated student adviser indicating permission to transfer, a copy of your I-20 issued from the attending university and a transfer release on SEVIS must also be provided. The transfer form is available at www.sfcc.edu.
7. SEVIS Fee
As of September 1, 2004, all international students and exchange visitors entering the United States are subject to a congressionally mandated fee with Form 1-20. All applicants must pay the SEVIS fee before going to the U.S. embassy or consulate for their visa review. You can pay the fee and complete form I-901 at www.FMJfee.com, or through the mail.

8. Student Health Insurance
All international students attending SFCC are required to have health insurance. Hospital care and all medical care in general are expensive; without insurance you will be held responsible for all costs. Proof of insurance will need to be provided at the time of your arrival.

9. International Transfer Students
Applicants under disciplinary suspension from another institution will not be considered for admission during the period of suspension. Applicants on academic probation will be admitted on probationary status.

Students who conceal prior attendance at other institutions or who falsify information will be subject to immediate suspension.

NOTE: All forms and required documents must be sent directly to: SFCC, International Adviser, 6401 Richards Ave., Santa Fe, NM 87508.

In order to provide sufficient time to process the paperwork and issue an I-20 form, submit all of the above documents by the following deadlines:

2018-2019 Academic Year
<table>
<thead>
<tr>
<th>Semester</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2018</td>
<td>May 28, 2018</td>
</tr>
<tr>
<td>Spring 2019</td>
<td>Oct. 29, 2018</td>
</tr>
<tr>
<td>Summer 2019</td>
<td>April 8, 2019</td>
</tr>
</tbody>
</table>

After receiving the I-20 form, the student must obtain a student visa from the appropriate authority.

All international students with F-1 visas are required to be full-time, degree-seeking students. No financial aid monies and very limited scholarships are available for international students at this time, and there is no housing available through the college.

Final admission status is granted when the student has met all admission criteria.

International visitors with visas other than F-1 students who wish to enroll are restricted from enrolling in a full course of study. However, students may enroll in up to four credit hours of casual, short-term courses that are not the primary purpose of their presence in the U.S.

READMISSION TO SFCC
A new admission information form is required if the student has been absent from SFCC for six semesters or more, or if the student has attended any other college or university while absent from SFCC. An applicant who has attended other colleges will be processed as a transfer student.

ADMISSION APPEALS
The college’s admission policies may not be appealed. They must be administered without exception. The only basis for an appeal of the college’s admission decision is if the admission policy was not followed or was not properly administered in which case this is the process:

1. The applicant submits a written appeal to the Welcome and Advising Center Manager, who refers the matter to an appeals committee.
2. If the appeals committee denies the appeal, the applicant may then appeal directly to the senior officer or designee, who makes the final decision. (The senior officer or designee may choose to hold an administrative hearing on the matter or make the decision without such a hearing.)

TRANSFER STUDENTS
Students who transfer from other colleges or universities and wish to complete a degree or certificate at SFCC must request that each institution they attended send official transcripts to the Registrar's Office. Transfer students are treated as first-time students for satisfactory academic progress. Transcript request forms are available in the Registrar's Office and the Welcome and Advising Center or at www.sfcc.edu/get-grades/transcripts.

Applicants under disciplinary suspension from another institution will not be considered for admission during the period of suspension. Applicants on academic probation will be admitted on probationary status.

Students who conceal prior attendance at other institutions or who falsify information will be subject to immediate suspension.
ENROLLMENT IN COURSES
A student enrolling at SFCC should be aware of the college’s policies, procedures and options regarding course enrollment.

ACADEMIC DISHONESTY
Academic dishonesty, including cheating or plagiarism, carries consequences ranging from failure in a particular course to suspension from the college.

ATTENDANCE
Students are expected to attend all sessions of their courses. Each faculty member will establish specific attendance requirements (including punctuality) for each course and will inform students of these requirements at the beginning of the semester, and in the course syllabus. Faculty are not expected to drop students for non-attendance, nor should students expect faculty to do so. Any student who is consistently absent or tardy jeopardizes good scholastic standing in the class.

CHANGES IN ENROLLMENT
Students who wish to change their course enrollment status may do so during the allowed time frame, (see academic calendar, Page iv) from their online account or by obtaining the appropriate form from the Welcome and Advising Center. The following changes in enrollment are permissible:

Add
Students may add full-semester courses through the end of the add/drop period only. Late-starting courses may be added up to the date of the first class meeting.

Audit to Credit/Credit to Audit
For a full-semester course, a student may change enrollment from audit to credit or from credit to audit until the end of the seventh week of instruction during the spring or fall semester and through the end of the third week of instruction in a summer session. Changes from audit-to-credit require the faculty member’s signature. For deadlines applied to courses that are less than a full semester in length, see the alternative calendar grid in the course schedule or contact the Welcome and Advising Center. A course taken for audit may not be used to meet a prerequisite or corequisite.

Drop or Withdrawal
Students who drop a full-semester course during the first three weeks of the fall or spring semester or the first two weeks of the summer session will receive a refund and no grade will appear on the official transcript. A grade of “W” will appear on the student’s record if the student officially withholds after the third week of the fall or spring semester or after the second week of the summer session. The deadline for withdrawing is at approximately 60 percent completion of the course term. There is no refund associated with a withdrawal. Drop and withdrawal deadlines for short courses vary; contact the Welcome and Advising Center for more information.

Students are responsible for initiating an official drop or withdrawal from a course, from all courses or from the college. There are two ways to officially drop or withdraw from a class:

- Online through your student account; or
- In writing to the Welcome and Advising Center.

Verbal requests, whether made in person or over the phone, cannot be processed. Students should not assume that they are automatically dropped or withdrawn from a class for non-attendance or non-payment. A student who has not officially dropped or withdrawn from a class will receive a final grade in the class and will not be eligible for a refund. Contact the Welcome and Advising Center at 505-428-1270 for more information.
CREDIT/AUDIT STATUS
Students may enroll in any given course for credit or for audit only if they have met the prerequisite(s) for the course. Students who audit courses are not required to complete assignments; consequently, they receive neither grades nor credit. Courses that are audited cannot be used to fulfill prerequisites or corequisites.

CREDIT HOUR DEFINITION
Credit is awarded in terms of semester hours of credit. Each semester hour of credit in a lecture class requires a minimum of 12.5 hours or 750 minutes of instruction per semester; each semester hour of credit in a laboratory class requires a minimum of 25 hours or 1,500 minutes of instruction per semester.

CLASSIFICATION OF STUDENTS
The following are standards for the academic classification of students:

1. Freshman: A student who has completed fewer than 33 credits
2. Sophomore: A student who has completed 33 or more credits
3. Part time: A student carrying fewer than 12 credits a semester
4. Full time: A student carrying 12 or more credits a semester

COURSE LOAD
Full-time enrollment in a regular fall or spring semester (16-weeks in length) is 12 to 18 credit hours; three-quarter enrollment is 9 to 11.99 credit hours; half-time is 6 to 8.99 credit hours; and less than half-time is 0-5.99 credit hours for fall and spring semesters. For financial aid purposes, this applies to summer as well, even though in a summer session the usual load is 6 to 9 credit hours because of the compressed time frame. An overload is more than 18 credit hours in a regular semester or more than nine hours in a summer session. Students wishing to take an overload must obtain permission from an adviser or counselor. To be eligible to take an overload, students must have a cumulative GPA of at least 2.5 with no grade lower than a C in any course in the previous semester.

COURSE SUBSTITUTIONS
In certain circumstances, courses required by degree or certificate plans may be substituted with other courses that satisfy similar learning outcomes. A student must gain permission from the appropriate department chair to substitute a course.

REPEATING COURSES
In most cases, students may repeat any course without special permission. Both course enrollments and both grades of the repeated class will appear on the transcript. Only the last grade earned will be applied to degree requirements and used to calculate the cumulative GPA, however, unless the course is designated “repeatable for degree or certificate credit.” When there is a difference of credit hours, the value of a repeated course will be used for the purpose of calculating the cumulative GPA and in determining the satisfaction of degree requirements. If a student in their final semester fails a course in which a passing grade was previously earned, the grade of F will be waived in favor of the higher grade earned.

NOTE: Certain forms of financial aid will not provide assistance to students who repeat courses they previously completed successfully. Compliance with such regulations is the student’s responsibility.

BASIC SKILLS AND DEVELOPMENTAL-LEVEL COURSES
SFCC offers developmental-level courses in which students build foundational skills in reading, writing and mathematics. These courses are designated with a department name and a number below 111 — for example, Math 109, English 108 or Reading 101L. In addition to developmental courses in core academic skills, SFCC offers developmental-level courses in other fields across the curriculum to support students in job preparation, career planning and personal growth.

Developmental coursework carries credit for financial aid purposes and may be required by SFCC to ensure success at the college level. However, credits earned in classes numbered below 111 do not fulfill specific SFCC degree or certificate requirements. Students should be aware that state and federal financial aid programs limit the amount of funding that can be used for developmental-level coursework.

FIRST-YEAR STUDENT SUCCESS COURSE REQUIREMENT
All degree-seeking students with fewer than 15 credits of course work must take either FYSS 111 or FYSS 116 (based on placement test reading scores) during their first semester at SFCC.
PREREQUISITES
Students may fulfill course prerequisites by:
• Completing the required course at SFCC with a grade of C or better
• Demonstrating proficiency on a placement test administered through the Testing Center
• Submitting qualifying ACT, SAT, AP or CLEP scores
• Submitting transcripts from another institution that demonstrate completion of an equivalent course with a grade of C or better.

A math or science course taken more than three years ago cannot fulfill a prerequisite for a subsequent math or science course unless a student can demonstrate proficiency. Because course material differs from college to college, placement testing is the best way to determine accurate course placement. The college reserves the right to disenroll or transfer a student who does not meet the necessary course prerequisites. Contact the Testing Center at 505-428-1625 for more information on placement testing or course prerequisites.

WAIVERS OF PREREQUISITES
A student may be permitted to waive a prerequisite based on demonstrated mastery of skills. A student must petition the appropriate department chair or designee for permission to waive a prerequisite.

SCIENCE LAB COREQUISITE WAIVER/WITHDRAWAL
Students who wish to register for science classes must register for the corequisite labs. The only exception is when students have previously earned a C or higher in either the lab or lecture portion. In that case, students do not have to register for the portion of the course that they have completed successfully. The lab and lecture portions of the class will be graded as two separate classes. Students who desire to withdraw from a science course or change to audit must withdraw from or change to audit in both the lab and the lecture sections. In exceptional cases, students may withdraw from the lab or the lecture section only, with the permission of the science department chair and in consultation with the faculty. Students must have completed a substantial percentage of the lab and lecture requirements before this option will be considered.

GRADE OPTIONS
Two types of grades are issued at SFCC: midterm grades and final grades. Midterm grades are issued after the eighth week of the semester for full-semester courses. They are intended to give students an indication of their progress in the course(s) they are taking, but are not part of a student's permanent record and do not appear on the transcript. Final grades are based on the overall quality of work. They appear on a student's transcript and are calculated toward the grade point average (GPA). Letter grades are defined as follows:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Description</th>
<th>Grade Points per Unit of Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>A-</td>
<td></td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td></td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>B-</td>
<td>Good</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>Adequate</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Inadequate*</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
<td></td>
</tr>
</tbody>
</table>

*D represents insufficient mastery to satisfy core degree requirements or prerequisites.

Other Grades Description
AU Audit: Students do not earn credit for audited courses. These courses are not computed in the GPA but are recorded as AU on students' permanent records. Audit courses may not be used to meet prerequisites or corequisites.

I Incomplete: The grade of “I” is given only when extenuating circumstances beyond the student's control have prevented completion of the coursework within the official dates of the semester.

A grade of Incomplete “I” may only be entered when the faculty member and the student agree on what remaining work is to be finished and the deadline by which the work is to be submitted to the faculty member for review and a final grade. A change of grade form will be submitted by the faculty member to the Registrar's Office to enter the completed grade.

To be eligible for consideration of Incomplete “I” as a grade, a student must have completed at over 60 percent of the required coursework. The faculty member and the student will both sign the Support Document for Entry of Incomplete grade, attaching supporting documentation of the extenuating circumstance whenever possible.

If the required work is not completed by the agreed-upon deadline, which cannot exceed one year (12-months) from the published end of the semester in which the grade was assigned, the
Incomplete grade “I” automatically is changed to an F grade.

An “I” grade may affect financial aid eligibility if a student is receiving financial aid.

**IP** In Progress: The course has not ended by the time grades are submitted.

**W** Withdrawal: A grade of W is given to students who officially withdraw from a course after the third week of a regular semester or the second week of a summer session, but before 60 percent of the course is complete.

**P/F** Pass/Fail (selected courses only): P = grade of C or better. Students earn no grade points. Credit hours are counted toward graduation. Courses approved for this option are labeled as such in course descriptions.

**PR** Progress (selected developmental courses only): This grade indicates that a student has made progress but has not met the achievement requirements of the course and is not able to advance to the next level course. No honor points are earned and the credit is not computed in the GPA, nor is it counted toward graduation. Students may earn a progress grade twice, after which time they must earn a letter grade. Courses approved for this option are labeled as such in course descriptions.

**NR** Not Reported: This grade is given when a faculty member has not submitted grades.

NOTE: Grades earned from HPER courses were not calculated into a student's GPA between Spring 2013 and Fall 2014.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A'</td>
<td>A</td>
</tr>
<tr>
<td>A-'</td>
<td>B'</td>
</tr>
<tr>
<td>B'</td>
<td>C</td>
</tr>
<tr>
<td>B'-</td>
<td>C'</td>
</tr>
<tr>
<td>C'</td>
<td>D</td>
</tr>
<tr>
<td>C'-</td>
<td>F</td>
</tr>
<tr>
<td>D'</td>
<td>F'</td>
</tr>
</tbody>
</table>

**CALCULATING THE GRADE POINT AVERAGE**

The GPA is calculated by dividing the total grade points by the total GPA hours in the following manner:

1. Grade points are calculated by multiplying the number of credit hours for an individual course by the point value assigned to the grade. For example, a three-credit-hour course with a grade of C, (point value of 2) equals 6 grade points. (See above for points awarded for each letter grade.)

2. To determine the GPA, the total number of grade points earned in all courses is divided by the total number of credit hours attempted.

**FACULTY-INITIATED WITHDRAWAL**

Students are responsible for meeting deadlines for dropping and withdrawing from classes without penalty. A faculty member has the discretion to withdraw a student if the student stops attending or never attended during the period before the withdrawal deadline. The instructor will attempt to contact the student prior to initiating the withdrawal. Students may also request to be withdrawn at the Welcome and Advising Center due to special circumstances that are outside their control within the current semester.

**DEAN’S LIST**

Every fall and spring semester, students who have taken a minimum of 9-credit hours of course work and who earn a current term GPA of 3.5 or above are placed on the Dean’s List. Pass/Fail courses are not considered in the GPA or the 9 credits as there are no point values attached. Students who attain this academic distinction are notified by a letter from the dean of the school in which they have declared their major, or, if they are undeclared, from the Dean of the School of Liberal Arts.

**ACADEMIC PROBATION AND SUSPENSION**

Students will be placed on academic probation at the end of any semester in which their cumulative GPA (based on at least 16-semester hours of all course work attempted) is less than 2.0. Probationary status serves as a red flag that a student is not earning sufficiently high grades to graduate. Students on probation are encouraged to meet with an adviser or counselor to discuss academic planning and support needs.

Students on academic probation at SFCC may continue to enroll in classes, provided they maintain a semester GPA of 2.0 or higher. Otherwise, they are subject to academic suspension (see below). No student on probation will be allowed to take more than 12-credit hours during a regular semester or six credit hours during a summer session, except by permission of the Vice President for Academic and Student Affairs. The student remains on probation until the cumulative GPA is raised to at least 2.0.

Students serving a probationary semester are subject to academic suspension at the close of that semester if, based on at least 36-hours of all course work attempted, their cumulative GPA is less than 2.0. Academic suspension means that a student may not enroll in courses at SFCC for a specified time. The duration of an initial suspension is one semester; the duration of any subsequent suspension is two regular semesters. After the specified time has elapsed, the student will be placed on probation and will be subject to the requirements listed under probation and/or suspension.
**Academic Violations**

Students have a duty to be honest in their academic endeavors and to maintain academic integrity. If there is a violation related to an academic issue, the faculty member teaching the course may give the student a verbal warning. The faculty member will meet with the student, explain the nature of the unsatisfactory performance or behavioral issue and indicate future expectations of the student. The student will have the opportunity in the meeting to discuss the issues raised with the faculty member and clarify expectations.

**STUDENT APPEALS**

**Academic Appeals**

To make an academic appeal, a student should take the following steps:

1. The student must first present the appeal in writing to the faculty member involved. The faculty member either approves or denies the appeal.
2. If the written appeal is not resolved at this level, the student may then present the appeal to the appropriate dean.
3. If the appeal is still not resolved, the student may then present the appeal in writing to the Vice President for Academic and Student Affairs. The decision of the Vice President is final.

**Grade Appeals**

Only a student or faculty member may initiate a request for a change of grade, and such a change must be initiated within the first academic year after the grade is given. To make a grade appeal, the student should take the following steps:

1. The student must appeal to the faculty member for a grade change.
2. If the matter is not resolved, the student may then appeal to the appropriate department chair.
3. If the matter is not resolved by the department chair, the student may then appeal to the appropriate dean, who will mediate the appeal.
4. If the appeal is not resolved by the dean the student may then appeal in writing to the Vice President for Academic and Student Affairs who will review the appeal and make a recommendation. The decision of the Vice President is final.

**Academic Renewal**

Students may request, through the Office for Academic and Student Affairs or through an adviser or counselor, to have up to two semesters of failing grades removed from consideration in their GPA. The grades remain on the transcript but are noted to indicate that academic renewal has been applied. This request may be made one time only. Failing grades earned at SFCC from a student’s GPA calculation may be removed when the student meets the following conditions:

- A period of one year must have lapsed since the grades in question were earned;
- A minimum of 12 credits must have been successfully completed with a 2.0 GPA prior to the petition for renewal;
- The student must be in good academic and financial standing with the institution; and
- Academic renewal will only be granted one time during the academic life of the student at SFCC.

**Appeal of Academic Suspension**

The appeal process for a student who has been suspended by SFCC or by another college is as follows:

1. The student may appeal in writing to the Vice President for Academic and Student Affairs, who can approve or deny the appeal based upon various factors, including if the student has completed the required suspension time (one semester for the first offense, two semesters for the second offense). The student may then be referred to an academic advisor or counselor to discuss an academic probation and re-enrollment plan.
2. If the appeal for re-enrollment is denied, the student may then appeal to the Student Academic Appeals Committee as follows:
   a. The student must present a written appeal providing a complete statement of the student's case to the Registrar for transmittal to the Student Academic Appeals Committee.
   b. The student may either present the case to the committee in person or permit the appeal to be heard on the basis of written documentation only.
   c. Hearings dealing with suspension from SFCC will be scheduled prior to registration and will occur no later than the second day of instruction.

The decision of the Student Academic Appeals Committee is final. If the committee decides to readmit a suspended student, the admission status will be probationary.

**Non-Academic Violations**

Students are expected to behave responsibly and respectfully while on campus and when interacting with other students and college staff and faculty members.

If a student violates the Code of Conduct or any other college policy that applies to students and the issue is not related to an academic issue, the faculty or staff member with the concern regarding the violation should raise it with the Vice President for Academic and Student Affairs.
Non-Academic Appeals
Student appeals of a nonacademic nature must be brought before the Vice President for Academic and Student Affairs for resolution, provided that no other procedure exists.

VERTICAL/HORIZONTAL TRANSFER
Faculty members who teach skills-based courses and who determine that a student is not at an appropriate course level may recommend that the student transfer to a higher-level or lower-level course. The vertical transfer is done only upon the recommendation of the faculty member. If the student is moving down a level, the transfer must take place within the first four weeks of a regular semester or the first two weeks of a summer session or short course. If the student is moving up a level, the transfer must take place within the first two weeks of a regular semester or the first week of a summer session or short course. A horizontal transfer to a course at an equivalent level must take place within the first four weeks of a regular semester or the first two weeks of a summer session or short course.

FINANCIAL AID

FINANCIAL AID PHILOSOPHY
The Financial Aid Office is responsible for the administration of federal, state, institutional, SFCC Foundation and other funds. While a student and their family have primary responsibility for the costs of education, most students can qualify for some type of assistance. Types of financial aid include need-based and non-need-based grants, scholarships, loans and part-time employment.

Students applying for federal financial aid must complete a Free Application for Federal Student Aid (FAFSA) available at www.fafsa.ed.gov. Most types of state assistance require a completed FAFSA. Computers are available at the Financial Aid Office to file FAFSA online and assistance is available from the financial aid staff. To optimize opportunities for need-based financial aid at SFCC, file your FAFSA by May 1 each year. SFCC's school code is 016065. Use this code when filing the FAFSA. Additional information is available at www.sfcc.edu/financial_aid. The following is a summary of financial aid policies and programs.

DETERMINATION OF FINANCIAL NEED
Each source of financial aid has eligibility requirements. Many sources require a student to demonstrate financial need. The first step is to file a FAFSA. Using a federal formula, the U.S. Department of Education will compute the amount the student (and their family) can reasonably be expected to contribute to the student's college expenses. This figure is referred to as the Expected Family Contribution (EFC).

The Financial Aid Office calculates a student's financial need by subtracting the Expected Family Contribution from the Cost of Attendance, which includes allowances for tuition, fees, books, supplies, room and board, transportation and personal expenses. The difference is the student's financial need:

\[
\text{Financial Need} = \text{Cost of Attendance} - \text{Expected Family Contribution (EFC)}
\]

GENERAL ELIGIBILITY FOR FINANCIAL AID
Most sources of financial aid require a student to meet the following eligibility criteria:

- Must be enrolled as a regular student in a degree program or eligible certificate program taking college credit courses;
- Must be a U.S. citizen or eligible non-citizen (for state programs, must meet the state residency requirements);
- Must have a high school diploma or a high school equivalency; beginning with the fall 2018 semester, all new students or students who have not attended for more than one academic year, will need to have an official high school transcript on file in the Registrar's Office. Students enrolled in the Alternative Licensure Certificate Programs will be exempt.
- Cannot be enrolled in elementary or secondary school;
- Must be making satisfactory academic progress (see Page 14);
- Must not be in default of a federal student loan;
- Must not owe money on a federal student aid grant;
- Must be registered with the Selective Service, if required;
- Must not have exceeded annual or aggregate loan limits on federal student loans, as defined by the U.S. Department of Education;
- Must not have had federal benefits suspended or terminated as a result of a drug conviction;
- Must meet financial need, if required, and other program-specific eligibility requirements;
- Must meet minimum enrollment status requirements (i.e., full-time, half-time, or less than half-time);
- Must not receive federal aid at more than one institution during the same term.

NOTE: Additional requirements may apply to particular sources of financial aid.
VERIFICATION
When the FAFSA is filed, the U.S. Department of Education performs edits and may select a FAFSA for further review. The student will be notified of the additional documents that must be submitted to the Financial Aid Office to verify data reported on the financial aid application. A student’s financial aid file will not be complete and financial aid will not be awarded until the verification is concluded. Corrections to data will be filed on the student’s behalf by the school, based on the documentation submitted by the student. If a student needs to make a correction to the FAFSA information, they should contact the financial aid staff for assistance.

FINANCIAL AID AWARDS
Financial aid recipients receive a letter of award notifying them of their eligibility for aid. All financial aid awards are based on information provided by the student, availability of funds and eligibility requirements for the sources of aid. Any award may be revised based on changes in enrollment, changes resulting from verification, cost of attendance, family contribution or failure to meet satisfactory academic progress. Withdrawals or changes in enrollment may affect a current award and any future awards.

GRANTS
- Federal Pell Grant recipients are undergraduate students without bachelor’s degrees. Pell awards currently range between $800 and $5,645 per academic year, depending on expected family contribution and enrollment status.
- Federal Supplemental Educational Opportunity Grants recipients must be Pell eligible and demonstrate exceptional financial need.
- New Mexico Student Incentive Grant recipients must demonstrate financial need, be New Mexico residents and be enrolled for at least six credit hours.
- New Mexico College Affordability Grant recipients must demonstrate financial need and not qualify for other state grants or scholarships. A student cannot receive an NMSIG, SEOG and NMCAG simultaneously.

SCHOLARSHIPS
SFCC awards numerous scholarships including:
- Road to Success scholarships for first-term students who may qualify for the New Mexico Legislative Lottery Scholarship for the following term. A student must be a recent graduate of a New Mexico high school or high school equivalency program, file a FAFSA, complete an SFCC scholarship application, declare an eligible major and enroll at SFCC for at least 12-credit hours. The scholarship assists with tuition.
- The New Mexico Legislative Lottery Scholarship is for students who have completed a minimum of 12-college credit hours with a minimum cumulative grade point average of 2.5 in the previous term. There is no requirement to file a FAFSA, although we encourage all students to do so. The student must meet the requirements of New Mexico residency. The scholarship assists with tuition for up to four semesters at SFCC if the student maintains eligibility, including a minimum cumulative grade point average of 2.5.

NOTE: Future lottery funding is uncertain. The Lottery Scholarship may not cover 100 percent of tuition in the year 2018-2019.
- Institutional and SFCC Foundation scholarships are competitively awarded with preference given to those students who meet or exceed the minimum qualifications and who submit completed applications within required time frames. Students must be residents of New Mexico to be considered for an SFCC scholarship. Some limited SFCC Foundation scholarships are available for immigrant students. A FAFSA is required for some scholarships. An SFCC scholarship application must be completed each academic year.

Specific scholarship descriptions and eligibility criteria are provided in the Student Handbook and at www.sfcc.edu/financial_aid/scholarships. All students are encouraged to apply.

STUDENT EMPLOYMENT
Whether a student has received a work-study award as part of a financial aid package or is hoping to earn a little cash while going to school, the Student Employment Office can help. Interested students should meet with the Student Employment Director and register for the program, at which point they may be referred to various available positions on campus. It is the student’s responsibility to contact hiring supervisors and arrange for interviews. Working on campus, students can work a maximum of 20-hours a week.

To be eligible for student employment on campus, you must meet the following criteria:
- Apply for financial aid (complete a FAFSA)
- Be registered for at least 6 credit hours unless during summer semester during which there are exceptions
- Be pursuing a degree or qualified certificate offered by SFCC
- Be in good academic and financial aid standing
- Possess a valid Social Security number
- Be at least 16 years of age
- Have graduated high school or earned a high school equivalency.

Eligibility requirements may be different for international students. Check with an international student adviser and/or the Student Employment Director.

**FEDERAL AND STATE STUDENT LOANS**
Loan applications and eligibility information on Direct Subsidized and Direct Unsubsidized loans, PLUS loans and Nursing Student Loans for Service are available in the Financial Aid Office. Students must complete a financial aid form (FAFSA), electronic loan application, undergraduate Entrance Loan Counseling and a Master Promissory Note. The student must enroll in at least six degree-related credit hours. For federal student loans, the annual loan maximum is based on grade level and dependency status. A first-year student may qualify for up to $3,500 and a second-year student for up to $4,500 in subsidized loans. A dependent student may qualify for up to $2,000 in unsubsidized loans; an independent student may qualify for up to $6,000 in unsubsidized loans. More information is available from the Financial Aid Office or at [www.sfcc.edu/financial_aid/loans](http://www.sfcc.edu/financial_aid/loans).

**GENERAL FINANCIAL AID POLICIES**
It is the student's responsibility to become familiar with both financial aid and SFCC regulations and policies concerning withdrawals, incomplete grades, repeats, audits, degree plan requirements and any other policies that may affect financial aid eligibility.

**CHANGES IN ENROLLMENT STATUS**
Initial awards are based on full-time status. If a student drops or withdraws from any class prior to the close of the drop/add period of the course, awards will be adjusted to reflect the change in enrollment. Grant aid is disbursed after the beginning date of a student's course and prorated based on credit hours attending. Students receiving financial aid who are planning to drop classes or withdraw completely should visit the Financial Aid Office to learn about the implications.

**TUITION REFUND POLICY**
SFCC's tuition refund policy is explained on Page 19.

**WITHDRAWAL FROM ALL COURSES AND RETURN OF FEDERAL STUDENT AID FUNDS**
Federal student aid recipients who withdraw from all classes may be required to repay financial aid. To learn the consequences of withdrawing and the amount of student aid that must be repaid, contact the Financial Aid Office before officially withdrawing.

When a student officially withdraws from all courses in a term, or earns all non-passing grades (which is referred to as an unofficial withdrawal), a federally prescribed formula will be calculated to determine if the student, the school, or both will be required to pay back a portion of their aid to the U.S. Department of Education and/or student loan lender. If the student had aid that could have been disbursed, they may qualify for a post-withdrawal disbursement. After the 60 percent point of a term, the student has earned 100 percent of the federal aid. A student is notified by letter when it is necessary to return aid. The letter includes the amount of the return. If the school is required to return funds, the amount will be charged to the student's account. As prescribed by federal regulations, funds will be returned in the following order: 1) Unsubsidized Loan 2) Subsidized Loan 3) Pell Grant 4) FSEOG Grant.

Refer to [www.sfcc.edu/financial_aid](http://www.sfcc.edu/financial_aid) for more information or contact the Financial Aid Office at 505-428-1268.

**SATISFACTORY ACADEMIC PROGRESS STANDARDS**
Federal regulations require that financial aid recipients meet certain academic standards to be eligible for federal financial aid. SFCC's Financial Aid Office reviews academic transcripts each semester. All terms of attendance are reviewed (fall, spring and summer), including periods during which a student did not receive financial aid. Students will be placed on financial aid warning or financial aid suspension if they do not meet these three requirements:

1. Qualitative Progress: Students must maintain a cumulative grade point average of at least 2.0.
2. Incremental Progress: Students must successfully complete 67 percent of the credit hours they attempt. All terms of attendance at SFCC will be reviewed regardless of whether the student was receiving financial aid for those terms. Any course in which the student earns a grade of failing (F), withdrawal (W), incomplete (I), progress (PR) or audit (AU), are treated as attempted but not completed coursework. Students changing from audit to credit classes during the semester should check with the Financial Aid Office. Transfer credits are counted as attempted and completed.
3. **Quantitative Progress (i.e., Maximum Time Frame):** Students must complete a program within a maximum number of attempted credit hours to continue to qualify for aid. The maximum time frame is 150 percent of the credit hours required for the program of study. For example, if a program requires 60 credit hours, the maximum number of attempted credit hours, including transfer credits, is 90. Up to 30 credit hours of developmental or remedial courses may be excluded from the maximum time frame calculation. In addition, courses dropped during the drop/add period are excluded from calculations. Repeat courses, incompletes, audits and withdrawals are included in the maximum time frame calculation as attempted credit hours. Students who exceed the maximum time frame will be immediately suspended from receiving financial aid.

**FINANCIAL AID WARNING**
A student will be placed on financial aid warning if they do not meet the minimum qualitative or incremental progress requirements. That is, students are placed on warning for not maintaining a cumulative GPA of at least 2.0 and at least a 67 percent completion rate of all course work. Students on financial aid warning are still eligible to receive financial aid during the term that they are in warning status. Aid for the term following the warning term will not be considered until final grades for that term have been posted and satisfactory academic progress has been reestablished. Students on warning status who do not meet the Satisfactory Academic Progress standards at the end of their warning term will be placed on financial aid suspension.

**FINANCIAL AID SUSPENSION**
A student’s financial aid eligibility will be suspended when a student has not met Satisfactory Academic Progress Standards for two consecutive semesters. Students who exceed the maximum time frame are placed directly on financial aid suspension. Students who are on financial aid suspension are not eligible for further financial aid. A student may appeal their suspension from aid. Students on financial aid suspension can reestablish eligibility for financial aid by meeting the Satisfactory Academic Progress Standards.

**FINANCIAL AID APPEAL PROCESS**
Students have the right to appeal the suspension of financial aid. A written appeal must be submitted to the Financial Aid Office stating the reasons for not maintaining Satisfactory Academic Progress. The appeal and all supporting documents will be reviewed by the Financial Aid Appeals Committee in the order in which they are received. Appeals are reviewed usually within 10 days after submission. The committee will notify the student of its decision in writing. Students whose appeal is approved will have their aid reinstated for the upcoming term. This term will be called probation, as their continuing eligibility will be determined after their probationary term is over. Students whose appeal is approved may be placed on an academic plan. If the student is placed on an academic plan, the student will need to meet certain conditions to maintain eligibility.

**REGULATORY CHANGES**
Federal regulations and procedures for financial aid change frequently. All financial aid information is subject to change without prior notice. If a student has questions regarding the ramifications of a change in eligibility or enrollment status, contact the Financial Aid Office at 505-428-1268.

**GRADUATION**

**GENERAL REQUIREMENTS**
To be eligible to receive a degree or certificate from SFCC, students must meet the following requirements as well as those listed under the specific program they wish to pursue.

1. The student must maintain an overall cumulative GPA of 2.0 or higher and must complete all required course work. No course numbered below 111 is acceptable for graduation credit.
2. A grade of C or better is required for core.
3. Transfer credits may be used toward graduation requirements as recommended by the faculty, with the following requirements and/or guidelines:
   a. Residency requirement: Transfer students must earn at least one-quarter of the total number of required credit hours (nine credit hours minimum) for the degree or certificate at SFCC. This shall include a minimum of one-quarter of the core requirements.
   b. Technical or occupational courses accepted in transfer may, with the approval of the appropriate dean, be substituted for SFCC course requirements. Such work might not apply toward courses in a major or toward general education requirements.
   c. A GPA for all courses accepted in transfer and for those used to meet graduation requirements must equal 2.0 or more.
4. The student must submit a Petition to Graduate to the Registrar.
   The following are the deadlines for submittal:
   **Academic Year 2018-2019**
<table>
<thead>
<tr>
<th>Semester</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2018</td>
<td>June 29, 2018</td>
</tr>
<tr>
<td>Fall 2018</td>
<td>September 7, 2018</td>
</tr>
<tr>
<td>Spring 2019</td>
<td>February 8, 2019</td>
</tr>
<tr>
<td>Summer 2019</td>
<td>June 28, 2019</td>
</tr>
</tbody>
</table>

The student graduates in the semester in which all graduation requirements are completed, even though there may not be a graduation ceremony scheduled for that semester.

5. All debts to the college must be paid in full before graduation.

**GRADUATION WITH HONORS**

Students who have completed at least 25 percent of their required course work at SFCC, have passed a cumulative of 16 credits and whose cumulative GPA falls within a certain range will graduate with honors. A notation to that effect will appear on the student's transcript. Honors categories are as follows:

- 3.50 to 3.74  With Honors
- 3.75 to 3.99  With High Honors
- 4.00         With Highest Honors

**SUBSEQUENT DEGREES AND CERTIFICATES**

A student who has earned an associate degree from SFCC and wishes to pursue another SFCC degree must earn at least 15 additional credits over and above the general studies requirements in the subsequent degree plan.

To qualify for an additional certificate, a student must earn at least nine credits more than those required to earn the previous certificate.

**TUITION AND FEES**

**RESIDENCY FOR TUITION PURPOSES**

New Mexico Residency

The rules and regulations for establishing residency for tuition purposes are defined by the New Mexico Higher Education Department, which is authorized by the Constitution of the State of New Mexico and state statutes (Chapter 235, IE, NMSA 1971 and Section 21-1-4E NMSA 1978) to provide classification for a tuition differential between resident and nonresident students. These regulations for residency apply to all public postsecondary institutions in New Mexico, including university branches and independent community colleges.

An individual must establish legal residency in New Mexico before they are entitled to pay in-state tuition rates. The requirements to establish residency for tuition purposes are independent from those of other types of residency such as voting or holding public office. A legal resident for tuition purposes is someone who meets the requirements set forth in the policy.

The full policy for establishing residency for tuition purposes is available at the Welcome and Advising Center and at www.hed.state.nm.us. The following are the three basic requirements that must be met at the time of application (additional requirements may apply):

1. The 12-Month Consecutive Residence Requirement. A person must physically reside in New Mexico for 12 consecutive months immediately preceding the term for which the petition is submitted. Note: A student cannot begin to complete the 12-month requirement until their 18th birthday.

2. The Written Declaration of Intent Requirement: The student must sign a written declaration of intent to relinquish residency in any other state and to establish residency in New Mexico.

3. The Overt Act Requirement: New Mexico requires the completion of overt acts, which support the student's written declaration of intent to become a permanent resident of New Mexico. Information on the number and type of required overt acts is available at the Welcome and Advising Center.

NOTE: All residency requirements must be met before the first day of the term. Any act considered inconsistent with being a New Mexico resident such as voting, securing and/or maintaining a driver's license and any vehicle registration in another state will cause in-state residency status to be denied or revoked. Nondisclosure or misrepresentation in filling out the Admission Form is grounds for denial of admission, cancellation of registration or suspension.

**Additional Residency Information**

- In New Mexico, for most purposes, the age of majority is 18. Persons under the age of 18 are considered minors under the law. A minor's residence is presumed to be the same as their parents’ or legal guardian's. The residence decision for students under 18 is based upon the legal residence of the parents or legal guardian. In the event that a non-custodial parent is a legal resident of New Mexico, the minor student will be classified as a resident.

- All persons, regardless of immigration status, who have attended a secondary educational institution (i.e. high school) in New Mexico for at least one year and who have either graduated from a New Mexico
high school or received a high school equivalency in New Mexico will be assessed in-state tuition rates.

- Any individual married to a legal resident of New Mexico and who can provide appropriate evidence shall not be required to complete the 12-month durational requirement but must satisfy all other requirements.
- Any person, their spouse and dependents who move to New Mexico or who now live in New Mexico and who provide appropriate evidence that they work in a permanent full-time position or practice a profession or conduct a business full time in New Mexico, shall not be required to complete the 12-month durational requirement but must satisfy all other requirements.
- Any person, their spouse and dependents, who move to New Mexico for retirement purposes and who provide appropriate evidence of retirement, shall not be required to complete the 12-month durational requirement but must satisfy all other requirements.
- All out-of-state members of an American Indian nation, tribe and pueblo, located wholly or partially in New Mexico, regardless of the residence of the member prior to acceptance at a postsecondary educational institution, shall be eligible to pay the in-state tuition rate. Appropriate evidence must be provided. These include members of the following tribes or pueblos: Jicarilla Apache, Mescalero Apache, Taos Pueblo, Picuris Pueblo, Ohkay Owingeh, Santa Clara Pueblo, Nambe Pueblo, San Ildefonso Pueblo, Pojoaque Pueblo, Tesuque Pueblo, Cochiti Pueblo, Jemez Pueblo, Kewa (formerly Santo Domingo) Pueblo, San Felipe Pueblo, Zia Pueblo, Santa Ana Pueblo, Sandia Pueblo, Isleta Pueblo, Laguna Pueblo, Acoma Pueblo, Zuni Pueblo and the Ute Mountain Tribe.
- All out-of-state members of the Navajo Nation who reside on the Navajo reservation, as certified by the Navajo Department of Higher Education, will be assessed in-state tuition rates upon providing appropriate evidence.
- Any person entering the active military service of the United States while a resident of New Mexico and who enters a state institution of postsecondary education in New Mexico after separation from such service may be classified as having been a legal resident in New Mexico during the time spent in the service, provided they:
  - Have not done anything (such as voting in another state) while in the service to show abandonment of their New Mexico residency;
  - Have not established residence in some other state subsequent to being separated from service;
  - Return to New Mexico within one year after separation from service with the intention of maintaining this state as their legal residence;
  - Are not a dependent minor with parent(s) or guardian(s) whose place of residence classifies them as a nonresident of New Mexico.
- Any person, their spouse or dependent child, not otherwise entitled to claim residence, who is a member of the armed forces of the United States or armed forces of a foreign country assigned to active duty in the state of New Mexico will be assessed in-state tuition rates.
  - Assignment to active duty within New Mexico must be certified by the military person's commanding officer upon the student's initial enrollment. Such students may continue paying resident rates for as long as they attend consecutive semesters at the same institution.
  - A spouse or child of an active member of the armed forces who dies or is killed becomes a resident of New Mexico within 60 days of the date of death.
  - If an active member of the armed forces is stationed outside New Mexico following assignment to duty in New Mexico and the member's spouse or child established residence in New Mexico and registers a letter of intent to establish and continue residing in New Mexico, the spouse or child shall be assessed in-state tuition rates.
  - An active member of the National Guard's spouse and children shall be deemed in-state residents for purposes of determining tuition and fees.

Petitions for New Mexico Residency for Tuition Purposes

A nonresident student who feels they have satisfied the residency requirements may obtain a Petition for Resident Tuition Classification from the Welcome and Advising Center. A student should complete the form in detail and return it to the Welcome and Advising Center prior to the deadline, along with a copy of their parents' or guardian's 1040 or 1040A U.S. income tax form, if the student is under 23 years old. A change in residency classification is never automatic and it is always the student's responsibility to initiate and complete the petition.

All residency requirements must be met before the first day of the term in which the student petitions. Petitions must be submitted no later than the 15th day of the term (including weekends) for which the petition is being filed. A petition received after that date will not be considered. A student may be asked to supply additional information or to explain apparent inconsistencies before a final decision is reached. Until officially classified as a resident, the student must proceed as a nonresident. Tuition and fees must be paid on time at the nonresident rates. The student is notified of the decision and, if denied, may amend their petition with additional information. Amended petitions are reviewed by the same standards as original petitions. If the amended
petition is denied, the student may appeal to SFCC’s Residency Appeals Committee. If a student has reason to believe that they have satisfied the residency requirements at some later time, they may reapply for residency.

TUITION AND FEE CHARGES
Tuition is charged according to a student’s residency status and the number of credit hours enrolled. The following explains the types of residency classification at SFCC:

- **Out-of-state residents taking more than six credits per semester**
  All credit hours taken are subject to out-of-state tuition rates for students who have not established New Mexico residency.

- **In-state/out-of-district residents**
  Students are eligible for in-state/out-of-district tuition rates if they have established New Mexico residency for tuition purposes and reside outside the college’s district.*

- **In-state/in-district residents**
  Students are eligible for in-state/in-district tuition rates if they are residents of New Mexico for tuition purposes and reside within the college’s district.*

Senior Citizens
According to state law, qualified senior citizens are eligible to receive a senior citizen discounted rate of $5 per credit hour. This applies on a space-available basis only to students 65 or older at the beginning of the term for which they are enrolling. They must have established New Mexico residency for tuition purposes and be enrolled for six or fewer credits. State law requires that qualified senior citizens taking more than six credits be charged the full rate for all credits, based on in-district or out-of-district residency.

The total cost of a class is determined by adding tuition, service fee, Student Government Association (SGA) fee and applicable additional course/program fees.

PAYMENT DEADLINES
Check the schedule of classes for payment deadline information.

PAYMENT METHODS
- **In person**
- **By mail (make sure to meet payment deadlines)**
- **By phone (credit or debit card only)**
- **Online (credit or debit card, checking or savings bank account) Log in to my.sfcc.edu, click on the Registration Tools, then click on Pay Online and follow the prompts.**

<table>
<thead>
<tr>
<th>TUITION RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTE: Tuition and fees are subject to change.</td>
</tr>
<tr>
<td>Residency Status for Tuition Purposes</td>
</tr>
<tr>
<td>Out-of-State</td>
</tr>
<tr>
<td>In-State</td>
</tr>
<tr>
<td>Out-of-District</td>
</tr>
<tr>
<td>In-District</td>
</tr>
<tr>
<td>Senior Citizen (NM resident taking six or fewer hours/space available)</td>
</tr>
</tbody>
</table>

**FEES SCHEDULE**

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory Service fee</td>
<td>$7 per credit hour</td>
</tr>
<tr>
<td>SGA and Student Activity</td>
<td>$1.50 per credit hour</td>
</tr>
<tr>
<td>Technology Fee</td>
<td>$2 per credit hour</td>
</tr>
<tr>
<td>Course/program fees</td>
<td>As indicated by course</td>
</tr>
<tr>
<td>Distance education fee</td>
<td></td>
</tr>
<tr>
<td>Laboratory fees</td>
<td></td>
</tr>
<tr>
<td>Program fees</td>
<td></td>
</tr>
<tr>
<td>Supply fees</td>
<td></td>
</tr>
<tr>
<td>Special service fees</td>
<td></td>
</tr>
<tr>
<td>Payment plan</td>
<td>$15</td>
</tr>
<tr>
<td>set-up fee (non-refundable)</td>
<td></td>
</tr>
<tr>
<td>Art Facility Fee</td>
<td>$25</td>
</tr>
<tr>
<td>Fitness Center: One visit</td>
<td>$8</td>
</tr>
<tr>
<td>Monthly pass</td>
<td>$50</td>
</tr>
<tr>
<td>Fitness Center Locker</td>
<td>$10 per semester</td>
</tr>
<tr>
<td>Fitness Center Locker</td>
<td>$30 per year</td>
</tr>
<tr>
<td>Fitness Facility fee</td>
<td>$100 per semester</td>
</tr>
<tr>
<td>Student Studio Rental</td>
<td>$100 per semester</td>
</tr>
<tr>
<td>Studio damage deposit</td>
<td>$75</td>
</tr>
<tr>
<td>(refundable upon inspection at end of semester)</td>
<td></td>
</tr>
<tr>
<td>Third-party proctoring</td>
<td>$25 per testing session</td>
</tr>
<tr>
<td>Penalty fees</td>
<td></td>
</tr>
<tr>
<td>Dishonored check/charge</td>
<td>$20</td>
</tr>
<tr>
<td>Student ID card replacement fee</td>
<td>$10</td>
</tr>
</tbody>
</table>

Questions concerning residency for tuition purposes should be directed to the Welcome and Advising Center at 505-428-1270.

PAYMENT OPTIONS
- **Cash**
- **Check and money orders**
- **Credit/debit card (Visa, Master Card, Discover)**
- **Financial aid (must be authorized in Banner by the Financial Aid Office). Check with the Cashier’s or Financial Aid Office on the status of your award.**
- **College’s payment plan available through census date (set up payment plans online through your my.sfcc.edu account). Click on the Registration Tools, click on Payment Plans and follow the prompts.**
- **Third-party sponsorship (see Third-Party Sponsorship details on Page 19).**

Cashier’s Office hours: Monday through Thursday, 8 a.m. to 6 p.m.; Friday, 8:30 a.m. to 5 p.m.

*The college’s district is identical to the Santa Fe Public School District and includes the towns of Cerrillos, Galisteo, Glorieta, La Cienega, Lamy, Madrid, Santa Fe and Tesuque. To view a map of the college’s district, visit www.sfcc.edu/about.*
Additional charges incurred due to changes made during the add/drop period are due the day the changes are made unless other payment arrangements have been made through the Financial Aid Office, or the student has submitted a third-party authorization that covers the changes.

All debts to SFCC must be paid in full before graduation. All debts must be paid in full by the end of the semester or the account will be sent to collections. Students will also be liable for any fees incurred while in collections.

### PAYMENT REFUNDS

To receive a refund of tuition or related charges, students must first drop a course or all courses by notifying the Welcome and Advising Center in person or by written notice. Class drop requests cannot be processed by phone. Be sure to include your student ID number and the classes you wish to drop. A refund after the deadline may be approved for extenuating circumstances such as a death in the family, accident or illness. Submit a billing appeal form to the Cashier's Office including documentation to support your request.

Refunds for courses paid online will be credited to the same credit card used to make the payment. For all forms of payment (credit/debit card, cash or check) done in person or on the phone, a refund check will be mailed to the address on record. New online services offer an e-refund. Get it deposited automatically into your bank account by creating an e-refund profile on my.sfcc.edu. Eligible refunds for amounts paid by a third party will be refunded to that party. Allow three to four weeks for processing. If you are receiving financial aid and drop a class after it has started, you will be required to repay federal funds. Check with the Financial Aid Office.

NOTE: If you registered for both summer and fall and have credits in the summer term, those credits will be applied to any outstanding charges for the fall term.

<table>
<thead>
<tr>
<th>Length of Course</th>
<th>When SFCC receives the student's withdrawal form</th>
<th>Percent of refund received</th>
</tr>
</thead>
<tbody>
<tr>
<td>For full-semester courses (16-weeks)</td>
<td>Through the third Friday of the semester</td>
<td>100%</td>
</tr>
<tr>
<td>For courses 10- to 15-weeks</td>
<td>After the third week of classes</td>
<td>No refund</td>
</tr>
<tr>
<td>For courses six to nine weeks</td>
<td>After the second week of classes</td>
<td>No refund</td>
</tr>
<tr>
<td>For courses one to five weeks</td>
<td>After the second day of class</td>
<td>No refund</td>
</tr>
<tr>
<td>For courses less than one week</td>
<td>If classes have begun</td>
<td>No refund</td>
</tr>
</tbody>
</table>

NOTE: Class weeks begin on Saturdays and end on Fridays.

Students are refunded tuition and charges according to the following schedule, based upon the date that the student’s notice is received in the Welcome and Advising Center.

### EMPLOYER OR THIRD-PARTY SPONSOR

You may authorize a third-party (an employer, government agency, etc.) to make payments on your behalf online at www.sfcc.edu/cashiers; follow the instructions at the bottom of the page. A purchase order or letter of intent from the employer should be submitted to the Accounts Receivable Office and received before tuition payment deadlines. Students may purchase books if indicated on the purchase order or letter of intent. Books will be available two weeks before classes begin through the third week of classes. Mail to SFCC Accounts Receivable Office, 6401 Richards Ave., Santa Fe, NM 87508-4887. For information call 505-428-1582.

### RETURNED CHECK OR RETURNED ELECTRONIC PAYMENTS

Any checks or electronic payments that are returned will result in a $20 fee that will be assessed to your account. After two returned items, you will no longer be able to make check or electronic payments. For information about your account, call 505-428-1211.

### AVOID DELINQUENT ACCOUNTS

A delinquent account will cause denial of privileges and services offered by the college and its affiliates, including but not limited to the New Mexico Educational Assistance Foundation. They also will be subject in the future to the withholding of:

- Registration
- Readmission
- Transcripts
- Deferred payment plan participation
- Child care services
- Student Accessibility services (tutoring, ADA assistance, etc.)
- Locker rentals
- Other services offered by the college.

All account balances must be paid in full before students are allowed to graduate.
PAYMENT PROCESS

The Cashier’s Office is open Monday through Thursday from 8 a.m. to 6 p.m., Friday from 8:30 a.m. to 5 p.m., and closed on campus holidays. Online payment services are available 24 hours a day, 7 days a week through the my.sfcc.edu portal.

<table>
<thead>
<tr>
<th>Payment Type</th>
<th>Method</th>
<th>Where</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online payments</td>
<td>Credit or debit card, checking or savings account</td>
<td>my.sfcc.edu Portal Online</td>
<td>To make a payment online, log on to the my.sfcc.edu portal. Click the “Registration” tab. In the “Payment” section click “Pay Online,” click “Bills and Payments,” and follow instructions on the screen. Parents and other authorized users can log on to <a href="http://www.sfcc.edu/cashier">www.sfcc.edu/cashier</a> and follow the instructions for parents, third-party and other authorized users.</td>
</tr>
<tr>
<td>Counter payments</td>
<td>In person</td>
<td>Cashier’s Office</td>
<td>Cash, money orders, personal checks with ID, credit card (Visa, MasterCard, and Discover)</td>
</tr>
<tr>
<td>Payment plan</td>
<td>Online</td>
<td>my.sfcc.edu Portal</td>
<td>To set up a payment plan, click the Registration tab. In the Payment section click Payment Plans, click Bills and Payments, click on Payment Plan and follow the instructions. Students are required to pay a non-refundable $15 process fee and 25% or 40% (detail below) of the total bill when registering for the payment plan. Fall and spring terms: $15 fee plus 25% down payment plus three monthly installments. Summer term: $15 fee plus 40% down payment plus two monthly installments.</td>
</tr>
<tr>
<td>Financial aid</td>
<td>N/A</td>
<td>Financial Aid Office</td>
<td>Students can apply the cost of classes and textbooks to their authorized financial aid. Their financial aid must be approved and the student must also be making satisfactory academic progress. The student must also meet minimum enrollment requirements. Students can check with the Cashier or Financial Aid Office after they enroll to determine if their aid is authorized.</td>
</tr>
<tr>
<td>Authorized parents; Online</td>
<td>Online</td>
<td>Online</td>
<td>Students can authorize a parent or other third-party user to view other third-party users statements and make payments on their account. Log on to my.sfcc.edu portal click on the Registration Tools, click on Payments Plans and follow the prompts.</td>
</tr>
<tr>
<td>Paying in full</td>
<td>By phone</td>
<td>Cashier’s Office</td>
<td>Student ID number and credit card information</td>
</tr>
<tr>
<td>Employer or Third-Party Sponsor</td>
<td></td>
<td>505-428-1211</td>
<td>You may authorize a third party (an employer, government agency, etc.) to make payments on your behalf at <a href="http://www.sfcc.edu/cashier">www.sfcc.edu/cashier</a>; follow the instructions at the bottom of the page. A purchase order or letter of intent from the employer should be submitted to the Accounts Receivable Office and received before tuition payment deadlines. Students may purchase books if indicated on the purchase order or letter of intent. Books will be available two weeks before classes begin through the third week of classes. Mail to SFCC Accounts Receivable Office, 6401 Richards Ave., Santa Fe, NM 87508-4887. For information call 505-428-1871.</td>
</tr>
</tbody>
</table>

Students are required to pay a non-refundable $15 process fee and 25% or 40% (detail below) of the total bill when registering for the payment plan. Fall and spring terms: $15 fee plus 25% down payment plus three monthly installments. Summer term: $15 fee plus 40% down payment plus two monthly installments.
PROGRAMS AND SERVICES

ACADEMIC ADVISING
Academic advising is provided to all students to help them establish and attain their educational goals, including planning the most appropriate course selection at a pace that will allow them to progress successfully. New first-time, full-time, degree-seeking students are required to meet with a first-year adviser in the Welcome and Advising Center prior to registration.

Students will be advised to take courses that help meet their specific educational goals.

Students who enter SFCC with credits from another institution should have all official transcripts sent to the Registrar’s Office and they should declare majors and meet with a departmental counselor, adviser or faculty adviser who will determine how previously earned credits will be applied.

ACADEMY FOR TEACHING AND LEARNING
The Academy for Teaching and Learning provides educators with support and recognition for innovation and excellence in teaching, learning and leadership. The Academy values building collaborative relationships and helping students learn by way of supporting SFCC educators. Its goals are to honor educators, build community, strengthen teaching, advance learning and foster leaders.

Online Teaching and Learning
Online classes at SFCC enable students with time and/or geographic constraints to participate in college courses where technology provides a bridge between the faculty and students.

Faculty and students interact through a globally recognized course management system designed to deliver an interactive, web-based classroom over the internet.

Online courses generally follow a schedule with specific due dates for course work, but the choice of when (during the day, late at night, early morning, etc.) and where (at home, at the library, in SFCC’s computer labs) students do their work is up to them.

Courses may be delivered completely by Canvas Learning Management System for online courses with no face-to-face classroom instruction and no campus visits required. They may also be delivered partially by Canvas with on-campus meetings required. Further information about online courses offered by SFCC and their format is available at www.sfcc.edu/otl.

Students enrolled in an online course will need internet access and a computer that meets recommended requirements. To enroll in an online class, follow the usual registration procedure. Online courses are identified in the printed schedule by a “WEB” designation, located in the “Days” area of the listings.

There is a $25/credit hour (to a maximum of $75) online learning fee attached to each online class; regular tuition and fees also apply.

Online learning students must abide by all college policies.

ADULT EDUCATION
Adult Education, located in Room 502, provides free instruction to adults preparing for college and careers. Classes are offered in reading, writing, math, high school equivalency preparation (GED and HiSET), English as a Second Language, and citizenship preparation.

Adult Education partners with college certificate programs to offer the nationally recognized Integrated Basic Education and Skills Training (I-BEST) and Bridge courses to help students advance in chosen career pathways.

Adult Education strives to improve students’ successes, both in educational gains and in family and community involvement. Classes are free with the exception of a small registration fee and are for adults and out-of-school youth 16 years of age or older. Adult Education works in affiliation with Literacy Volunteers of Santa Fe. For information, call 505-428-1356.

CAREER SERVICES
Career Services provides guidance in career exploration, job search, and education and training through classroom presentations, seminars, job fairs and individual appointments. Services include career interest assessments, access to a vast career information database, résumés and cover letters, job postings, job search coaching, interview practice, self-marketing workshops, job referrals, matching education and training with career goals, internship opportunities and connecting to other colleges and non-traditional education and training options.

All services are free to students and community members. For more information, visit www.sfcc.edu/careerservices, stop by the office in Room 204-E at the back of the Welcome and Advising Center or call 505-428-1303.
COLLEGE FOR WORKING ADULTS
College for Working Adults is a unique program for busy adults who understand how challenging it is to balance family, work and personal time yet still wish to earn an Associate in Arts degree in Business Administration or Accounting. In just over two and one half years, while working full time and balancing one's life, a student can obtain a degree through this program. CWA schedules its degree program into eight blocks of two to three courses each. The courses are offered on Saturdays and at night in full- and half-semester time frames that include classroom, online and blended (online and classroom) learning formats. To learn more about CWA, visit www.sfcc.edu/cwa or call 505-428-1745.

CONTINUING EDUCATION
SFCC offers many personal enrichment and professional development classes to meet the interests of the area’s varied population. Continuing Education classes are described in the division’s schedule, published three times per year. The classes are held on the SFCC campus, as well as at locations throughout the city and county. Some of the popular topics include fitness, home and garden, languages and crafts. For information, visit www.sfcc.edu/ce or call 505-428-1676.

Teamwork in Action
Using experience-based training and development, Teamwork in Action helps organizations achieve results. Training takes place in classrooms, at conference centers or on SFCC’s state-of-the-art Challenge Course. Located on more than 20 acres, the Challenge Course is the largest ropes course in the Southwest. For information, visit www.sfcc.edu/teammwork_in_action or call 505-428-1637.

COUNSELING
Professional counselors at SFCC support student development. They are uniquely qualified to address the multitude of issues facing college students. In addition, timely and appropriate referral sources to outside agencies and providers are available as a vital resource for students. The counselors are available to provide support services for students in the following areas:

- Assistance and support for personal and academic issues
- Help in resolving conflicts with family, friends or co-workers
- Address feelings of depression or anxiety
- Learn stress and time management skills
- Referrals to community mental-health providers
- Discuss education and career interests and goals.

Counseling offers ways to deal with personal issues and stressors impacting college success. It is a confidential, respectful process where you can feel safe discussing your concerns. Counselors can offer one-on-one assistance and support on a range of personal, social and academic issues. To be eligible for counseling you must be enrolled in an SFCC credit course. Learn more at www.sfcc.edu/offices/counseling-services.

CUSTOMIZED AND CONTRACT TRAINING
SFCC offers customized and contract training to meet the unique needs of local employers in business, industry, nonprofit and public-sector agencies and organizations. Customized courses and programs can be offered for either credit or noncredit on many topics, such as skills development, OSHA training, strategic planning, technical writing and workplace Spanish. Courses can be delivered at the client’s location or at the college. The college has state-of-the-art computer labs and conference facilities, and hires faculty who are experts in their fields. Customized training offers a cost-effective way to increase productivity and effectiveness. The professional staff at SFCC is available to meet and discuss training needs. For information, call 505-428-1866 or email workforce@sfcc.edu.

FIRST-YEAR EXPERIENCE PROGRAM
The First-Year Experience Program supports and engages first-year students through a variety of services that help students connect to SFCC and be successful on campus. Services include New Student Orientation, First-Year Student Success Classes, expanded advising services within First-Year Advising, accelerated and learning community courses and Great Achievement in Men's Education (GAME).

All new full-time, degree-seeking students with 15 or fewer credits are required to meet with an adviser each semester until the student has earned 16 cumulative credits. These requirements are designed to keep students on track, enhance student success and improve degree completion.

New Student Orientation and Advising
All first-time students are required to participate in New Student Orientation prior to the start of their first semester at SFCC. This interactive event gives students an opportunity to learn more about financial aid, campus resources, advising services and expectations. In addition, students interact with other new students, current students, faculty and staff to make connections on campus prior to the first day of classes, so they start their semester prepared to be successful at SFCC.
HIGH SCHOOL EQUIVALENCY TESTING
The high school equivalency test is offered by appointment at the SFCC Testing Center. Registration for the test must be completed online at www.gedcomputer.com or through the Pearson VUE call center at 877-EXAM-GED (877-392-6433).

The minimum required age to take the high school equivalency in New Mexico is 16 years old. Test-takers under the age of 18 must submit a completed Underage Verification Form signed by a parent or guardian and by the Superintendent of the test-taker’s local school district. Underage Verification Forms are available at the SFCC Testing Center and at www.sfcc.edu/testing (click the GED Testing link).

All test-takers who pass the high school equivalency test in New Mexico must create an account at www.diplomasender.com to order a final transcript and New Mexico high school diploma. The first copy of each is free of charge. Additional copies are available for a fee. For more information about taking the high school equivalency test at SFCC, call 505-428-1625.

The Adult Education Department at SFCC offers high school equivalency preparation classes free of charge to students who want to prepare for the official test. For more information, call 505-428-1356.

KIDS CAMPUS
Kids Campus is accredited by the National Association for the Education of Young Children and serves the children of SFCC students, staff, faculty and community families. Kids Campus is open year-round and offers full-time enrollment on a space-available basis to children ages eight weeks through five years old. It is conveniently located on SFCC’s main campus at 6401 Richards Ave. For information, visit kidscampus.sfcc.edu or call 505-428-1354.

LIBRARY
The SFCC Library is a beautiful and welcoming environment for studying, reading, using computers and relaxing. The Library provides high-quality academic resources that faculty members need to teach and students need to learn. The physical collection consists of 60,000 items including books, periodicals, DVDs, CDs, screenplays, and audio books. All items are listed in the Library’s online catalog.

The Library also provides access to a wealth of resources electronically. Databases include electronic reference sources, full text academic electronic books, full text scholarly journal articles in a wide range of academic disciplines, newspapers, dictionaries and popular magazines. There are also databases for test preparation, high-resolution art images and streaming educational films.

The Library’s catalog and electronic resources are available with an internet connection 24/7 at www.sfcc.edu/library. You will need your SFCC login for off-campus access.

The Library also provides a number of services. Professional librarians are available for research assistance and class instruction and are eager to help. The Library, through its course reserves section, provides textbooks and other materials for some classes. These materials can be used in the Library.

Through the interlibrary loan service, the Library is able to borrow materials from many other libraries. You must be a current students, faculty or staff member. Additionally, there are agreements with other academic libraries in New Mexico for reciprocal borrowing privileges. Ask about the passport system.

The Library houses the archives of the college, and a rare books room that has a special collection focusing on the Southwest. For more information, visit www.sfcc.edu/library or call 505-428-1352.

LITERACY VOLUNTEERS OF SANTA FE
Literacy Volunteers of Santa Fe was established in 1985 to provide free, quality tutoring services to adults seeking to improve their basic reading skills or to learn English as a Second Language.

Thirty-four percent of adults in Santa Fe County are functionally illiterate and 32 percent speak only limited English. To put this into perspective, using the 2010 United States Census Bureau data, over 39,000 people in the Santa Fe County area require special basic literacy tutoring services and another 37,000 adult immigrants in Santa Fe County need the opportunity to learn English as a second language. LVSF is the only free literacy program for adults in Santa Fe.

Tutoring is student centered and focuses on building job skills, improving reading and writing skills for low literacy adults, empowering parents to help their children succeed in school, and encouraging citizenship. Because of the great demand for literacy services in the area, the program has grown to support the work of 200 volunteer tutors on average working with more than 400 students annually. Even with this large effort, there are many more adults seeking services than LVSF can help with its present tutor capacity.

Volunteer tutors are carefully interviewed, trained and matched with students. Volunteers can earn college credit for their service by enrolling in the credit course titled Volunteer in the Community (HUDV 170). For more
information, call 505-428-1353, stop by Room 502 in the Adult Education Department or go to lvsf.org.

OFFICE FOR COMMUNITY LEARNING AND SERVICE
The mission of the Office for Community Learning and Service is to engage SFCC undergraduates, faculty and community partners in programs that integrate teaching, research and service-learning. OCLS promotes citizenship, leadership and social justice through service learning, internships and other community-based learning experiences. Through this work, OCLS fulfills its obligation as a public institution to educate persons in effective citizenship. The following programs are housed in the OCLS:

- Service-learning is a component of credit classes that includes community service in the learning objectives of the class and encourages reflective thinking on personal and civic responsibility. The community service experience of the class is part of the pedagogy and increases the learning experience by demonstrating how community issues and programs relate to what is being taught in the class.
- The Volunteer in the Community class (HUDV 170) provides opportunities for students to earn college credit by volunteering in community agencies and public schools. Volunteering in the community helps students focus on their career goals and become more qualified job applicants.
- Women in Transition (HUDV 160) explores a variety of issues important to women who are making changes in their personal circumstances. Topics include personal wellness, psychological strength, legal issues, community resources, parenting skills, support services, educational opportunities and communication skills. Experts on these issues make presentations in a workshop format.
- Outreach and Prevention Programs explore ways students can engage the SFCC community and the larger community on critical issues such as drug and alcohol addictions, physical and sexual abuse, sexually transmitted diseases and other topics. Students are trained in mentoring, media arts, tutoring and public health skills that support the community in addressing these problems.

OFFICE OF STUDENT DEVELOPMENT
The Office of Student Development engages SFCC students by providing an environment of belonging where individuality, diversity and creativity are valued through student leadership programs. These include Student Activities, Student Ambassadors, Student Clubs, and the Student Government Association. Visit Student Development in the lower level of the West Wing, Room 312 or call 505-428-1665.

Student Activities
Throughout the academic year various events and activities are offered to students to expand their knowledge, support personal growth and improve the connection to other students and the college. Contact the Student Involvement Coordinator at 505-428-1582 or go to the Student Activities tab on my.sfcc.edu for more information.

Student Ambassadors (STAM)
The students serving in this organization are ambassadors for student involvement and engagement at SFCC. They work to promote the programs and activities of the college to their fellow SFCC students with the intent of developing well-informed and engaged students. Students who need assistance identifying and navigating campus resources may request to speak with a Student Ambassador in the Office of Student Development. Students must apply in a competitive process to be a part of this leadership team and earn a scholarship for their service. For information, contact the Student Development Director at 505-428-1681.

Student Clubs
Getting involved on campus is one of the quickest ways for students to become part of the college community and create their own unique SFCC experience. Student clubs and organizations are primarily active in the fall and spring semesters. These student-run organizations are a great way to meet new people, have fun and develop leadership and management skills. Studies show that students who are involved at their college receive better grades, are more satisfied with their overall college experience, are more likely to stay in school, and are more marketable when job searching and/or applying to other schools. Student clubs must be registered in the Office of Student Development in order to use college facilities, be listed in college publications, use the college name in publicity and receive funding.

Inquire at the Office of Student Development or participate in the Student Involvement Fair held at the beginning of each semester to find out if any of the current clubs are of interest or to learn how to start a club.

For more information, contact the Student Involvement Coordinator at 505-428-1582.
**Student Government Association (SGA)**
SGA is the official governance group that represents the SFCC student body. SGA members work to make a difference on campus by representing the student perspective to the administration and various governance councils. They also provide a forum for students to engage in conversations regarding campus issues. SGA encourages and advocates for student involvement on campus by sponsoring student events, programs and leadership opportunities. Students enrolled in at least one credit-bearing course are automatically members of the SGA and are encouraged to attend SGA meetings. Students earn voting rights at the third meeting they attend. Contact Student Government at sga@sfcc.edu for more information.

**Veterans Resource Center**
The SFCC Veterans Resource Center is a place for veterans to learn about available resources, attend programs, and meet fellow veterans. The VRC provides support, referrals, and resources to all veterans who would like to explore their educational goals at SFCC. For more information, go to the Veterans Resource Center in the West Wing, Lower Level, Room 312N, call 505-428-1305 or visit www.sfcc.edu/veterans.

**PLACEMENT TESTING**
Course placement testing is required at SFCC for placement into English, reading, and mathematics courses and into courses that have English, reading and mathematics prerequisites. Placement is used to ensure that students enroll in courses appropriate for their current skill levels and consistent with their educational and career goals.

Most students will take the ACCUPLACER, a computer-based placement assessment, to determine their course placement. However, ACT or SAT scores that are less than three years old or previously completed college-level coursework may sometimes be used for placement or to satisfy prerequisites. Mathematics courses that are more than three years old may never be used for placement or to satisfy prerequisites.

Students are STRONGLY ENCOURAGED to refresh their English and math skills before taking the placement test to ensure that they perform as well as possible on the test and are placed into the appropriate courses. Sample questions for the ACCUPLACER along with additional FREE study materials are available at www.sfcc.edu/testing or at www.accurater.org. For more information, contact the Testing Center at 505-428-1625.

Placement testing is free at the Testing Center, and no appointment is necessary. Photo ID (such as an SFCC ID card or drivers license) and your SFCC A number are required for testing. The tests are untimed, but the complete exam (English and math) takes about two hours. The Testing Center will provide testing accommodations for students who have documented disabilities. Accommodations must be arranged through Student Accessibility Services at 505-428-1711.

**SANTA FE COMMUNITY TELEVISION**
Through an agreement with the City of Santa Fe, SFCC operates a channel on the Comcast Cable System designated for community use: Santa Fe Community Television (SFCTV-16). Channel 16 features programming focused on public and educational issues. The college offers a number of credit and noncredit courses in video production and related areas in conjunction with SFCTV. Students and community volunteers are encouraged to assist with and produce programming. For information, visit www.sfcc.edu/SFCTV or call 505-428-1509 or 505-428-1132.

**SANTA FE HIGHER EDUCATION CENTER**
The Santa Fe Higher Education Center, located at 1950 Siringo Road, is a partnership between SFCC and New Mexico Highlands University, the University of New Mexico and Northern New Mexico College to bring students an affordable, convenient way to earn bachelor's and master's degrees without leaving Santa Fe. Students can complete an associate degree at SFCC, then transfer to one of the four-year partner institutions and obtain a bachelor's degree. Classes are offered in a traditional classroom setting, via instructional TV or online. The new state-of-the-art, energy-efficient facility is conveniently located across from Santa Fe High School. The HEC also houses the Santa Fe Small Business Development Center.

**SANTA FE SMALL BUSINESS DEVELOPMENT CENTER**
The Santa Fe Small Business Development Center is a member of the New Mexico Small Business Development Center Network. This statewide network of business experts includes 20 centers, affiliate programs, the International Business Accelerator, and the Procurement and Technical Assistance Program. Partnership with the U.S. Small Business Administration, the New Mexico State Legislature, 17 host colleges and the private sector equips SBDCs to ensure that New Mexico entrepreneurs have the resources and support they need to make sound business decisions.
The SBDC offers training, advising, research and technical support to business owners and aspiring entrepreneurs. Training involves courses, workshops and seminars; advising provides free one-on-one, confidential business advice and access to partner organizations; and research includes a library of reference materials and access to industry reports and resources at no charge. SBDC offers self-paced learning programs in a wide range of business-related topics. All services are open to the public. The SBDC is located in the Santa Fe Higher Education Center at 1950 Siringo Road. For information, visit www.nmsbdc.org/santafe or call 505-428-1343.

STUDENT ACCESSIBILITY SERVICES
SFCC follows the guidelines outlined in the Americans with Disabilities Act and provides for reasonable accommodations to qualified individuals with documented disabilities. Students with disabilities are encouraged to contact Student Accessibility Services to make an appointment to discuss educational goals and to create a plan for success. Accessibility Services will respond to each student’s accommodation request based on a dialogue with the student and review of the disability documentation.

After students have completed the advising and planning process and are registered with Accessibility Services, they are responsible for allowing sufficient lead time for requested accommodations. Refer to the following chart when making a request. Staff makes every effort to provide requested services as quickly as possible.

<table>
<thead>
<tr>
<th>Accommodation</th>
<th>Minimum Time Needed</th>
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<tbody>
<tr>
<td>Text in Alternative Format</td>
<td>Two to three weeks</td>
</tr>
<tr>
<td>Note-taker</td>
<td>One to two weeks</td>
</tr>
<tr>
<td>Signed Language Interpreter</td>
<td>Two weeks</td>
</tr>
<tr>
<td>Classroom accommodations</td>
<td>One to two weeks</td>
</tr>
<tr>
<td>Tape recorder for classes</td>
<td>One week</td>
</tr>
<tr>
<td>Extended test time</td>
<td>One week</td>
</tr>
</tbody>
</table>

For more information or to request an interview, call 505-428-1711 or stop by Room LL311.

TESTING CENTER
The Testing Center serves the assessment needs of SFCC students and the larger community with a variety of paper-and-pencil and computer-based exams and other assessments. The center offers the college’s placement test and make-up exams for students who are unable to test with their class. It also offers the high school equivalency exam, test proctoring for students taking courses at other institutions, certification and licensure exams, and services for students seeking to earn credit for college-level learning gained outside the traditional college classroom. Visit the Testing Center in the East Wing, Room 611, www.sfcc.edu/testing_center or call 505-428-1625.

TRiO/STUDENT SUPPORT SERVICES
TRiO/Student Support Services, is a federally funded grant program designed to work with 160 SFCC students. The program serves income eligible, first-generation students and students with disabilities. Eligible students who are committed to their college education and willing to participate will be offered enhanced services designed to help them meet their educational goals. Services include advising, tutoring, workshops related to student success, cultural/historical trips and other academic support. The TRiO Program also provides private study space and a computer lab. For more information, contact the TRiO/SSS Office in the West Wing, Lower Level, Room 313 or call 505-428-1364.

TUTORING CENTER
Tutoring is a very important resource for students who wish to be successful in their courses. Free tutoring is available by appointment or drop-in basis for most English, math, office technology and science courses when classes are in session. Peer and paraprofessional tutors work with students individually and in small groups. Students are allowed a maximum of two hours a week of appointment tutoring per course but may drop in for tutoring any time (based on availability of tutors). For more information, visit the Tutoring Center, West Wing, Lower Level Room 326, www.sfcc.edu/tutoring or call 505-428-1260.

VETERANS BENEFITS
Qualified students are eligible to receive veterans’ educational benefits. Students must declare a major in a degree or certificate program that has been approved by the New Mexico State Veterans approval agency; eligible students will be reimbursed only for classes that are required in the degree program. Students receiving VA educational benefits may also qualify for other forms of financial aid. All forms associated with VA education benefits may be obtained from the Registrar’s Office or at www.gibill.va.gov. For more information, visit the Veterans Resource Center, www.sfcc.edu/veterans or call 505-428-1305.

WELCOME AND ADVISING CENTER
The Welcome and Advising Center offers a friendly and helpful environment to complete the admission process, registration and first-year advising services. WAC staff members strive to accommodate the diverse needs of students, community, faculty and staff as they pursue their educational and career
goals. For more information, visit the Welcome and Advising Center, www.sfcc.edu/registration or call 505-428-1270.

WELLNESS CENTER
The goal of the Wellness Center is to provide services in health, wellness evaluation and methods of self-directed behavior change for SFCC students, staff and the community at large. The program includes fitness assessments, exercise programs and informational and educational seminars. The Wellness Center is located in the William C. Witter Fitness Education Center. For information on strategies to improve health and well-being, stop by the FEC, go to www.sfcc.edu/fitness_center or call 505-428-1291.

SPECIAL OPTIONS FOR STUDY AT SFCC

INDEPENDENT STUDY
Independent study refers to an approved arrangement between a faculty member and an individual or small group of students, and consists of the student(s) fulfilling the requirements for an existing credit course or a special project. Independent study sections must be approved by the appropriate dean and by the Vice President for Academic and Student Affairs.

INTERNSHIPS
Internships combine structured classroom learning with actual work experience. Students enroll in classes at SFCC and work at training sites for a specified number of hours a week. They are then evaluated by faculty advisers and training site supervisors for work they completed in the field.

Internships are activities that introduce students to different aspects of the workplace, including the opportunity to perform specific jobs in businesses, educational institutions or government agencies. Internships may be paid or unpaid.

Students in all degree programs may enroll in internship courses with the permission of their faculty adviser and department chair, subject to course availability.

Students may earn up to six credit hours in an internship course; and earn one credit for every 50 clock hours worked. Internships are designated as 198 or 298 courses in each discipline area (e.g., HUSV 298).

To enroll in an internship course, students must:

1. Obtain approval from their faculty adviser and arrange the time for the internship education course;
2. Maintain a GPA of 2.0 or above.

NOTE: Some internship placements may have other requirements set by employers.

PRACTICUM
Practicum courses are designed to give students hands-on field experiences in areas that complement their classroom learning. Students work under the supervision of a faculty member as a part of their course work. Practicums often involve work experience with community agencies.

Courses numbered 193 and 293 are practicum courses. The number of contact hours varies by department based on the amount of work required for the nature of the practicum.

PHI THETA KAPPA
Phi Theta Kappa, the international honor society for two-year colleges, invites all SFCC students who meet the criteria to apply for membership. Phi Theta Kappa is designed to encourage outstanding students to pursue high academic achievement. Members of the SFCC Alpha Kappa Xi chapter of Phi Theta Kappa are eligible for activities that provide intellectual challenges. Membership also offers opportunities to develop leadership skills and serve the community through activities and programs. Members are eligible for special scholarships to continue their education at four-year institutions and are invited to participate in regional and national conferences. Membership in Phi Theta Kappa is noted on the student's transcript and diploma.

Phi Theta Kappa membership criteria:
- Completion of at least 12 credits of college-level course work (courses numbered 111 or higher); and
- A cumulative GPA of 3.4 or higher on a 4.0 scale.

Application procedure:
- Qualified applicants will receive an email from Phi Theta Kappa headquarters after their qualifying semester, asking them to join.
- The one-time enrollment fee, good for life, is $75.
- Once you have been asked to join, you will be given a passcode and can enroll and pay online.

To retain full membership in Phi Theta Kappa, students must maintain a 3.2 or higher cumulative GPA on a 4.0 scale. For information go to www.sfcc.edu/Phi_Theta_Kappa or call 505-428-1375 or 505-428-1834 for an appointment.
TRANSFER OF CREDIT

TRANSFER OF CREDIT FROM SFCC TO OTHER INSTITUTIONS

With few exceptions, SFCC cannot guarantee transfer of credit to other colleges and universities; credit is accepted at the discretion of the receiving institution. There are important exceptions to this general rule. Public institutions in New Mexico are obligated to accept general education courses that have been approved for transfer by the New Mexico Higher Education Department, and they are also obligated to accept coursework in approved transfer modules in Criminal Justice, Early Childhood Education, Business Administration, Teacher Education and General Engineering. Visit www.hed.state.nm.us for more information. Refer to the certificate in General Academic Transfer on Page 130.

TRANSFER OF CREDIT FROM OTHER INSTITUTIONS TO SFCC

To transfer credit earned at other institutions of higher education to SFCC, several criteria must be met.

- Courses must be from accredited institutions.
- Official transcripts must be on file in the SFCC Registrar’s Office.
- Courses must be approved for content and learning outcomes by the SFCC Registrar. The Registrar evaluates the courses with SFCC faculty advisers and counselors in specific program areas.
- Courses considered for transfer must have a grade of “C” or higher.

The same exceptions that apply to transfer of credit from SFCC to other New Mexico institutions apply to transfer of credit from other New Mexico institutions to SFCC — those general education courses that are approved by the New Mexico Higher Education Department and the courses making up transfer modules outlined below.

Planning for effective transfer with maximum efficiency is ultimately the student’s responsibility. Responsible transfer planning includes early and regular consultation with the intended degree-granting institution to ensure that all pre-transfer course work will meet the requirements of the desired degree.

GENERAL EDUCATION REQUIREMENTS FOR TRANSFER STUDENTS WITH A BACHELOR’S DEGREE OR HIGHER

When an official transcript arrives in the Registrar’s Office showing completion of a bachelor’s or higher degree, for most degree programs, a comment is posted to the SFCC transcript stating that general education requirements have been met.

Exceptions to this occur when a student chooses a program of study that has a specific general education requirement such as art history for a Fine Arts degree. The student will be expected to complete those requirements. Some majors may have specific general education requirements, such as Nursing, Respiratory Care, Fine Arts or the Sciences. Check with your adviser to see if you need to meet specific general education requirements.

Prerequisites of English 109 or 111 will be satisfied as a result of holding a bachelor’s or higher degree. A math or science course taken more than three years ago cannot fulfill a prerequisite for a subsequent math or science course unless a student can demonstrate proficiency.

A math or science course taken more than five years ago cannot fulfill a prerequisite for other courses. Because course material differs from college to college, placement testing is the best way to determine accurate course placement. The college reserves the right to disenroll or transfer a
student who does not meet the necessary course prerequisites. A student may be permitted to waive a prerequisite based on demonstrated mastery of skills. A student must petition the appropriate department chair or designee for permission to waive a prerequisite.

LOWER DIVISION 64-CREDIT TRANSFER MODULES

Students who have selected a field of study but have not yet selected the college or university from which they wish to earn a baccalaureate degree are advised to take courses outlined in one of the lower-division 64 (minimum) credit transfer modules during their freshman and sophomore years. For students enrolled at any public institution in New Mexico, these courses are guaranteed to transfer to any New Mexico public university and apply toward bachelor’s degree program requirements. Students should consult advisers at their current institution regarding which specific classes fit these categories. Lower-division transfer modules exist for:

- Business Administration
- Criminal Justice
- Early Childhood Education
- General Engineering
- Teacher Education

Modules for additional areas of study are being developed. For more information, visit www.hed.state.nm.us.

TRANSFERRING COURSES TO FULFILL THE NEW MEXICO GENERAL EDUCATION COMMON CORE

During the 2005 New Mexico Legislative session, Senate Bill 161, consistent with requirements of state law (Chapter 224 of the Laws of New Mexico, 1995 as amended) was signed into law to further enhance and facilitate the transfer of general education courses among New Mexico’s public institutions of higher education. Students who have decided on a major and/or an institution at which to complete their studies should consult with an academic at that particular institution to determine the most appropriate course selections. Students enrolling for the first year of study at a New Mexico public college or university and considering possible transfer into a certificate and/or degree program at another institution are encouraged to take the courses approved for transfer during their freshman and sophomore years of study. The core matrix of approved courses guaranteed to transfer and meet general education requirements at any New Mexico public college or university can be found at hed.state.nm.us. The course prefix and number that appear next to many of the institutions’ internal course prefixes and numbers is the New Mexico Common Course Number Systems. Simply put, the common course number connects equivalent courses at multiple institutions, ensuring students that the course will transfer to the receiving institution and meet degree requirements. The NMCCNS has an alpha prefix that identifies the subject area. The four digits in the number represent the specific course in that subject area, with each digit having significance as demonstrated here:

<table>
<thead>
<tr>
<th>Course Level:</th>
<th>Four Character Academic Prefix</th>
<th>Freshman = 1</th>
<th>Course Sophomore = 2 Seq.</th>
<th>Credit Hours:</th>
<th>1, 2, 3 or 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL</td>
<td>1</td>
<td>11</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The number under NMCCNS infers the course will transfer within New Mexico to meet the required area of New Mexico’s General Education Common Core.
THE LOWER-DIVISION GENERAL EDUCATION COMMON CORE (NMGEC)  

Area I: Communications  
Select six to nine semester hours*  

<table>
<thead>
<tr>
<th>NMCCNS</th>
<th>Select nine semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 111........</td>
<td>ENGL 1113..............................(3)</td>
</tr>
<tr>
<td>ENGL 112........</td>
<td>ENGL 1123..............................(3)</td>
</tr>
<tr>
<td>ENGL 119........</td>
<td>ENGL 1193..............................(3)</td>
</tr>
<tr>
<td>ENGL 216........</td>
<td>ENGL 2113..............................(3)</td>
</tr>
<tr>
<td>SPCH 111........</td>
<td>COMM 1113..............................(3)</td>
</tr>
<tr>
<td>SPCH 220........</td>
<td>COMM 2123..............................(3)</td>
</tr>
<tr>
<td>SPCH 225........</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Area II: Mathematics  
Select three semester hours  
(this course will not transfer into some degree programs)  

<table>
<thead>
<tr>
<th>NMCCNS</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MATH 119........</td>
<td>(3)</td>
</tr>
<tr>
<td>MATH 121........</td>
<td>MATH 1114..............................(4)</td>
</tr>
<tr>
<td>MATH 135........</td>
<td>MATH 2113..............................(3)</td>
</tr>
<tr>
<td>MATH 150........</td>
<td>(4)</td>
</tr>
<tr>
<td>MATH 155........</td>
<td>MATH 1213..............................(3)</td>
</tr>
<tr>
<td>MATH 162........</td>
<td>MATH 1614..............................(4)</td>
</tr>
<tr>
<td>MATH 163........</td>
<td>MATH 1624..............................(4)</td>
</tr>
<tr>
<td>MATH 180........</td>
<td>(4)</td>
</tr>
<tr>
<td>MATH 181........</td>
<td>(4)</td>
</tr>
<tr>
<td>MATH 264........</td>
<td>MATH 2614..............................(4)</td>
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</table>

Area III: Sciences  
Select eight semester hours  

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>ASTR 111/111L...</td>
<td>ASTR 1113/ASTR 1111..............................(4)</td>
</tr>
<tr>
<td>BIOL 111/111L...</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 114/114L...</td>
<td>ENVS 1113/ENVS 1111..............................(4)</td>
</tr>
<tr>
<td>BIOL 115........</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 116........</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 123/123L...</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 201/201L...</td>
<td>(4)</td>
</tr>
<tr>
<td>BIOL 202/202L...</td>
<td>(4)</td>
</tr>
<tr>
<td>CHEM 111/111L...</td>
<td>CHEM 1113/CHEM 1111..............................(4)</td>
</tr>
<tr>
<td>CHEM 121/121L...</td>
<td>CHEM 1213/CHEM 1211..............................(4)</td>
</tr>
<tr>
<td>CHEM 122/122L...</td>
<td>CHEM 1223/CHEM 1221..............................(4)</td>
</tr>
<tr>
<td>GEOL 111/111L...</td>
<td>GEOL 1113/GEOL 1111..............................(4)</td>
</tr>
<tr>
<td>GEOL 112/112L...</td>
<td>GEOL 1213/GEOL 1211..............................(4)</td>
</tr>
<tr>
<td>PHYS 111/111L...</td>
<td>(4)</td>
</tr>
<tr>
<td>PHYS 121/121L...</td>
<td>PHYS 1113/PHYS 1111..............................(4)</td>
</tr>
<tr>
<td>PHYS 122/122L...</td>
<td>PHYS 1123/PHYS 1121..............................(4)</td>
</tr>
<tr>
<td>PHYS 161/161L...</td>
<td>PHYS 1213/PHYS 1211..............................(4)</td>
</tr>
<tr>
<td>or PHYS 162/162L</td>
<td>PHYS 1223/PHYS 1221 (4)</td>
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Area IV: Social/Behavioral Sciences  
Select six to nine semester hours*  

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<tbody>
<tr>
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</tr>
<tr>
<td>ANTH 112........</td>
<td>ANTH 2113..............................(3)</td>
</tr>
<tr>
<td>BSAD 235........</td>
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<tr>
<td>ECON 200........</td>
<td>ECON 2113..............................(3)</td>
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<tr>
<td>ECON 201........</td>
<td>ECON 2123..............................(3)</td>
</tr>
<tr>
<td>HUDV 270........</td>
<td>(3)</td>
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<tr>
<td>POLI 200........</td>
<td>POLS 1123..............................(3)</td>
</tr>
<tr>
<td>POLI 211........</td>
<td>POLS 1213..............................(3)</td>
</tr>
<tr>
<td>PSYC 111........</td>
<td>PSYC 1113..............................(3)</td>
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<tr>
<td>PSYC 240........</td>
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<td>PSYC 250........</td>
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<td>PSYC 265........</td>
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<td>PSYC 280........</td>
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<td>SOCI 1113..............................(3)</td>
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<td>SOCI 209........</td>
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<tr>
<td>SOCI 216........</td>
<td>(3)</td>
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<tr>
<td>SOCI 220........</td>
<td>SOCI 2113..............................(3)</td>
</tr>
<tr>
<td>SOCI 225........</td>
<td>SOCI 2213..............................(3)</td>
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Area V: Humanities and Fine Arts  
Select six to nine semester hours*  

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<tr>
<td>AMSL 131........</td>
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<tr>
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</tr>
<tr>
<td>AHST 201........</td>
<td>ARTS 2113..............................(3)</td>
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<tr>
<td>AHST 202........</td>
<td>ARTS 2123..............................(3)</td>
</tr>
<tr>
<td>AHST 204........</td>
<td>(3)</td>
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<tr>
<td>AHST 261........</td>
<td>(3)</td>
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<tr>
<td>AHST 262........</td>
<td>(3)</td>
</tr>
<tr>
<td>DRAM 111........</td>
<td>THTR 1013..............................(3)</td>
</tr>
<tr>
<td>ENGL 210........</td>
<td>(3)</td>
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<td>ENGL 239........</td>
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<td>ENGL 253........</td>
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<td>ENGL 273........</td>
<td>ENGL 2733..............................(3)</td>
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<tr>
<td>ENGL 280........</td>
<td>ENGL 286..............................(3)</td>
</tr>
<tr>
<td>ENGL 286........</td>
<td>ENGL 2323..............................(3)</td>
</tr>
<tr>
<td>ENGL 287........</td>
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<tr>
<td>ENGL 288........</td>
<td>ENGL 2313..............................(3)</td>
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<tr>
<td>FREN 111........</td>
<td>FREN 1111/FREN 1113..............................(4)</td>
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<tr>
<td>FREN 112........</td>
<td>FREN 1121/FREN 1123..............................(4)</td>
</tr>
<tr>
<td>FREN 211........</td>
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<td>FREN 212........</td>
<td>(3)</td>
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<tr>
<td>HIST 111........</td>
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<td>HIST 1063..............................(3)</td>
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<td>HUMS 211........</td>
<td>(3)</td>
</tr>
<tr>
<td>HUMS 212........</td>
<td>(3)</td>
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</table>
ISCS 275.................................................................(3)
ITAL 111.................................................................(4)
ITAL 112.................................................................(4)
JAPN 111.................................................................(4)
JAPN 112.................................................................(3)
MUSC 115..............MUSI 1213..............................(3)
MUSC 116.................................................................(3)
MUSC 140..............MUSI 1113..............................(3)
PHIL 111..............PHIL 1113..............................(3)
PHIL 155..............PHIL 1212..............................(3)
PHIL 220..............PHIL 2113..............................(3)
PHIL 245.................................................................(3)
PHIL 246.................................................................(3)
PHIL 258.................................................................(3)
PHIL 265.................................................................(3)
SPAN 111/111L.............SPAN 111/SPAN 1113.......(4)
SPAN 112/112L.............SPAN 1121/SPAN 1123.......(4)
SPAN 113/113L..........................................................(4)
SPAN 114/114L..........................................................(4)
SPAN 150.................................................................(3)
SPAN 211..............SPAN 2133..............................(3)
SPAN 212..............SPAN 2143..............................(3)
SPAN 280.................................................................(3)
SPAN 284.................................................................(3)
SPAN 285.................................................................(3)
SPAN 286.................................................................(3)

or any literature course in English or any other modern language.

*Choose a total of 15 semester hours from Area IV — Behavioral and Social Sciences and Area V — Humanities, with a minimum of six semester hours in each area.

NOTE: The New Mexico Higher Education Department has approved for transfer many additional courses in each of the general education categories. If a transfer institution has unspecified course requirements in a particular category, students have many more options than are indicated in the preceding list. Consult with an SFCC adviser or check with the Registrar's Office for the latest updates.

COMPLAINT PROCEDURE FOR TRANSFER STUDENTS

All New Mexico public postsecondary institutions are required to establish policies and practices for receiving and resolving complaints from students or from other complainants regarding the transfer of course work from other public institutions in the state. SFCC’s complaint process is as follows:

1. File a written appeal with the Registrar's Office providing the prefix/number of the course(s) in question, semester and year the course was taken, the name of the course and the course description from sending institution's catalog.

2. If the request is denied, the student may continue the appeal process to the Vice President for Academic and Student Affairs and must do so no later than 30 days following the notification of denial.

3. The Vice President for Academic and Student Affairs, in concert with the appropriate college and/or content area, will review applicable materials and render a final decision.

If the course or courses in question are part of a state-approved transfer module, the student may make further appeal to the Higher Education Department:

New Mexico Higher Education Department
2048 Galisteo Street
Santa Fe, NM 87505-2100

If a student's articulation complaint is upheld at that level, and the student was required to repeat the course, the receiving institution shall reimburse the student the complete cost, including tuition, books and fees for each course the student was required to repeat at the receiving institution.

Students who have been admitted to SFCC as degree students in transfer from a regionally accredited college, university or other postsecondary institution may request the transfer of credit earned at other institutions. Students must request that each previously attended college or university send an official transcript directly to the Registrar's Office. SFCC will accept college transcripts directly from students only in sealed envelopes marked “official transcript.” Credits may be transferred in accordance with the following guidelines:

1. Credit for courses from regionally accredited institutions will be accepted without condition.

2. Credit for courses accepted in transfer may be used toward graduation requirements as approved by the department head and as specified in the college's graduation regulations.

3. Credit for technical or occupational courses earned at nationally accredited postsecondary institutions will be evaluated according to the technical program being followed at SFCC and may be substituted for SFCC requirements as approved by the division dean. Such work might not apply toward courses in a major or toward general education requirements.

4. The GPA for all courses accepted in transfer that are used to meet graduation requirements must equal 2.0 or more. Course work at SFCC is on a semester-credit-hour basis. Therefore, all transfer
work will be converted to semester hours. For example, three quarter hours will be transferred as two semester hours of credit.

ARTICULATION
SFCC has articulation transfer agreements with various high schools, agencies and postsecondary schools and programs. For more information, stop by the Registrar’s Office in the Welcome and Advising Center, go to www.sfcc.edu/registrar or call 505-428-1264.

CREDIT FOR PRIOR LEARNING
SFCC recognizes that students may gain college-level knowledge through life and work experience outside of traditional academic settings. The Credit for Prior Learning process provides students the opportunities to document their college-level knowledge or use predetermined examinations or earned licenses to demonstrate the equivalency of their learned skills to classroom competencies. Each program defines specific procedures on how students may apply for Credit for Prior Learning consistent with national standards and best practices. SFCC will follow such as indicated on the SFCC Policy 3-18 Credit for Prior Learning and Prior Learning Assessment, its procedures and the college’s residency requirements. It is not possible to earn prior-learning credit for every course in a program, and each process is subject to specific requirements and fees imposed by the department. For more information, contact the department chair in the area of study for which you will be requesting credit for prior learning. For information on college level examinations, contact the Testing Center at 505-428-1625.

1. College Level Examination Program (CLEP)
   Refer to the equivalency matrix on Page 34.

2. DANTES Standardized Subject Tests (DSST)
   Refer to the equivalency matrix on Page 34.

3. College Board Advanced Placement Program (AP)
   Refer to the equivalency matrix on Page 34.

4. Armed Services Educational Experience
   SFCC will award credit for prior learning in alignment and according to the recommendations of The American Council on Education (ACE) and the United States Armed Forces Institute. The Military Occupational Specialists credit recommendations may be modified to be consistent with the institution's credit policy subject to review by the college's subject matter expert, course descriptions and objectives. Additionally, two physical education credits will be awarded to students who have completed basic training in the military service. For more information, contact the Registrar's Office.

5. Certifications and Licensures
   SFCC will award course credit to students who have earned certain professional credentials by examination that demonstrate learning comparable to that of the published learning outcomes for the course credit requested. Contact the department chair for more information.

6. SFCC Challenge Examinations
   Students may earn course credit by successfully passing a comprehensive challenge exam developed internally by the department if one is available. If the student passes the challenge exam with a grade of C or better, the course will be posted to the student’s transcript with a grade of P (Pass) and the appropriate number of credit hours. The course will count toward graduation requirements, but it will not be included in calculating the grade point average. The course will not count towards the SFCC residency requirement for graduation. A student may attempt a challenge exam only once per course. If the challenge is unsuccessful, the student must take the course to receive academic credit. Contact the department chair for more information.

7. Credit by Portfolio
   If no exam options are available, students may, in certain cases, be able to earn course credit by documenting in a portfolio college-level learning acquired through those experiences. Faculty members will evaluate and assess if the learning outcomes are met as listed on the course syllabus. Course credit awarded through the portfolio process will not count towards the SFCC residency requirement for graduation. Contact the department chair for more information.
<table>
<thead>
<tr>
<th>Advanced Placement Exam</th>
<th>Minimum Score</th>
<th>Equivalent SFCC Course</th>
<th>Credits Granted</th>
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<tr>
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<tr>
<td>Art history</td>
<td>3</td>
<td>AHST 201 and 202</td>
<td>6</td>
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<tr>
<td><strong>Biology</strong></td>
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<tr>
<td>Biology</td>
<td>3</td>
<td>BIOL 123/123L or BIOL 111/111L</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>BIOL 201/201L</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>BIOL 201/201L and 202/202L</td>
<td>8</td>
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<tr>
<td><strong>Chemistry</strong></td>
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<td></td>
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<td>Chemistry</td>
<td>3</td>
<td>CHEM 111/111L</td>
<td>4</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>5</td>
<td>CHEM 121/121L and 122/122L</td>
<td>8</td>
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<tr>
<td><strong>Computer Science</strong></td>
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<tr>
<td>C S A</td>
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<td>ISCS 125</td>
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<td>C S AB</td>
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<td>U.S. History</td>
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<td>HIS 161 and 162</td>
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<tr>
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<td>SPAN 111, 112, 211, 212</td>
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<tr>
<td>Calc BC</td>
<td>3</td>
<td>MATH 162 and 163</td>
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<td>Physics C Elec., and Mang.</td>
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<td>4, 5</td>
<td>PHYS 162/162L</td>
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<td></td>
<td>4, 5</td>
<td>PHYS 162/162L</td>
<td>4</td>
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<td>POLI 200</td>
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<tr>
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<td>PSYC 111</td>
<td>3</td>
</tr>
</tbody>
</table>

*Subject to departmental review
**Where a range of credit is possible, the credit awarded is determined by the department head.
## EQUIVALENCY MATRIX OF SFCC COURSES/CLEP AND DSST

<table>
<thead>
<tr>
<th>CLEP Exam (or DSST where noted)</th>
<th>Minimum Score</th>
<th>SFCC Course and Credit hours</th>
</tr>
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<tbody>
<tr>
<td>Financial Accounting</td>
<td>50</td>
<td>ACCT 121 (4)</td>
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<tr>
<td><strong>DSST</strong> Principles of Financial Accounting</td>
<td>50</td>
<td>ACCT 121 (4)</td>
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<tr>
<td>Biology</td>
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<td>BIOL 111 (4)</td>
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<tr>
<td>Principles of Management</td>
<td>55</td>
<td>BSAD 211 (3)</td>
</tr>
<tr>
<td>Introductory Business Law</td>
<td>50</td>
<td>BSAD 232 (3)</td>
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<tr>
<td>Principles of Marketing</td>
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<td>BSAD 240(3)</td>
</tr>
<tr>
<td>Chemistry</td>
<td>50</td>
<td>CHEM 121/121L/122/122L (8)</td>
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<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>ECON 200 (3)</td>
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<td>Principles of Microeconomics</td>
<td>50</td>
<td>ECON 201 (3)</td>
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<tr>
<td>College Composition</td>
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<td>ENGL 111(3)</td>
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<tr>
<td>College Composition</td>
<td>70</td>
<td>ENGL 111/112 (6)</td>
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<tr>
<td><strong>DSST</strong> Technical Writing*</td>
<td>46</td>
<td>ENGL 216* (3)</td>
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<tr>
<td>English Literature</td>
<td>50</td>
<td>ENGL 251/252 (6)</td>
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<tr>
<td>American Literature</td>
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<td>ENG 261/262(6)</td>
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<tr>
<td>French Language</td>
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<td>FREN 111/112 (8)</td>
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<td>French Language</td>
<td>59</td>
<td>FREN 111/112/211/212 (14)</td>
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<tr>
<td>German Language</td>
<td>50</td>
<td>GERM 111/112 (8)</td>
</tr>
<tr>
<td>German Language</td>
<td>60</td>
<td>GERM 111/112/211 and 3-credit language elective (14)</td>
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<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>HIST 111 (3)</td>
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<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>HIST 112 (3)</td>
</tr>
<tr>
<td>History of the United States I</td>
<td>50</td>
<td>HIST 161 (3)</td>
</tr>
<tr>
<td>History of the United States II</td>
<td>50</td>
<td>HIST 162 (3)</td>
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<tr>
<td>Analyzing and Interpreting Literature</td>
<td>50</td>
<td>Humanities Elective (3)</td>
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<tr>
<td>College Algebra</td>
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<td>MATH 121 (4)</td>
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<tr>
<td>Precalculus</td>
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<td>MATH 150 (4)</td>
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<tr>
<td>Calculus</td>
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<td>MATH 162 (4)</td>
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<tr>
<td>American Government</td>
<td>50</td>
<td>POLI 200 (3)</td>
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<tr>
<td>Introductory Psychology</td>
<td>50</td>
<td>PSYC 111 (3)</td>
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<tr>
<td>Introductory Sociology</td>
<td>50</td>
<td>SOCI 111 (3)</td>
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<tr>
<td>Human Growth/Development</td>
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<td>Social Science Elective (3)</td>
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<tr>
<td>Spanish Language</td>
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<td>SPAN 111/112 (8)</td>
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<tr>
<td>Spanish Language</td>
<td>63</td>
<td>SPAN 111/112/211/212 (14)</td>
</tr>
</tbody>
</table>

*To earn credit, a student must score at the appropriate level on the multiple choice portion of the DSST and also successfully complete a separate writing assignment. Contact the Testing Center for information, 505-428-1625.
STUDENT RECORDS

SFCC is committed to maintaining the confidentiality of student records. Policy 2-12 Student Records is in accordance with the Family Educational Rights and Privacy Act of 1974 (P.L.93-380, 513) (FERPA), which affords students certain rights with respect to their education records. These rights include:

- The right to inspect and review student’s education records within 45 days of the day the college receives a request for access. Students should submit to the Registrar written requests that identify the record(s) they wish to inspect. A college official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the college official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
- The right to request the amendment of information in the student’s education records that the student believes is inaccurate. Students should write the Registrar, clearly identifying the part of the record they want changed and specifying why it is inaccurate. If the college decides not to amend the record as requested by the student, the college will notify the student of the decision and advise the student of their right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- The right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent. One exception, which permits disclosure without consent, is the disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor or collection agent); a person serving on the Governing Board; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing their tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill their professional responsibility.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA.

Concerns can be submitted to the office that administers FERPA:

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

ACCESS TO STUDENT RECORDS

All currently enrolled and former students may have access to their educational records. Other people and agencies that may have access to students’ records include:

1. College faculty and staff performing their job responsibilities related to academic and educational programs.
2. Parents claiming the student as a dependent on their federal income tax returns.
3. Scholarship and other financial aid organizations supporting the student.
4. Federal, state and local officials who by law must receive information from the college.
5. Any party designated by judicial order or subpoena, provided that the college notifies the student of the subpoena.
6. Any person with the written consent of the student
7. Santa Fe Higher Education Center partner schools for transfer.

PUBLIC DIRECTORY INFORMATION

Public directory information is only disseminated on a need-to-know basis such as internal processing for financial aid and federal and state reporting. The college has defined public directory information as a student’s name, local and permanent addresses, campus email, major field of study, dates of attendance, and degrees and certificates and honors and awards received. A written request to withhold any information can be filed annually by the student at the Registrar’s Office. Request forms may be obtained at the Registrar's Office and must be submitted within two weeks of the first day of a semester to be honored that semester. For information, call the Registrar’s Office at 505-428-1264.

CHALLENGE OF THE CONTENT OF THE STUDENT RECORD

Students have the right to challenge the content of their student record if they believe the information is misleading, inaccurate or otherwise in violation of privacy or other rights. Disputes are handled through informal meetings between the student and the Vice President for Academic and Student Affairs. If the dispute cannot be resolved informally, the student has the right to a formal hearing before the Nonacademic Appeals Committee.
TRANSCRIPT REQUESTS

Official Transcripts
To obtain an official copy of your transcript or to have one sent to an employer or another college, there are several options:
- Complete a transcript request form online at www.sfcc.edu/registrar.
- Complete a transcript request form in person at the Registrar's Office.
- Mail a letter with the request to the Registrar's Office.
- Fax a letter with the request to 505-428-1405.
- Email a letter with the request to records@sfcc.edu
- Go to www.sfcc.edu and log into mysfcc/quick links/student records/request official transcript

Requests should include:
- Last four digits of Social Security Number or date of birth or “A” Number.
- Date of the last term you attended SFCC
- Former names used while attending SFCC
- Name and address of the person or institution where you want the transcript sent.
- Signature (on letter)

Allow three to five business days for processing.

Unofficial Transcripts
For an unofficial transcript go to www.sfcc.edu and log into mysfcc/quick links/student records/view unofficial transcript.
Go to the Welcome and Advising Center and request a printed copy. There is no charge for unofficial transcripts.

NOTE: SFCC will not release your transcript if you have outstanding debts with the college unless you have made arrangements for payment of those debts with the Cashier's Office. For more information about student records, refer to SFCC Policy 2-12 Student Records.

ETHNICITY AND RACE IN STUDENT RECORDS
The college is required to report aggregated race and ethnic statistics on students and employees to the U.S. Department of Education on an annual basis for research purposes. The data also assists the college in applying for federal and state grants and financial aid funding for students.

CURRICULUM

DISCIPLINE AREAS
Students should ask their advisers to identify specific courses in each discipline area that will count as credit for specific degrees or certificates. No studio course in art, drama or music may be used to meet the general studies requirements for a degree other than a Fine Arts degree.

INSTRUCTIONAL SCHOOLS
SCHOOL OF ARTS, DESIGN, AND MEDIA ARTS
505-428-1731
Artists and designers play an increasingly significant role in the creative economy; they are involved in creating images, designs, and products for magazines, television, film, theater, video games, the internet, green architectural design, lines of clothing, furniture design and many other innovative fields. The opportunities for artists and designers extend far beyond gallery exhibitions. The creative problem solving and communication skills developed in an arts degree are applicable to any career. The educational goal is to set artists and designers on the path to successfully participate in, and contribute to, the arts community and the creative industry.

The innovative programs and variety of courses offered by the School of Arts, Design, and Media Arts focus on developing each individual as a skilled and creative practitioner of their craft. Whether for transfer to a four-year university or to enter a profession, degrees, certificates, and courses are available in many areas. All programs help students develop a portfolio for use in applying to four-year programs, to apply for entry-level positions or to launch a creative business.

Department of Arts and Design ...............505-428-1731
Architecture/Interior Design ..........................(ARCH)
Art History .....................................................(AHST)
Arts ...............................................................(ARTS)
Book Arts/Printmaking ..............................(PRBK)
Clay and Pottery .........................................(CLAY)
Dance ............................................................(DRAM)
Drama ...........................................................(DRAM)
Drawing and Painting ..........................(DRPT)
Fashion Design ......................................(FASH)
The School of Fitness Education consists of Exercise Science, 505-428-1615
Nutrition, and Health, Physical Education and Recreation classes, all housed in the William C. Witte Fitness Education Center. The goal of each of the instructional departments is to provide quality courses that build academic and/or career skills. The Associate in Applied Science in Exercise Science leads to national-level professional certifications and transfers to the bachelor of science programs at the U.S. Sports Academy. The Certificate in Fitness Instructor Training gives students the knowledge and skills to attain American Council on Exercise certifications. The Certificate in Nutrition is delivered in its entirety online and offers professional development for students who work in the health education field. Through a variety of traditional and nontraditional approaches, including online courses, the programs offer instruction that is challenging and success oriented and prepares students for employment after graduation. A variety of HPER classes are geared towards entering freshman as well as life-long learners to enhance health and well-being.

Department of Fitness Education...........505-428-1615
Exercise Science.................................(EXSC)
Health Education...................................(HLED)
Health, Physical Education and Recreation.....(HPER)
Nutrition..............................................(NUTR)

SCHOOL OF BUSINESS, PROFESSIONAL STUDIES
AND EDUCATION
505-428-1308 or 505-428-1256
The School of Business, Professional Studies and Education offers high-quality programs that provide students with academic or career skills needed for a variety of professions. Associate degrees and certificates are offered in Accounting, Business Administration, Criminal Justice, Hospitality and Tourism, Early Childhood Education, Entrepreneurship, Office Management, Paralegal Studies and Teacher Education. These are designed to transfer to four-year colleges or to provide the skills needed for jobs in business. The Teachers Academy offers students who already hold a bachelor's degree an alternative route to teacher licensure. The school embraces both traditional and non-traditional delivery of contemporary curricula using current technology. Faculty members bring years of teaching and real-world experience to the classrooms and labs.

Department of Business ......................505-428-1308
Accounting............................................(ACCT)
Business Administration/Entrepreneurship......(BSAD)
Economics............................................(ECON)
Office Technologies.............................(OFTC)

Department of Professional Studies ......505-428-1308
Criminal Justice.................................(CRJS)
Culinary Arts.......................................(CULA)
Hospitality and Tourism.......................(HRMG)
Paralegal Studies...............................(LEGL)

Department of Teacher Education .........505-428-1256
Early Childhood Education...............(ECED and ECME)
Teacher Certification (Teacher Academy) ....(EDUC)

SCHOOL OF LIBERAL ARTS
505-428-1772
The School of Liberal Arts offers varied curricula, including university-transferable general education courses in English and speech, social and behavioral sciences, humanities and world languages. The school offers associate in arts degrees in American Sign Language Interpreting, General Studies, Human Services, Psychology and Spanish Language, and certificates in Academic Transfer, American Sign Language Interpreting, Creative Writing, Leadership, and Traumatic Stress Aide. Liberal Arts courses are designed to give students a solid foundation in general education by emphasizing essential skills that prepare students for an active life, professionally and personally. Many of these degrees will transfer to bachelor's degree programs at four-year colleges. The school also offers courses in developmental education that are designed to increase college readiness by improving basic skills in reading and writing.

Department of Social Sciences, Humanities and
Human Development .........................505-428-1772
Anthropology.....................................(ANTH)
Geography.........................................(GEOG)
History.............................................(HIST)
Human Development............................(HUDV)
Human Services..................................(HUSV)
Humanities.......................................(HUMS)
SCHOOL OF SCIENCES, HEALTH, ENGINEERING AND MATH, 505-428-1323 or 505-428-1754

The School of Sciences, Health, Engineering and Math includes Dental Health, Engineering, Home Health Aide, Information Systems, Computer Science, Nursing, Nursing Assistant, Math, Paramedic/EMT, Medical Assisting, Phlebotomy, Respiratory Care, Science, Paramedic and Emergency Medical Services. The goal of each department is to provide quality courses that build academic or career skills. Some programs lead to transferable Associate in Applied Science degrees in Dental Health, Nursing and transferable Associate in Science degrees. Others prepare students for professional credentialing examinations in Dental Assisting, Emergency Medical Services, Home Health Aide, Nursing Assistant, Paramedic, Phlebotomy, Respiratory Care and Nursing. Through traditional and nontraditional delivery approaches, including online and telecourses, the programs offer courses that are challenging and success oriented in state-of-the-art, high-tech facilities.

Department of Dental Health ..........505-428-1258
Dental Assisting.................................(DAST)
Expanded Funding Dental Auxiliary............(EFDA)

Department of EMSI .........................505-428-1820
American Heart Association......................(AHAC)
Emergency Medical Services Institute...........(EMSI)

Department of Computer Science, Engineering and Math ...............505-428-1754

Department of Medical Assisting and Phlebotomy ..................505-428-1763
Health Care ........................................(HLCR)
Medical Assisting................................(MAST)
Phlebotomy ...........................................(PHLB)

Department of Nursing .......................505-428-1323
Nursing .............................................(NURS)

Department of Respiratory Care ...........505-428-1723
Respiratory Care ...............................(RESP)

Department of Sciences ......................505-428-1757
Astronomy .........................................(ASTR)
Biology ..............................................(Biol)
Chemistry ...........................................(CHEM)
Geology ............................................(GEOL)
Physics ...............................................(PHYS)

SCHOOL OF TRADES, ADVANCED TECHNOLOGIES AND SUSTAINABILITY, 505-428-1524

The School of Trades, Advanced Technologies and Sustainability integrates 21st-century trades and advanced technologies with a sustainability focus. These cutting-edge degrees, certificates and industry-recognized certifications lead to high-skill, high-wage careers and are aligned with local job opportunities. SFCC’s state-of-the-art labs allow for hands-on, applied learning experiences. SFCC faculty are experts in their fields and bring real-world experiences to the classroom. Students gain skills for immediate employment or credits for transfer to a four-year program.

Sustainable Technologies Center ...............505-428-1524
Adobe Construction ............................(ADOB)
Alternative Fuels ..................................(ALTF)
Automotive .........................................(ATEC)
Building Construction .........................(BLDG)
Electrical ............................................(ELCT)
Electronics ...........................................(ELEC)
Energy Efficiency ...................................(ENEF)
Environmental Technologies ...................(ENVR)
Facility Technologies ............................(FACT)
Greenhouse Management ......................(GRHS)
Heating, Ventilation and Air Conditioning ... (HVAC)
Plumbing ............................................(PLMB)
Solar Energy .......................................(SOLR)
Water Technology ...............................(WATR)
Welding .............................................(WELD)
ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES
These degrees are intended to prepare students to transfer to bachelor degree programs at four-year institutions. The associate in arts degree gives emphasis to those majoring in the arts, humanities and behavioral and social sciences, and the associate in science degree gives emphasis to those majoring in engineering, technology and the sciences, with substantial undergraduate requirements in mathematics and the natural sciences.

Although students awarded associate in arts or associate in science degrees may be accepted as junior-level transfers in baccalaureate degree-granting institutions, not all four-year institutions grant full junior-level status to persons holding associate degrees. Therefore, students should work closely with their advisers and their transfer institutions to assure the best transition to four-year schools.

ASSOCIATE IN ARTS AND ASSOCIATE IN SCIENCE DEGREES (A.A. AND A.S.) INCLUDE THE FOLLOWING CATEGORIES OF REQUIREMENTS:

General education requirements consist of a minimum of 35 college level (numbered 111 or above) credit hours in these areas:

- Communications (9 credit hours)
- Mathematics (3 credit hours)
- Laboratory Science (8 credit hours)
- Social and Behavioral Sciences (6-9 credit hours)
- Humanities and Fine Arts (6-9 credit hours)

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Refer to the General Education Transfer Matrix at www.hed.state.nm.us for specific information about transferable general education courses.

Additional general education degree requirements are mandatory for all SFCC associate degrees and consist of:

- Health and Wellness (1 credit hour)

Core requirements are required courses in or closely related to the major field of study.

Related requirements (if any) consist of courses that the student may choose that are in or closely related to the major field of study.

Approved electives (if any) may consist of courses from the related requirements list or may be other courses that the student and their adviser have determined to be appropriate and applicable to the degree. Taken together, program requirements, related requirements and approved electives may constitute up to 31 credit hours, and the associate degree may consist of up to 72 credit hours.

ASSOCIATE IN APPLIED ARTS AND ASSOCIATE IN APPLIED SCIENCE DEGREES (A.A.A. AND A.A.S.) INCLUDE THE FOLLOWING CATEGORIES OF REQUIREMENTS:

The American Association of Community Colleges’ Board Statement on the Associate Degree (2000) states:

The associate in applied arts or applied science degree programs are designed to lead the individual directly to employment in a specific career. Although the objective of the associate in applied arts or applied science
degrees is to enhance employment opportunities, some baccalaureate degree-granting institutions have developed upper-division programs to recognize this degree for transfer credits. The associate in applied arts or applied science degree programs must be designed to recognize this dual possibility and to encourage students to recognize the long-term career possibilities that continued academic study will create.

**General education requirements** consist of a minimum of 22 college level (numbered 111 or above) credit hours in the following areas:

- Communications (6 credit hours, ENGL 111 or ENGL 119 required)
- Mathematics (3 credit hours)
- Laboratory Science (4 credit hours)
- Social and Behavioral Sciences (3-6 credit hours)
- Humanities and Fine Arts (3-6 credit hours)

*The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.*

Refer to the General Education Transfer Matrix for specific information about transferable general education courses at www.hed.state.nm.us.

Additional general education degree requirements are mandatory for all SFCC associate degrees and consist of:

- Health and Wellness (1 credit hour)

General education requirements for the A.A.A. and A.A.S. need not be chosen from the New Mexico Higher Education Department transfer matrix and therefore are not guaranteed for transfer. However, the “dual possibility” of the degree (i.e., workplace preparation and transfer) makes careful consideration of general education requirements essential.

**CERTIFICATES**

SFCC offers certificates of various lengths and learning levels. Certificates are built on clear learning pathways that are connected to Career and Technical Education-based competencies or they may be designed to apply to two-year degrees.

List of additional general education degree requirements:

- Health and Wellness courses
  - EXSC 220 Fitness and Exercise Testing
  - FILM 140L Film Crew I Lab
  - HLED 111 Lifetime Health and Wellness
  - HLED 112 Weight Management and Exercise
  - HPER 111L Beginning Yoga
  - HPER 117L Beginning Body Sculpting
  - HPER 120L Multi-Level Tennis
  - HPER 130L Beginning Swimming
  - HPER 160L Fitness Cycling
  - HPER 165L Beginning Hiking
  - HPER 166L Beginning Co-ed Strength Training
  - HPER 172L Beginning Fitness Program
  - HPER 173L Swimming Fitness Program
  - HPER 179L R.I.P.P.E.D
  - NUTR 200 Nutrition

Speak to your adviser for an updated list of classes.

**ASSOCIATE IN ARTS**

A list of current degrees follows. This list may not be complete because program development is ongoing. The Associate in Arts degrees are designed for students who intend to transfer to four-year colleges or universities, with the transfer of credits subject to the policy of the institution to which the student is transferring.

SFCC has a mandatory assessment and placement policy. Students wishing to enroll in English or math or in any course in which an English or math course is a prerequisite must participate in assessment as described on Page 8. New students seeking degrees or certificates at SFCC must fulfill the student success course requirement described on Page 8 within their first 12 college credit hours or within their first two semesters of enrollment, whichever comes first.

- Accounting
- American Sign Language
- Business Administration
- Criminal Justice
- Early Childhood Education
- Film
- Fine Arts
- General Studies (various concentrations)
- Hospitality and Tourism Management
- Human Services
- Media Arts
- Photography
- Psychology
- Spanish Language
- Teacher Education
<table>
<thead>
<tr>
<th>ASSOCIATE IN ARTS</th>
<th>RELATED CERTIFICATE(S)</th>
</tr>
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<tbody>
<tr>
<td>Accounting</td>
<td>Accounting Specialist</td>
</tr>
<tr>
<td>American Sign Language</td>
<td><em>American Sign Language</em>; <em>American Sign Language Interpreter Preparation</em></td>
</tr>
<tr>
<td>Business Administration</td>
<td>Accounting Specialist; <em>Business Administration</em>; Entrepreneurship</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>Criminal Investigation; <em>Police Supervision</em></td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>Early Childhood Development; Infant Family Studies</td>
</tr>
<tr>
<td>Film</td>
<td>Digital Cinematography; Independent Filmmaking; Multimedia Journalism; Production; Post-Production</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>Ceramics, <em>Drawing and Painting</em>; Jewelry/Metal Arts; <em>Sculpture</em></td>
</tr>
<tr>
<td>General Studies</td>
<td><em>Liberal Arts for Transfer</em>; Creative Writing</td>
</tr>
<tr>
<td>Hospitality and Tourism Management</td>
<td><em>Hospitality and Tourism</em></td>
</tr>
<tr>
<td>Human Services</td>
<td><em>Traumatic Stress Aid</em></td>
</tr>
<tr>
<td>Media Arts</td>
<td>3D, Animation, Game Design; Audio Production; Graphic and Interactive Design; Web Design</td>
</tr>
<tr>
<td>Photography</td>
<td><em>Fine Arts Photography, Commercial Photography</em></td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
</tr>
<tr>
<td>Spanish Language</td>
<td></td>
</tr>
<tr>
<td>Teacher Education</td>
<td>Certifications: Teaching Bilingual Education; Teaching Early Childhood Education; Teaching Elementary Education (K-8); Teaching Secondary Education (K-12); Teaching Special Education; Teaching Speakers of Other Languages (TESOL)</td>
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<table>
<thead>
<tr>
<th>ASSOCIATE IN SCIENCE</th>
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<tbody>
<tr>
<td>Biological Sciences</td>
<td></td>
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<tr>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>General Engineering and Engineering Technologies</td>
<td>Engineering Technologies; <em>General Engineering Technologies</em>; Manufacturing Engineering Technologies; Mechanical Engineering Technologies; Electrical, Smart Grid, and Micro Grid Technologies</td>
</tr>
<tr>
<td>DEGREE</td>
<td>RELATED CERTIFICATE(S) Italics indicates nested certificates</td>
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<tr>
<td>General Studies</td>
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<tr>
<td>Physical Sciences</td>
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<tr>
<td><strong>ASSOCIATE IN APPLIED ARTS</strong></td>
<td></td>
</tr>
<tr>
<td>Fashion Design</td>
<td>Fashion Design</td>
</tr>
<tr>
<td>Photography</td>
<td>Fine Arts Photography; Commercial Photography</td>
</tr>
<tr>
<td>Professional Crafts</td>
<td>Fine Woodworking; Jewelry/Metal Arts; Sculpture</td>
</tr>
<tr>
<td><strong>ASSOCIATE IN APPLIED SCIENCES</strong></td>
<td></td>
</tr>
<tr>
<td>Allied Health</td>
<td>Emergency Medical Technician — Basic; Emergency Medical Technician — Intermediate; Home Health Aide; Nursing Assistant; Paramedicine; Community Healthcare Worker Training; Nutrition; Phlebotomy</td>
</tr>
<tr>
<td>American Sign Language Interpreter Preparation</td>
<td>American Sign Language Interpreter Preparation</td>
</tr>
<tr>
<td>Architectural and Interior Design Technologies</td>
<td>Architectural and Interior Design Software; Architectural and Interior Design Technologies</td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>Auto Maintenance and Light Truck Repair; Automatic Transmission Transaxle; Automotive Engine Repair; Automotive Heating and Air Conditioning; Brakes; Manual Transmission and Drive Train; Steering and Suspension</td>
</tr>
<tr>
<td>Building Science and Construction Technologies</td>
<td>Building Science and Construction Technologies; Green Building Construction Skills; Green Building Systems: Heating, Ventilation, and Air Conditioning; Plumbing; Adobe Construction; Advanced Green Building Construction Skills</td>
</tr>
<tr>
<td>Business Administration</td>
<td>Accounting Specialist; Business Administration; Entrepreneurship</td>
</tr>
<tr>
<td>Computer and Information Technologies</td>
<td>Computer and Information Technologies; Computer and Network Security; Information Technology Support for Smart Grids and Micro Grids</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>Criminal Investigation; Police Supervision</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>Culinary Arts; Patissier; Nutrition; Hospitality and Tourism</td>
</tr>
<tr>
<td>Dental Health</td>
<td>Dental Assisting; Expanded Functions Dental Auxiliary</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>Early Childhood Education; Infant Family Studies</td>
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<tr>
<td>Engineering Technologies</td>
<td>Engineering Technologies; General Engineering Technologies; Manufacturing Engineering Technologies; Mechanical Engineering Technologies; Electrical, Smart Grid, and Micro Grid Technologies</td>
</tr>
<tr>
<td>DEGREE</td>
<td>RELATED CERTIFICATE(S) Italics indicates nested certificates</td>
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<tr>
<td>Exercise Science</td>
<td>Fitness Instructor Training; Nutrition</td>
</tr>
<tr>
<td>Film</td>
<td>Digital Cinematography; Independent Filmmaking; Multimedia Journalism; Production; Post-Production</td>
</tr>
<tr>
<td>General Studies</td>
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<tr>
<td>Controlled Environment Agriculture (formerly Greenhouse Management)</td>
<td>Controlled Environment Agriculture</td>
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<td></td>
<td>Algae Cultivation</td>
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<tr>
<td>Media Arts</td>
<td>3D, Animation, Game Design; Audio Production; Graphic and Interactive Design; Web Design</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>Medical Assisting; Phlebotomy</td>
</tr>
<tr>
<td>Nursing</td>
<td>Practical Nursing</td>
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<td>Paralegal Studies</td>
<td>Law Office Administrative Assistant; Legal Secretary; Paralegal Studies</td>
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<tr>
<td>Paramedicine</td>
<td>Emergency Medical Technician — Basic; Emergency Medical Technician — Intermediate; Paramedicine</td>
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<tr>
<td>Respiratory Care</td>
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<tr>
<td>Sustainable Technologies</td>
<td>Biofuels; Water Treatment Operation; Solar Energy; Sustainable Technologies</td>
</tr>
<tr>
<td>Welding Technologies</td>
<td>Welding</td>
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</table>
CERTIFICATE(S)
American Sign Language
American Sign Language Interpreter Preparation
Architectural and Interior Design Software
Architectural and interior Design Technologies
Auto: Auto Maintenance and Light Truck Repair
Auto: Automatic Transmission Transaxle
Auto: Automotive Engine Repair
Auto: Automotive Heating and Air Conditioning
Auto: Brakes
Auto: Manual Transmission and Drive Train
Auto: Steering and Suspension
Building Science: *Green Building Construction Skills
Building Science: *Green Building Systems
Building Science:
  *Heating, Ventilation, and Air Conditioning
Building Science: *Plumbing
Building Science: Adobe Construction
Building Science:
  Advanced Green Building Construction Skills
Building Science:
  Building Science and Construction Technologies
Business: Accounting Specialist
Business: Business Administration
Business: Entrepreneurship
Controlled Environment Agriculture
(formerly Greenhouse Management)
Criminal Justice: Criminal Investigation
Criminal Justice: Police Supervision
Culinary: Culinary Arts
Culinary: Patissier
Dental Health: Dental Assisting
Dental Health: Expanded Functions Dental Auxiliary
Engineering: Electrical, Smart Grid, and Micro Grid Technologies
Engineering: Engineering Technologies
Engineering: General Engineering Technologies
Engineering: Manufacturing Engineering Technologies
Engineering: Mechanical Engineering Technologies
Exercise Science: Fitness Instructor Training
Exercise Science: Nutrition
Facility Technologies
Fashion Design
Film: Digital Cinematography
Film: Independent Filmmaking
Film: Multimedia Journalism
Film: Post-Production
Film: Production
Fine Arts: Ceramics
Fine Arts: Drawing and Painting
Fine Arts: Jewelry/Metal Arts
Fine Arts: Sculpture
General Studies: Creative Writing
General Studies: Liberal Arts for Transfer
Healthcare: Community Health Worker
Healthcare: Emergency Medical Technician Basic
Healthcare: Emergency Medical Technician Intermediate
Healthcare: Home Health Aide
Healthcare: Medical Assisting
Healthcare: Medical Billing and Coding
Healthcare: Nursing Assistant
Healthcare: Nutrition
Healthcare: Paramedicine
Healthcare: Patient Care Assistant
Healthcare: Phlebotomy
Healthcare: Practical Nursing
Hospitality and Tourism
Human Services: Traumatic Stress Aide
Information Technology:
  Computer and Information Technologies
Information Technology: Computer and Network Security
Information Technology: Information Technology Support for Smart Grids and Micro Grids
Leadership
Legal Studies: Law Office Administrative Assistant
Legal Studies: Legal Secretary
Legal Studies: Paralegal Studies
Media Arts: 3D, Animation, and Game Design
Media Arts: Audio Production
Media Arts: Graphic and Interactive Design
Media Arts: Web Design
Photography: Commercial Photography
Photography: Fine Arts Photography
Professional Crafts: Ceramics
Professional Crafts: Fine Woodworking
Professional Crafts: Jewelry/Metal Arts
Sustainable Technologies: *Biofuels
Sustainable Technologies: *Water Treatment Operation
Sustainable Technologies: Solar Energy
Sustainable Technologies: Sustainable Technologies
Teacher Certification: *Bilingual Education Endorsement
Teacher Certification:
  *Teaching Early Childhood Education
Teacher Certification:
  *Teaching Elementary Education (K-8)
Teacher Certification: *Teaching English to Speakers of Other Languages (TESOL)
Teacher Certification:
  *Teaching Secondary Education (7-12)
Teacher Certification: *Teaching Special Education (K-12)
Teacher Education: Early Childhood Development
Teacher Education: Infant Family Studies
Welding
ASSOCIATE IN ARTS

ACCOUNTING
(69 hrs. min.)  CIP:  52.0301
School of Business, Professional Studies and Education, 505-428-1308

This program is designed for students who intend to obtain bachelor's degrees in accounting. It provides general education requirements and basic accounting courses. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Read, prepare, analyze, and appraise financial statements.
• Appraise financial information for effective decision-making.
• Explain the relationships between the four functions of management.
• Analyze and interpret data using descriptive and inferential statistics for business decision making.
• Describe relevant elements of the American legal system and their impact on business.
• Apply key economic concepts to the evaluation of relationships among individuals, businesses and government entities.
• Evaluate organizational performance based on ethics, law, sustainability and social responsibility.
• Apply relevant technology to communication processes.

GENERAL EDUCATION REQUIREMENTS: (37 HRS. MIN.)

Communications (9 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 216  Technical Writing (3)
SPCH 111  Public Speaking (3)
[or]
SPCH 225  Small-Group Communication (3)

Mathematics (4 hrs.)
MATH 121  College Algebra (4) or higher

Laboratory Science (8 hrs.)

Social/Behavioral Sciences (9 hrs.)
BSAD 235  Human Relations in the Workplace (3)
ECON 200  Principles of Macroeconomics (3)
ECON 201  Principles of Microeconomics (3)

Humanities and Fine Arts (6 hrs.)
BSAD 270  Business Ethics (3)
Humanities and Fine Arts course (3)

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (32 HRS.)

ACCT 121  Principles of Accounting I (Financial) (4)
ACCT 122  Principles of Accounting II (Managerial) (4)
ACCT 125  Computerized Accounting—QuickBooks (3)
ACCT 221  Intermediate Accounting (4)
BSAD 211  Principles of Management (3)
BSAD 232  Business Law I (3)
BSAD 245  Corporate Finance (3)
BSAD 260  Business Statistical Analysis (4)
OFTC 111  Business Software Essentials (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 69 CREDITS MIN.

ASSOCIATE IN ARTS

AMERICAN SIGN LANGUAGE
(61 hrs. min.)  CIP:  16.1603
School of Liberal Arts, 505-428-1370

This Associate of Arts degree in American Sign Language (ASL) prepares students for transfer to a four-year program or professional positions in Deaf education (such as instructional aides, dorm counselors, etc.), research, human services (vocational rehabilitation), or community services (interpreting). Students gain an extensive knowledge of Deaf culture as well as a broad understanding of the scope and types of support services that should be available to deaf persons. It is recommended that sign language students select their courses and program plan in consultation with an American Sign Language/Interpreter adviser with World Languages Department advisers. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools. For more information: www.sfcc.edu/programs/american_sign_language_interpreting.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate a broad understanding of and respect for the language, culture, and history of American Deaf people.
• Demonstrate the ASL skills that will support the undertaking of further study and employment in education of the Deaf, interpreting, and in various
professional and paraprofessional occupations in which the ability to communicate using ASL is essential.

- Demonstrate the ability to effectively communicate in ASL with diverse members of the Deaf community in many types of settings.
- Demonstrate effective advocacy by working with the Deaf to advance understanding and support for Deaf-related issues that impact the lives of Deaf individuals worldwide.

Students can earn the following certificate related to this degree:
- American Sign Language

GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)

Communications (9 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 112  Composition and Literature (3)
Any SPCH course (3)

Mathematics (3 hrs.)
MATH 119  Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (8 hrs.)

Social/Behavioral Sciences (6 hrs.)
PSYC 111  Psychology I (3)
SOCI 111  Introduction to Sociology (3)

Humanities and Fine Arts (9 hrs.)
Choose from the following:
AMSL 131  Introduction to Deaf Studies (3)
Any approved electives (6)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (25 HRS.)

AMSL 111  American Sign Language I (4)
AMSL 112  American Sign Language II (4)
AMSL 135  Basic American Sign Language Linguistics (3)
AMSL 211  American Sign Language III (4)
AMSL 212  American Sign Language IV (4)
AMSL 215  Fingerspelling and Numbers (3)
AMSL 216  American Sign Language Classifiers (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 61 CREDITS MIN.

ASSOCIATE IN ARTS

BUSINESS ADMINISTRATION

(62 hrs. min.)  CIP: 52.0201
School of Business, Professional Studies and Education, 505-428-1308

This program is designed for students who intend to obtain bachelor's degrees in business administration. It provides general education requirements and basic business core courses. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Read, prepare, analyze, and appraise financial statements.
- Explain the relationship between the four functions of management.
- Analyze and interpret data using descriptive and inferential statistics for business decision-making.
- Describe relevant elements of the American legal system and their impact on business.
- Apply key economic concepts to the evaluation of relationships among individuals, businesses, and government entities.
- Evaluate organizational performance based on ethics, law, sustainability and social responsibility.
- Describe the methods, policies, and organizations involved in the exchange of goods and services among producers and consumers.
- Apply relevant technology to communication processes.

Students can earn the following certificates related to this degree:
- Entrepreneurship
- Business Administration

GENERAL EDUCATION REQUIREMENTS: (37 HRS. MIN.)

Communications (9 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 216  Technical Writing (3)
SPCH 111  Public Speaking (3)
SPCH 225  Small-Group Communication (3)

Mathematics (4 hrs.)
MATH 121  College Algebra (4) or higher

Laboratory Science (8 hrs.)

Social/Behavioral Sciences (9 hrs.)
BSAD 235  Human Relations in the Workplace (3)
ECON 200  Principles of Macroeconomics (3)
ECON 201  Principles of Microeconomics (3)

**Humanities and Fine Arts (6 hrs.)**
BSAD 270  Business Ethics (3)
Humanities and Fine Arts course (3)

*The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.*

**Health and Wellness (1 hr.)**

**CORE REQUIREMENTS: (25 HRS.)**
ACCT 121  Principles of Accounting I (Financial) (4)
ACCT 122  Principles of Accounting II (Managerial) (4)
BSAD 211  Principles of Management (3)
BSAD 232  Business Law I (3)
BSAD 240  Principles of Marketing (3)
[or]
BSAD 245  Corporate Finance (3)
BSAD 260  Business Statistical Analysis (4)
OFTC 111  Business Software Essentials I (4)

**NOTE:** See First-Year Student Success Course Requirement on Page 8.

**TOTAL 62 CREDITS MIN.**

**ASSOCIATE IN ARTS**

**CRIMINAL JUSTICE**

(61 hrs.)  
CIP: 43.0104
School of Business, Professional Studies and Education, 505-428-1308

This program prepares students for positions in the criminal justice field or for transfer to four-year colleges or universities. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

**PROGRAM LEARNING OUTCOMES**

Upon completion of this program, students will be able to:

- Discuss in detail the institutions of the U.S. criminal and civil justice systems, including police, courts and corrections.
- Explain the judicial system and legal procedures with particular emphasis on due process.
- Demonstrate knowledge of the history, elements and applications of criminal law.
- Analyze issues and theories of ethical standards and unethical conduct in criminal justice.

- Describe the methods used in various social sciences to understand criminal conduct.
- Process and maintain the integrity of crime scenes.

**Students can earn the following certificate related to this degree:**
- Police Supervision

**GENERAL EDUCATION REQUIREMENTS: (37 HRS.)**

**Communications (9 hrs.)**
ENGL 111  Composition and Rhetoric (3)
Choose one of the following ENGL courses
ENGL 112  Composition and Literature (3)
ENGL 119  Professional Communication (3)
ENGL 216  Technical Writing (3)
[and]
Any SPCH course (3)

**Mathematics (3 hrs.)**
MATH 119  Applications for Mathematics for Non-science Majors (3) or higher

**Laboratory Science (8 hrs.)**

**Social/Behavioral Sciences (9 hrs.)**

**Humanities and Fine Arts (7 hrs.)**
Any foreign language in Area V of the New Mexico General Education Common Core (NMGECC) (4)
Humanities and Fine Arts course (3)

*The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.*

**Health and Wellness (1 hr.)**

**CORE REQUIREMENTS: (21 HRS.)**
CRJS 111  Introduction to Criminal Justice (3)
CRJS 201  Ethics of Law Enforcement (3)
CRJS 203  Criminal Law and Procedure (3)
[or]
CRJS 204  The Law and the Professional Investigator (3)
CRJS 209  Probation, Parole and Community Corrections (3)
[or]
CRJS 223  American Correctional Systems (3)

Choose three courses from the following:
CRJS 113  Introduction to Protective Services (3)
CRJS 115  Foundations of Professional Investigation (3)
CRJS 133  Introduction to Cybercrime (3)
CRJS 205  Law Enforcement Supervision — First Line (3)
CRJS 214 Police and Patrol (3)  
CRJS 231 Criminal Investigation (3)  
CRJS 232 Crime Profiling (3)  
CRJS 251 Death Investigation (3)  
CRJS 298 Criminal Justice Internship (1-3)  
OFTC 111 Business Software Essentials I (4)  
Any CRJS course (3)  

APPROVED ELECTIVES: (3 HRS.)  
Choose from the following:  
Criminal Justice (CRJS), Human Services (HUSV), Legal Studies (LEGL), Philosophy (PHIL), Psychology (PSYC) or Sociology (SOCI).  

NOTE: See First-Year Student Success Course Requirement on Page 8.  

TOTAL 61 CREDITS MIN.  

EARLY CHILDHOOD EDUCATION PROGRAM  

PROGRAMS OF STUDY  
The Department of Teacher Education offers several courses of study in Early Childhood Education (Birth through Grade 3). These allow students to pursue various paths toward their professional and educational goals.  
• ECME 111: The 45-hour, entry-level course introduces students to the seven competency areas of skills and knowledge developed by the State of New Mexico for entry-level positions in the early childhood field.  
• Associate in Applied Science — Early Childhood Education: This program offers the theory and skills required for working in various settings that serve young children, birth through grade three. Graduates may qualify as a teacher in an early childhood center classroom. The A.A.S. partially fulfills the New Mexico Public Education Department’s competency requirements for age 3 through Grade 3 licensure.  
• Associate in Arts — Early Childhood Education: This program transfers as the first two years of a Bachelor in Arts in Early Childhood Education degree at public four-year colleges and universities in New Mexico. The completion of this degree partially fulfills the New Mexico Public Education Department’s competencies for age 3 through Grade 3 licensure. Graduates may qualify as a teacher in an early childhood center. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.  

• Certificate in Early Childhood Teacher Certification: This is a teacher certification program for qualified individuals wishing to obtain New Mexico early childhood teacher licensure. Admission requirements and information can be found under Teacher Certification Programs in this catalog, at www.sfcc.edu/early_childhood_education or through the Education Department at 505-428-1256.  

ASSOCIATE IN ARTS  
EARLY CHILDHOOD EDUCATION  
(65 hrs. min.)  
School of Business, Professional Studies and Education, 505-428-1256  
This program transfers as the first two years of a Bachelor in Arts in Early Childhood Education degree at public four-year colleges and universities in New Mexico. The completion of this degree partially fulfills the New Mexico Public Education Department’s competencies for age 3 through Grade 3 licensure. Graduates may qualify as a teacher in an early childhood center. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.  

PROGRAM LEARNING OUTCOMES  
Upon completion of this program, students will be able to:  
• Describe the processes of and influences on development in young children.  
• Identify the adult's role in supporting each child's growth, development and learning.  
• Create and promote supportive environments that engage parents, guardians, families and the community to meet the needs of each child.  
• Select and use diverse assessment tools to monitor child development.  
• Select and use diverse assessment tools to monitor the quality of early childhood programs.  
• Design, implement and evaluate curricula and instruction that promote optimal development and learning for all children.  
• Make appropriate and ethical decisions to positively influence children's development.  
• Analyze safe environments and appropriate nutrition that promote positive physical and mental health for young children.  

Students can earn the following certificate related to this degree:  
• Infant Family Studies
GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
Any SPCH course (3)

Mathematics (3 hrs. min.)
Choose from the following:
MATH 111 Math for Elementary School Teachers I (3)
MATH 112 Math for Elementary School Teachers II (3)
MATH 121 College Algebra (4) or higher

Laboratory Science (8 hrs.)
No more than 4 hrs. in any one discipline area

Social/Behavioral Sciences (9 hrs. min.)
PSYC 111 Psychology I (3)
Choose from the following:
ANTH 112 The Nature of Culture (3)
ANTH 207 Cultures of the Southwest (3)
PSYC 220 Psychology of Gender (3)
PSYC 250 Brain and Behavior (3)
PSYC 260 Psychology of Learning and Memory (3)
PSYC 290 Developmental Psychology (3)

Humanities and Fine Arts (6 hrs. min.)
Choose from the following:
HIST 111 Western Civilization I (3)
HIST 112 Western Civilization II (3)
HIST 161 United States History to 1877 (3)
HIST 162 United States History from 1877 (3)
HIST 260 History of New Mexico (3)
SPAN 111 Beginning Spanish I (4)
SPAN 113 Beginning Heritage Spanish I (4)
SPAN 120 Survival Spanish for the Education Professional (3)

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (29 HRS.)
ECED 111 Child Growth, Development and Learning (3)
ECED 112 Health, Safety and Nutrition (2)
ECED 113 Family and Community Collaboration (3)
ECED 114 Assessment of Children and Evaluation of Programs (3)
ECED 211 Introduction to Language, Literacy and Reading (3)
ECED 215 Professionalism (2)
ECED 216A Curriculum Development Through Play/Birth-Age 4 (Pre-K) (3)
ECED 216B Practicum Curriculum Development Through Play/Birth-Age 4 (Pre-K) (2)
ECED 217A Curriculum Development and Implementation Age 3-Grade 3 (3)
ECED 217B Curriculum Development and Implementation Practicum Age 3-Grade 3 (2)
ECED 218 Guiding Young Children (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 65 CREDITS MIN.

ASSOCIATE IN ARTS

FILM
(64 hrs. min.) CIP: 50.0602
School of Arts, Design and Media Arts, 505-428-1421

The Associate of Arts in Film degree is intended for students seeking transfer to university. Students acquire the aesthetic and technical skills to work individually or as part of a team. Students obtain general education core requirements for university transfer. Students are encouraged to begin working with a film program adviser their first semester.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Use current technologies to create media and film.
- Express themselves through the vocabulary of film.
- Demonstrate knowledge of structure and storytelling in film, from idea to script to production
- Apply written and communication skills in research-based inquiry.
- Analyze how film elicits emotional and intellectual responses and how those responses impact society.

GENERAL EDUCATION REQUIREMENTS: (39 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
SPCH 111 Public Speaking (3)

Mathematics (3 hrs. min.)
MATH 119 Applications of Mathematics for Non-science majors (3) or higher

Laboratory Science (8 hrs.)

Social/Behavioral Sciences (9 hrs.)

Humanities and Fine Arts (9 hrs.)
FILM 155 Film History (3)
FILM 200 Media and the Environment (3)
[and]
Any state approved Area V class (3)

**Health and Wellness (1 hr.)**
FILM 140L Film Crew I Lab (1)

**CORE REQUIREMENTS: (19 HRS. MIN.)**
FILM 130 Video Production I (3)
FILM 131 Editing I (3)
FILM 140 Film Crew I (4)
FILM 145 Performance for Film and Media (3)
[or]
DRAM 160 Acting I (3)
FILM 160 Film Theory and Criticism (3)
FILM 175 Screenwriting I (3)

**RELATED REQUIREMENTS: (6 HRS. MIN.)**
Choose from the following:
ANY FILM or MART class

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 64 CREDITS MIN.**

**ASSOCIATE IN ARTS**

**FINE ARTS**
(65 hrs. min.)
School of Arts, Design, and Media Arts, 505-428-1731

The rigorous nature of the creative process in visual arts — conception, creation, critique, revision and exhibition — shapes the intellectual foundation for any individual to become an independent and critical thinker. The Fine Arts curriculum develops the capabilities of emerging artists because it is centered in liberal arts studies and combined with applied studio courses. The course sequence builds core skills and knowledge in a variety of media, provides historical and contemporary perspectives, fosters aesthetic sophistication and passion for the arts, and sets emerging artists on the path to becoming practitioners in the creative economy.

Students may select from concentrations in Painting and Drawing, Ceramics, Jewelry/Metal Arts, Sculpture, Art History, Book Arts, Printmaking and Intermedia Studies. Each concentration features the possibility of integrating other courses across the School of Arts, Design, and Media Arts. The program emphasizes the development of a high-quality portfolio of artwork to help students be accepted into the four-year program of their choice. This degree is designed for students who intend to transfer to four-year colleges or universities to complete a Bachelor's of Fine Arts in Art or Art History degree. It includes the general studies core curriculum as well as the basic fine arts courses recommended by most four-year institutions. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

**PROGRAM LEARNING OUTCOMES**
Upon completion of this program, students will be able to:
- Demonstrate effective communication based on the elements and principals of design.
- Demonstrate the use of critical thinking and problem solving in analysis or creation of art.
- Demonstrate knowledge of a range of contemporary and historical perspectives in art.
- Demonstrate safe and sustainable studio practice and craftsmanship.
- Demonstrate the ability to professionally present creative work.
- Express an individual creative voice.

Students can earn the following certificates related to this degree:
- Drawing and Painting
- Sculpture

**GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)**

**Communications (9 hrs.)**
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
Any SPCH course (3)

**Mathematics (3 hrs. min.)**
MATH 119 Applications of Mathematics for Non-science Majors (3)
[or]
MATH 121 College Algebra (4) or higher

**Laboratory Science (8 hrs.)**

**Social/Behavioral Sciences (6 hrs.)**

**Humanities and Fine Arts (9 hrs.)**
AHST 201 Art History I (3)
AHST 202 Art History II (3)
Humanities and Fine Arts course (3)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

**Health and Wellness (1 hr.)**

**CORE REQUIREMENTS: (15 HRS. MIN.)**
ARTS 125L Art Practices I (3)
ARTS 116L Three-Dimensional Design (3)
DRPT 118L Drawing I (3)
Choose two from the following:
ARTS 296 Fine Arts Portfolio Development (3)
GLRY 161 Gallery Practices (3)
MART 119 Digital Design Presentation (3)
PHOT 195 Photographing Artwork (3)

AREAS OF CONCENTRATION: (14-15 HRS. MIN.)
Choose an area of concentration from the following:

ART HISTORY CONCENTRATION
(15 HRS. MIN.) CIP: 50.0703
Core Requirements: (6 hrs.)
AHST 204 Modern Art (3)
AHST 207 Contemporary Art (3)
Related Requirements: (6 hrs.)
Any AHST courses (6)
Elective: (3 hrs.)
Any Arts and Design course (3)

CERAMICS CONCENTRATION:
(17 HRS. MIN.) CIP: 50.0711
Core Requirements: (15 hrs. min.)
CLAY 128L Clay Hand Building I (3)
CLAY 129L Ceramics: Wheel Throwing I (3)
CLAY 136L Ceramic Color on Form (3)
CLAY 214L Clay Hand-Building II (3)
CLAY 216L Ceramics: Wheel Throwing II (3)
Electives: (3 hrs. min.)
CLAY 136L Ceramic Color on Form (3)
[or]
CLAY 280L Ceramics: Integrative Projects (3)

DRAWING AND PAINTING CONCENTRATION:
(15 HRS. MIN.) CIP: 50.0702
Core Requirements: (12 hrs.)
DRPT 121L Painting I (3)
DRPT 219L Drawing II (3)
DRPT 221L Figure Drawing (3)
DRPT 225L Painting II (3)
Related Requirements: (3 hrs.)
Choose one from the following:
Any approved DRPT course
ARTS 120L Color Theory (3)
ARTS 295 Studio Practice (3)
GLRY 161 Gallery Practices (3)
PHOT 195 Photographing Artwork (3)

INTERMEDIA STUDIES CONCENTRATION:
(15 HRS. MIN.) CIP: 50.0706
Any School of Arts and Design courses from three different programs.

JEWELRY / METAL ARTS CONCENTRATION:
(15 HRS. MIN.) CIP: 50.0713
Core Requirements: (15 hrs.)
JEWL 114L Jewelry/Metal Arts I (3)
JEWL 158L Silversmithing I (3)
JEWL 217L Jewelry/Metal Arts II (3)
Choose two from the following:
JEWL 159L Wax Carving (3)
JEWL 212L Advanced Stone Setting (3)
JEWL 218L Silversmithing II (3)
JEWL 220L Casting for Jewelry (3)
JEWL 275L Jewelry/Metal Arts III (3)
JEWL 233L CAD for Jewelry (3)

PRINTMAKING AND BOOK ARTS CONCENTRATION:
(15 HRS. MIN.) CIP: 50.0710
Core Requirements: (6 hrs.)
PRBK 165L Book Arts (3)
PRBK 174L Introduction to Printmaking (3)
Related Requirements: (9 hrs. min.)
Choose from the following:
PRBK 167L Introduction to Papermaking (3)
PRBK 168L Letterpress (3)
PRBK 175L Monotype Printmaking (3)
PRBK 182L Intaglio (3)
PRBK 191L Relief Printmaking (3)
PRBK 211L Alternative Printmaking (3)
MART 180 Photoshop I (3)
MART 223 Typography (3)

SCULPTURE CONCENTRATION:
(14 HRS. MIN.) CIP: 50.0709
Core Requirements: (8 hrs. min.)
SCUL 115L Basic Fabrication and Safety (2)
SCUL 213L Sculpture I (3)
SCUL 263L Sculpture II (3)
Related Requirements: (3 hrs. min.)
Choose one from the following:
SCUL 117L Santeros: Craft and Tradition (3)
SCUL 260L Contemporary Bronze Sculpture (3)
SCUL 262L Metal Sculpture I (3)
SCUL 294L Sculpture: Advanced Projects (3)
Electives: (3 hrs. min.)
Any Arts and Design course (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 65 CREDITS MIN.

ASSOCIATE IN ARTS

GENERAL STUDIES

(63 hrs. min.) School of Liberal Arts, 505-428-1370

This curriculum is designed for students who need maximum academic flexibility to meet requirements for transfer or career exploration, or to meet other personal goals. Transferability and applicability of this program depend on courses selected and the transfer program and institution, personal goals and career selected.

This curriculum consists of courses that fulfill the New Mexico General Education Common Core (NMGECC) and a variety of general electives. General education courses are required by all New Mexico public state and local institutions. Additional courses in health, physical recreation and computers/technology are SFCC requirements. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

The General Studies degree is available in five concentration areas: General Studies, Social and Behavioral Sciences, Humanities, Creative Writing, and Culture and Gender Studies.

NOTE: The general education requirements below apply to all concentrations.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate analytical, critical thinking and interpersonal skills applicable to real-world problems.
• Demonstrate a foundation of liberal arts and specific knowledge that supports and encourages further personal and professional development.
• Use critical and creative thinking skills and strategies to solve complex individual and social problems.
• Pursue further study at the baccalaureate level.

Students can earn the following certificates related to this degree:
• Creative Writing
• Liberal Arts for Transfer

GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
Any SPCH course (3)

Mathematics (3 hrs. min.)
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (8 hrs.)
Social/Behavioral Sciences (6-9 hrs.)
Select courses from the following areas:
ANTH 112 The Nature of Culture (3)
ANTH 113 World Archaeology (3)
ANTH 207 Cultures of the Southwest (3)
BSAD 235 Human Relations in the Workplace (3)
ECON 200 Principles of Macroeconomics (3)
ECON 201 Principles of Microeconomics (3)
HUDV 270 Service Leadership (3)
POLI 200 American Government and Politics (3)
POLI 211 New Mexico Government (3)
POLI 215 Comparative Politics (3)
PSYC 111 Psychology I (3)
PSYC 240 Abnormal Psychology (3)
PSYC 250 Brain and Behavior (3)
PSYC 265 Cognitive Psychology (3)
PSYC 280 Human Sexuality (3)
PSYC 290 Developmental Psychology (3)
SOCI 111 Introduction to Sociology (3)
SOCI 209 Aging and the Family (3)
SOCI 216 Race, Class and Gender (3)
SOCI 220 Social Problems (3)
SOCI 225 Marriage, Family and Intimate Relationships (3)

Humanities and Fine Arts (6-9 hrs.)
Select courses from the following areas:
American Sign Language (AMSL)
AHST 201 Art History I (3)
AHST 202 Art History II (3)
AHST 204 Modern Art (3)
DRAM 111 Introduction to Theater and Drama (3)
English (ENGL) Any 200-level literature course
HIST 111 Western Civilization I (3)
HIST 112 Western Civilization II (3)
HIST 161 United States History to 1877 (3)
HIST 162 United States History from 1877 (3)
HIST 260 History of New Mexico (3)
HUMS 211 Humanities I (3)
HUMS 212 Humanities II (3)
INTR 231 The American Deaf Community (3)
MUSC 115 Music Theory I (3)
MUSC 116 Music Theory II (3)
MUSC 140 Music Appreciation (3)
PHIL 111 Introduction to Philosophy (3)
PHIL 155 Logic and Critical Thinking (3)
PHIL 220 Ethical Theory (3)
PHIL 246 Biomedical Ethics (3)
PHIL 258 Environmental Ethics and Sustainability (3)
PHIL 265 Comparative World Religions (3)
World Languages (Any 111 and above level AMSL, ARAB, CHIN, FREN, GERM, ITAL, JAPN, PORT, SPAN)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

BEHAVIORAL AND SOCIAL SCIENCES CONCENTRATION:
(27 HRS.) CIP: 30.1701
The Behavioral and Social Sciences Concentration provides students with an initial exposure to the various disciplines which traditionally comprise the social and behavioral sciences, including anthropology, political science, psychology, sociology, economics and geography.

NOTE: For more specialized study in psychology or human services, see also the Associate of Arts in Psychology and in Human Services degree, and the Traumatic Aide Certificate and the Substance Abuse Prevention Certificate.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Explain how behaviors are influenced by social institutions in diverse communities.
• Articulate how values are influenced by factors such as politics, geography, economics, culture, biology and history.
• Describe the relationship between the individual and society.
• Apply knowledge of the social and behavioral sciences to critically evaluate a variety of contemporary relevant issues and ethical dilemmas.

CORE REQUIREMENTS: (21 HRS.)
Select courses from at least three of the following areas:
(No more than 6 hrs. at the 100-level)
Any ANTH course (3)
BSAD 235 Human Relations in the Workplace (3)
CRJS 232 Crime Profiling (3)
ECON 200 Principles of Macroeconomics (3)
ECON 201 Principles of Microeconomics (3)
Any POLI course (3)
Any PSYC course (3)
Any SOCI course (3)

APPROVED ELECTIVES: (6 HRS.)

CREATIVE WRITING CONCENTRATION
(30 HRS.) CIP: 23.1302
The Creative Writing Concentration provides students with the opportunity to develop a broad undergraduate background in creative writing. This curriculum concentrates on the development of creative writing, editing and publishing skills to prepare students to apply to a bachelor's degree program in creative writing, submit a manuscript for publication, or work in the publishing field. This concentration is recommended for students who intend to pursue further studies in creative writing at the Institute for the American Indian Arts.

NOTE: Also see the Certificate in Creative Writing.

NOTE: It is recommended that students take ENGL 250, 287 and 288 as their general education humanities core requirement.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate proficiency in at least one form of creative writing (poetry, fiction, memoir).
• Employ the conventions of different forms of creative writing.
• Demonstrate proficiency in editing and publishing skills.

CORE REQUIREMENTS: (21 HRS.)
ANTH 248 Indigenous Peoples of North America (3)
ARTS 151L Creative Expression (3)
ENGL 221 Beginning Creative Writing — Fiction (3)
ENGL 222 Creative Writing — Poetry (3)
ENGL 227 Memoir and Personal Essay (3)
[or] ENGL 228 Creative Nonfiction: Writing on Location (3)
ENGL 290 Portfolio Development (3)
ENGL 298 Literature Magazine Internship (3)

RELATED REQUIREMENTS: (9 HRS.)
NOTE: Must include at least one second-level creative writing course (ENGL 225, ENGL 232, or FILM 275)
PRBK 165L Book Arts (3)
ENGL 120 Writing Creatively (3)
ENGL 225 Intermediate Creative Writing — Fiction (3)
ENGL 232 Intermediate Creative Writing — Poetry (3)
ENGL 273 Native American Literature (3)
[or] Any 200-level literature course
FILM 175 Screenwriting I (3)
MART 123 Adobe InDesign (3)
CULTURE AND GENDER STUDIES CONCENTRATION  
(32 HRS. MIN.)  
CIP: 05.0299

The Culture and Gender Concentration is for students who are especially interested in how they understand themselves, others and their place in the world. This curriculum allows students to explore how sex, gender, ethnicity, culture and class are understood and lived in their own and in other cultures, and provides students with the tools to critically analyze a wide range of issues. The study of culture and gender also complements all forms of study in the humanities and social sciences as well as law or legal studies, the sciences, the arts, government and policy-making, commerce, education, and international relations.

NOTE: It is recommended that students take ANTH 112 and SOCI 216 as their general education social/behavioral sciences core requirement.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Identify the social and cultural processes by which gender and culture are constructed.
• Explain how sex and gender are understood and experienced in their own and other cultures.
• Analyze a wide range of issues from the critical perspective of gender and culture.
• Demonstrate an awareness of world cultures, focusing on cultures of the Southwestern United States.

CORE REQUIREMENTS: (24 HRS.)

Select courses from at least five of the following discipline areas: (No more than 6 hrs. at the 100-level)

HUMS 150  Introduction to Culture and Gender Studies (3)

and

Choose from the following:
AHST 201  Art History I (3)
AHST 202  Arts History II (3)
AHST 203  History of Women Artists: Renaissance to 21st Century (3)
AHST 215  Artistic Traditions of the Southwest (3)
Any Anthropology (ANTH) course (3)
CRJS 111  The Criminal Justice System (3)
CULA 215  International Cuisine (4)
DANC 150L  World Beat Fusion (3)
ENGL 250  The Drama (3)
ENGL 270  Literature of the Southwest (3)
ENGL 273  Native American Literature (3)
ENGL 286  The Novel (3)
FASH 150  History of Fashion (3)
FILM 155  Film History (3)
FILM 160  Film Theory and Criticism (3)
FILM 192  Independent Film (3)
FILM 200  Media and the Environment (3)
FILM 250  International Horror Cinema (3)
FILM 255  International Cinema (3)
HIST 260  History of New Mexico (3)
HIST 265  History of La Raza (3)
HIST 272  Latin American Civilization (3)
HUMS 191  Media and Culture (3)
HUMS 200  Media and Gender (3)
INTR 231  The American Deaf Community (3)
ITAL 150  Italian Language and Culture (3)
LEGL 260  Tribal Law and Government (3)
PHIL 265  Comparative World Religions (3)
PSYC 210  Cultural Psychology (3)
PSYC 220  Psychology of Gender (3)
PSYC 271  Social Psychology (3)
SCIUL 117L  Santeros: Craft and Tradition (3)
SCIUL 171L  Introduction to New Mexico Tinwork (2)
SOCI 209  Aging and the Family (3)
SOCI 216  Gender, Race, and Class (3)
SOCI 220  Social Problems (3)
SPAN 284  Chicano Literature and Expression (3)
SPAN 285  Latin American Feminist Expression (3)
SPAN 286  Southwest Culture Through Film (3)
SPAN 288  Contemporary Latino Film (3)

World Languages Requirement: (8 HRS.)
Select courses from any of the following world languages: American Sign Language (AMSL), Arabic (ARBC), Chinese (CHIN), French (FREN), German (GERM), Italian (ITAL), Japanese (JAPN), Portuguese (PORT), Spanish (SPAN)

GENERAL STUDIES CONCENTRATION  
(30 HRS. MIN.)  
CIP: 24.0102

The general studies option is designed for the student who elects not to pursue an Associate of Arts degree with a concentration in Behavioral and Social Sciences, Humanities, Creative Writing or Culture and Gender Studies. Students must, in consultation with their academic advisers, choose discipline areas and course work for their major core requirements. Suggested areas of focus include Anthropology, English, Film, History, Philosophy and World Languages.

CORE REQUIREMENTS: (24 HRS)

APPROVED ELECTIVES (6 HRS.)
Social/Behavioral Science course (3)  Humanities and Fine Arts course (3)
HUMANITIES CONCENTRATION
(27 HRS. MIN.) CIP: 24.0103

The Humanities Concentration provides students with the opportunity to develop a broad undergraduate background in various disciplines which traditionally comprise the humanities, including the arts, history, world languages, English and foreign literature, music and philosophy.

NOTE: For more specialization study in the humanities, see also the Associate in Arts in Spanish Language and in Fine Arts degrees and the Certificate in Creative Writing.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Analyze various literary, cinematic, philosophical, and historical works.
• Describe the diversity of human experience across a range of historical periods and/or cultural perspectives.
• Explain how ways of thinking and expression have been influenced by historical periods and political, geographic, economic, social, cultural, intellectual, and religious events.
• Describe human values as they are represented and explained through various humanistic works and traditions.

CORE REQUIREMENTS: (21 HRS.)

Select courses from at least three of the following areas:
(No more than 6 hrs. at the 100-level)
ANTH 280 Anthropology and Film (3)
Any AHST course (3)
ARTS 111 Arts and Design Survey (3)
DRAM 111 Introduction to Theater and Drama (3)
FILM 155 Film History (3)
FILM 160 Film Theory and Criticism (3)
FILM 192 Independent Film (3)
FILM 195 Contemporary and Postmodern Film (3)
FILM 200 The Documentary (3)
FILM 250 International Horror Cinema (3)
FILM 255 International Cinema (3)
INTR 231 The American Deaf Community (3)
Any 200-level Literature (ENGL) course (3)
Any HIST course (3)
Any HUMS course (3)
Any PHIL course (3)
World Languages (Any 111 and above level AMSL, ARAB, CHIN, FREN, GERM, ITAL, JAPN, PORT, SPAN)

APPROVED ELECTIVES: (6 HRS.)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 63 CREDITS

ASSOCIATE IN ARTS
HOSPITALITY AND TOURISM MANAGEMENT
(60 hrs. min.) CIP: 52.0901

School of Business, Professional Studies and Education
505-428-1332

This program is designed for students planning to enter the hospitality industry and for those already working in the industry with a view toward management by providing basic knowledge and techniques required as a professional in Hospitality and Tourism Management.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Apply effective techniques in hospitality and tourism supervision and management.
• Demonstrate appropriate communication skills in operational and human resource management.
• Create forecasted and actual departmental budgets.
• Develop elements of a hospitality and tourism marketing plan.
• Demonstrate the use of standard operational processes.

Students can earn the following certificates related to this degree:
• Hospitality and Tourism

GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 119 Professional Communication (3)
[or]
ENG 216 Technical Writing (3)
Any SPCH course (3)

Mathematics (3 hrs. min.)
MATH 135 Introduction to Probability and Statistics (3)
[or]
BSAD 260 Business Statistical Analysis (4)

Laboratory Science (8 hrs.)

Social/Behavioral Sciences (9 hrs.)
ECON 200 Principals of Macroeconomics (3)
ECON 201 Principals of Microeconomics (3)
PSYC 111 Psychology I (3)
Humanities and Fine Arts (6 hrs. min.)
HIST 260 History of New Mexico (3)
SPAN 111 Beginning Spanish I (4) or higher
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS (24 HRS. MIN.)
CULA 115 Culinary Fundamentals (4)
CULA 251 Restaurant Concepts (4)
HRMG 114 Introduction to Tourism (3)
HRMG 115 Customer Relations (3)
HRMG 116 Introduction to Hospitality Management (3)
HRMG 220 Dining Room Service and Beverage Management (3)
HRMG 240 Hospitality and Tourism Marketing (3)
HRMG 298 Hospitality Internship (1-4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN ARTS

HUMAN SERVICES
(60 hrs. min.) CIP: 44.0701
School of Liberal Arts, 505-428-1370

Human Services is a career-oriented program that prepares students to become professional helpers. It is designed for those who want to bring about change and make a difference in the lives of others and in their communities. Human Services graduates can often find entry-level work in behavioral health and social services agencies.

Internships in the Human Services program provide community work experience for academic credit. These offer students the opportunity to develop skills that are useful in the job market. Students may be offered paid internships or jobs after completing their initial internships. Program concentrations give students maximum flexibility and an opportunity to specialize in a particular area of human services. Human Services graduates often choose to continue their education pursuing a bachelor's degree or higher in social work, human services, counseling, family studies, community services, psychology and/or sociology. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
- Demonstrate effective helper communication.
- Understand and apply helping skills theory and competencies.
- Research and classify human services agencies for case management referrals.
- Interact professionally in diverse environments and demonstrate ethical behavior.
- Perform professionally in a human services agency in the community.

Students can earn the following certificates related to this degree:
- Traumatic Stress Aide

GENERAL STUDIES REQUIREMENTS: (36 HRS.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
[or]
ENGL 216 Technical Writing (3)
Any SPCH course (3)

Mathematics (3 hrs.)
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (8 hrs.)

Social /Behavioral Sciences (6 hrs.)
PSYC 111 Psychology I (3)
SOCI 111 Introduction to Sociology (3)

Humanities and Fine Arts (9 hrs.)
HIST 260 New Mexico History (3)
[or]
PHIL 258 Environmental Ethics and Sustainability (3)
Humanities and Fine Arts courses (6)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (15 HRS.)
HUSV 111 Human Services Professions (3)
HUSV 130 Group Process and Counseling (3)
HUSV 270 Case Management (3)
HUSV 298 Human Services Internship (3)
PSYC 125 Communication and Counseling Skills (3)

ELECTIVES (9 HRS. MIN.)
Choose nine credits from one of the following areas of concentrations:
NOTE: only nine credits of electives are required to complete
the A.A. in Human Services; students can choose to complete more classes within a concentration to fulfill transfer, licensing or certificate requirements. Meet with an academic adviser for details.

LICENSED ALCOHOL AND DRUG ABUSE COUNSELOR (LADAC) CONCENTRATION
In addition to having an associate degree in a Social Science discipline, graduates who wish to pursue the LADAC license are required to complete a total of 18.5 additional credit hours from the courses below. Be sure to check the New Mexico Counseling and Therapy Practice Board website: www.rld.state.nm.us/boards

HUSV 150 Counseling Ethics (.5) (required for LADAC)
HUSV 200 Psychology of Addictive Behavior (3)
HUSV 205 Effects of Drug Abuse (3)
HUSV 210 Substance Abuse: Assessment, Evaluation and Treatment (3)
HUSV 215 Families and Substance Abuse (3)
HUSV 220 Substance Abuse Prevention (3)
HUSV 225 Counseling skills for Addiction Professionals (3)

TRANSFER CONCENTRATION FOR SOCIAL WORK OR HUMAN SERVICES:
These courses are part of the core matrix of approved classes guaranteed to transfer to any public college or university in New Mexico.

SOCI 209 Aging and the Family (3)
SOCI 216 Race, Class and Gender (3)
SOCI 225 Marriage, Family and Intimate Relationships (3)
PSYC 240 Abnormal Psychology (3)
PSYC 280 Human Sexuality (3)
PSYC 290 Developmental Psychology (3)

TRAUMATIC STRESS STUDIES CONCENTRATION:
These courses provide an educational foundation for working with trauma. Students who are interested in specializing in trauma treatment may also want to complete a certificate in Traumatic Stress Aide.

HUSV 170 Loss, Bereavement, and the Family (3)
HUSV 280 Compassion Fatigue and Secondary Stress Disorder (3)
HUSV 285 Post-traumatic Stress Disorder Diagnosis and Treatment (3)
HUSV 290 Crisis Intervention, Coping Strategies and Stabilization (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN ARTS MEDIA ARTS
(64 hrs. min.) CIP: 50.0401
School of Arts, Design, and Media Arts, 505-428-1731

This program is for students who wish to transfer to a four-year institution and obtain a bachelor's degree in any of the broad range of media arts concentrations. It includes transferable general education requirements as well as media arts core courses. These core classes are designed to give students basic design, computer and production skills as well as transfer as introductory-level classes at a four-year institution. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate proficiency in written, oral and visual communication within a variety of electronic media.
• Demonstrate proficiency in communication design and electronic color theory principles.
• Create professional presentations of their own work.
• Demonstrate proficiency in project management.

Students can earn the following certificates related to this degree:
• Graphic and Interactive Design
• Web Design

GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 216 Technical Writing (3)
[or]
MART 170 Writing for Mass Media (3)
Any SPCH course (3)

Mathematics (3 hrs.)
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (8 hrs.)

Social/Behavioral Sciences (6-9 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (25 HRS.)
MART 118 Communication Design (3)
MART 119 Digital Design Presentation (3)
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>MART 121</td>
<td>Adobe Illustrator</td>
<td>(3)</td>
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<tr>
<td>MART 123</td>
<td>Adobe InDesign</td>
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<td>MART 130</td>
<td>Web Design I</td>
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<td>MART 143</td>
<td>After Effects</td>
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<td>MART 146</td>
<td>Game Design Fundamentals</td>
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<td>MART 148</td>
<td>3D Graphics and Animation</td>
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<td>Photoshop I</td>
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<td>MART 187</td>
<td>Electronic Color Theory and Practice</td>
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<td>MART 178</td>
<td>3D Graphics and Animation II</td>
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<td>MART 280</td>
<td>Photoshop II</td>
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**APPROVED ELECTIVES: (3 HRS.)**

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 64 CREDITS MIN.**

**ASSOCIATE IN ARTS PHOTOGRAPHY**

(63 hrs. min.)  
CIP: 50.0605  
School of Arts, Design, and Media Arts, 505-428-1731

Photography studies at SFCC include digital, black and white film, and alternative photographic processes, as well as conceptual and expressive approaches to using photography as a means of communication. Students develop an understanding of historical, cultural, and aesthetic perspectives in photography in addition to learning how to critically analyze an image. Students complete their general and core studies, as well as create a portfolio of their work. The program is designed for maximum transferability to four-year degree programs.

Speak to an adviser for updated information on 2+2 and other types of articulation agreements with institutions in and out of state and the latest program accreditation information. Students should select all courses in consultation with an adviser. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

**PROGRAM LEARNING OUTCOMES**

Upon completion of this program, students will be able to:

- Work competently with a variety of photographic equipment and techniques.
- Compose, light, stage, capture, modify and print exhibition quality photographs.
- Describe contemporary and historical perspectives in photography.
- Analyze photographs for expressive and conceptual content, including composition, meaning, subtext and aesthetic style.
- Prepare a portfolio appropriate for application to a four-year institution.

**Students can earn the following certificates related to this degree:**

- Commercial Photography
- Fine Arts Photography

**GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)**

**Communications (9 hrs. min.)**

- ENGL 111 Composition and Rhetoric (3)
- ENGL 112 Composition and Literature (3)
- SPCH 111 Public Speaking (3)
- or
- SPCH 220 Interpersonal Communications (3)
- or
- SPCH 225 Small Group Communications (3)

**Mathematics (3 hrs. min.)**

- MATH 119 Applications for Mathematics for Non-science Majors (3)
- or
- MATH 121 College Algebra (4) or higher

**Laboratory Science (8 hrs. min.)**

**Social/Behavioral Sciences (6 hrs.)**

- ANTH 112 The Nature of Culture (3) (recommended)
- PSYC 111 Psychology I (3) (recommended)
- or
- Social/Behavioral Sciences (6)

**Humanities and Fine Arts (9 hrs. min.)**

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

**Health and Wellness (1 hr.)**

**CORE REQUIREMENTS: (15 HRS. MIN.)**

Choose from the following

- ARTS 296 Fine Arts Portfolio Development (3)
- GLRY 161 Gallery Practices (3)
- PHOT 111 Digital Photography I (3)
- PHOT 120 Black and White Film Photography I (3)
- PHOT 130 Alternative Photographic Processes I (3)
- PHOT 210 Digital Photography II (3)
RELATED REQUIREMENTS: (3 hrs. min.)
MART 180 Photoshop I (3)

APPROVED ELECTIVES: (9 HRS. MIN.)
Photography (6 hrs. min.)
Arts and Design or Media Arts course outside of photography (3 hrs. min.)
AHST, ARCH, ARTS, CLAY, DANC, DESN, DRAM, DRPT, FASH, GLRY, JEWL, MUSC, PRBK, SCUL, WOOD or MART courses

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 63 CREDITS MIN.

ASSOCIATE IN ARTS

PSYCHOLOGY

(60 hrs. min.) CIP: 42.0101
School of Liberal Arts, 505-428-1370

This program is for students who wish to transfer to a four-year institution and obtain a bachelor’s degree in psychology. It includes transferable general education requirements as well as psychology core courses. These core courses are designed to give students a basic foundation in psychology as well as transfer as introductory-level classes at a four-year institution. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate familiarity with major concepts, theoretical perspectives, empirical findings and historical trends in psychology.
• Understand and apply basic research methods in psychology, including basic research design, data analysis and interpretation.
• Use critical thinking, skeptical inquiry and, when possible, the scientific approach to solve problems related to behavior and mental processes.
• Understand and apply psychological principles to personal, social and organizational issues.
• Weigh evidence, appreciate ambiguity, act ethically and reflect other values that are the underpinnings of psychology as a science.

GENERAL EDUCATION REQUIREMENTS (36 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)

Any SPCH course (3)

Mathematics (3 hrs.)
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (8 hrs.)
BIOL 123 Biology for Health Sciences (3)
BIOL 123L Biology for Health Sciences Lab (1)
Laboratory Science course (4)

Social/Behavioral Sciences (9 hrs.)
PSYC 111 Psychology I (3)
SOCI 111 Introduction to Sociology (3)

Choose one course from the following:
ANTH 112 The Nature of Culture (3)
BSAD 235 Human Relations in the Workplace (3)
ECON 200 Principles of Macroeconomics (3)
ECON 201 Principles of Microeconomics (3)
POLI 200 American Government and Politics (3)
SOCI 216 Race, Class and Gender (3)

Humanities and Fine Arts (6 hrs.)
PHIL 111 Introduction to Philosophy (3)

Humanities and Fine Arts course (3)

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (21 HRS.)
PSYC 200 Statistical Principles for the Social Sciences (3)
PSYC 295 Directed Studies in Psychology (3)
Choose five (5) courses from the following:
PSYC 210 Cultural Psychology (3)
PSYC 220 Psychology of Gender (3)
PSYC 225 Positive Psychology (3)
PSYC 231 Psychology of Personality (3)
PSYC 240 Abnormal Psychology (3)
PSYC 250 Brain and Behavior (3)
PSYC 260 Psychology of Learning and Memory (3)
PSYC 265 Cognitive Psychology (3)
PSYC 270 Study Abroad: Images and Insights (3)
PSYC 271 Social Psychology (3)
PSYC 280 Human Sexuality (3)
PSYC 290 Lifespan Developmental Psychology (3)

RECOMMENDED ELECTIVES: (3 HRS.)
Choose from the following recommended course(s):
CRJS 232 Crime Profiling (3)
HUSV 280 Compassion Fatigue and Secondary Stress Disorder (3)
HUSV 285 Post-Traumatic Stress Disorder Diagnosis and Treatment (3)
PSYC 125 Communication and Counseling Skills (3)
SOCI 209 Aging and the Family (3)
SOCI 220 Social Problems (3)
SOCI 225 Marriage, Family and Intimate Relationships (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN ARTS

SPANISH LANGUAGE

(62 hrs. min.) CIP: 16.0905
School of Liberal Arts, 505-428-1370

This program is designed to prepare students with the necessary course work and proficiency in Spanish for continued study at the baccalaureate level in majors such as Spanish and Bilingual Education. It will benefit students who wish to attain a level of proficiency that will enhance their careers in any field that requires communication skills in Spanish; it will be especially helpful to students whose heritage language and culture are Spanish. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate proficiency in speaking and listening comprehension in Spanish.
• Demonstrate proficiency in reading comprehension in Spanish.
• Demonstrate proficiency in writing in Spanish.
• Demonstrate familiarity with the Spanish-speaking communities around the world and the many variations in the language that exist.

GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
Any SPCH course (3)

Mathematics (3 hrs.)
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (8 hrs.)

Social/Behavioral Science (9 hrs.)

Humanities and Fine Arts (6 hrs.)

HIST 260 History of New Mexico (3)

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (17 HRS. MIN.)

SPANISH AS A FOREIGN LANGUAGE CONCENTRATION:
SPAN 111 Beginning Spanish I (4)
SPAN 112 Beginning Spanish II (4)
SPAN 150 Conversational Spanish I (3)
SPAN 211 Intermediate Spanish I (3)
SPAN 212 Intermediate Spanish II (3)

SPANISH AS A HERITAGE LANGUAGE CONCENTRATION:
SPAN 113 Beginning Heritage Spanish I (4)
SPAN 114 Heritage Spanish II (4)
SPAN 150 Conversational Spanish I (3)
SPAN 213 Intermediate Heritage Spanish I (3)
SPAN 214 Intermediate Heritage Spanish II (3)

APPROVED ELECTIVES: (9 hrs.)*
Select from the list of recommended electives below, one elective must be SPAN 250 or higher:

AHST 215 Artistic Traditions of the Southwest (3)
ANTH 112 The Nature of Culture (3)
ANTH 252 Anthropology of Food (3)
ENGL 270 Literature of the Southwest (3)
HIST 161 United States History to 1877 (3)
HIST 162 United States History from 1877 (3)
HIST 265 History of La Raza (3)
HIST 272 Latin American Civilization (3)
SPAN 111L Spanish I Conversation Lab (1) optional
SPAN 112L Spanish II Conversation Lab (1) optional
SPAN 121L Spanish Lab (1)
SPAN 150 Intermediate Spanish I (3)
SPAN 152 Spanish for Medical Personnel (3)
SPAN 154 Spanish for Medical Personnel II (3)
SPAN 250 Intermediate Spanish II (3)
SPAN 255 Spanish Through Children's Literature (3)
SPAN 280 Introduction to Hispanic Literature (3)
SPAN 284 Chicano Literature and Expression (3)
SPAN 285 Latin American Feminist Expression (3)
SPAN 286 Southwest Culture through Film (3)
SPAN 288 Contemporary Latino Film (3)
SPAN 290 Spanish Grammar and Composition (4)

*Spanish-speaking students who already possess intermediate skills may see their advisers about fulfilling the language requirement with other Spanish classes.
NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 62 CREDITS MIN.**

**ASSOCIATE IN ARTS**

**TEACHER EDUCATION**

(63 hrs. min.)  
CIP: 13.0101

School of Business, Professional Studies and Education, 505-428-1256

Students who anticipate transferring to one of New Mexico’s public universities and majoring in education should follow this module of lower-division courses. Regardless of course equivalencies for transfer credit, students must complete the minimum number of upper-division credit hours required at the receiving institution. Students who successfully complete this preparatory curriculum for teacher education are strongly advised to take the New Mexico Teacher Assessment of Basic Skills and General Knowledge before transferring to a university. Admission to most teacher education programs requires successful completion of the Basic Skills portion of the NMTA.

Prior to transferring into the selected specialization at the university level, students are required to complete a minimum of 63 credit hours in the A.A. degree. It is recommended that students consult SFCC advisers to assess and determine SFCC course prerequisite requirements. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

**PROGRAM LEARNING OUTCOMES**

Upon completion of this program, students will be able to:

- Reflect critically upon their teaching practice for continuous improvement.
- Demonstrate professionalism.
- Recognize, address, and value diversity among students and contexts.
- Demonstrate effective collaboration and communication with students, colleagues, families and community members.

**GENERAL EDUCATION REQUIREMENTS: (53 HRS. MIN.)**

**Communications (9 hrs.)**

ENGL 111 Composition and Rhetoric (3)  
ENGL 112 Composition and Literature (3)  
Any SPCH course (3)

**Mathematics (7 hrs. min.)**

MATH 111 Math for Elementary School Teachers I (3)  
MATH 112 Math for Elementary School Teachers II (3)  
MATH 121 College Algebra (4)  
MATH 150 Precalculus (4)

**Laboratory Science**

(12 hrs. — max. of 4 hrs. in one area)

**Social/Behavioral Sciences**

(6 hrs. — max. of 3 hrs. in one area)

Choose from the following:

ANTH 112 The Nature of Culture (3)  
ECON 200 Principles of Macroeconomics (3)  
ECON 201 Principles of Microeconomics (3)  
GEOG 112 World Regional Geography (3)  
POLI 200 American Government and Politics (3)  
SOCI 111 Introduction to Sociology (3)  

**Humanities and Fine Arts**

(18 hrs.: 6 hrs. of Fine Arts, 12 hrs. of Humanities)

Fine Arts (6 hrs.)

Choose from the following

(3 hrs. of Art History recommended):

AHST 201 Art History I (3)  
AHST 202 Art History II (3)  
DRAM 111 Introduction to Theater and Drama (3)  
MUSC 140 Music Appreciation (3)  

Humanities (12 hrs.)

HIST 111 Western Civilization I (3)  
HIST 112 Western Civilization II (3)  
HIST 161 United States History to 1877 (3)  
HIST 162 United States History from 1877 (3)  
HIST 260 History of New Mexico (3)

**Health and Wellness (1 hr.)**

**CORE REQUIREMENTS: (10 HRS. MIN.)**

EDUC 111 Introduction to Education (3)  
EDUC 112L Field-Based Teaching Observations (1)  
EDUC 208 Exceptionalities and Placement (3)  
PSYC 111 Psychology I (3)  
EDUC 228 Technology in the Classroom (3)

Note: Six additional credits in literature are required for students who transfer to New Mexico Highlands University.

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 63 CREDITS MIN.**
ASSOCIATE IN SCIENCE

A list of current degrees follows. This list may not be complete because program development is ongoing. The associate in science degrees are designed for students who intend to transfer to four-year colleges or universities, with the transfer of credits subject to the policy of the institution to which the student is transferring.

SFCC has a mandatory assessment and placement policy. Students who wish to enroll in English or math or in any course in which an English or math course is a prerequisite must participate in assessment as described on Page 8. New students seeking degrees or certificates at SFCC must fulfill the student success course requirement described on Page 8 within their first 12 college credit hours or within their first two semesters of enrollment, whichever comes first.

ASSOCIATE IN SCIENCE

BIOLOGICAL SCIENCES

(63 hrs. min.) CIP: 26.0101
School of Sciences, Health, Engineering and Math
505-428-1757

This program allows students to develop a degree plan with an emphasis in the biological sciences. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

- Formulate hypotheses used in scientific inquiry.
- Solve scientific problems experimentally, conceptually and quantitatively.
- Demonstrate knowledge of concepts and information in the life sciences.
- Interpret and explain processes in living organisms from the molecular to the ecological scale.
- Apply evolutionary theory to biological problems.

GENERAL EDUCATION REQUIREMENTS: (36 HRS. MIN.)

Communications (9 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 112  Composition and Literature (3)

[or]
ENGL 216  Technical Writing (3)
Any SPCH course (3)

Mathematics (3 hrs. min.)
MATH 121  College Algebra (4)
[or]
MATH 135  Introduction to Probability and Statistics (3)

Laboratory Science (8 hrs.)
CHEM 121  General Chemistry I (3)
CHEM 121L  General Chemistry I Lab (1)
CHEM 122  General Chemistry II (3)
CHEM 122L  General Chemistry II Lab (1)

Social/Behavioral Sciences (6-9 hrs.)

Humanities and Fine Arts (6-9 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (24 HRS. MIN.)
BIOL 201  Cell Biology (3)
BIOL 201L  Cell Biology Lab (1)
BIOL 202  Genetics (3)
BIOL 202L  Genetics Lab (1)
MATH 162  Calculus I (4)
[or]
MATH 180  Elements of calculus I (4)
PHYS 121  General Physics I (3)
PHYS 121L  General Physics I Lab (1)
PHYS 122  General Physics II (3)
PHYS 122L  General Physics II Lab (1)
Approved science elective (4)

RELATED REQUIREMENTS: (3 HRS. MIN.)
Approved electives (3)

Six credit hours of the A.A. and A.S. must come from an approved list of courses that satisfy the following requirements. These are not meant to be additional hours in the degree but are, instead, existing courses that satisfy the requirement and appear anywhere in the degree.
- Cultural Perspectives (3 credit hours)
- Sustainable Living (3 credit hours)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 63 CREDITS MIN.
ASSOCIATE IN SCIENCE

COMPUTER SCIENCE

(62 hrs. min.)
CIP: 11.0201
School of Sciences, Health, Engineering and Math
505-428-1323

This program is designed for students who intend to pursue a bachelor's degree in computer science. It provides students with general education requirements and rigorous courses in software design and programming. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year schools.

Students can earn the following certificate related to this degree:
• Information Technology Support for Smart Grids and Micro Grids

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Identify and explain theoretical and core concepts of computer science.
• Design and create software applications using high-level programming language.
• Analyze and formulate solutions for problems using mathematical foundations and algorithmic principles.
• Work effectively in teams to build software systems.
• Evaluate ethical, social and legal issues related to computer science fields.
• Justify and support the importance of lifelong learning in the area of computer science and technology.

GENERAL EDUCATION REQUIREMENTS: (39 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
ENGL 216 Technical Writing (3)
[or]
SPCH 111 Public Speaking (3)

Mathematics (8 hrs.)
Students who do not place into MATH 162 must take appropriate MATH prerequisites
MATH 162 Calculus I (4)
MATH 163 Calculus II (4)

Laboratory Science (12 hrs.)
Choose from the following:
BIOL 201 Cell Biology (3)
BIOL 201L Cell Biology Lab (1)
BIOL 202 Genetics (3)

BIOL 202L Genetics Lab (1)
CHEM 121 General Chemistry I (3)
CHEM 121L General Chemistry I Lab (1)
CHEM 122 General Chemistry II (3)
CHEM 122L General Chemistry II Lab (1)
PHYS 161 Calculus Physics I (3)
PHYS 161L Calculus Physics I Lab (1)
PHYS 162 Calculus Physics II (3)
PHYS 162L Calculus Physics II Lab (1)

Social/Behavioral Sciences (3-6 hrs.)
Humanities and Fine Arts (3-6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (23 HRS.)
ISCS 120 Introduction to Programming I (4)
ISCS 125 Introduction to Programming II (4)
ISCS 215 Intermediate Programming (3)
ISCS 225 Advanced Programming and Data Structures (3)
ISCS 241 Data Organization and Implementation (3)
ISCS 275 Cyber Ethics (3)
MATH 261 Mathematical Foundations of Computer Science (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 62 CREDITS MIN.

ASSOCIATE IN SCIENCE

GENERAL ENGINEERING AND ENGINEERING TECHNOLOGY

(62 hrs. min.)
CIP: 14.0102
School of Sciences, Health, Engineering and Math
505-428-1754

This degree prepares students to transfer to four-year institutions to earn bachelor's degrees in engineering or engineering technology. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transitions to four-year schools.
PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Evaluate, construct, and utilize design models to identify and solve problems related to project management.
• Implement engineering design methodology to predict both primary and alternative solutions.
• Evaluate and solve engineering problems related to course content.
• Articulate and justify both technical considerations and solutions through oral, written and graphical communication methods in engineering problems.
• Effectively solve problems in teams.
• Demonstrate an understanding of professional and ethical responsibility in the field of engineering.

Students can earn the following certificates related to this degree:
• General Engineering Technologies

GENERAL EDUCATION REQUIREMENTS: (39 HRS.)

Communications (9 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 112  Composition and Literature (3)
ENGL 216  Technical Writing (3)

Mathematics (8 hrs.)
Students who do not place into MATH 162 must take appropriate MATH prerequisites
MATH 162  Calculus I (4)
MATH 163  Calculus II (4)

Laboratory Science (12 hrs.)
CHEM 121  General Chemistry I (3)
CHEM 121L  General Chemistry I Lab (1)
PHYS 161  Calculus Physics I (3)
PHYS 161L  Calculus Physics I Lab (1)
PHYS 162  Calculus Physics II (3)
PHYS 162L  Calculus Physics II Lab (1)

Social/Behavioral Sciences (3-6 hrs.)
ECON 200  Principles of Macroeconomics (3)
[or]
ECON 201  Principles of Microeconomics (3)
Social/Behavioral Sciences course (3)

Humanities and Fine Arts (3-6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (23 HRS.)
ENGR 111  Introduction to Engineering (3)
Mathematics (7 hrs. min.)
(choose two MATH courses, MATH 121 or higher)

Laboratory Science (8 hrs.)

Social/Behavioral Sciences (6-9 hrs.)

Humanities and Fine Arts (6-9 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (16 HRS.)
For an Associate in Science in General Studies degree, students must choose majors and course work in one of the science-based disciplines. Science courses numbered 111 and below are not accepted as core major requirements. See your science adviser for details.

APPROVED ELECTIVES: (6 HRS.)
NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 62 CREDITS MIN.

ASSOCIATE IN SCIENCE

PHYSICAL SCIENCES
(64 hrs. min.) CIP: 40.0101
School of Sciences, Health, Engineering and Math
505-428-1757

This program allows students to develop a degree plan with an emphasis in the physical sciences. Students must work closely with their transfer institutions and their SFCC advisers to ensure the best transition to four-year schools.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Formulate hypotheses used in scientific inquiry.
• Test hypotheses experimentally using a variety of techniques.
• Solve problems in the physical sciences (physics and chemistry) conceptually and quantitatively.
• Demonstrate knowledge of concepts and information in the physical sciences.

GENERAL EDUCATION REQUIREMENTS: (37 HRS. MIN.)

Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
[or]
ENGL 216 Technical Writing (3)
Any SPCH course (3)

Mathematics (4 hrs. min.)
MATH 150 Precalculus (4)

Laboratory Science (8 hrs.)
CHEM 121 General Chemistry I (3)
CHEM 121L General Chemistry I Lab (1)
CHEM 122 General Chemistry II (3)
CHEM 122L General Chemistry II Lab (1)

Social/Behavioral Sciences (6-9 hrs.)

Humanities and Fine Arts (6-9 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 15 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (20 HRS. MIN.)
MATH 162 Calculus I (4)
MATH 163 Calculus II (4)
PHYS 161 Calculus Physics I (3)
PHYS 161L Calculus Physics I Lab (1)
PHYS 162 Calculus Physics II (3)
PHYS 162L Calculus Physics II Lab (1)
Approved science elective (4)

RELATED REQUIREMENTS: (7 HRS.)
Approved electives (7)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 64 CREDITS MIN.

ASSOCIATE IN APPLIED ARTS
A list of current degrees follows. This list may not be complete because program development is ongoing. The Associate in Applied Arts degrees are two-year programs and the certificates usually may be completed in one year or less; both are intended to prepare the student for employment.

SFCC has a mandatory assessment and placement policy. Students wishing to enroll in English or math or in any course in which an English or math course is a prerequisite must participate in assessment as described on Page 8. New students seeking degrees or certificates at SFCC must fulfill the student success course requirement described on Page 8 within their first 12 college credit hours or within their first two semesters of enrollment, whichever comes first.

Fashion Design
Photography
Professional Crafts
ASSOCIATE IN APPLIED ARTS

FASHION DESIGN

(61 hrs. min.)
CIP: 50.0407
School of Arts, Design, and Media Arts, 505-428-1731

An Associate in Applied Arts in Fashion Design degree provides students with skills in one of the three disciplines of apparel, textile or costume design. Entrepreneurial and design skills prepare the graduate for employment in the fashion industry or self-employment as a professional designer. Students develop highly refined skills in one-of-a-kind creation of functional and decorative apparel and textiles. A professional portfolio of illustrations, patterns, textiles and finished garments may lead to employment, creating a business or transfer to a four-year institution.

NOTE: A.A.A. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate competence in fashion illustration through the fashion fantasy and flat in both hand drawn illustration and computer generated illustration.
• Produce on-trend styles using professional production methods.
• Create a fashion design portfolio/website that documents student work in illustration, costume, textile and apparel design.
• Demonstrate competence in choice of fabrics, yarns, embellishments and prints for final collection.
• Participate/organize fashion shows and promotional materials.
• Apply knowledge of fashion history and global perspectives to forecast trends.

Students can earn the following certificate related to this degree:
• Fashion Design

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
SPCH 111 Public Speaking (3)

Mathematics (3 hrs.)
BSAD 112 Business Math (3)

MATH 119 Applications of Math for Non-science Majors (3)

Laboratory Science (4 hrs.)

Social/Behavioral Sciences (3 hrs.)

Humanities and Fine Arts (6 hrs.)
FASH 150 History of Fashion (3)

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (23 HRS. MIN.)

ARTS 298 Arts and Design Internship (2)
FASH 113 Production Sewing (3)
FASH 120 Flat Pattern (3)
FASH 130 Fashion Illustration (3)
FASH 160 Introduction to Fashion Design (3)
FASH 170 Textiles Study of Fabrics (3)
FASH 224 Introduction to Computer Fashion Design (3)
FASH 260 Fashion Collection Studio (3)

APPROVED ELECTIVES: (15 HRS.)

Choose from the following:
ARTS 120L Color Theory (3)
ARTS 185L Trade Mart Field Trip (3)
BSAD 119 The Culture and Techniques of Entrepreneurship (3)
BSAD 219 Business Models (3)
BSAD 220 E-Commerce, Crowdfunding and Marketing (3)
DRPT 118L Drawing I (3)
FASH 155 Costume Design for Film and Stage (3)
FASH 222 Advanced Flat Pattern and Draping (3)
FASH 240 Sample Design (3)
FASH 248 Global Influences on Fashion (3)
JEWL 114L Jewelry/Metal Arts (3)
JEWL 158L Silversmithing (3)
MART 130 Web Design I (3)
PHOT 248 Fashion Photography (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 61 CREDITS MIN.
ASSOCIATE IN APPLIED ARTS
PHOTOGRAPHY
(62 hrs. min.)
CIP: 50.0406
School of Arts, Design, and Media Arts, 505-428-1731

The A.A.A. in Photography degree prepares students for entry-level work in, among others, advertising, editorial and fine arts photography. The program includes digital, black and white film, and non-silver techniques as well as conceptual and expressive approaches to using photography as a means of communication. Students develop an understanding of historical, cultural and aesthetic perspectives in photography in addition to learning how to critically analyze an image. The program of study includes an internship component and business courses in order to build practical marketplace skills. Students complete their studies by creating a portfolio of their work of sufficient quality to obtain work in photography and launch a freelance business. Students should select all courses in consultation with an adviser.

NOTE: A.A.A. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Work competently with digital photographic equipment and techniques.
• Compose, light, stage, capture, modify and print exhibition quality photographs.
• Analyze photographs for expressive and conceptual content, including composition, meaning, subtext and aesthetic style.
• Demonstrate professional and entrepreneurial work skills in photo-related industries.

Students can earn the following certificates related to this degree:
• Commercial Photography
• Fine Arts Photography

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)
Communications (6 hrs. min.)
ENGL 111 Composition and Rhetoric (3)
SPCH 111 Public Speaking (3)
[or]
SPCH 225 Small Group Communications (3)
[or]
SPCH 235 Intercultural Communication (3)
Mathematics (3 hrs. min.)
BSAD 112 Business Math (3)
[or]
MATH 119 Applications for Mathematics for Non-science Majors (3) or higher
Laboratory Science (4 hrs.)
Social/Behavioral Sciences (3 hrs.)
BSAD 235 Human Relations in the Work Place (3)
(recommended)
[or]
Social/Behavioral Sciences course (3)
Humanities and Fine Arts (6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.
Health and Wellness (1 hr.)

CORE REQUIREMENTS: (24 HRS. MIN.)
Choose from the following:
ARTS 113L Two-Dimensional Design (3)
[or]
ARTS 125L Art Practices I (3)
ARTS 280 Business Practices for Designers (3)
ARTS 296 Fine Arts Portfolio Development (3)
ARTS 298 Art and Design Internship (3)
(can be taken twice as an elective)
PHOT 111 Digital Photography I (3)
PHOT 140 Photography and Studio Lighting I (3)
PHOT 195 Photographing Artwork (3)
PHOT 210 Digital Photography II (3)
RELATED REQUIREMENTS: (3 HRS. MIN.)
MART 180 Photoshop I (3)

APPROVED ELECTIVES: (12 HRS. MIN.)
Photography (9 hrs. min.)
Any Arts and Design or Media Arts course outside of photography (3 hrs. min.)
AHST, ARCH, ARTS, CLAY, DANC, DESN, DRAM, DRPT, FASH, GLRY, JEWL, MUSC, PRBK, SCUL, WOOD or MART course.

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 62 CREDITS MIN.
ASSOCIATE IN APPLIED ARTS

PROFESSIONAL CRAFTS

(62 hrs. min.)
School of Arts, Design, and Media Arts, 505-428-1731

An Associate in Professional Crafts degree provides students with skills in one of the three disciplines of woodworking, ceramics or jewelry. Entrepreneurial and design skills prepare the graduate for self-employment as a professional artisan. Students develop highly refined skills in one-of-a-kind creation of functional and non-functional objects concluding their studies by creating a portfolio of craft objects leading to employment or the launch of their own business.

NOTE: A.A.A. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate effective communication based on elements and principles of design.
• Demonstrate knowledge of contemporary and historical perspectives in art and craft.
• Demonstrate safe and sustainable studio practice.
• Demonstrate an appropriate level of craftsmanship.
• Express an individual creative voice.
• Demonstrate knowledge of entrepreneurial skills appropriate for a professional crafts business.

Students can earn the following certificates related to this degree:
• Ceramics
• Fine Woodworking
• Jewelry/Metal Arts

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 119  Professional Communication (3)
[or]
SPCH 111  Public Speaking (3)
[or]
SPCH 225  Small group Communication (3)

Mathematics (3 hrs.)
BSAD 112  Business Math (3) (or equivalent)

Laboratory Science (4 hrs.)

Social/Behavioral Sciences (3 hrs. min.)

Humanities and Fine Arts (6 hrs.)
AHST 201  Art history I (3)
AHST 202  Art History II (3)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (12 HRS. MIN.)

ARTS 116L  Three-Dimensional Design (3)
ARTS 125L  Arts Practices I (3)
DRPT 118L  Drawing I (3)
[and]
Choose one from the following:
ARTS 280  Business Practices for Designers (3)
PHOT 195  Photographing Artwork (3)

CERAMICS CONCENTRATION:
(27 HRS. MIN.)  CIP: 50.0711
The student develops expertise, craftsmanship, and aesthetic skills in designing and creating clay objects, including learning clay body characteristics, refined glazing techniques, advanced forming techniques, kiln design and operation.

Requirements: (24 HRS. MIN.)

CLAY 127L  Hand-Building Functional Ceramics (3)
CLAY 128L  Clay Hand Building I (3)
CLAY 129L  Ceramics: Wheel Throwing I (3)
CLAY 136L  Ceramic Color on Form (3)
[or]
CLAY 220L  Ceramics Glaze Formulation (3)
CLAY 177L  Pueblo Pottery (3)
CLAY 211L  Extreme Pottery (3)
CLAY 214L  Clay Hand-building II (3)
CLAY 216L  Ceramics: Wheel Throwing II (3)

RELATED REQUIREMENTS: (3 HRS. MIN.)

Any other Ceramics courses (3)
[or]
ARTS 298  Arts and Design Internship (3)

FINE WOODWORKING CONCENTRATION:
(27 HRS. MIN.)  CIP: 48.0701
The student develops expertise, craftsmanship, and aesthetic skills in designing and creating functional wood objects, including learning wood characteristics, refined finishing techniques, and advanced fabrication skills.

Requirements: (27 HRS. MIN.)
ASSOCIATE IN APPLIED SCIENCE

A list of current degrees follows. This list may not be complete because program development is ongoing. The Associate in Applied Science degrees are two-year programs and the certificates may usually be completed in one year or less; both are intended to prepare the student for employment.

SFCC has a mandatory assessment and placement policy. Students who wish to enroll in English or math or in any course in which an English or math course is a prerequisite must participate in assessment as described on Page 8. New students seeking degrees or certificates at SFCC must fulfill the student success course requirement described on Page 8 within their first 12 college credit hours or within their first two semesters of enrollment, whichever comes first.

Allied Health
American Sign Language Interpreter Preparation
Architectural and Interior Design Technologies
Automotive Technology
Building Science and Construction Technologies
Business Administration
Computer and Information Technologies
Controlled Environment Agriculture
Criminal Justice
Culinary Arts
Dental Health
Early Childhood Education
Engineering Technologies
Exercise Science
Film
General Studies
Media Arts
Medical Assisting
Nursing
Paralegal Studies
Paramedicine
Respiratory Care
Sustainable Technologies
Welding Technologies
The Associate in Applied Science in Allied Health degree allows students interested in pursuing allied health careers to enter the workforce upon graduation. This degree also allows individuals who have already obtained a nationally recognized certification or licensure the opportunity to gain college credit and work towards the completion of an associate degree.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificates related to this degree:
- Home Health Aide
- Nursing Assistant

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Demonstrate proficiency in selected allied health program skills, strategies and techniques.
- Demonstrate creative and critical thinking skills to solve patient or client problems.
- Provide safe, compassionate advocacy-based care to patients or clients.
- Demonstrate competence in interpersonal and communication skills.

GENERAL EDUCATION REQUIREMENTS: (30 HRS. MIN.)

Communications (9 hrs. min.)
- ENGL 111 Compositions and Rhetoric (3)
- ENGL 119 Professional Communication (3)
[or]
- ENGL 216 Technical Writing (3)
- SPCH 220 Interpersonal Communication (3)

Mathematics (3 hrs. min.)
- BSAD 112 Business Math (3)
[or]
- MATH 119 Applications of Math for Non-Science Majors (3) or Higher

Laboratory Science (8 hrs. min.)
- CHEM 111 Introduction to Chemistry (3)
- CHEM 111L Introduction to Chemistry Lab (1)
[and]
- BIOL 123 Biology for Health Sciences (3)
- BIOL 123L Biology for Health Sciences Lab (1)
[or]
- BIOL 136 Non-Majors Anatomy and Physiology (3)
- BIOL 136L Non-Majors Anatomy and Physiology Lab (1)
[or]
- BIOL 230 Human Anatomy and Physiology I (3)
- BIOL 230L Human Anatomy and Physiology I Lab (1)

Social/Behavioral Science (6 hrs.)
- PSYC 111 Psychology I (3)
- PSYC 290 Developmental Psychology (3)

Humanities and Fine Arts (3 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hrs.)

CORE REQUIREMENTS: (16.5 HRS. MIN.)
- AHAC 151 Basic Life Support for Health Care Providers (.5)
- HLCR 113 Medical Terminology (3)
- OFTC 111 Business Software Essentials I (4)
- HLCR 235 Pharmacology for Allied Health (3)
- HLCR 250 Medical Law, Ethics and Professional Issues (3)
[or]
- PHIL 246 Biomedical Ethics (3)
- NUTR 200 Nutrition (3)
[or]
- NUTR 205 Nutrition in the Life Cycle (3)

Electives: (10 hrs.)

Areas of Concentration: (5 hrs. min.)
Student will choose an area of concentration from the following:

EMT CONCENTRATION (12 HRS. MIN.)
- EMSI 160 EMT — Basic (8)
- EMSI 160L EMT — Basic Lab (3)
- EMSI 161L EMT Basic Clinical (1)
HEALTH CARE CONCENTRATION (5 HRS. MIN.)
Choose from the following:
HLCR 116 Community Health Worker Training (5)
HLCR 125 Nurse Aide (5)
HLCR 126 Home Health Aide (5)

NUTRITION CONCENTRATION (17 HRS. MIN.)
EXSC 202 Instruction in Lifestyle Change (3)
NUTR 121 Dietary Guidelines (1)
NUTR 200 Nutrition (3)
NUTR 205 Nutrition in the Life Cycle (3)
NUTR 206 Community Nutrition (3)
NUTR 215 Culinary Nutrition (3)

PHLEBOTOMY CONCENTRATION (9 HRS. MIN.)
PHLB 113 Introduction to Phlebotomy (3)
PHLB 115L Clinical Phlebotomy I (3)
PHLB 116L Clinical Phlebotomy II (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 61.5 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE

AMERICAN SIGN LANGUAGE INTERPRETER PREPARATION
(62 hrs. min.)
CIP: 16.1603
School of Liberal Arts, (505) 428-1370

The Associate in Applied Science in American Sign Language Interpreter Preparation (ASL IP) is designed to graduate highly qualified entry-level interpreters for community or educational settings. The interpreter preparation program further develops students’ existing ASL skills while adding extensive knowledge of Deaf culture as well as a broad understanding of the scope and types of interpreting environments that are available to deaf persons. The competencies developed over the course of the program allow students to provide interpreting services in a range of low-risk settings with professional autonomy. Additionally, the program prepares students to take nationally recognized interpreter exams once they are qualified to sit for these tests. Upon graduation, the student will be work ready and can confidently approach professional credentials within a year. Prerequisites for admission to the program include AMSL 131 and a minimum of AMSL 212 skill-level proficiency or equivalent. Working interpreters who are fluent and seek to further their proficiency in American Sign Language or ASL interpreting may register for some courses with the department’s permission. It is recommended that degree students select their courses and program plan in consultation with an American Sign Language/Interpreter Preparation adviser.

Call the Liberal Arts Department at 505-428-1370 for the AAS in ASL IP packet or visit our website at www.sfcc.edu/programs/american_sign_language_interpreting.

PROGRAM OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate a broad understanding of and respect for the language, culture, and history of Deaf people in interactions with members of the Deaf community.
• Perform proficient entry-level American Sign Language interpretation in a variety of settings.
• Demonstrate the ability to create and maintain professional relationships and appropriate cultural sensitivities with various members of the Deaf community, including professional interpreters and interpreter agencies through effective interpersonal and cross-cultural communication skills.
• Demonstrate adherence to the code of professional conduct for American Sign Language interpreters.
• Apply critical-thinking skills to assess the potential demands of interpreting situations and construct appropriate responses to mitigate those demands.

GENERAL EDUCATION REQUIREMENTS:
(23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
[or]
ENGL 216 Technical Writing (3)

Mathematics (3 hrs.)
MATH 119 Applications of Mathematics for Non-Science Majors (3)

Laboratory Science (4 hrs.)

Social/Behavioral Sciences (6 hrs.)
Any Social/Behavioral Science courses (6)

Humanities and Fine Arts (3 hrs.)
Any Humanities and Fine Arts course (3)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.
Health and Wellness (1 hr.)

CORE REQUIREMENTS: (39 HRS.)

- AMSL 215  Fingerspelling and Numbers (3)
- AMSL 216  ASL Classifiers (3)
- AMSL 217  Advanced Fingerspelling, Numbers and Classifiers (3)
- INTR 111  Introduction to Professional ASL Interpreting (3)
- INTR 112  Consecutive Interpreting (3)
- INTR 113  Simultaneous Interpreting (3)
- INTR 211  Interactive Interpreting (3)
- INTR 230  Critical Thinking and Analysis Skills for Interpreters (3)
- INTR 232  Cross-Cultural Issues of Interpreting (3)
- INTR 250  Educational Interpreting (3)
- INTR 252  Community Interpreting (3)
- INTR 294  Interpreting Practicum (3)
- INTR 298  Interpreting Internship (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 62 CREDITS MIN

ASSOCIATE IN APPLIED SCIENCE

ARCHITECTURAL AND INTERIOR DESIGN TECHNOLOGIES

(60 hrs. min.)  CIP: 04.0901
School of Arts, Design, and Media Arts, 505-428-1731

This program is designed to provide students with the necessary skills for gainful employment as an architectural or interior design technician, working under a licensed professional. Student will learn to use software to create design and technical drawings, collaborate with multidisciplinary team members and consultants, and assist in solving complex design issues.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificates related to this degree:
- Architectural and Interior Design Software
- Architectural and Interior Design Technologies

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Demonstrate professionalism in an architecture or interior design office.
- Apply the principles of the Phases of Work and sustainable design principles to the creation of design and technical drawings.
- Use software to create and communicate design and technical drawings.
- Create a portfolio for employment and for further education.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
- ENGL 111  Composition Rhetoric (3)
- SPCH 111  Public Speaking (3)

Mathematics (3 hrs.)
- BLDG 115  Trades Mathematics (3)
- MATH 119  Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (4 hrs.)
- PHYS 111  Introduction to Physics (3)
- PHYS 111L  Introduction to Physics Lab (1)

Social/Behavioral Sciences (3 hrs.)
- ECON 200  Principles of Macroeconomics (3)
- ECON 201  Principles of Microeconomics (3)

Humanities/Fine Arts (6 hrs.)
- The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (37 HRS. MIN.)

- ARCH 111L  Introduction to Architectural Graphics (3)
- ARCH 112L  Building Materials and Methods (3)
- ARCH 115L  Design Fundamentals (3)
- ARCH 117L  Technical Documentation with AutoCAD I (3)
- ARCH 120L  Building Information Modeling with Revit I (3)
- ARCH 123L  Introduction to Architecture (3)
- ARCH 128L  Interior Design I (3)
- ARCH 126L  Building Information Modeling with ArchiCAD I (3)
- ARCH 129L  Sustainable Design Studio (3)
- ARCH 130L  Building Information Modeling with Revit II (3)
- [or]
ARCH 132L Building Information Modeling with ArchiCAD II (3)
ARCH 135L Technical Documentation with AutoCAD II (3)
[or]
ARCH 138 Interior Design II (3)
ARCH 139L Sketching Workshop (1)
ARCH 229 Commercial Environmental Design (3)
ARCH 240 Professional Practices and Portfolio Assessment (3)
MART 119 Digital Design Presentation (3)
*Transfers to UNM School of Architecture
NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE

AUTOMOTIVE TECHNOLOGY

(73 hrs.) CIP: 47.0604
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

The Automotive Technology associate degree program is designed to provide students with entry-level employment as automotive technicians. By the time students complete this program, they should be able to achieve Automotive Service Excellence (ASE) certification in four or more competency areas.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificates related to this degree:
- Auto Maintenance and Light Truck Repair
- Automotive Engine Repair
- Automotive Heating and Air Conditioning
- Automatic Transmission Transaxle
- Brakes
- Manual Transmission and Drive Train
- Steering and Suspension

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Demonstrate service, diagnostic, and repair procedures required by dealership and private repair facilities.
- Service and repair modern automotive vehicles while addressing all National Highway Traffic Safety Administration standards and environmental concerns.
- Demonstrate the safe operation of tools and equipment associated with the automotive repair industry.
- Demonstrate professionalism in dealing with the public, manufacturers, certification agencies, independent businesses, and governmental agencies.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
[or]
ENGL 119 Professional Communication (3)
SPCH 111 Public Speaking (3)

Mathematics (3 hrs.)
BLDG 115 Trades Mathematics (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (4 hrs.)

Social/Behavioral Sciences (3-6 hrs.)

Humanities/Fine Arts (3-6 hrs.)
PHIL 220 Ethical Theory (3) Elective (3)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS (50 HRS.)
ATEC 111L Introduction to Automotive Repair (2)
ATEC 112L Engine Repair (4)
ATEC 114L Automotive Brake Systems (4)
ATEC 115L Automotive Suspension Systems (4)
ATEC 116L Automotive Electrical/Electronic I (4)
ATEC 119L Automotive Air Conditioning and Heating (4)
ATEC 125 Automotive Management (3)
ATEC 130L On-Board Diagnostic System II (2)
ATEC 150L Automotive Computer Management Systems I (4)
ATEC 165 Alternative Fuel Vehicles (3)
ATEC 200L Electrical Electronic II (4)
ATEC 201L Computer System Management II (4)
ATEC 206L Manual Transmission and Differential (4)
ATEC 208L Automatic Transmission Transaxle Differential (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 73 CREDITS MIN.
ASSOCIATE IN APPLIED SCIENCE
BUILDING SCIENCE
AND CONSTRUCTION
TECHNOLOGIES
(62 hrs. min.)
CIP: 15.1001
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This program prepares students for the National Center for Construction Education and Research (NCCER) and Associate General Contractors of American (AGC) Journeyman certification exams. Students acquire the necessary knowledge and skills for entry-level positions in residential and industrial building construction industry. This degree provides students with communication and critical-thinking skills that support job advancement.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificates related to this degree:
- Adobe Construction
- Heating, Ventilation, and Air Conditioning
- Plumbing

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
- Demonstrate competency in the residential and industrial construction areas of basic safety, methods and materials.
- Demonstrate competency in OSHA 30-hour construction safety.
- Demonstrate competency in trade fundamentals, adhesive selection and use, properties of fasteners, concrete, and green building standards.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 119  Professional Communication (3)
[or]
ENGL 216  Technical Writing (3)
[or]
Any SPCH course (3)

Mathematics (3 hrs.)
BLDG 115  Trades Mathematics (3)
[or]
MATH 119  Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (4 hrs.)

Social/Behavioral Sciences (3-6 hrs.)
Humanities and Fine Arts (3-6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health, and Wellness (1 hr.)

CORE REQUIREMENTS: (39 hrs.)
BLDG 111  Construction Safety (3)
BLDG 112  Building Systems (3)
BLDG 113  Introduction to Green Building (3)
BLDG 114  Construction Methods and Materials I (3)
BLDG 116  Applied Construction I (4)
BLDG 118  Construction Methods and Material II (3)
BLDG 121  Applied Construction II (4)
BLDG 201  Construction Methods and Material III (3)
BLDG 203  Applied Construction III (4)
BLDG 225  Green Building Policies, Codes, and Incentives (3)
BSAD 119  Entrepreneurship — Planning and Introduction (3)
ENEF 111  Healthy Homes (1)
FACT 113  Basic Blueprint Reading (2)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 62 CREDITS MIN.
ASSOCIATE IN APPLIED SCIENCE
BUSINESS ADMINISTRATION
(61 hrs. min.)
School of Business, Professional Studies and Education
505-428-1308
This program is designed for students who wish to obtain or sharpen their basic business administration skills — accounting, marketing, business law, management and office technology — while pursuing course work in their chosen area of concentration (accounting, technology, media arts, etc.). The associate in applied science degree is available with concentrations in accounting, business administration and entrepreneurship or a focus area of your choice.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog or speak with an academic adviser.

Students can earn the following certificate related to this degree:
• Accounting Specialist
• Business Administration
• Entrepreneurship

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Read and prepare financial statements.
• Explain the relationships between the four functions of management.
• Describe relevant elements of the American legal system and their impact on business.
• Apply key economic concepts to the evaluation of relationships among individuals, businesses and government entities.
• Evaluate organizational performance based on ethics, law, sustainability and social responsibility.
• Communicate clearly and effectively, both orally and in writing, using appropriate office technologies.

GENERAL EDUCATION REQUIREMENTS: (26 HRS. MIN.)
Communications (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 119 Professional Communication (3)
[or]
ENGL 216 Technical Writing (3)
SPCH 111 Public Speaking (3)
[or]
SPCH 225 Small-Group Communication (3)

Mathematics (3 hrs.)
BSAD 112 Business Math (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3)

Laboratory Science (4 hrs.)
BSAD 235 Human Relations in the Workplace (3)
ECON 200 Principles of Macroeconomics (3)
[or]
ECON 201 Principles of Microeconomics (3)

Social/Behavioral Sciences (6 hrs.)
BSAD 270 Business Ethics (3)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (19 HRS. MIN.)
ACCT 111 Small Business Accounting (3)
[or]
ACCT 121 Principles of Accounting I (Financial) (4)
(required for Accounting and Business Administration Concentration)
ACCT 125 Computerized Accounting — QuickBooks (3)
BSAD 111 Introduction to Business (3)
BSAD 211 Principles of Management (3)
BSAD 232 Business Law I (3)
OFTC 111 Business Software Essentials I (4)

ACCOUNTING CONCENTRATION:
(17 HRS.)
CIP: 52.0302
ACCT 122 Principles of Accounting II (Managerial) (4)
ACCT 124 Payroll Accounting (3)
ACCT 221 Intermediate Accounting (4)
BSAD 245 Corporate Finance (3)

Approved electives (3): This course should be an upper-level course (112 or higher) in Accounting (ACCT), for example: ACCT 202 or ACCT 140 and 140L, Business Administration (BSAD), Economics (ECON), Office Technologies (OFTC) or related field.
BUSINESS ADMINISTRATION CONCENTRATION:  
(18 HRS.)  CIP: 52.0201

BSAD 240  Principles of Marketing (3)  
BSAD 245  Corporate Finance (3)  

Approved electives (12): These courses should be upper-level courses (112 or higher) in Accounting (ACCT), Business Administration (BSAD), Economics (ECON), Office Technologies (OFTC) or related field.

ENTREPRENEURSHIP CONCENTRATION:  
(16 HRS.)  CIP: 52.0701

BSAD 119  Entrepreneurship — Planning and Introduction (3)  
BSAD 219  Business Models (3)  
BSAD 220  E-Commerce, Crowdfunding and Marketing (3)  
BSAD 223  Finance and Funding Start-ups (3)  
BSAD 224  Pitching Your Start-up (1)  

Approved electives (3)  
Choose from the following:  
ACCT 111  Small Business Accounting (3)  
BSAD 211  Principles of Management (3)  
BSAD 232  Business Law I (3)  
BSAD 235  Human Relations in the Workplace (3)  
BSAD 240  Principles of Marketing (3)  

3 credit hours within an area or field of interest

FOCUS AREA CONCENTRATION:  
(16 HRS.)  CIP: 52.0201

Approved electives (16): These should be related courses in one area of study — for example: computer sciences, fine arts, video production, web design, etc.

Six credit hours of the A.A.A. and A.A.S. must come from an approved list of courses that satisfy the following requirements. These are not meant to be additional hours in the degree but are, instead, existing courses that satisfy the requirement and appear anywhere in the degree.

- Cultural Perspectives (3 credit hours)  
- Sustainable Living (3 credit hours)  

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 61 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE  
COMPUTER AND INFORMATION TECHNOLOGIES  
(60 hrs. min.)  CIP: 11.0101

School of Sciences, Health, Engineering and Math  
505-428-1862

This degree provides students with the skills necessary to enter the workplace technically competent in the fields of computers and technology. It combines theoretical learning and industry certification preparation with the benefits of hands-on training and exercises to provide a breadth of knowledge in the computer information technology field.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificates related to this degree:

- Application Development  
- Computer and Network Security  
- Computer Hardware and Software  
- Information Technology Support for Smart Grids and Micro Grids  
- Web Programming

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

- Identify the function of a variety of computer software applications.  
- Provide accurate technical explanations of the role of the major components of a PC.  
- Perform routine network administrative tasks, including Network Operating System (NOS) installations and upgrades, user administration, and resource sharing.  
- Troubleshoot and repair various network and PC problems.  
- Identify, organize, plan, and allocate resources effectively in the computer work environment.  
- Use programming languages to solve problems.  
- Identify and correct computer security risks.
GENERAL EDUCATION REQUIREMENTS: (24 HRS. MIN.)
Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 216 Technical Writing (3)

Mathematics (4 hrs.)
MATH 121 College Algebra (4)

Laboratory Science (4 hrs.)
MATH 135 Introduction to Probability and Statistics (3)
MATH 150 Precalculus and Trigonometry (4)
MATH 150L Precalculus and Trigonometry Laboratory (1)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE

CONTROLLED ENVIRONMENT AGRICULTURE

(60 hrs. min.)
CIP: 01.0604
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

The purpose of this program is to revitalize agricultural traditions in order to build local food security in a way that is ecologically, economically and culturally viable, socially just, sustainable, and regenerative for current and future generations. Students will receive hands-on and classroom training in greenhouse management. Through various program concentrations, completion of this degree prepares students for careers in controlled environment agriculture with a focus on hydroponic and aquaponic production techniques.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificates related to this degree:
- Controlled Environment Agriculture
- Algae Cultivation

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Demonstrate understanding of sustainable agriculture production techniques such as hydroponics and aquaponics in controlled environment agriculture.
- Provide leadership in creating and maintaining safe working and production environments.
- Demonstrate an awareness of economic, environmental, and community impacts of soilless agriculture.
- Demonstrate an understanding of soilless plant growth.
GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
Any SPCH course (3)

Mathematics (3 hrs.)
BLDG 115 Trades Mathematics (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (4 hrs.)
BIOL 111 Introduction to Biology (3)
[and]
BIOL 111L Introduction to Biology Lab (1)
[or]
BIOL 114 Environmental Science (3)
[and]
BIOL 114L Environmental Science Lab (1)
[or]
BIOL 115 Introduction to Ecology and Field Biology (4)

Social/Behavioral Sciences (3-6 hrs.)
ANTH 252 Anthropology of Food (3)

Humanities and Fine Arts (3-6 hrs.)
PHIL 258 Environmental Ethics and Sustainability (3)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (18 hrs.)
GRHS 121 Greenhouse Design and Operation (3)
GRHS 123 Introduction to Soilless Production Systems (4)
GRHS 125 Hydroponic Plant Growth (3)
GRHS 127 Hydroponic Crop Production (4)
GRHS 221 Aquaponics (4)

RELATED REQUIREMENTS: (19 hrs.)
Choose from the following:
ALTF 161 Introduction to Algae Cultivation (3)
ALTF 261 Advanced Algae Cultivation (3)
ALTF 262 Algae Harvesting (3)
ALTF 268 Algae Capstone (1-3)
ALTF 298 Biofuels Internship (1-3)
BLDG 111 Construction Safety (3)
BSAD 119 Entrepreneurship — Planning and Introduction (3)
ENVR 111 Introduction to Sustainability (3)
ENVR 120 Introduction to Sustainable Energy Technologies (3)
ENVR 215 Active Water Harvesting and Distribution Systems (3)
GRHS 128 Biopesticides Application and Safety (2)
GRHS 223 Greenhouse Fodder Production (3)
GRHS 298 Greenhouse Internship (1-4)
HMRG 118 Sanitation and Safety (2)
PLMB 141 Pumps and Motors (2)
SOLR 111 Introduction to Solar (1)
SOLR 121 Design and Installation of Photovoltaic Systems I (3)
SOLR 131 Design and Installation of Solar Hot Water Systems (3)
STEM 111 Introduction to Science, Technology, Engineering and Mathematics (3)
WATR 160 Applied Chemistry for Water Treatment Operators (4)
WATR 166 Microbiology for Water Treatment Operators (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE
CRIMINAL JUSTICE
(60 hrs.)
School of Business, Professional Studies and Education, 505-428-1689

This program prepares students for positions in the criminal justice field. The degree can be completed with a concentration in law enforcement supervision or crime scene investigation. Employment opportunities are provided by various law enforcement agencies and correctional institutions in New Mexico. Programs are articulated with the Law Enforcement Academy and the Corrections Academy.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificate related to this degree:
- Police Supervision
PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Discuss the major concepts, theories, empirical findings, patterns, types, and root causes of crime.
• Use critical thinking and the scientific approach to solve problems in the criminal justice system.
• Communicate with professionalism and clarity during victim or suspect interviews.
• Communicate with professionalism and clarity when testifying from a written report in a court of law.
• Apply investigative techniques and critical thinking skills to bring a case to its logical conclusion.
• Interact and display professional and ethical behavior in diverse environments while communicating with law enforcement agencies, courts, attorneys, clients, witnesses and the public.
• Demonstrate knowledge of crime and justice, policing, laws, Constitutional requirements, legally defined procedures, courts and corrections when applied to the diverse and multicultural nature of society.

GENERAL EDUCATION REQUIREMENTS: (24 HRS. MIN.)
Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
[or]
ENGL 119 Professional Communication (3)
Any SPCH course (3)
Mathematics (3 hrs.)
BSAD 112 Business Math (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher
Laboratory Science (4 hrs.)
CRJS 135 Forensic Science I (4)
[or]
CRJS 236 Forensic Science II (4)
Social/Behavioral Sciences (6 hrs.)
Choose from the following:
BSAD 235 Human Relations in the Workplace (3)
HUSV 200 Psychology of Addictive Behavior (3)
POLI 200 American Government and Politics (3)
POLI 211 New Mexico Government (3)
PSYC 111 Psychology I (3)
PSYC 240 Abnormal Psychology (3)
SOCI 111 Introduction to Sociology (3)
SOCI 216 Race, Class and Gender (3)
Humanities and Fine Arts (4 hrs.)
Any foreign language (4)

Choose one of the following concentrations:

CRIME SCENE INVESTIGATION CONCENTRATION: (15 HRS.)
CRJS 115 Foundations of Professional Investigation (3)
CRJS 119 Crime Scene Investigation (3)
[or]
CRJS 133 Introduction to Cybercrime (3)
CRJS 231 Criminal Investigations (3)
CRJS 251 Death Investigation (3)
[and]
Choose from the following:
CRJS 113 Introduction to Protective Services (3)
CRJS 214 Police and Patrol (3)
CRJS 298 Criminal Justice Internship (1-3)
OFTC 111 Business Software Essentials I (4)

INVESTIGATION CONCENTRATION: (15 HRS.)
CRJS 115 Foundations of Professional Investigation (3)
CRJS 119 Crime Scene Investigation I (3)
[or]
CRJS 133 Introduction to Cybercrime (3)
CRJS 215 Investigative Surveillance (3)
[or]
CRJS 231 Criminal Investigations (3)
CRJS 251 Death Investigation (3)
[and]
Choose from the following:
CRJS 113 Introduction to Protective Services (3)
CRJS 214 Police and Patrol Procedures (3)
CRJS 298 Criminal Justice Internship (1-3)
OFTC 111 Business Software Essentials I (4)
LAW ENFORCEMENT SUPERVISION
CONCENTRATION: (15 HRS.)

CRJS 205  Law Enforcement
Supervision — First Line (3)
CRJS 206  Law Enforcement
Supervision — Command Level (3)
CRJS 207  Law Enforcement
Supervision — Executive Level (3)
CRJS 214  Police and Patrol (3)
CRJS 206  Law Enforcement
Supervision — Command Level (3)
CRJS 207  Law Enforcement
Supervision — Executive Level (3)
CRJS 208  Law Enforcement
Supervision — First Line (3)
CRJS 206  Law Enforcement
Supervision — Command Level (3)
CRJS 207  Law Enforcement
Supervision — Executive Level (3)
CRJS 214  Police and Patrol (3)
CRJS 208  Law Enforcement
Supervision — First Line (3)
CRJS 206  Law Enforcement
Supervision — Command Level (3)
CRJS 207  Law Enforcement
Supervision — Executive Level (3)
CRJS 214  Police and Patrol (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE
CULINARY ARTS
(65 hrs. min.)

School of Business, Professional Studies and Education, 505-428-1524

This program is built around the 12 areas of general knowledge recommended by the American Culinary Federation: basic baking, beverage management, business and math skills, dining room service, food preparation, garde-manger, human relations management, introduction to the hospitality industry, menu planning, nutrition, purchasing and receiving, and sanitation and safety.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog or speak with an academic adviser.

Students can earn the following certificate related to this degree:

• Culinary Arts

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

• Create and maintain a safe, organized and sanitary kitchen work station.
• Demonstrate proper care and use of knives.
• Describe how purchasing and inventory management affect operational success.
• Produce correctly cooked, nutritious and visually appealing menus and meals.
• Demonstrate the ability to use standard kitchen equipment safely and correctly.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 119  Professional Communication (3)

Mathematics (3 hrs.)
BSAD 112  Business Math (3)

Laboratory Science (4 hrs.)

Social/Behavioral Sciences (6 hrs.)
ANTH 252  Anthropology of Food (3)
BSAD 235  Human Relations in the Workplace (3)

Humanities and Fine Arts (3 hrs. min.)
BSAD 270  Business Ethics (3)
[or]
SPAN 111  Beginning Spanish I (4)
[and]
SPAN 111L  Spanish I Conversation Lab (1)
[or]
SPAN 113  Beginning Heritage Spanish I (4)
or higher

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (23 HRS. MIN.)

ARTS 280  Business Practices for Designers (3)
[or]
BSAD 111  Introduction to Business (3)
[or]
BSAD 119  Entrepreneurship — Planning and Introduction (3)

CULA 115  Culinary Fundamentals I (4)
CULA 151  Culinary Fundamentals II (4)
NUTR 200  Nutrition (3)

CULA 299  Culinary Externship (2)*
HRMG 118  Sanitation and Safety (2)
HRMG 130  Purchasing (3)
OFTC 116  Word Essentials I (1)
OFTC 117  Excel Essentials I (1)

*Students with previous culinary experience will be required to fulfill 1 credit hour in the culinary café plus 1 credit hour in an outside food service establishment. Students with no previous culinary experience will be
required to fulfill a minimum of 4 credit hours, 2 in the culinary café and 2 in an outside entity.

PROFESSIONAL CHEF CONCENTRATION:
(19 HRS.) CIP: 12.0503
CULA 215  International Cuisine (4)
CULA 219  Vegetarian Cuisine (2)
CULA 224L Professional Sauté (1)
CULA 251  The Restaurant from Concept to Operation (4)
CULA 257L Fundamentals of Meat Fabrication and Butchery (1)
HRMG 210  Hospitality Supervision (3)
Culinary Arts electives (4 hrs.)

Choose from the following:
CULA 123L  Soups and Sauces (1)
CULA 214L  Seafood Cooking (1)
CULA 216L  French Cuisine (1)
CULA 217L  Asian Cuisine (1)
CULA 220L  Food Trends Workshop (1)
CULA 222L  Italian Cuisine (1)
CULA 223  African Cuisine (1)
CULA 226L  Southwest Cuisine (1)
CULA 229  Jewish Food (1)
CULA 240L  The Art of Presentation (1)
CULA 246L  Advanced Garde-Manger (1)
CULA 256L  History and Use of Spices (1)

PROFESSIONAL PASTRY CHEF CONCENTRATION:
(20 HRS.) CIP: 12.0501
CULA 113L  Basic Baking I (1)
CULA 114  Commercial Baking (4)
CULA 133L  Basic Baking II (1)
CULA 212L  Advanced Baking I (1)
CULA 221L  Advanced Baking II (1)
CULA 232L  Cake Making (1)
CULA 233L  Cake Decorating (1)
CULA 234L  Chocolate and Sugar Workshop (1)
CULA 235L  The Plated Dessert (1)
CULA 250  Pastry Presentation and Display (4)
Pastry electives (4 hrs.)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 65 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE
DENTAL HEALTH
(67.50 hrs. min.) CIP: 51.0601
School of Sciences, Health, Engineering and Math
505-428-1258

The A.A.S. degree provides the dental assisting major with additional career and educational opportunities in dental health. The program includes all of the course work required for the Certificate in Dental Assisting, which is accredited by the American Dental Association Commission on Dental Accreditation (CODA). The objective of the A.A.S. degree is to enhance an individual’s employment opportunities in dental office management or in teaching dental assisting. Some dental institutions have developed upper-division programs that recognize the A.A.S. degree for transfer of credits.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are generally not intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificate related to this degree:

• Dental Assisting

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:

• Demonstrate the methods for infection control in a dental office by utilizing the current infection control and safety precautions in all laboratory and clinical setting.

• Demonstrate the knowledge and skills required to systematically collect and record diagnostic data.

• Demonstrate the skills as an effective and efficient member of the dental health team by performing a variety of lab and clinical supportive treatments such as producing quality dental radiographs, taking impressions, application of surface anesthesia, application of dental fluorides, application of coronal polishing, application of dental sealants and other additional state-approved expanded functions.

• Demonstrate the knowledge and skills pertaining to legal and ethical issues related to dentistry including effective verbal and written communication skills.

• Demonstrate the skills required for management of a dental practice, including managing staff, recordkeeping, inventory, payroll, billing and quality assurance.

• Demonstrate the knowledge of public health education, including regarding the prevalence and incidence of dental disease.
• Demonstrate compassion, empathy and sensitivity to patients of different cultural backgrounds.
• Understand the higher education options in all dental professions.

**PROGRAM PREREQUISITES:**
HLCR 113 Medical Terminology (3)

**GENERAL EDUCATION REQUIREMENTS: (27 HRS.)**

**Communications (6 hrs.)**
ENGL 111 Composition and Rhetoric (3)
Any SPCH course (3)

**Mathematics (3 hrs. min.)**
BSAD 112 Business Math (3)
(or any equal or higher MATH)

**Laboratory Science (8 hrs.)**
BIOL 123 Biology for Health Sciences (3)
BIOL 123L Biology for Health Sciences Lab (1)
CHEM 111 Introduction to Chemistry (3)
CHEM 111L Introduction to Chemistry Lab (1)

**Social/Behavioral Sciences (6 hrs.)**
Choose from the following:
BSAD 235 Human Relations in the Workplace (3)
PSYC 111 Psychology I (3)
PSYC 130 Applied Health Psychology (3)
SOCI 111 Introduction to Sociology (3)

**Humanities and Fine Arts (3 hrs.)**
Choose from the following:
BSAD 270 Business Ethics (3)
SPAN 152 Spanish for Medical Personnel (3)
Any World Language course (4)

*The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.*

**Health and Wellness (1 hr.)**

**CORE REQUIREMENTS: (35.5 HRS.)**
AHAC 151 Basic Life Support for Healthcare Providers (.5)
DAST 121 Dental Assisting I (2)
DAST 122 Dental Materials (2)
DAST 122L Dental Materials Lab (1)
DAST 123 Dental Radiography I (2)
DAST 123L Dental Radiography I Lab (1)
DAST 124 Dental Sciences I (3)
DAST 125 Clinical Procedures I (2)
DAST 125L Clinical Procedures I Lab (1)
DAST 131 Dental Sciences II (3)
DAST 131L Dental Sciences II Lab (1)
DAST 133 Dental Practice Management (2)
DAST 134 Clinical Procedures II (2)
DAST 134L Clinical Procedures II Lab (2)
DAST 141 Dental Education Issues (1)
DAST 193 Dental Clinical Practicum I (2)
DAST 222 Community Dental Health (2)
DAST 293 Dental Clinical Practicum II (5)
EFDA 294 Dental Insurance Billing and Coding (2)

**APPROVED ELECTIVES: (5 HRS. MIN.)**
Choose from the following:
DAST 294 Dental Professional Seminar (1-2)
EDUC 111 Introduction to Education (3)*
EDUC 290 Education Seminar (1-3)
EFDA 295A Dental Radiation Health and Safety Review (1)
EFDA 295B Dental Infection Control Review (1)
EFDA 295C General Chair-side Review (1)
EFDA 296 Dental Fluorides, Polishing and Sealants Review (1)
NUTR 200 Nutrition (3)
OFTC 111 Business Software Essentials (4)

*EDUC 112L is not required as a corequisite to EDUC 111 for dental students.

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 67.50 CREDITS MIN.**

**ASSOCIATE IN APPLIED SCIENCE**

**EARLY CHILDHOOD EDUCATION**

(61 hrs. min.)

School of Business, Professional Studies and Education, 505-428-1256

This program offers the theory and skills required for working in various settings that serve young children birth through grade three. Graduates may qualify as a teacher in an early childhood center classroom. The A.A.S. partially fulfills the New Mexico Public Education Department’s competency requirements for age three through grade three licensure.
Note: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog or speak with an academic adviser.

Students can earn the following certificate related to this degree:
- Infant Family Studies

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
- Describe the processes of and influences on development in young children.
- Identify the adult’s role in supporting each child’s growth, development and learning.
- Create and promote supportive environments that engage parents, guardians, families and the community to meet the needs of each child.
- Select and use diverse assessment tools to monitor child development.
- Select and use diverse assessment tools to monitor the quality of early childhood programs.
- Design, implement and evaluate curricula and instruction that promote optimal development and learning for all children.
- Make appropriate and ethical decisions to positively influence children’s development.
- Analyze safe environments and appropriate nutrition that promote positive physical and mental health for young children.

GENERAL EDUCATION REQUIREMENTS: (26 HRS. MIN.)
Communications (9 hrs.)
- ENGL 111 Composition and Rhetoric (3)
- ENGL 112 Composition and Literature (3)
- ENGL 119 Professional Communication (3)
- ENGL 216 Technical Writing (3)
- Any SPCH course (3)

Mathematics (3 hrs. min.)
Choose from the following:
- BSAD 112 Business Math (3)
- MATH 111 Math for Elementary School Teachers I (3)
- MATH 112 Math for Elementary School Teachers II (3)
- MATH 119 Applications of Mathematics for Non-science Majors (3)
- MATH 121 College Algebra (4) or higher

Laboratory Science (4 hrs. min.)
Social/Behavioral Sciences (6 hrs.)
- The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (32 HRS.)
- ECED 111 Child Growth, Development and Learning (3)
- ECED 112 Health, Safety and Nutrition (2)
- ECED 113 Family and Community Collaboration (3)
- ECED 114 Assessment of Children and Evaluation of Programs (3)
- ECED 211 Introduction to Reading and Literacy Development (3)
- ECED 215 Professionalism (2)
- ECED 216A Curriculum Development and Implementation I (3)
- ECED 216B Curriculum Development and Implementation Practicum I (2)
- ECED 217A Curriculum Development and Implementation Age 3-Grade 3 (3)
- ECED 217B Curriculum Development and Implementation Practicum Age 3-Grade 3 (2)
- ECED 218 Guiding Young Children (3)
- ECME 111 Foundations of Early Childhood (3)

RELATED REQUIREMENTS: (3 HRS. MIN.)
Choose from the following:
- EDUC 228 Technology in the Classroom (3)
- MART 119 Digital Design Presentation (3)
- OFTC 111 Business Software Essentials I (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 61 CREDITS MIN.
ASSOCIATE IN APPLIED SCIENCE
ENGINEERING TECHNOLOGIES

(60 hrs. min.)  CIP: 15.0000

School of Sciences, Health, Engineering and Math
505-428-1754

This degree provides students with opportunities to acquire the skills necessary to enter the workplace as competent engineering technicians. Nested certificates in General Engineering Technologies, Mechanical Engineering Technologies, Electrical, Smart Grid and Micro Grid Technologies and Manufacturing Technologies allow students to focus on distinct career paths. This program combines computer-based modeling with conventional methods in engineering graphics communication. Students use machining as well as instrumentation and control skills to solve basic design-related problems. The program provides foundational learning in regards to critical thinking and problem solving using engineering methods.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificates related to this degree:
- Electrical, Smart Grid and Micro Grid Technologies
- General Engineering Technologies

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Evaluate and communicate design goals, constraints, and methodology within the engineering fields of discipline.
- Evaluate, construct, and utilize design models to identify and solve problems related to project management.
- Implement engineering design methodology to predict both primary and alternative solutions.
- Evaluate and solve engineering problems related to course content.
- Articulate and justify both technical considerations and solutions through oral, written, and graphical communication methods in engineering problems.
- Effectively solve problems in teams.
- Demonstrate an understanding of professional and ethical responsibility in the field of engineering.

GENERAL EDUCATION REQUIREMENTS: (25 HRS.)

Communications (6 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 216  Technical Writing (3)

Mathematics (5 hrs.)
MATH 150  Precalculus (4)
MATH 150L  Precalculus Lab (1)

Laboratory Science (4 hrs.)
PHYS 121  General Physics I (3)
PHYS 121L  General Physics I Lab (1)

Social/Behavioral Sciences (3-6 hrs.)

Humanities and Fine Arts (3-6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (22 HRS.)
ENGR 111  Introduction to Engineering (3)
ENGR 121  Engineering Graphics (3)
ENGR 122  Engineering Methods (3)
ENGR 160  Engineering Graphics and Design (3)
ENGR 260  Mechanical Engineering Design (2)
ENGR 260L  Mechanical Engineering Design Lab (2)
ENGR 298  Internship (3)
ENVR 113  Instrumentation and Controls (3)

Related Requirements (13 hrs. min.)

Choose at least 13 credits from other appropriate fields, which may include Mechanical Engineering Technology, Civil Engineering Technology, Electromechanical Engineering Technology, Smart Grid and Micro Grid Technologies, or Manufacturing Technologies. Related certificates include General Engineering Technologies, Mechanical Engineering Technologies, and Electrical and Smart Grid/Micro Grid Technologies.

Choose 13 or more hours from the following:
ALFT 111  Introduction to Alternate Fuels (3)
ELEC 111  Electronic Fundamentals (4)
ELEC 151  Power Generation, Transmission, and Distribution (3)
ELEC 201  Smart Energy Management Systems (3)
ENGR 231  Engineering Graphics II (3)
MATT 113  Manufacturing Safety and Measurement (1)
MATT 114  Introduction to Lathes (1)
MATT 115  Introduction to Mills (1)
MATT 116L  Introduction to Supporting Machine Tools and Principles (1)
MATT 117 Introduction to Materials for Machining (1)
MATT 119 Introduction to Non-Traditional Machining (1)
MATT 154 Introduction to CNC Programming (2)
MATT 155 Introduction to Computer Numeric Control Mills (2)
SOLR 121 Design and installation of Photovoltaic Systems I (3)

Or other engineering technology related course(s) approved by an engineering adviser

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE

EXERCISE SCIENCE

(61 hrs. min.)  CIP: 51.0903
School of Fitness Education, 505-428-1651

This program provides students with the foundational knowledge and skills required of fitness professionals. Successful completion of course work prepares students to take national-level certification exams offered by the American College of Sports Medicine (ACSM), National Strength and Conditioning Association (NSCA) and American Council on Exercise (ACE). If students wish to transfer, they must work closely with their transfer institutions and their SFCC advisers to ensure smooth transitions to four-year schools. Students need to show current proof of American Heart Association or American Red Cross Adult CPR/-AED certification

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificate related to this degree:
• Fitness Instructor Training  • Nutrition

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Apply the basic principles of exercise science, behavior modification, nutrition, and weight management to help clients achieve a healthy lifestyle.
• Describe and apply basic elements of anatomy, applied kinesiology, biomechanics, and exercise physiology.
• Administer and interpret health screenings and fitness assessments to design safe exercise programs for a diverse range of individuals.
• Explain and employ the scope of practice and professional responsibilities of a certified fitness professional.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)
Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
[or]
ENGL 216 Technical Writing (3)
[or]
Any SPCH course (3)

Mathematics (3 hrs. min.)
MATH 119 Applications of Mathematics for Non-science Majors (3)
[or]
MATH 121 College Algebra (4)

Laboratory Science (4 hrs.)
BIOL 136 Non-Majors Anatomy and Physiology (3)
BIOL 136L Non-Majors Anatomy and Physiology Lab (1)

Social/Behavioral Sciences (6 hrs.)
Humanities and Fine Arts (3 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (28 HRS.)
EXSC 200 Exercise Physiology (3)
EXSC 201 Structural Kinesiology (4)
EXSC 202 Instruction in Lifestyle Change (3)
EXSC 203 Nutrition for Fitness and Sports (3)
EXSC 210 Prevention and Care of Exercise Injury (3)
EXSC 220 Fitness and Exercise Testing (3) ♥
EXSC 230 Physical Fitness Theory and Instruction (3)
EXSC 293L Practicum (1) [Must be taken twice to fulfill degree requirements.]
EXSC 298 Internship (1)
NUTR 200 Nutrition (3) ♥

APPROVED ELECTIVES: (10 HRS.)
Choose from the following:
BIOL 123 Biology for Health Sciences (3)
BIOL 123L Biology for Health Sciences Lab (1)
EXSC 120 Instructional Methods: Pilates (.5)
EXSC 122 Instructional Methods: Youth Fitness (.5)
EXSC 123 Instructional Methods: Fitness Cycling (.5)
EXSC 124 Instructional Methods: Senior Fitness (.5)
EXSC 126 Instructional Methods: Personal Training (1)
EXSC 129 Instructional Methods: Group Exercise (1)
EXSC 132 Instructional Methods: Alternative Strength Training (.5)
EXSC 133 Instructional Methods: Training Techniques Review (.5)
EXSC 134 Instructional Methods: Outdoor Applications (.5)
EXSC 150 Fitness Instructor Training I (4)
EXSC 151 Fitness Instructor Training II (4)
HLED 112 Weight Management and Exercise (3)
HLED 113 Stress Management (3)
NUTR 121 Dietary Guidelines (1)
NUTR 205 Nutrition in the Life Cycle (3)
NUTR 206 Community Nutrition (3)
NUTR 221 Diabetes Management (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 61 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE

FILM

(60 hrs. min.)
School of Arts, Media Arts, and Design, 505-428-1738

The A.A.S. in Film degree is available in these concentrations: Directing and Performance; Documentary and Environmental Media; Film Production; Multimedia Journalism; and Screenwriting and Film Studies. Students acquire the aesthetic and technical skills to work individually or as part of a team in their area of focus.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificate related to this degree:
• Film: Production

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Illustrate the relationship between film and other artistic mediums.
• Express themselves through the vocabulary of film.
• Demonstrate storytelling from idea to script to production using current technologies.
• Design and model the collaborative process of filmmaking.
• Demonstrate a broad understanding of the global impact of media.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
Any SPCH (3)

Mathematics (3 hrs. min.)
BSAD 112 Business Math (3)
or
MATH 119 Applications of Mathematics for Non-science Majors (3) or Higher

Laboratory Science (4 hrs.)

Social/Behavioral Sciences (3 hrs.)

Humanities and Fine Arts (6 hrs.)
FILM 155 Film History (3)
FILM 200 Media and the Environment (3)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)
FILM 140L Film Crew I Lab (1)

CORE REQUIREMENTS: (16 HRS. MIN.)

FILM 130 Video Production I (3)
FILM 135 Girls Make Media (3)
FILM 136 Women Make Media (3)
FILM 131 Editing I (3)
FILM 140 Film Crew I (4)
FILM 160 Film Theory and Criticism (3)
FILM 175 Screenwriting I (3)

CONCENTRATION AREAS (21 HRS. MIN.)
Select one from the following concentrations:

DIRECTING AND PERFORMANCE CONCENTRATION
(25 hrs. min.)
CIP: 50.0602
Students will work in teams and learn the fundamental skills of script development, script breakdown, scene development, and character development required to be an artistic leader on a film set.

CORE REQUIREMENTS (15 hrs. min.)
FILM 145 Performance for Film and Media I (3)
FILM 190 Directing I (3)
FILM 230 Video Production II (3)
FILM 245  Performance for Film and Media II (3)
FILM 290  Directing II (3)

RELATED REQUIREMENTS (10 hrs. min.)
DRAM 160  Acting I (3)
FILM 141  Film Crew II (4)
FILM 239  Producing and Directing the Independent Film (3)
FILM 240  Film Crew III (9)
FILM 270  Film Crew Seminar (.5-3)

DOCUMENTARY AND ENVIRONMENTAL MEDIA CONCENTRATION
(24 HRS. MIN.)  
Students who choose this concentration will learn documentary filmmaking techniques and how they apply in the fields of ecology, anthropology and socio-political journalism. Students will develop techniques to explore socially conscious stories and learn skills to take on leadership roles in the emerging fields surrounding environmental journalism.

CORE REQUIREMENTS (12 hrs. min.)
FILM 210  Documentary Film Production I (3)
FILM 211  Documentary Film Production II (3)
FILM 231  Editing II (3)
FILM 232  Editing III (3)

RELATED REQUIREMENTS (12 hrs. min.)
Choose from the following:
ANTH 280  Anthropology and Film (3)
ENV 111  Introduction to Sustainability (3)
FILM 233  Editing IV (3)
FILM 236  Sound for Film (3)
FILM 240  Film Crew III (9)
FILM 241  Film Crew IV (9)
FILM 242  Film Crew V (9)
FILM 280  Digital Cinematography (3)
FILM 270  Film Crew Seminar (.5-3)
HUMS 191  Media and Culture (3)
LEG 205  Entertainment, Media and the Law (3)
MART 148  3-D Graphics and Animation (3)
MART 180  Photoshop I (3)
MART 189  Copyright and Media (1)
MART 248  3-D Graphics and Animation II (3)
PHOT 111  Digital Photography I (3)

FILM PRODUCTION CONCENTRATION:
(25 HRS. MIN.)  
Students choosing this concentration acquire the aesthetic and technical skills related to film allowing them to work as part of a collaborative team in the film industry. Students will explore writing, directing, producing, and editing and focus on areas of study related to film industry jobs including accounting and payroll, production marketing, sewing and costume design, make-up, craft services, cinematography and sound. Students must work with an adviser to select related requirements.

CORE REQUIREMENTS: (13 HRS. MIN.)
FILM 141  Film Crew II (4)
FILM 230  Video Production II (3)
FILM 280  Digital Cinematography (3)
FILM 231  Editing II (3)
FILM 275  Screenwriting II (3)

RELATED REQUIREMENTS: (12 HRS. MIN.)
Choose from the following:
ACCT 111  Small Business Accounting (3)
ACCT 124  Payroll Accounting (3)
BSAD 119  Entrepreneurship — Planning and Introduction (3)
BSAD 240  Principles of Marketing (3)
CULA 115  Culinary Fundamentals I (4)
FASH 13  Production Sewing (3)
FASH 155  Costume Design for Film and Stage (3)
FILM 119  Beginning Make-Up Artistry (3)
FILM 180  Film Directing Workshop (3)
FILM 219  Advanced Make-Up Artistry (3)
FILM 232  Editing III (3)
FILM 236  Sound for Film (3)
FILM 239  Producing and Directing the Independent Film (3)
FILM 240  Film Crew III (9)
FILM 241  Film Crew IV (9)
FILM 242  Film Crew V (9)
FILM 270  Film Crew Seminar (6)
FILM 281  Digital Cinematography II (3)
FILM 298  Film Crew Internship (3)
MART 148  3-D Graphics and Animation (3)
MART 160  Audio Production I (3)
MART 180  Photoshop I (3)
MART 189  Copyright and Media (1)
MART 248  3-D Graphics and Animation II (3)
PHOT 111  Digital Photography I (3)

NOTE: Students must complete an application process for FILM 240, 241 and 242

MULTIMEDIA JOURNALISM CONCENTRATION
(21 HRS. MIN.)
Students who choose this concentration acquire media
literacy and computer technical skills with a broad understanding of global sustainability, socio-economic politics and ethical reporting related to broadcast journalism. Students will work individually or in a team production environment to learn writing, communication and reporting skills necessary for employment in the news reporting fields of radio, television, social media and internet media.

CORE REQUIREMENTS (12 hrs. min.)
- FILM 132 Television Production (3)
- FILM 166 Radio Journalism I (3)
- FILM 215 Social Media and Global Sustainability (3)
- FILM 298 Internship (3)

RELATED REQUIREMENTS (9 hrs. min.)
Choose from the following:
- FILM 210 Documentary Production I (3)
- FILM 211 Documentary Production II (3)
- FILM 231 Editing II (3)
- FILM 236 Sound for Film (3)
- MART 127 Design by Nature (3)
- MART 130 Web Design I (3)
- MART 160 Audio Production I (3)
- MART 189 Copyright and Media (1)
- PHIL 258 Environmental Ethics and Sustainability (3)
- PSYC 210 Cultural Psychology (3)

SCREENWRITING AND FILM STUDIES CONCENTRATION:
(24 HRS. MIN.)
Students who choose this concentration will learn film history, media theory and criticism, genre, international and historical concepts of film and media. Students will learn the fundamentals necessary to write for film and media productions. Students will be able to work in the fields of writing and criticism, film festivals and theatrical distribution.

CORE REQUIREMENTS: (15 HRS. MIN.)
- FILM 192 Independent Film (3)
- FILM 195 Contemporary and Postmodern Film (3)
- FILM 255 International Cinema (3)
- FILM 275 Screenwriting II (3)
- MART 170 Writing for Mass Media (3)

RELATED REQUIREMENTS: (9 HRS. MIN.)
Choose from the following:
- ANTH 280 Anthropology and Film (3)
- ENGL 210 Film and Literature (3)
- FILM 231 Editing II (3)
- FILM 236 Sound for Film (3)
- FILM 239 Producing and Directing the Independent Film (3)
- FILM 250 International Horror Cinema (3)
- FILM 265 Directing Performance for Film and Media (3)
- FILM 270 Film Crew Seminar (.5-3)
- FILM 298 Internship (3)
- HUMS 200 Media and Gender (3)
- SPAN 288 Contemporary Latino Film (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 60 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE

GENERAL STUDIES

(62 hrs. min.)
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

The Associate in Applied Science in General Studies allows students flexibility in creating plans around their core interests. Some concentrations are designed to prepare students for specific occupations. Other concentrations may transfer. Transferability of courses is determined by the receiving institution.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
- ENGL 111 Composition and Rhetoric (3)
- ENGL 112 Composition and Literature (3)
- ENGL 119 Professional Communication (3)
- ENGL 216 Technical Writing (3)
- Any SPCH course (3)

Mathematics (3 hrs. min.)

Laboratory Science (4 hrs. min.)

Social/Behavioral Sciences (3-6 hrs.)
Humanities and Fine Arts (3-6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (21 HRS.)

RELATED REQUIREMENTS: (18 HRS.)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 62 CREDITS MIN.

ASSOCIATE IN APPLIED SCIENCE

MEDIA ARTS

(67 hrs. min.)
School of Arts, Design, and Media Arts 505-428-1517

A.A.S. Degrees in Media Arts are available in four concentrations: 3-D Graphics, Animation and Game Design, audio production, graphic and interactive design and web design. An A.A.S. in Media Arts degree provides students with employable skills in web design, multimedia and digital layout design. They also receive a general education foundation. Emphasis is placed on mastery of industry software and hardware applications.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificates related to this degree:
• Graphic and Interactive Design
• Web Design

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate proficiency in written, oral and visual communication within a variety of electronic media.
• Demonstrate proficiency in a variety of electronic media.
• Develop professional portfolios.
• Demonstrate proficiency in project management.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 216 Technical Writing (3)

MART 170 Writing for Mass Media (3)

Mathematics (3 hrs. min.)
BSAD 112 Business Math (3)

MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (4 hrs. min.)

Social/Behavioral Sciences (3-6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (25 HRS. MIN.)

MART 118 Communication Design (3)
MART 119 Digital Design Presentation (3)
MART 121 Adobe Illustrator (3)*

MART 123 Adobe InDesign (3)
MART 127 Design by Nature (3)*

MART 188 Adobe Lightroom (2)
MART 130 Web Design I (3)
MART 180 Photoshop I (3)
MART 187 Electronic Color Theory and Practice (1)
MART 189 Copyright and Media (1)
MART 280 Photoshop II (3)
MART 284 Advanced Digital Projects (3)
MART 298 Internship (1) or approved work experience

*Students seeking the Graphic and Interactive Design concentration must take MART 121 and MART 123.

CONCENTRATION AREAS (19 HRS. MIN.)

To fulfill requirements for a general A.A.S. in Media Arts degree, students may select one of the following options:
1. The student successfully completes one of the four concentrations OR 2. The student successfully completes a minimum of 19 credit hours from approved Media Arts classes and other approved courses.

3D GRAPHICS, ANIMATION AND GAME DESIGN CONCENTRATION:
(19 HRS. MIN.) CIP: 50.0102

Students enhance their technical abilities while examining design aesthetics, game study, and writing. Successful 3D artists and game designers are imaginative, inquisitive, and virtual communicators and they excel at integrating ideas into a visual or interactive entity people can enjoy. These
courses of study highlight the development of design, writing, game study, modeling, and animation skills. Students will be prepared for entry-level positions in 3D design/video game studios, animation studios and independent companies.

**CORE REQUIREMENTS: (19 HRS. MIN.)**

- MART 144 Game Design Analysis (3)
- MART 146 Game Design Fundamentals (3)
- MART 148 3D Graphics and Animation (3)
- MART 179 3D Graphics and Animation II (3)
- MART 246 Game Design Concepts (3)
- MART 298 Internship (1) or approved work experience

Choose from the following: (3 hrs. min.)

- DRPT 118 Drawing I (3)
- DRPT 221 Figure Drawing (3)
- MART 121 Adobe Illustrator (3)
- MART 194 Media Arts Seminar (1-4)
- MART 284 Advanced Digital Projects (3)

**AUDIO PRODUCTION CONCENTRATION:**

CIP: 10.0203

Students acquire the skills related to audio recording in the studio and/or field as well as digital audio creation, and editing. Students will be positioned for advanced educational opportunities and they will have the necessary skills for entry and mid-level positions at professional audio, film, radio or multi-media studios, successfully engage in freelance work, or independently produce content for distribution and performance.

**CORE REQUIREMENTS: (13 HRS. MIN.)**

- MART 160 Audio Production I (3)
- MART 163 Sound for Film (3)
- MART 165 Audio Field Recording (2)
- MART 194 Media Art Seminar (2)
- MART 260 Audio Production II (3)

**APPROVED ELECTIVES: (6 HRS. MIN.)**

**GRAPHIC AND INTERACTIVE DESIGN CONCENTRATION:**

CIP: 50.0409

Students acquire skills in graphic design, print media, and web design, as well as the fundamentals in animation, multimedia, and digital film. Upon completion of this concentration students will be prepared for a variety of employment opportunities as media design specialists in advertising and news agencies, print and graphics businesses, pre-press industries and web design companies. Students will design a self-promotional package, electronic portfolio and gain experience working in a team environment.

**CORE REQUIREMENTS: (19 HRS. MIN.)**

- MART 121 Adobe Illustrator (3)
  [or]
- MART 123 Adobe InDesign (3)
- MART 127 Design by Nature (3)
- MART 143 After Effects (3)
- MART 186 Scanning Techniques (1)
- MART 223 Typography (3)
- MART 225 InDesign II (3)

Choose from the following: (3 hrs. min.)

- FILM 131 Editing I (3)
- MART 146 Game Design Fundamentals (3)
- MART 148 3D Graphics and Animation (3)
- MART 194 Media Arts Seminar (1-4)
- MART 230 Web Design II: CSS Responsive Web Design (3)
- MART 231 Dreamweaver (2)

**WEB CONCENTRATION:**

CIP: 50.0102

Students learn best practices in current web design visual trends and technologies, as well as develop forward-thinking skills to advance their careers or education in the field. Areas covered include XHTML and CSS, Flash and advanced database programming. Students will be positioned for entry-level careers in web design/graphic design studios or advertising agencies.

**CORE REQUIREMENTS: (19 HRS. MIN.)**

- MART 186 Scanning Techniques (1)
- MART 228 Web Design in the Real World (2)
- MART 229 Introduction to Wordpress (2)
- MART 230 Web Design II: CSS Responsive Web Design (3)
- MART 231 Dreamweaver (2)
- MART 232 Advanced Web Projects (3)

Choose from the following (6 hr. min.)

- MART 143 After Effects (3)
- MART 146 Game Design Fundamentals (3)
- MART 148 3D Graphics and Animation (3)
- MART 194 Media Arts Seminar (1-4)
- MART 284 Advanced Digital Projects (3)

**NOTE:** See First-Year Student Success Course Requirement on Page 8.

**TOTAL 67 CREDITS MIN.**
ASSOCIATE IN APPLIED SCIENCE IN  
MEDICAL ASSISTING  
(61.5 hrs.)  
CIP: 51.0801  
School of Sciences, Health, Engineering and Math  
505-428-1323  

This program encompasses the competencies necessary for a professional Medical Assistant. Specific education includes performing administrative and clinical procedures in settings such as physician offices, clinics and ambulatory settings. Courses are sequenced to build skill level. Medical Assisting is a growing occupation in New Mexico and the United States. This program of study is oriented to students who have an aptitude for organization and health-care systems. The goal of the program is to prepare competent entry-level medical assistants in the knowledge, skills and behavior learning domains essential to providing competent and caring services. This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon recommendation of the Medical Assisting Education Review Board (MAERB). Upon completion of this program, graduates are eligible to take the national certification exam for medical assisting.

ADMISSION REQUIREMENTS
Eligibility for application to the medical assisting program includes the following: successful completion of MATH 102, ENGL 111, and HLCR 113. Math and Biology courses must have been completed within five years prior to enrollment in the Medical Assisting Program. An application process is required; call 505-428-1323 well before the open registration date for fall.

Prospective students who have been convicted of a felony are advised to contact the Department of Health and the Medical Assisting Education Review Board prior to admission to determine their eligibility for certification. Fingerprinting for background checks, drug testing, and proof of recommended vaccinations are required once students are accepted into the program. All students must meet the stated requirements of each assigned clinical site to qualify for placement.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Perform major operational functions of the medical office, including basic medical bookkeeping, scheduling and other office functions.

• Measure vital signs and prepare patients for examinations and clinical tests.
• Accurately and safely perform laboratory and clinical testing and specimen preparation.
• Communicate effectively and compassionately with patients of varying ages, cultures and education levels.
• Communicate effectively and professionally with medical personnel.
• Demonstrate a basic understanding of the anatomy and physiology of the human body.
• Demonstrate an understanding of various biomedical legal and ethical issues.
• Demonstrate proficiency in medical assisting competencies.

PROGRAM PREREQUISITES

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 111</td>
<td>Composition and Rhetoric</td>
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<td>ENGL 119</td>
<td>Professional Communication</td>
<td>(3)</td>
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<tr>
<td>MATH 102</td>
<td>Basic Algebra</td>
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<td>BSAD 112</td>
<td>Business Math</td>
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<td>OFTC 111</td>
<td>Business Software Essentials</td>
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GENERAL EDUCATION REQUIREMENTS: (26 HRS. MIN.)

Communications (9 hrs.)
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<tbody>
<tr>
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<td>ENGL 216</td>
<td>Technical Writing</td>
<td>(3)</td>
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<td>SPCH 220</td>
<td>Interpersonal Communication</td>
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<td>SPCH 225</td>
<td>Small-Group Communication</td>
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Mathematics (3 credits)
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<td>BSAD 112</td>
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Laboratory science (4 hrs.)
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<tbody>
<tr>
<td>BIOL 136</td>
<td>Non-Majors Anatomy and Physiology</td>
<td>(3)</td>
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<tr>
<td>BIOL 136L</td>
<td>Non-Majors Anatomy and Physiology Lab</td>
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Social/Behavioral Sciences (6 hrs.)
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<tr>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td>PSYC 111</td>
<td>Psychology I</td>
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<td>PSYC 240</td>
<td>Abnormal Psychology</td>
<td>(3)</td>
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<tr>
<td>PSYC 290</td>
<td>Developmental Psychology</td>
<td>(3)</td>
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</tbody>
</table>

Humanities (3 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (32.5 HRS.)
THE NURSING PROGRAM

ADMISSION REQUIREMENTS
Eligibility for application to the nursing program includes the following: a minimum GPA of 2.75 in all prerequisite courses, a minimum GPA of 2.75 in the science courses, a current BLS/CPR certificate from American Heart Association, HESI Admission test score of at least 75. Math and science courses must have been completed within five years prior to enrollment in the Nursing Program.

The following are required prerequisites prior to admission: BIOL 230, BIOL 230L, BIOL 231, BIOL231L, ENGL 112 or ENGL 216 and MATH 121 or 135. Students must meet with a nursing adviser prior to completing the application. It is the student's responsibility to meet the application deadline. Incomplete or late applications will not be considered.

Prospective students who have been convicted of a felony are advised to contact the appropriate state board of nursing prior to admission to determine their eligibility for licensure. Fingerprinting for background checks, drug testing, and proof of required vaccinations are required once students are accepted into the program. All students must meet the stated requirements of each assigned clinical site to qualify for placement.

ACCELERATED B.S.N. TRACK
This track is designed for students with bachelor's degrees from accredited colleges or universities. See an adviser within the School of Sciences, Health, Engineering and Math for details regarding admission.

TRADITIONAL A.D.N. PROGRAM PROGRESSION
The program is designed to be completed in two academic years after admission to the program. Nursing courses are to be taken in sequence as outlined by the nursing department. A minimum grade of “C” must be maintained in all nursing courses to progress from one level to the next and to graduate. A cumulative GPA of 2.0 must be maintained to remain in the Nursing Program.

B.S.N. PROGRAM PROGRESSION
Students complete the five semester B.S.N. track with an Associate in Science in Nursing degree awarded along with a Bachelor's in Nursing from the University of New Mexico.
ASSOCIATE IN APPLIED SCIENCE

NURSING

(72 hrs. min.)  CIP: 51.3801
School of Sciences, Health, Engineering and Math
505-428-1323

The SFCC Nursing Program is approved by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, 404-975-5000 or www.acenursing.org. Students who successfully complete the Associate in Applied Science in Nursing degree are eligible to apply to take the National Council Licensure Examination for registered nurses (NCLEX-RN) to qualify for licensure as registered nurses in New Mexico. Students who plan to take the licensure examination in another state are advised to contact that state's board of nursing for specific requirements.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

• Engage in professional nursing practice that is patient centered and culturally appropriate for individuals, families and communities.
• Integrate principles of quality improvement and safety into nursing practice within health care organizations and systems.
• Deliver nursing care that is evidence-based across the lifespan.
• Demonstrate leadership behaviors through the application of policies that apply to health care delivery.
• Engage in effective inter-professional collaboration in the delivery of health care for quality patient outcomes.
• Utilize technologies for the management of information and in the delivery of patient care.
• Demonstrate conscience in nursing practice through the application of professional nursing standards and ethical and legal decision-making.
• Establish commitment to ongoing professional growth to assure excellence in the nursing profession.

GENERAL EDUCATION REQUIREMENTS: (31HRS. MIN.)

Communications (6 hrs.)
ENGL 111  Composition and Rhetoric (3)
ENGL 112  Composition and Literature (3)

Mathematics (3 hrs. min.)
MATH 121  College Algebra (4)

MATH 135  Introduction to Probability and Stats (3)

Laboratory Sciences (12 hrs.)
BIOL 221  Microbiology for Health Sciences (3)
BIOL 221L  Microbiology for Health Sciences Lab (1)
BIOL 230  Human Anatomy and Physiology I (3)
BIOL 230L  Human Anatomy and Physiology I Lab (1)
BIOL 231  Human Anatomy and Physiology II (3)
BIOL 231L  Human Anatomy and Physiology II Lab (1)

Social/Behavioral Sciences (6 hrs.)
PSYC 111  Psychology I (3)
PSYC 290  Developmental Psychology (3)

Humanities and Fine Arts (3 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)
CORE REQUIREMENTS: (41 HRS.)
NURS 120  Introduction to Nursing Concepts (3)
NURS 125  Principles of Nursing Practice (4)
NURS 140  Health and Illness Concepts I (3)
NURS 145  Health Care Participant (3)
NURS 155  Nursing Pharmacology (3)
NURS 160  Assessment and Health Promotion (4)
NURS 200  Health and Illness Concepts II (3)
NURS 210  Professional Nursing Concepts I (3)
NURS 225  Care of Patients with Chronic Conditions (4)
NURS 230  Health and Illness Concepts III (4)
NURS 235  Clinical Intensive I (4)
NURS 260  A.D.N. Capstone (3)

NOTE: Before starting the nursing program, the following prerequisites must be completed:
• ENGL 111  • PSYC 111
• PSYC 290  • BIOL 221 and BIOL 221L
• BIOL 230 and BIOL 230L

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 72 CREDITS MIN.
ASSOCIATE IN APPLIED SCIENCE
PARALEGAL STUDIES
(61 hrs. min.)
School of Business, Professional Studies and Education, 505-428-1308

This program prepares students for employment as paralegals/legal assistants in private law firms, courts and government agencies, corporations, businesses and organizations conducting legal-related work. Students learn legal principles, legal research and writing, case management, interviewing and investigating, preparation of legal documents, law office administration and legal ethics.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Explain the structure of the American legal system and how legal cases are processed.
• Analyze legal problems by conducting legal research, interpreting law, and composing persuasive written and oral legal arguments.
• Compose basic legal pleadings, legal memoranda and correspondence related to case processing.
• Demonstrate evidence gathering techniques for obtaining discovery and interviewing clients and witnesses.
• Explain the paralegal’s role in providing office support that maintains the legal field’s ethical and professional standards.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
[or]
ENGL 119 Professional Communications (3)

Mathematics (3 hrs.)
BSAD 112 Business Math (3)
[or]
MATH 119 Applications of Mathematics for Non-Science Majors (3)
[or]
Any MATH higher than 119 (3)

Laboratory Science (4 hrs. min.)
CRJS 135 Forensic Science I (4)
[or]
CRJS 236 Forensic Science II (4)
[or]
Any laboratory science courses (4)

Social/Behavioral Sciences (6 hrs.)
PSYC 111 Psychology I (3)
[or]
SOCI 111 Introduction to Sociology (3)
[and]
Any Social/Behavioral Sciences (3)

Humanities and Fine Arts (3 hrs. min.)
Any foreign language (4) Recommended
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (29 HRS.)
LEGL 111 Introduction to American Law for Paralegals (3)
LEGL 112 Introduction to the Paralegal Profession (3)
LEGL 115 Torts, Practice and Procedure (3)
LEGL 121 Legal Research and Writing I (3)
LEGL 231 Evidence Law (3)
LEGL 240 Constitutional Law (3)
LEGL 241 Legal Research Writing II/Westlaw (4)
LEGL 250 Civil Litigation (3)
OFTC 111 Business Software Essentials I (4)

*It is highly recommended that students take LEGL 111 and 121 in their first semester.

RELATED REQUIREMENTS: (9 HRS.)
CRJS 203 Criminal Law and Procedure (3)
[or]
CRJS 204 Law and the Professional Investigator (3)
[and]
Any LEGL courses 200 and higher, including LEGL 114* (3)
LEGL 298 Internship (3) Recommended

*LEGL 114 is primarily for students enrolled in the Legal Secretary or Law Office Administrative Assistant Certificates.

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 61 CREDITS MIN.
ASSOCIATE IN APPLIED SCIENCE

PARAMEDICINE

(72 hrs. min.)

CIP: 51.0904

School of Sciences, Health, Engineering and Math
505-428-1820

SFCC offers a paramedic training program. Through the use of scenario-based human patient simulation and case-based practice, students undergo an intensive, practical learning process. This cohort prepares students for the National Registry Paramedic (NREMT-P) licensure exam and the New Mexico licensing exam. Licensed paramedics provide advanced life support in pre-hospital settings.

NOTE: A.A.S degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more specific information on transfer, refer to Page 28 of this catalog or speak with an academic adviser.

Students can earn the following certificates related to this degree:
- Paramedicine
- Emergency Medical Technician — Basic
- Emergency Medical Technician — Intermediate

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Demonstrate the ability to provide appropriate care to pre-hospital patients presenting with injuries or illness.
- Apply medical-legal concepts as they relate to pre-hospital care.
- Demonstrate proficiency in and appropriately apply advanced life support skills and techniques.
- Demonstrate critical thinking skills to accurately diagnose and manage injuries and illness in a variety of settings.
- Provide safe, compassionate care and patient advocacy.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
SPCH 220 Interpersonal Communications (3)

Mathematics (3 hrs. min.)
MATH 121 College Algebra (3)
[or]
MATH 135 Probability and Statistics (3)

Laboratory Science (4 hrs.)
BIOL 123 Biology for Health Sciences (3)
BIOL 123L Biology for Health Sciences Lab (1)

Social/Behavioral Sciences (6 hrs.)
PSYC 111 Psychology I (3)
Social/Behavioral Science course (3)

Humanities and Fine Arts (3 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (49 HRS. MIN.)
EMSI 240 Anatomy and Physiology for EMS (4)
EMSI 240L Anatomy and Physiology for EMS Lab (2)
EMSI 241 Pre-Hospital Environment (2)
EMSI 242 Pre-Hospital Pharmacology (3)
EMSI 242L Pre-Hospital Pharmacology Lab (2)
EMSI 243 Respiratory Emergencies (2)
EMSI 243L Respiratory Emergencies Lab (2)
EMSI 244 Trauma Emergency Care (3)
EMSI 244L Trauma Emergency Care Lab (2)
EMSI 246L Paramedic Clinical I (2)
EMSI 248 OB/GYN Emergencies (2)
EMSI 248L OB/GYN Emergencies Lab (1)
EMSI 249 Pediatric Emergencies (2)
EMSI 249L Pediatric Emergencies Lab (1)
EMSI 250 Medical Emergencies (3)
EMSI 250L Medical Emergencies Lab (3)
EMSI 251 Cardiac Emergencies (4)
EMSI 251L Cardiac Emergencies Lab (2)
EMSI 252L Paramedic Clinical II (2)
EMSI 298 EMT-P Field Internship (5)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 72 CREDITS MIN.
ASSOCIATE IN APPLIED SCIENCE

RESPIRATORY CARE

(83.5 hrs. min.)

School of Sciences, Health, Engineering and Math
505-428-1723

The A.A.S. Respiratory Care program at SFCC, Program number 200549, is accredited by the Committee on Accreditation for Respiratory Care. CoARC can be reached at 817-283-2835 or 1248 Harwood Road, Bedford, TX 76021-4244.

Respiratory therapists work closely with doctors, nurses and other clinicians in emergency rooms, critical care units, diagnostic centers, clinics, and home health care organizations. SFCC’s program prepares students for a fast-paced, in-demand career. Blending high-tech training with compassionate care, students gain the skills required to be a specialist in assessing and treating people with breathing and cardiopulmonary disorders.

SFCC’s Respiratory Care Program prepares students to become knowledgeable, competent, effective, and ethical respiratory care practitioners consistent with the professional, community, and employer expectations of registered respiratory therapists. Graduates will have demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists.

For information on admission requirements and process, see the Respiratory Care Applicant Information document at www.sfcc.edu/programs/respiratory_care or a Respiratory Care Department adviser. Students must complete all respiratory care core courses at SFCC. Students are required to pass each course with a grade of “C+” or better in order to progress in and complete this sequential program.

Students who successfully complete the A.A.S. in Respiratory Care are eligible to take the National Board for Respiratory Care (NBRC) Therapist Multiple Choice Exam (TMC). Graduates who successfully complete the TMC exam are eligible for licensure as a certified respiratory therapist (CRT) and are eligible for the NBRC RRT exams. Students preparing for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, the SFCC Respiratory Care web page, or speak with an academic adviser.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate professional, effective, compassionate and ethical behavior in the practice of respiratory care.
• Demonstrate competence in the respiratory care of the adult, pediatric and newborn patient populations.
• Provide community and patient education in cardiopulmonary health promotion and disease management.
• Explain the fundamental principles of medical ethics, and the legal and ethical aspects of the practice of respiratory care.
• Demonstrate competence in interpersonal and communication skills to effectively interact with diverse population groups.
• Apply problem solving strategies in the patient care setting.

GENERAL EDUCATION REQUIREMENTS: (31 HRS.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 216 Technical Writing (3)
[or]
SPCH 111 Public Speaking (3)
[or]
SPCH 220 Interpersonal Communications (3)

Mathematics (3 hrs. min.)
Choose from the following:
MATH 119 Mathematics for Non Science Majors (3)
[or]
MATH 121 College Algebra (4)
[or]
MATH 135 Introduction to Probability and Statistics (3)

Laboratory Science (12 hrs.)
BIOL 221 Microbiology for Health Sciences (3)
BIOL 221L Microbiology for Health Sciences Lab (1)
BIOL 230 Human Anatomy and Physiology I (3)
BIOL 230L Human Anatomy and Physiology I Lab (1)
CHEM 111 Introduction to Chemistry (3)
CHEM 111L Introduction to Chemistry Lab (1)

Social/Behavioral Science (3-6 hrs.)
PSYC 111 Introduction to Psychology (3)
(recommended)

Humanities and Fine Arts (3-6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

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### ASSOCIATE IN APPLIED SCIENCE

#### SUSTAINABLE TECHNOLOGIES

(62 hrs. min.)

School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This degree provides students with an in-depth understanding of issues regarding sustainability, renewable energy, water treatment and water conservation. Through their chosen concentration, students will acquire skills needed to seek entry-level positions in a wide range of energy- and water-related businesses, public agencies and/or consider starting their own business.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, refer to Page 28 of this catalog, or speak with an academic adviser.

Students can earn the following certificate related to this degree:
- Biofuels

### PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Provide leadership in creating and maintaining a safe working environments.
- Describe the function, design and installation of sustainable systems.
- Recognize wasteful practices and recommend sustainable alternatives.
- Measure and describe energy and its relationship to sustainable systems.
- Develop and articulate a definition of sustainability.
- Understand the principles of entrepreneurship and creating a sustainable small business.

### GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

#### Communications (6 hrs.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 111</td>
<td>Composition and Rhetoric (3)</td>
</tr>
<tr>
<td>ENGL 119</td>
<td>Professional Communication (3)</td>
</tr>
<tr>
<td>or</td>
<td>ENGL 216 Technical Writing (3)</td>
</tr>
</tbody>
</table>

#### Mathematics (3 hrs.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 115</td>
<td>Trades Mathematics (3)</td>
</tr>
<tr>
<td>or</td>
<td>WATR 112 Applied math for Water Operators (4) (required for Water Treatment concentration)</td>
</tr>
</tbody>
</table>

### CORE REQUIREMENTS: (52.5 HRS.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHAC 151</td>
<td>Basic Life Support — CPR (.5)</td>
</tr>
<tr>
<td>AHAC 281</td>
<td>ACLS (1)</td>
</tr>
<tr>
<td>AHAC 284</td>
<td>PALS (1)</td>
</tr>
<tr>
<td>RESP 112</td>
<td>Respiratory Care Anatomy and Physiology (4)</td>
</tr>
<tr>
<td>RESP 120</td>
<td>Therapeutic Modalities (5)</td>
</tr>
<tr>
<td>RESP 122</td>
<td>Cardiopulmonary Pathophysiology I (1)</td>
</tr>
<tr>
<td>RESP 125</td>
<td>Cardiopulmonary Pharmacology I (1)</td>
</tr>
<tr>
<td>RESP 130</td>
<td>Clinical I (3)</td>
</tr>
<tr>
<td>RESP 160</td>
<td>Ventilator Management (5)</td>
</tr>
<tr>
<td>RESP 162</td>
<td>Cardiopulmonary Diagnostics (4)</td>
</tr>
<tr>
<td>RESP 164</td>
<td>Cardiopulmonary Pathophysiology II (2)</td>
</tr>
<tr>
<td>RESP 166</td>
<td>Cardiopulmonary Pharmacology II (1)</td>
</tr>
<tr>
<td>RESP 170L</td>
<td>Clinical II (4)</td>
</tr>
<tr>
<td>RESP 214</td>
<td>Respiratory Care Seminar — Alternate Sites (2)</td>
</tr>
<tr>
<td>RESP 220</td>
<td>Respiratory Care Seminar — Critical Care Topics (4)</td>
</tr>
<tr>
<td>RESP 230</td>
<td>Clinical III (2)</td>
</tr>
<tr>
<td>RESP 240</td>
<td>Professional Development (2)</td>
</tr>
<tr>
<td>RESP 260</td>
<td>Neonatal Pediatric Respiratory Care (3)</td>
</tr>
<tr>
<td>RESP 270</td>
<td>Clinical IV (7)</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 83.5 CREDITS**
Applications of Mathematics for Non-science Majors (3) or higher

**Laboratory Science (4 hrs.)**
- BIOL 111 Introduction to Biology (3)
- BIOL 111L Introduction to Biology Lab (1)
  (required for Biofuels concentration)
- WATR 166 Microbiology for Water Treatment Operators (4)
  (required for Water Treatment concentration)

**Social/Behavioral Sciences (3-6 hrs.)**

**Humanities and Fine Arts (3-6 hrs.)**
- PHIL 258 Environmental Ethics and Sustainability (3)

The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

**Health and Wellness (1 hr.)**

**CORE REQUIREMENTS: (22 HRS. MIN.)**
- BLDG 111 Construction Safety (3)
- BSAD 119 Entrepreneurial — Planning and Introduction (3)
- ELEC 111 Electronic Fundamentals (4)
- ENVR 111 Introduction to Sustainability (3)
- ENVR 112 Introduction to Sustainable Energy Technologies (3)
- ENVR 113 Instrumentation and Control Labs (3)
- ENVR 115 Introduction to Water Conservation Technologies (3)

**BIOFUELS CONCENTRATION:**

(18 HRS.) CIP: 47.0614
- ALTF 121 Biofuels I (4)
- ALTF 161 Introduction to Algae Cultivation (3)
- ALTF 221 Biofuels II (4)
- CHEM 111 Introduction to Chemistry (3)
- CHEM 111L Introduction to Chemistry Lab (1)

Approved elective (3)
Students must work closely with program advisers to select electives.

**SOLAR ENERGY CONCENTRATION:**

(19 HRS.) CIP: 15.0505
- ELCT 227 National Electrical Code (2)
- ENEF 114 House as a System (3)
- SOLR 111 Introduction to Solar Energy (1)
- SOLR 121 Design and Installation of Photovoltaic Systems I (3)
- SOLR 131 Design and Installation of Solar Hot Water Systems (3)

[and]

Choose one solar focus:
- Solar Photovoltaic Focus (4 hrs.):
  - SOLR 221 Design and Installation of Photovoltaic Systems II (3)
  - SOLR 221D Photovoltaic Design Lab (1)
- Solar Thermal Focus (4 hrs.):
  - SOLR 231 Advanced Solar Thermal Design (3)
  - SOLR 231D Advanced Solar Thermal Design Lab (1)
- SOLR 131I Solar Thermal Install Lab (1)

**WATER CONSERVATION TECHNOLOGIES CONCENTRATION:**

(17 HRS.) CIP: 15.0506
- ENVR 215 Active Water Harvesting and Distribution Systems (3)
- ENVR 216 Watershed Management (3)
- ENVR 217 Water System Auditing and Evaluation (3)
- ENVR 217L Water System Auditing and Evaluation Lab (1)

Approved Electives (4)
Students must work closely with program advisers to select electives.

**WATER TREATMENT OPERATION CONCENTRATION:**

(19 HRS.) CIP: 15.0506
- WATR 111 Introduction to Water Treatment and Distribution Systems (2)
- WATR 160 Applied Chemistry for Water Treatment Operators (4)
- WATR 215 Permits, Regulations and Water Resource Management (3)
- WATR 260 Advanced Water Treatment Technologies (4)
- WATR 290 Water Operator Certification Review (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

Students in the Sustainable Technologies programs who are required to take a First-Year Student Success course are recommended to take STEM 111.

**TOTAL 62 CREDITS MIN.**
ASSOCIATE IN APPLIED SCIENCE

WELDING TECHNOLOGIES

(64 hrs. min.)  CIP: 48.0508
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This program provides students with the knowledge required for entry into the welding occupations. The foundation of knowledge and skills learned will enable students to quickly adapt to employer’s needs or obtain certification in whatever welding procedure needed. Knowledge base will include Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Tungsten Gas Arc Welding (TGAW), Oxy Acetylene Welding and Cutting (OAW, OAC) and allied processes. In this program, theory and practice are combined. Students will understand the importance of weld quality, welding codes, and welding safety.

NOTE: A.A.S. degrees are designed to prepare students for entry-level positions in specific occupations; they are not generally intended to transfer to four-year institutions. For more information on transfer, see Page 28 or speak with an academic adviser.

Students can earn the following certificate related to this degree:
• Welding

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Provide leadership in creating and maintaining a safe working environment.
• Select tools, equipment and materials based on characteristics and properties for necessary welding procedures.
• Display manipulative skills with the various welding processes (oxy-acetylene, shielded metal arc, gas metal arc, flux cored arc, gas tungsten, etc.) to assure adequate weld integrity and appearance.
• Interpret blueprint welding symbols to fabricate components.
• Apply basic math skills and geometry to correctly identify and solve welding problems.

GENERAL EDUCATION REQUIREMENTS: (23 HRS. MIN.)

Communications (6 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 119 Professional Communication (3)

[or]

ENGL 216 Technical Writing (3)
Any SPCH course (3)

Mathematics (3 hrs.)
BLDG 115 Trades Mathematics (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher

Laboratory Science (4 hrs.)

Social/Behavioral Sciences (3-6 hrs.)

Humanities and Fine Arts (3-6 hrs.)
The combined total of Social and Behavioral Sciences and Humanities and Fine Arts areas should equal 9 credit hours.

Health and Wellness (1 hr.)

CORE REQUIREMENTS: (41 HRS. MIN.)
FACT 113 Basic Blueprint Reading (2)
WELD 111 Shielded Metal Arc Welding I (4)
WELD 112 Shielded Metal Arc Welding II (4)
WELD 115 Oxyacet Welding, Cutting and Allied Processes (3)
WELD 121 Gas Tungsten Arc Welding I (4)
WELD 122 Gas Tungsten Arc Welding II (4)
WELD 131 Gas Metal and Flux Cored Arc Welding I (4)
WELD 132 Gas Metal and Flux Cored Arc Welding II (4)
WELD 141 Introduction to Metallurgy (2)
WELD 211 Shielded Metal Arc Welding III (4)
WELD 221 Gas Tungsten Arc and Gas Metal Arc Welding III (3)
WELD 261 Pipe Fabrication (3)

Suggested Elective:
BLDG 111 Construction Safety (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 64 CREDITS MIN.
CERTIFICATES

A list of current certificates follows. This list may not be complete because program development is ongoing. Certificates are one-year programs intended to prepare the student for employment.

SFCC has a mandatory assessment and placement policy. Students wishing to enroll in English or math or in any course in which an English or math course is a prerequisite must participate in assessment as described on Page 8. New students seeking degrees or certificates at SFCC must fulfill the student success course requirement described on Page 8 within their first 12 college credit hours or within their first two semesters of enrollment, whichever comes first.

Accounting Specialist
Adobe Construction
Algae Cultivation
American Sign Language
American Sign Language Interpreter Preparation
Application Development
Architectural and Interior Design Software
Architectural and Interior Design Technologies
Auto Maintenance and Light Truck Repair
Automatic Transmission Transaxle
Automotive Engine Repair
Automotive Heating and Air Conditioning
Bilingual Education Endorsement*
Biofuels*
Brakes
Building Science and Construction Technologies
Business Administration
Ceramics
Commercial Photography
Computer Hardware and Software
Community Health Worker Training
Computer and Network Security
Controlled Environment Agriculture
Creative Writing*
Criminal Investigation
Culinary Arts
Dental Assisting
Digital Cinematography
Drawing and Painting
Early Childhood Development
Electrical, Smart Grid and Micro Grid Technologies
Emergency Medical Technician — Basic
Emergency Medical Technician — Intermediate
Engineering Technologies
Entrepreneurship
Expanded Functions Dental Auxiliary
Facility Technologies*
Fashion Design
Film Production

Film: Post-Production
Fine Arts Photography
Fine Woodworking
Fitness Instructor Training
General Engineering Technologies
Green Building Construction Skills*
Green Building Systems*
Heating, Ventilation and Air Conditioning*
Home Health Aide
Hospitality and Tourism
Independent Filmmaking
Infant Family Studies
Information Technology Support for Smart Grids and Micro Grids
Jewelry/Metal Arts
Law Office Administrative Assistant
Leadership
Legal Secretary
Liberal Arts for Transfer
Manufacturing Engineering Technologies
Manual Transmission and Drive Train
Mechanical Engineering Technologies
Media Arts:
  3D, Animation and Game Design
  Audio Production*
  Graphic and Interactive Design*
  Web Design*
Medical Assisting
Medical Billing and Coding
Multimedia Journalism
Nursing Assistant
Nutrition
Paralegal Studies
Paramedicine
Patient Care Assistant
Patissier
Phlebotomy
Plumbing*
Police Supervision
Practical Nursing
Sculpture
Social Media Specialist
Solar Energy*
Steering and Suspension
Sustainable Technologies
Teacher Certification
  Early Childhood*
  Elementary Education*
  Secondary Education*
  Special Education*
  Teaching English to Speakers of Other Languages (TESOL)*
Traumatic Stress Aide
Water Treatment Operation*
Web Development
Welding

*Financial-aid eligible
CERTIFICATE IN
ACCOUNTING SPECIALIST
(17 hrs. min.) CIP: 52.0302
School of Business, Professional Studies and Education, 505-428-1308
This program prepares students for entry into the accounting/bookkeeping field; for upgrading their accounting skills for job promotion; or upgrading their credentials through preparation for the National Bookkeeper Certification Exam. The program can be completed in one year (Fall, Spring and Summer semesters).

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Read, prepare, analyze and appraise financial statements.
• Prepare payroll computations, records, payment, taxes, deposits and reports.
• Apply relevant technology to communication processes.

Students can earn the following degree related to this certificate:
• A.A.S. in Business Administration

CORE REQUIREMENTS: (14 HRS.)
ACCT 121 Principles of Accounting I (Financial) (4)
ACCT 124 Payroll Accounting (3)
ACCT 125 Computerized Accounting — Quickbooks (3)
OFTC 111 Business Software Essentials (4)

RELATED REQUIREMENTS: (3 HRS. MIN.)
Choose from the following:
ACCT 122 Principles of Accounting II (Managerial) (4)
ACCT 140 Personal Income Tax Preparation (2) [and]
ACCT 140L Personal Tax Preparation Lab (1)
ACCT 202 Governmental Accounting (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 17 CREDITS MIN.

CERTIFICATE IN
ADOBE CONSTRUCTION
(19 hrs.) CIP: 15.1001
School of Trades, Advanced Technologies and Sustainability, 505-428-1664
This program provides the knowledge and skills for entry-level employment in the adobe construction and earth building fields. The certificate is also geared towards non-professional owner-builders who want to design and build their own adobe home. Students focus on building adobe structures from foundation to roof using traditional New Mexican adobe construction skills combined with an emphasis on modern “green” practices and sustainable building materials. Passive solar adobe design and construction principles are at the core of this certificate. Upon successful completion, students will be qualified to gain employment as both an entry-level office and field technician.

Students can earn the following degree related to this certificate:
• A.A.S. Building Science and Construction

CORE REQUIREMENTS: (17 HRS.)
ADOB 111 Adobe Construction Basics (3)
ADOB 112 Adobe Wall Construction (3)
ADOB 113 Passive Solar Adobe Design (2)
ADOB 114 Floor Design and Construction (3)
ADOB 115 Finish Practices (3)
ADOB 116 Roof Design and Construction (3)

APPROVED ELECTIVES: (2 HRS.)
Choose one of the following:
ADOB 118 Preservation Practices (3)
ADOB 122 Rammed Earth Construction (2)
ADOB 198 Adobe Building Practicum (1-4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 19 CREDITS MIN.
CERTIFICATE IN
ALGAE CULTIVATION
(32 hrs. min.) CIP: 01.0301
School of Trades, Advanced Technologies and Sustainability, 505-428-1664
This program covers the basic science and technology of algae cultivation. This certificate provides students with the skills required to work in the algae cultivation (algaculture) industry or create their own algaculture business. Students will learn the controlled environment requirements for successful cultivation of various algae species. The program emphasizes training in algal cultivation technologies, including algaculture extension training. Knowledge acquired will prepare students for jobs as Greenhouse/Agricultural Workers, Plant Technicians, Plant Managers, Laboratory Technicians, Sales Managers, Public Relations and Outreach, Process Coordinators, Extension Service and/or Business Owners/Managers.

Students can earn the following degree related to this certificate:
• A.A.S. Controlled Environment Agriculture

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Create and maintain a safe working environment.
• Design, install, maintain and operate sustainable algaculture systems.
• Identify wasteful practices and recommend sustainable alternatives.
• Measure and describe energy and its relationship to sustainable systems.
• Articulate the principles of entrepreneurship and creating a sustainable small business.

CORE REQUIREMENTS: (32 HRS. MIN.)
ALTF 161 Introduction to Algae Cultivation (3)
ALTF 261 Advanced Algae Cultivation (3)
ALTF 262 Algae Harvesting (3)
ALTF 268 Algae Capstone (1-3)
[or]
ALTF 298 Biofuels Internship (1-3)
BLDG 111 Construction Safety (3)
ENVR 112 Introduction to Sustainable Energy Technologies (3)
GRHS 121 Greenhouse Operation and Management (4)
HRMG 118 Sanitation and Safety (2)
PLMB 141 Pumps and Motors (2)
WATR 160 Applied Chemistry for Water Treatment Operators (4)
WATR 166 Microbiology for Water Treatment Operators (4)

First Year Student Success (3 hr.) If required — See NOTE
STEM 111 Introduction to Science, Technology, Engineering and Mathematics (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 32 CREDITS MIN.

CERTIFICATE IN
AMERICAN SIGN LANGUAGE
(19 hrs.) CIP: 16.1601
School of Liberal Arts, 505-428-1370
This certificate introduces students to American Sign Language (ASL), Deaf culture, and the history of the Deaf community. It also helps students gain a broad understanding of the scope and types of support services that are available to Deaf and hard-of-hearing persons. Additionally, there are career opportunities that the ability to use ASL supports, such as being an instructional aide for Deaf students or a dorm counselor at a Deaf school.

This certificate does not qualify you as a sign language interpreter by itself. Students wishing to continue their studies in ASL and/or ASL interpreting should consult with an ASL/Interpreting adviser. For more information, visit www.sfcc.edu/programs/american_sign_language_interpreting.

Students can earn the following degree related to this certificate:
• A.A. American Sign Language

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate a broad understanding of and respect for the language, culture, and history of American Deaf people.
• Demonstrate the ability to effectively communicate in ASL with diverse members of the Deaf community in various settings.
• Describe the knowledge and skills of ASL that will support the understating of study and employment in education of the Deaf, interpreting, and in various professional and paraprofessional occupations.
• Demonstrate effective advocacy by working with
the Deaf to advance understanding and support for Deaf-related issues that impact the lives of Deaf individuals worldwide.

CORE REQUIREMENTS: (19 HRS.)

AMSL 111 American Sign Language I (4)
AMSL 112 American Sign Language II (4)
AMSL 131 Introduction to Deaf Studies (3)
AMSL 211 American Sign Language III (4)
AMSL 212 American Sign Language IV (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 19 CREDITS

CERTIFICATE IN AMERICAN SIGN LANGUAGE INTERPRETER PREPARATION

(25 hrs.) CIP: 16.1603 School of Liberal Arts, 505-428-1370

This certificate is designed for students who have completed an associate degree or higher in American Sign Language (ASL) or who have equivalent skill-level proficiency. It emphasizes skills that can be used in career and educational opportunities in sign language interpreting between Deaf and hearing persons using spoken English and ASL. This certificate includes the study of Deaf culture, intercultural and cross-cultural communication, ethics, laws, and professional behavior for sign language interpreters. In addition, theoretical and practical training is designed to prepare students for entrance into the interpreting field, serving both Deaf and hearing consumers in a variety of settings. It is recommended that sign language interpreting students select their courses and program plan in consultation with an American Sign Language/Interpreter adviser. Students who plan to transfer to a four-year school must work closely with their transfer institution and their SFCC advisers to ensure the best transition. This certificate does not qualify you as a sign language interpreter by itself. For more information, visit www.sfcc.edu/programs/american_sign_language_interpreting.

CORE REQUIREMENTS: (25 HRS.)

AMSL 217 Advanced Fingerspelling, Numbers and Classifiers (4)
INTR 112 Consecutive Interpreting (4)
INTR 113 Simultaneous Interpreting (4)
INTR 211 Interactive Interpreting (3)
INTR 232 Cross-Cultural Issues of Interpreting (3)
INTR 250 Educational Interpreting (3)
INTR 293 ASL Interpreting Practicum (3)
INTR 298 Interpreting Internship (2)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 25 CREDITS
CERTIFICATE IN
APPLICATION DEVELOPMENT
(17 hrs.)
CIP: 11.0201
School of Sciences, Health, Engineering and Math
505-428-1862

This certificate provides students with an extensive set of object-oriented programming skills. This foundation prepares students to be entry-level application developers. Topics include object-oriented programming (OOP) languages, OOP paradigm of abstraction, polymorphism, inheritance, encapsulation, the software development cycle, basic and advanced data structures, algorithm optimization, and hands-on, agile software development. Students build applications for both mobile and stand-alone deployment.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Apply operating system tools for system management.
• Build operating system tools.
• Use programming languages to create applications that solve problems.
• Analyze, select, and apply appropriate algorithms.

CORE REQUIREMENTS: (11 HRS.)
ISCS 120 Introduction to Programming I (4)
ISCS 125 Introduction to Programming II (4)
ISCS 215 Intermediate Programming (3)

RELATED REQUIREMENTS: (6 HRS. MIN.)
Choose from the following:
ISCS 116 Introduction to Linux (3)
ISCS 212 Database Fundamentals (3)
ISCS 225 Advanced Programming and Data Structures (3)
ISCS 241 Data Organization and Implementation (3)
MATH 135 Introduction to Probability and Statistics (3)
MATH 150 Precalculus and Trigonometry (4)
MATH 150L Precalculus and Trigonometry Lab (1)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 17 CREDITS MIN.

CERTIFICATE IN
ARCHITECTURAL AND INTERIOR DESIGN SOFTWARE
(12 hrs. min.)
CIP: 15.1303
School of Arts, Design, and Media Arts, 505-428-1731

This program of study focuses on providing foundational technical skills in architectural and interior design software. Students gain primary knowledge of technical and visualization for the planning, creation, and management of technical documents. Students use design-oriented critical thinking skills to solve basic technical documentation issues that arise in a professional firm setting. This program uses classroom learning, integrated class projects, and employment situations to achieve knowledge and job skills.

Students can earn the following degree related to this certificate:
• A.A.S. in Architectural and Interior Design Technologies

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Create design drawings and technical drawings.
• Create and modify building components and site components.
• Create and manage drawing content.

CORE REQUIREMENTS: (12 HRS.)
ARCH 117L Technical Documentation with AutoCAD I (3)
ARCH 135L Technical Documentation with AutoCAD II (3)
[and]
ARCH 126L Building Information Modeling with ArchiCAD I (3)
ARCH 132L Building Information Modeling with ArchiCAD II (3)
[or]
ARCH 120L Building Information Modeling with Revit I (3)
ARCH 130L Building Information Modeling with Revit II (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 12 CREDITS
CERTIFICATE IN
ARCHITECTURAL
AND INTERIOR
DESIGN TECHNOLOGIES
(30 hrs. min.)  CIP: 04.0901
School of Arts, Design, and Media Arts, 505-428-1731

This program is designed to provide students with the necessary skills for gainful employment as an architectural or interior design technician, working under a licensed professional. The technician is responsible for using software to create design and technical drawings, multidisciplinary collaboration with team members and consultants, and assisting in solving complex design issues. Upon successful completion of this program, the student will be able to gain meaningful employment in an architecture or interior design office.

Students can earn the following degree related to this certificate:
• A.A.S. in Architectural and Interior Design Technologies

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate professionalism in an architecture or interior design office.
• Apply the principles of the Phases of Work and sustainable design principles to the creation of design and technical drawings.
• Use software to create and communicate design and technical drawings.

CORE REQUIREMENTS: (30 HRS. MIN.)
*ARCH 111L  Introduction to Architectural Graphics (3)
ARCH 112 L  Building Materials and Methods (3)
*ARCH 115L  Design Fundamentals (3)
ARCH 117L  Technical Documentation with AutoCAD I (3)
ARCH 120L  Building Information Modeling with Revit I (3)
*ARCH 123L  Introduction to Architecture (3)
[or]
ARCH 128L  Interior Design I (3)
ARCH 126L  Building Information Modeling with ArchiCAD I (3)
ARCH 129L  Sustainable Design Studio (3)
ARCH 229  Commercial Environmental Design (3)
MART 119  Digital Design Presentation (3)
*Transfers to UNM School of Architecture

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 30 CREDITS MIN.

CERTIFICATE IN
AUTO MAINTENANCE
AND LIGHT
TRUCK REPAIR
(24 hrs. min.)  CIP: 47.0604
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides the skills and training needed to earn an entry-level position at an automotive maintenance repair facility. Courses included in the certificate will prepare students to pass the Automotive Service Excellence Maintenance and Light Repair Certification (ASE G1) test.

Students can earn the following degree related to this certificate:
• A.A.S. in Automotive Technology

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Diagnose automotive electrical and accessory systems.
• Demonstrate mastery of a digital volt ohm meter (DVOM) and other electrical testing equipment to troubleshoot batteries, charging and lighting systems.
• Diagnose and repair brake antilock and power booster systems.
• Diagnose and repair suspension and steering components and perform vehicle alignment.
• Diagnose and repair heating and air conditioning systems, including manual and automatic climate control systems.
• Perform oil change service, tire rotation, vehicle inspections, water-leak and wind-noise diagnosis, and other general vehicle maintenance service.

CORE REQUIREMENTS: (24 HRS.)
ATEC 111L  Introduction to Automotive Service (2)
ATEC 114L  Automotive Brake Systems (4)
ATEC 115L  Automotive Steering and Suspension Systems (4)
ATEC 116L  Automotive Electrical and Electronic Systems I (4)
ATEC 119L  Automotive Heating and Air Conditioning Systems (4)
BLDG 115  Trades Mathematics (3)
[or]
MATH 119  Applications of Mathematics for Non-science Majors (3) or higher
ENGL 111  Composition and Rhetoric (3)
[or]
ENGL 119  Professional Communication (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 24 CREDITS

CERTIFICATE IN
AUTOMATIC TRANSMISSION TRANSAXLE
(20 hrs. min.)  CIP: 47.0604
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

Completion of this certificate provides the skills and training needed to earn an entry-level position at an automotive maintenance repair facility. Courses included in the certificate prepare students to pass the Automotive Service Excellence Maintenance Automatic Trans/Transaxle exam.

Students can earn the following degree related to this certificate:
• A.A.S. in Automotive Technology

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Diagnose automotive automatic trans/transaxle systems.
• Interpret machining specifications and determine repair procedures.
• Diagnose and repair automatic trans/transaxle to OEM specification.
• Interpret computer control diagnostic trouble codes (DTCs).
• Comply with all laws and regulations on the disposal of materials and waste products.

CORE REQUIREMENTS: (20 HRS. MIN.)
ATEC 111L  Introduction to Automotive Service (2)
ATEC 112L  Engine Repair (4)
ATEC 116L  Automotive Electrical and Electronic Systems I (4)
ATEC 208L  Automatic Transmission Transaxle Differential (4)
BLDG 115L  Trades Mathematics (3)
[or]
MATH 119  Applications of Mathematics for Non-science Majors (3) or higher
ENGL 111  Composition and Rhetoric (3)
NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 20 CREDITS**

**CERTIFICATE IN AUTOMOTIVE HEATING AND AIR CONDITIONING**

*(24 hrs. min.)*

School of Trades, Advanced Technologies and Sustainability, 505-428-1664

Completion of this certificate provides the skills, EPA certification, and training needed to earn an entry-level position at an automotive maintenance repair facility. Courses included in the certificate prepare students to pass the Automotive Service Excellence Maintenance Heating and Air Conditioning (ASE A-7) exam.

**Students can earn the following degree related to this certificate:**

- A.A.S. in Automotive Technology

**PROGRAM LEARNING OUTCOMES**

Upon completion of this program, students will be able to:

- Diagnose automotive automatic temperature-control systems.
- Interpret heating and air conditioning system specifications and determine repair procedures.
- Diagnose and repair heating and air conditioning systems to original equipment manufacturer (OEM) specifications.
- Interpret computer control diagnostic trouble codes (DTCs).
- Comply with all laws and regulations on the disposal of materials and waste products.
- Pass the EPA Recovery and Recycle exam.

**CORE REQUIREMENTS: (24 HRS. MIN.)**

- ATEC 111L Introduction to Automotive (2)
- ATEC 112L Engine Repair (4)
- ATEC 116L Automotive Electrical and Electronic Systems I (4)
- ATEC 119L Automotive Heating and Air Conditioning (4)

ATEC 150L Automotive Computer System Management I (4)
BLDG 115 Trades Mathematics (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher
ENGL 111 [or] Professional Communication (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 24 CREDITS**

**CERTIFICATE IN BILINGUAL EDUCATION ENDORSEMENT**

*(12 hrs.)*

School of Business, Professional Studies and Education, 505-428-1256

The Bilingual Education Endorsement Program is a 12 credit-hour program. This program facilitates achievement of the New Mexico Public Education Department bilingual education teacher competencies and provides a means for New Mexico teachers to add the bilingual endorsement to their teaching licenses. The courses are systematically organized into a natural sequence of integrated subject matter. Spanish and English are both used as a language of instruction in EDUC 220 and EDUC 222. Participants must pass the La Prueba Spanish Language proficiency test before applying for the bilingual endorsement with the NMPED.

**CORE REQUIREMENTS: (12 HRS.)**

- EDUC 220 Introduction to Bilingual Education (3)
- EDUC 222 Methods and Materials for the Bilingual/Multicultural Classroom (3)
- EDUC 260 Language Learning and Teaching (3)
- EDUC 261 Intercultural Communication (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 12 CREDITS**
CERTIFICATE IN BIOFUELS

(29 hrs. min.)  CIP: 47.0614
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides students with the skills required to work in the biofuels industry or create their own biofuels business. The emphasis on this program will be on non-food source feed stocks such as algae and native plants. Knowledge acquired will prepare students for jobs as Plant Technicians, Plant Managers, Laboratory Technicians, Sales Managers, Public Relations and Outreach, Process Coordinators and/or Business Owners/Managers.

Students can earn the following degree related to this certificate:
• A.A.S. in Sustainable Technologies

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Provide leadership in creating and maintaining safe working environments.
• Describe the function, design and installation of biofuels systems.
• Recognize wasteful practices and recommend sustainable alternatives.
• Measure and describe energy and its relationship to biofuels systems.
• Develop and articulate a definition of sustainability.
• Understand the principles of entrepreneurship and creating a sustainable small business.

CORE REQUIREMENTS: (29 HRS. MIN.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTF 121</td>
<td>Biofuels I</td>
<td>4</td>
</tr>
<tr>
<td>ALTF 221</td>
<td>Biofuels II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 111</td>
<td>Introduction to Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 111L</td>
<td>Introduction to Biology Lab</td>
<td>1</td>
</tr>
<tr>
<td>BLDG 111</td>
<td>Construction Safety</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 119</td>
<td>Entrepreneurial — Planning and Introduction</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111</td>
<td>Introduction to Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 111L</td>
<td>Introduction to Chemistry Lab</td>
<td>1</td>
</tr>
<tr>
<td>ELEC 111</td>
<td>Electronic Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ENVR 112</td>
<td>Introduction to Sustainable Energy</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

Students in the Sustainable Technologies programs who are required to take a First-Year Student Success course are recommended to take STEM 111

TOTAL 29 CREDITS MIN.

CERTIFICATE IN BRAKES

(20 hrs. min.)  CIP: 41.0604
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides the skills and training needed to earn an entry-level position at an automotive maintenance repair facility. Courses included in the certificate will prepare students to pass the Automotive Service Excellence Maintenance Brakes (ASE A-5).

Students can earn the following degree related to this certificate:
• A.A.S. in Automotive Technology

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Diagnose and repair the automotive antilock brake system.
• Interpret machining specifications and determine repair procedures.
• Diagnose and repair the service brake system (mechanical and hydraulic) to original equipment manufacturer (OEM) specifications.
• Interpret computer control diagnostic trouble codes (DTCs).
• Achieve certification in the operation of the computerized equipment associated with the repair of these systems.

CORE REQUIREMENTS: (20 HRS. MIN.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEC 111L</td>
<td>Introduction to Automotive</td>
<td>2</td>
</tr>
<tr>
<td>ATEC 112L</td>
<td>Engine Repair</td>
<td>4</td>
</tr>
<tr>
<td>ATEC 114L</td>
<td>Automotive Brake Systems</td>
<td>4</td>
</tr>
<tr>
<td>ATEC 116L</td>
<td>Automotive Electrical and Electronic Systems I</td>
<td>4</td>
</tr>
<tr>
<td>BLDG 115</td>
<td>Trades Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 119</td>
<td>Applications of Mathematics for Non-science Majors</td>
<td>3 or higher</td>
</tr>
<tr>
<td>ENGL 111</td>
<td>Composition and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 119</td>
<td>Professional Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 20 CREDITS
CERTIFICATE IN BUILDING SCIENCE AND CONSTRUCTION TECHNOLOGIES

(39 hrs. min.)

School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This program prepares students for the National Center for Construction Education and Research (NCCER) and Associate General Contractors of American (AGC) Journeyman certification exams. Students acquire the necessary knowledge and skills for entry-level positions in residential and industrial building construction industry. This degree provides students with communication and critical-thinking skills that support job advancement.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Demonstrate competency in the residential and industrial construction areas of basic safety, methods and materials.
• Demonstrate competency in OSHA 30-hour construction safety.
• Demonstrate competency in trade fundamentals, adhesive selection and use, properties of fasteners, concrete, and green building standards.

CORE REQUIREMENTS: (39 hrs.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 111</td>
<td>Construction Safety</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 112</td>
<td>Building Systems</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 113</td>
<td>Introduction to Green Building</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 114</td>
<td>Construction Methods and Materials I</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 116</td>
<td>Applied Construction I</td>
<td>4</td>
</tr>
<tr>
<td>BLDG 118</td>
<td>Construction Methods and Material II</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 121</td>
<td>Applied Construction II</td>
<td>4</td>
</tr>
<tr>
<td>BLDG 201</td>
<td>Construction Methods and Material III</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 203</td>
<td>Applied Construction III</td>
<td>4</td>
</tr>
<tr>
<td>BLDG 225</td>
<td>Green Building Policies, Codes, and Incentives</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 119</td>
<td>Entrepreneurship — Planning and Introduction</td>
<td>3</td>
</tr>
<tr>
<td>ENEF 111</td>
<td>Healthy Homes</td>
<td>1</td>
</tr>
<tr>
<td>FACT 113</td>
<td>Basic Blueprint Reading</td>
<td>2</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 39 CREDITS MIN.

CERTIFICATE IN BUSINESS ADMINISTRATION

(16 hrs. min.)

School of Business, Professional Studies and Education, 505-428-1308

This certificate provides entry-level skills for students considering business careers. It can be earned in one semester, and all courses apply to the Associate of Applied Science in Business Administration.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Compare the various disciplines within a business environment.
• Communicate clearly and effectively, both orally and in writing, using appropriate office technologies.

Students can earn the following degree related to this certificate:
• A.A. in Business Administration

CORE REQUIREMENTS: (10 hrs.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSAD 111</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 111</td>
<td>Composition and Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>[or]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 119</td>
<td>Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td>OFTC 111</td>
<td>Business Software Essentials</td>
<td>4</td>
</tr>
</tbody>
</table>

RELATED REQUIREMENTS: (6 HRS. MIN.)

Choose two from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 111</td>
<td>Small Business Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 121</td>
<td>Principles of Accounting I (Financial)</td>
<td>4</td>
</tr>
<tr>
<td>BSAD 112</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 211</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 232</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 235</td>
<td>Human Relations in the Workplace</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 240</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 245</td>
<td>Corporate Finance</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 270</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 200</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 201</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 16 CREDITS
CERTIFICATE IN
CERAMICS
(30 hrs. min.)   CIP: 50.0711
School of Arts, Design, and Media Arts, 505-428-1731

The certificate in Ceramics is designed as a workforce development degree that trains students to design and fabricate ceramic objects of art and enter the ceramics industry locally, nationally and/or internationally.

Core courses offer a broad perspective including numerous techniques in wheel throwing, hand building, kiln firing procedures, glaze formulation, clay body formulation, mass production techniques, basic studio work flow, maintenance and upkeep.

Electives focus on related design, photographic documentation of artwork as an aid to professional requirements in the field and business practices necessary for entrepreneurial endeavors.

Students can earn the following degree related to this certificate:
• A.A.A. in Professional Crafts

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Exhibit craftsmanship and originality in the conception and creation of functional and sculptural objects using clay and related materials.
• Design ceramic objects that are relevant and competitive in today's contemporary fine art ceramic market.
• Fabricate ceramic objects using wheel throwing, slip casting and/or hand building techniques.
• Experiment with glaze formulas and commercial clay composition.

CORE REQUIREMENTS: (24 HRS. MIN.)

ARTS 280  Business Practices for Designers (3)
CLAY 128L  Clay Hand-Building I (3)
CLAY 129L  Ceramics: Wheel Throwing I (3)
CLAY 136L  Ceramic Color on Form (3)
CLAY 214L  Clay Hand-Building II (3)
CLAY 216L  Ceramics: Wheel Throwing II (3)
CLAY 220L  Ceramics: Glaze Formulation (3)
CLAY 280L  Ceramics: Integrative Projects (3)

APPROVED ELECTIVES: (6 HRS. MIN.)

Choose from the following:
AHST 207  Contemporary Art (3)
ARTS 113L  Two-Dimensional Design (3)
ARTS 116L  Three-Dimensional Design (3)
[or] ARTS 125L  Art Practices I (3)
ARTS 295  Studio Practice (2-3)
ARTS 296  Fine Arts Portfolio Development (3)
ARTS 298  Arts and Design Internship (3)
DRPT 118L  Drawing I (3)
DRPT 121L  Painting I (3)
PHOT 195  Photographing Artwork (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 30 CREDITS MIN.

CERTIFICATE IN
COMMERCIAL PHOTOGRAPHY
(30 hrs. min.)   CIP: 50.0406
School of Arts, Design, and Media Arts, 505-428-1731

Students prepare for entry level work in, among others, advertising, editorial and fine arts photography. The program of study includes an internship component and business courses in order to build practical marketplace skills. Students complete their studies by creating a portfolio of their work of sufficient quality to obtain work in photography and launch a freelance business.

Students should select all courses in consultation with an academic adviser.

This certificate nests with the Associate in Applied Arts Photography Degree.

Students can earn the following degrees related to this certificate:
• A.A. in Photography
• A.A.A. in Photography

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Work competently with digital photographic equipment and techniques.
• Compose, light, stage, capture, modify and print exhibition quality photographs.
• Analyze photographs for expressive and conceptual content, including composition, meaning, subtext and aesthetic style.
• Demonstrate professional and entrepreneurial work skills in photo-related industries.
CORE REQUIREMENTS: (21 HRS. MIN.)
ARTS 280  Business Practices for Designers (3)
ARTS 296  Arts and Design Portfolio (3)
ARTS 298  Art and Design Internship (3)
(can be taken twice as an elective)
PHOT 111  Digital Photography I (3)
PHOT 140  Photography and Studio Lighting I (3)
PHOT 195  Photographing Artwork (3)
PHOT 210  Digital Photography II (3)

RELATED REQUIREMENTS: (3 HRS. MIN.)
MART 180  Photoshop I (3)

APPROVED ELECTIVES: (6 HRS. MIN.)
Any 3-credit PHOT classes (6)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 30 CREDITS MIN.

CERTIFICATE IN
COMMUNITY HEALTH WORKER TRAINING
(10 hrs.) CIP: 51.1504
School of Sciences, Health, Engineering and Math
505-428-1323

This two-semester program prepares students to enter the health care profession as an entry-level community health worker (CHW). CHWs are also known as community health representatives (CHRs), patient navigators or patient service representatives (PSRs). They function as patient advocates and educators in clinics, hospitals and managed care organizations (MCOs). This certificate program includes the 11 established competencies required for state certification. These competencies are: the CHW profession, effective communication skills, interpersonal skills, health coaching skills, service coordination skills, capacity building skills, advocacy skills, technical teaching skills, community health outreach skills, community knowledge and assessment, and clinical support skills. CHWs are trained to have a basic understanding of medical terminology as well as knowledge regarding maternal-child health issues, chronic disease and illness. Program completion enables students to qualify for the New Mexico state certification for CHWs.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate the professional role of the CHW in clinical practice.
• Educate, advocate and support clients through the navigation of the medical system.
• Assist clients in service coordination.

CORE REQUIREMENTS: (10 HRS. MIN.)
HLCR 115  Community Health Worker Training I (5)
HLCR 116  Community Health Worker Training II (5)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 10 CREDITS MIN.

CERTIFICATE IN
COMPUTER AND NETWORK SECURITY
(22 hrs. min.) CIP: 11.1003
School of Sciences, Health, Engineering and Math
505-428-1862

Successful completion of this certificate prepares students as Information Security (InfoSec) Professionals. This extensive hands-on, project-based curriculum is intended to provide working knowledge of tools and best practices used to protect an organization’s data and information. Upon completion of the program, students are encouraged to take the CompTIA Security+ exam or Cisco Certified Network Associate (CCNA) security certification exam. This curriculum prepares students to meet standards set out by the Committee on National Security Systems (CNSS), specifically CNSS-4011 National Training Standard for Information Systems (INFOSEC) Professionals and CNSS-4016 National Information Assurance Training Standard for Risk Analysis.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Apply operating system tools for system management.
• Build operating system tools.
• Perform routine network administrative tasks.
• Install, update, and configure hardware components.
• Install and update software.
• Use basic tools and best practices to protect an organization’s data.
• Demonstrate professional level understanding in the areas of privacy, intellectual property rights, accessibility, ethics, and codes of conduct.

CORE REQUIREMENTS: (22 HRS.)
ISCS 114  Essentials I: PC Hardware and Software (4)
CERTIFICATE IN
CONTROLLED ENVIRONMENT AGRICULTURE
(27 hrs. min.)
CIP: 01.0604
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

Successful completion of this certificate prepares students to become greenhouse professionals with the knowledge and skills to work in hydroponic and aquaponic greenhouses for home/farm and commercial scale operations. Students will learn about greenhouse operations, multiple hydroponic systems, major techniques and challenges of growing hydroponic plants from propagation to harvesting and marketing, resource conservation, integrated pest management and aquaponics.

Students can earn the following degree related to this certificate:
• A.A.S. in Greenhouse Management

PROGRAM LEARNING OUTCOMES:
Upon completion of this program, students will be able to:
• Demonstrate understanding of sustainable agriculture production techniques commonly used in controlled environment agriculture.
• Provide leadership in creating and maintaining safe working and production environments.
• Demonstrate an awareness of economic, environmental, and community impacts of soilless agriculture.
• Demonstrate an understanding of soilless plant systems.

CORE REQUIREMENTS: (18 HRS.)
GRHS 121  Greenhouse Design and Operations (3)
GRHS 123  Introduction to Soilless Production Systems (4)
GRHS 125  Hydroponic Plant Growth (3)
GRHS 127  Hydroponic Crop Production (4)
GRHS 221  Aquaponics (4)

RELATED REQUIREMENTS: (9 HRS.)
Choose from the following:
ALTF 161  Introduction to Algae Cultivation (3)
BLDG 111  Construction Safety (3)
BSAD 119  Entrepreneurship — Planning and Introduction (3)
ENVR 111  Introduction to Sustainability (3)
ENVR 112  Introduction to Sustainable Energy Technologies (3)
ENV 215  Active Water Harvesting and (3)  
Distribution Systems  
GRHS 128  Biopestreces — Application and Safety(2)  
GRHS 223  Greenhouse Fodder Production (3)  
GRHS 298  Greenhouse Internship (1-4)  
HMRG 118  Sanitation and Safety (2)  
SOLR 111  Introduction to Solar (1)  
SOLR 131  Design and Installation of Solar Hot (3)  
SOLR 121  Design and Installation of (3)  
Photovoltaic Systems I  
STEM 111  Introduction to Science, Technology,  
Engineering and Mathematics (3)  

NOTE: See First-Year Student Success Course Requirement on Page 8.  

Students in the Sustainable Technologies programs who  
are required to take a First-Year Student Success course are  
recommended to take STEM 111.  

TOTAL 27 CREDITS  

CERTIFICATE IN  
CREATIVE WRITING  
(18 hrs. min.)  
School of Liberal Arts, 505-428-1370  

This program concentrates on the development of creative  
writing and editing skills to prepare students to apply to  
a program in creative writing, submit a manuscript for  
publication or work in the publishing field. In order to be  
admitted into the certificate program students must take  
ENGL 111 or be granted permission.  

Students can earn the following degree related to  
this certificate:  
• A.A. in General Studies  

PROGRAM LEARNING OUTCOMES  
Upon completion of this program, students will be able to:  
• Demonstrate proficiency in at least one form of creative  
  writing (poetry, fiction, memoir).  
• Employ the conventions of different forms of creative writing.  
• Demonstrate proficiency in editing and publishing skills.  

CORE REQUIREMENTS: (12 HRS.)  
ENGL 290  Creative Writing Portfolio (3)  
[and]  
Choose three of the following:  
ENGL 221  Beginning Creative Writing — Fiction (3)  
ENGL 222  Creative Writing — Poetry (3)  
ENGL 225  Intermediate Creative Writing — Fiction (3)  
ENGL 227  The Memoir and Personal Essay (3)  
ENGL 232  Intermediate Creative Writing Poetry (3)  
ENGL 298  Literary Magazine Internship (3)  

RELATED REQUIREMENTS: (6 HRS.)  
Choose from the following:  
ARTS 151L  Creative Expression (3)  
PRBK 165L  Book Arts (3)  
ENGL 120  Writing Creatively (3)  
ENGL 228  Creative Nonfiction: Writing on Location (3)  
ENGL  Any 200-level literature course (3)  
FILM 175  Screenwriting I (3)  
MART 123  Adobe InDesign (3)  

NOTE: See First-Year Student Success Course Requirement on Page 8.  

TOTAL 18 CREDITS MIN.  

CERTIFICATE IN  
CRIMINAL INVESTIGATION  
(18 hrs. )  
CIP: 43.0107  
School of Business, Professional Studies and Education,  
505-428-1689  

This certificate supplies the necessary skills to become  
investigative professionals. The course of study enables  
students to track down perpetrators, unravel fraud and  
computer-related crimes or provide assistance in missing  
person cases. Professional investigators are an essential  
resource for most law enforcement organizations. An  
education in criminal investigations also provides the  
backbone for those who wish to work within the justice  
department as an administrator, bailiff, private investigator,  
campus security or in other positions.  

PROGRAM LEARNING OUTCOMES  
Upon completion of this program, students will be able to:  
• Demonstrate investigative skills used in law enforcement  
  and private investigation.  
• Identify the ethical, procedural and statutory bases for  
  investigations.  
• Develop and manage an effective investigation plan  
  within statutory, regulatory or organizational guidelines.  
• Identify the steps of crime scene processing, documentation  
  and summarize the procedures for protecting the evidence  
  and setting crime scene perimeters.  
• Describe the methods used to deal with witnesses, family  
  members and databases.
• Describe different types of evidence and the process used to identify physical evidence.
• Summarize the protocols and techniques for handling, collecting and preserving evidence, and define the chain of custody.
• Describe the role of investigators in forensic and legal procedures.
• Assess and finalize investigations, and produce an investigation report that will be defensible in court.

CORE REQUIREMENTS: (12 HRS.)
Choose from the following:
CRJS 115 Foundations of Professional Investigation (3)
CRJS 120 Courtroom Testimony (3)
CRJS 121 Report Writing for Criminal Justice (3)
CRJS 204 The Law and the Professional Investigator (3)
CRJS 215 Investigative Surveillance (3)
[or]
CRJS 231 Criminal Investigations (3)
CRJS 232 Crime Profiling (3)
CRJS 251 Death Investigation (3)

RELATED REQUIREMENTS: (6 HRS.)
Choose from the following:
CRJS 111 Introduction to Criminal Justice (3)
CRJS 119 Crime Scene Investigation I (3)
[or]
CRJS 133 Introduction to Cybercrime (3)
CRJS 135 Forensic Science I (3)
CRJS 201 Ethics of Law Enforcement (3)
CRJS 203 Criminal Law and Procedure (3)
CRJS 236 Forensic Science II (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 18 CREDITS

CERTIFICATE IN
CULINARY ARTS
(19 hrs.)
CIP: 12.0503
School of Business, Professional Studies and Education, 505-428-1308
This program is designed to prepare students for entry-level positions in professional kitchens by providing them with an understanding of basic culinary knowledge, techniques, terminology and certification in sanitation and safety through the National Restaurant Associations SERVSAFE program.

Students can earn the following degree related to this certificate:
• A.A.S. in Culinary Arts

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Create and maintain a safe, organized and sanitary kitchen work station.
• Demonstrate proper care and use of knives.
• Describe how purchasing and inventory management affect operational success.
• Produce correctly cooked, nutritious and visually appealing menus and meals.
• Demonstrate the ability to use standard kitchen equipment safely and correctly.

CORE REQUIREMENTS: (19 HRS.)
CULA 115 Culinary Fundamentals I (4)
CULA 151 Culinary Fundamentals II (4)
CULA 215 International Cuisine (4)
CULA 224L Professional Sauté (1)
CULA 257L Fundamentals of Meat Fabrication and Butchery (1)
HRMG 118 Sanitation and Safety (2)
HRMG 130 Purchasing (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 19 CREDITS MIN.
CERTIFICATE IN  
DENTAL ASSISTING  
(39 hrs. min.)  
CIP: 51.0601  
School of Sciences, Health, Engineering and Math  
505-428-1258

This program prepares students to enter the dental profession as entry-level dental assistants. A dental assistant, under the supervision of a dentist, assists chair-side, performs laboratory procedures, exposes and processes dental radiographs, and performs receptionist and secretarial duties. Program completion enables students to take the national board exam and to obtain certification in expanded duty functions as specified by the State of New Mexico.

The Dental Assisting Program is accredited by the Commission on Dental Accreditation. The commission is a specialized accrediting body recognized by the U.S. Department of Education. The Commission on Dental Accreditation can be contacted at 312-440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

As a requirement for admission to the program, students must place into ENGL 109 or higher with appropriate ACCUPLACER score or transfer documentation and must hold a current BLS-CPR certificate.

Students can earn the following degree related to this certificate:
• A.A.S. in Dental Health

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate the methods for infection control in a dental office by utilizing the current infection control and safety precautions in all laboratory and clinical settings.
• Demonstrate the knowledge and skills required to systematically collect and record diagnostic data.
• Demonstrate the skills as an effective and efficient member of the dental health team by performing a variety of lab and clinical supportive treatments such as producing quality dental radiographs, taking impressions, application of surface anesthesia, application of dental fluorides, application of coronal polishing, application of dental sealants and other additional state-approved expanded functions.
• Demonstrate the knowledge and skills pertaining to legal and ethical issues related to dentistry including effective verbal and written communication skills.
• Demonstrate the skills required for management of a dental practice, including managing staff, record-keeping, inventory, payroll, billing and quality assurance.
• Demonstrate knowledge of public health education, including regarding the prevalence and incidence of dental disease.
• Demonstrate compassion, empathy and sensitivity to patients of different cultural backgrounds.

PROGRAM PREREQUISITES:
ENGL 109 English Review (4)  
Current BLS-CPR certificate

GENERAL STUDIES REQUIREMENT: (3 HRS.)
ENGL 111 Composition and Rhetoric (3)  
[or]  
ENGL 119 Professional Communication (3)

CORE REQUIREMENTS: (36 HRS.)
DAST 121 Dental Assisting I (2)  
DAST 122 Dental Materials (2)  
DAST 122L Dental Materials (1)  
DAST 123 Dental Radiography I (2)*  
DAST 123L Dental Radiography I Lab (1)  
DAST 124 Dental Sciences I (3)  
DAST 125 Clinical Procedures I (2)  
DAST 125L Clinical Procedures I Lab (1)  
DAST 131 Dental Sciences II (3)*  
DAST 131L Dental Sciences II Lab (1)  
DAST 133 Dental Practice Management (2)  
DAST 134 Clinical Procedures II (2)*  
DAST 134L Clinical Procedures II Lab (2)  
DAST 141 Dental Education Issues (1)  
DAST 193 Dental Clinical Practicum I (2)  
DAST 222 Community Dental Health (2)  
DAST 293 Dental Clinical Practicum II (5)  
*These courses qualify certificate recipients for expanded duty functions as recognized by the State of New Mexico Board of Dental Health.

Choose from the following (2 hrs. min.)
DAST 294 Dental Professional Seminar (1-2)  
EFDA 294 Dental Insurance Billing and Coding (2)  
EFDA 295A Dental Radiation Health and Safety Review (1)  
EFDA 295B Dental Infection Control Review (1)  
EFDA 295C General Chair-side Review (1)  
EFDA 296 Dental Fluorides, Polishing and Sealants Review (1)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 39 CREDITS MIN.
CERTIFICATE IN
DIGITAL CINEMATOGRAPHY
(24 hrs. min.) CIP 50.0602
School of Arts, Design, and Media Arts, 505-428-1421

Upon successful completion of this certificate students have the technical skills for entry-level employment in the fields of camera, grip and electric equipment. Students utilize professional hardware and software tools to create short video projects. The curriculum is designed for students who are interested in working in a collaborative and creative culture in mentorship with filmmaking professionals.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate proficiency with electric, grip and camera equipment.
• Manage small crews, and prep electric, grip and camera equipment for film shoots.
• Design production workflow with a team.
• Apply filmmaking skills to complete a short film.
• Model skills used by professional filmmakers.

CORE REQUIREMENTS: (15 HRS.)
FILM 280 Digital Cinematography I (3)
FILM 281 Digital Cinematography II (3)
FILM 281L Digital Cinematography Lab (1) must be taken three times
FILM 282 Digital Cinematography III (3)
FILM 283 Digital Cinematography IV (3)

RELATED ELECTIVES: (9 HRS)
FILM 140 Film Crew I (4)
FILM 140L Film Crew I Lab (1) ❤
FILM 141 Film Crew II (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 24 CREDITS MIN.

CERTIFICATE IN
DRAWING AND PAINTING
(21 hrs. min.) CIP: 50.0702
School of Arts, Design, and Media Arts, 505-428-1731

The certificate in Drawing and Painting provides a solid basic understanding of drawing and painting techniques, as well as a contextual understanding of issues of historic and contemporary importance to this discipline. Completion of this certificate enables students to continue their studio work outside of an academic setting or complete additional coursework for an undergraduate degree in fine arts.

Students can earn the following degree related to this certificate:
• A.A. in Fine Arts

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Analyze and employ compositional dynamics within the two-dimensional format, demonstrating a competent handling of compositional forces including color interaction, value and space.
• Creatively describe three dimensional form and space, from observation or imagination, within a two dimensional format, using a variety of wet and dry drawing and painting media.
• Safely handle a variety of drawing media, oil and acrylic paints, and create suitable supports, grounds and fixatives.
• Demonstrate a basic understanding of how their work fits into contemporary and historic art practice.
• Demonstrate, through discussion and critique, the conceptual ability to apply issues central to painting and drawing in the analysis and evaluation of their own work and the work of fellow students.

CORE REQUIREMENTS: (3 HRS.)
ARTS 125L Art Practices I (3)

RELATED REQUIREMENTS: (15 HRS.)
DRPT 118L Drawing I (3)
DRPT 121L Painting I (3)
DRPT 219L Drawing II (3)
DRPT 221L Figure Drawing (3)
DRPT 225L Painting II (3)

Additional Related Requirements (3)
Choose one course from the following:
AHST 201 Art History I (3)
AHST 202 Art History II (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 21 CREDITS MIN.
CERTIFICATE IN
EARLY CHILDHOOD DEVELOPMENT
(16 hrs.)
School of Business, Professional Studies and Education, 505-428-1256

This certificate provides students with the course work necessary to apply for a New Mexico Child Development Certificate (CDC), a state-awarded certificate for early childhood teachers. The New Mexico CDC has been created to meet the entry-level professional requirements for teachers who are already working in a classroom setting with preschool children. The New Mexico CDC exceeds the requirements of the national CDA Credential. It is particularly designed to assist Head Start and Early Head Start programs meet the interim staff qualification requirements. All certificate course credits apply toward an associate degree in Early Childhood Education.

CORE REQUIREMENTS: (16 HRS.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECED 111</td>
<td>Child Growth and Development</td>
<td>3</td>
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<tr>
<td>ECED 112</td>
<td>Health, Safety, and Nutrition</td>
<td>2</td>
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<tr>
<td>ECED 113</td>
<td>Family and Community Collaboration</td>
<td>3</td>
</tr>
<tr>
<td>ECED 114</td>
<td>Assessment of Children and Collaboration of Programs</td>
<td>3</td>
</tr>
<tr>
<td>ECED 134L</td>
<td>Childhood Development Field Experience</td>
<td>2</td>
</tr>
<tr>
<td>[or] ECED 217B</td>
<td>Curriculum Development and Implementation Practicum</td>
<td>2</td>
</tr>
<tr>
<td>ECED 218</td>
<td>Guiding Young Children</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: ECED 111 should be taken first as it is the prerequisite for the other courses. ECED 112, ECED 113 ECED 114 are prerequisites for ECED 134L. The prerequisite for ECED 111 is ENGL 109 or demonstrated proficiency on the placement test administered through the Testing Center. Students can also submit qualifying ACT, SAT, AP or CLEP scores to satisfy the ENGL 109 prerequisite. Placement testing is the best way to determine accurate course placement.

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 16 CREDITS MIN.

CERTIFICATE IN
ELECTRICAL, SMART GRID AND MICRO GRID TECHNOLOGIES
(22 hrs. min.)
School of Sciences, Health, Engineering and Math 505-428-1754

Successful completion of this certificate prepares students to enter the transforming electrical power sector as a competent engineering technician. Students will gain a broad understanding of the dynamics of the changing electricity sector, supported with hands-on learning experiences in the area of smart grid and micro grid design and management.

Students can earn the following degree related to this certificate:
- A.A.S. in Engineering Technologies

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
- Evaluate and communicate design goals, constraints, and methodology within the engineering fields of discipline.
- Evaluate and solve engineering problems related to course content.
- Articulate and justify both technical considerations and solutions through oral, written and graphical communication methods in engineering problems.
- Effectively solve problems in teams.
- Demonstrate an understanding of professional and ethical responsibility in the field of engineering.

CORE REQUIREMENTS: (22 Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC 111</td>
<td>Electronics Fundamentals</td>
<td>4</td>
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<tr>
<td>ELEC 151</td>
<td>Power Generation, Transmission and Distribution</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 201</td>
<td>Smart Energy Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 111</td>
<td>Intro to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 112</td>
<td>Introduction to Sustainable Energy Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 113</td>
<td>Instrumentation and Controls</td>
<td>3</td>
</tr>
<tr>
<td>SOLR 121</td>
<td>Design and installation of Photovoltaic Systems I</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 22 CREDITS
CERTIFICATE IN
EMERGENCY MEDICAL
TECHNICIAN — BASIC
(12.5 hrs. min.) CIP: 51.0904
School of Sciences, Health, Engineering and Math
505-428-1754

This program is to prepare students to provide emergency care in a 911 setting. EMT-Basics are licensed professionals in the State of New Mexico who work under the guidance of a medical director and provide care in numerous settings from urban to wilderness. Successful completion of this course will allow students to sit for the National Registry Board Exam for New Mexico licensure.

Prerequisite to the program: Students must place into or have taken ENGL 111 or show proof of college English.

Students can earn the following degree related to this certificate:
• A.A.S. in Paramedicine

CORE REQUIREMENTS: (12.5 HRS.)
AHAC 151 Basic Life Support for Healthcare Providers (.5)
EMSI 160 EMT — Basic (8)
EMSI 160L EMT — Basic Lab (3)
EMSI 161L EMT — Basic Clinical (1)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 12.5 CREDITS MIN.

CERTIFICATE IN
ENGINEERING TECHNOLOGIES
(26 hrs. min.) CIP: 15.0303
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This program of study focuses on providing foundational technical skills suitable for entry-level work placement in common fields of engineering technology. Specifically, it is focused toward providing both dual-enrolled high school students and adult learners looking to rapidly change professions with opportunities to utilize classroom learning and on-the-job internship opportunities to achieve knowledge and skills, jobs and possible articulation into higher degree programs.

CORE REQUIREMENTS: (16 HRS.)
DRFT 111 Drafting I (3)
ELEC 111 Electronics Fundamentals (4)
ENGR 111 Introduction to Engineering (3)
ENGR 121 Engineering Graphics (3)
ENGR 122 Engineering Methods (3)

RELATED REQUIREMENTS: (4 HRS.)
MATH 150 Precalculus (4)

ELECTRONICS TECHNOLOGY CONCENTRATION: (8 HRS.)
ELEC 121 Electronic Fundamentals II (4)
ELEC 122 Digital Circuits (4)
MANUFACTURING ENGINEERING TECHNOLOGY
CONCENTRATION: (6 HRS.)
ENGR 117 Computer Integrated Manufacturing I (3)
ENGR 127 Computer Integrated Manufacturing II (3)
** 12 hours may be earned through dual-enrollment**

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 26 CREDITS MIN.

CERTIFICATE IN
ENTREPRENEURSHIP
(16 hrs.) CIP 52.0701
School of Business, Professional Studies and Education, 505-428-1308

This program provides potential and current entrepreneurs with hands-on experience planning a new start-up from concept identification to a pitch of the proposed venture to potential investors and select community members. Through the series of five core courses, students will explore the dynamics of entrepreneurship as related to the entrepreneurial mindset, process and product. All courses are taught in consecutive eight-week sessions.

Students can earn the following degree related to this certificate:
• A.A.S. in Business Administration

CORE REQUIREMENTS: (13 hrs.)
BSAD 119 The Culture and Technique of Entrepreneurship (3)
BSAD 219 Business Models (3)
BSAD 220 E-Commerce, Crowdfunding and Marketing (3)
BSAD 223 Finance and Funding Start-ups (3)
BSAD 224 Pitching Your Start-up (1)

APPROVED ELECTIVES (3 hrs.)
Choose from the following:
ACCT 111 Small Business Accounting (3)
BSAD 211 Principles of Management (3)
BSAD 232 Business Law I(3)
BSAD 235 Human Relations in the Workplace (3)
BSAD 240 Principles of Marketing (3)
3 credit hours within an area or field of interest

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 16 CREDITS

CERTIFICATE IN
EXPANDED FUNCTIONS DENTAL AUXILIARY
(7 hrs. min.) CIP: 51.0603
School of Sciences, Health, Engineering and Math 505-428-1258

The Expanded Function Dental Auxiliary (EFDA) Certificate Program is designed to train Certified Dental Assistants and Registered Dental Hygienists in the art of restorative dentistry. Upon successful completion of this program, an auxiliary is eligible to sit for the state certifying examination provided by the Western Regional Dental Board or any other approved testing agency. The curriculum for this course has been approved by the New Mexico Board of Dental Health Care.

The EFDA Program is a rigorous and challenging course. Students are expected to attend ALL lecture, laboratory and clinical sessions. Students must be very familiar with restorative procedures, be able to use both direct vision and indirect mirror vision to complete and evaluate restorations, and will have to perfect fine motor skills to enable the accurate and safe application of dental hand-pieces and instruments.

Admission Requirements
• Four-handed dentistry experience is expected.
• At least 2 years chair-side assisting experience in general dentistry is required (within the past five years).
• Proof of current status as a Certified Dental Assistant from the DANB or State of New Mexico license OR Proof of current status as a Registered Dental Hygienist (license) is required OR a dentist license.
• Current CPR/BLS certification.
• Hepatitis B Vaccination or Declination.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Describe general and dental anatomy, physiology, oral pathology and occlusion.
• Place and shape direct restorative materials in cavity preparations completed by a dentist.
• Take impressions for permanent fixed or removable prosthesis, including single crowns or single tooth replacement prosthetics.
• Cement permanent or provisional restorations with temporary or provisional cement, provided the permanent cementation is completed and monitored by the dentist within six months.
• Place pit and fissure sealants under supervision as certification or licensure allows.
• Place temporary or sedative restorations in open carious lesions after hand excavation of gross decay and debris and into unprepared tooth fractures as a palliative measure.
• Remove residual orthodontic bracket or band cement or resin from teeth after the brackets or bands have been removed by the dentist performing the orthodontic treatment, or to prepare the tooth or teeth for re-cementation of a de-bonded bracket or band.
• Perform preliminary fitting and shaping of stainless steel crowns and re-cement temporary or permanent crowns or bridges using provisional cement under the general supervision of a dentist, under an emergency situation.

CORE REQUIREMENTS: (7 HRS.)
EFDA 250  Restorative Functions (2)
EFDA 250L  Restorative Functions Lab (1)
EFDA 293  Restorative Clinical Practicum (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 7 CREDITS MIN.

CERTIFICATE IN
FASHION DESIGN
(32 hrs. min.)  CIP: 50.0407
School of Arts, Design, and Media Arts, 505-428-1731
This certificate provides students with the entry-level skills to design, create and market fashion. Students may select courses in fashion and costume design, fashion marketing and illustration. Students should select all courses in consultation with an adviser.

Students can earn the following degree related to this certificate:
• A.A.A. in Fashion Design

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate competence in fashion illustration through the fashion fantasy and flat in both hand drawn illustration and computer generated illustration.
• Produce on-trend styles using professional production methods.
• Create a fashion design portfolio/website that documents student work in illustration, costume, textile and apparel design.
• Demonstrate competence in choice of fabrics, embellishments, yarns, and prints for final collection.
• Participate/organize fashion shows and promotional materials.
• Apply knowledge of fashion history and global perspectives to forecast trends.

CORE REQUIREMENTS: (26 HRS.)
ARTS 298  Arts and Design Internship (2)
FASH 170  Textiles: Study of Fabrics (3)
FASH 113  Production Sewing (3)
FASH 120  Flat Pattern (3)
FASH 130  Fashion Illustration (3)
FASH 150  History of Fashion (3)
FASH 160  Introduction to Fashion Design (3)
FASH 224  Introduction to Computer Fashion Design (3)
FASH 260  Fashion Collection Studio (3)

APPROVED ELECTIVES: (6 HRS.)
Choose from the following:
ARTS 120L  Color Theory (3)
ARTS 185L  Trade Mart Field Trip (3)
BSAD 119  The Culture and Techniques of Entrepreneurship (3)
BSAD 219  Business Models (3)
BSAD 220  E-Commerce, Crowdfunding and Marketing (3)
NOTE: See “First-Year Student Success Course Requirement” on Page 8.

TOTAL 32 CREDITS MIN.

CERTIFICATE IN

FILM:

POST-PRODUCTION

(24 hrs. min.)

CIP: 50.0602

School of Arts, Design, and Media Arts, 505-428-1738

Upon successful completion of this certificate students have the technical skills for entry-level employment in the field of post-production. Students will utilize multiple non-linear editing software platforms and integrate multiple hardware and software tools necessary to create short video projects. The curriculum is designed for students who are interested in working in a collaborative and creative culture in mentorship with filmmaking professionals.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

• Use multiple non-linear editing software programs to execute a short video project.
• Manage media, media storage, and execute off-line and on-line edits.
• Design with a team post-production workflow.
• Apply filmmaking skills to complete a short film.
• Model skills used by professional filmmakers.

CORE REQUIREMENTS: (12 HRS.)

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>FILM 131</td>
<td>Editing I (3)</td>
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<tr>
<td>FILM 231</td>
<td>Editing II (3)</td>
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<tr>
<td>FILM 232</td>
<td>Editing III (3)</td>
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</tr>
<tr>
<td>FILM 233</td>
<td>Editing IV (3)</td>
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RELATED ELECTIVES: (12 HRS. MIN.)

Choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILM 130</td>
<td>Video Production I (3)</td>
<td></td>
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</tbody>
</table>
FILM 135 Girls Make Media (3)  
FILM 136 Women Make Media (3)  
FILM 131 Editing I (3)  
FILM 231 Editing II (3)  
FILM 280 Digital Cinematography (3)  
FILM 232 Editing III (3)  
FILM 236 Sound for Film (3)  
FILM 239 Producing and Directing the Independent Film (3)  
FILM 240 Film Crew III (9)  
FILM 281 Digital Cinematography II (3)  
Any MART course

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 24 CREDITS MIN.

CERTIFICATE IN  
FINE ARTS PHOTOGRAPHY

(27 hrs. min.)  
CIP: 50.0605  
School of Arts, Design, and Media Arts, 505-428-1731  
Photography studies at SFCC include digital, black and white film, and alternative processes as well as conceptual and expressive approaches to using photography as a means of communication. Students develop an understanding of historical, cultural, and aesthetic perspectives in photography in addition to learning how to critically analyze an image.

Students should select all courses in consultation with an academic adviser.

This certificate nests with the Associate in Arts in Photography.

Students can earn the following degree related to this certificate:
• A.A. Photography
• A.A.A. in Photography

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Work competently with a variety of photographic equipment and techniques.
• Compose, light, stage, capture, modify and print exhibition quality photographs.
• Describe contemporary and historical perspectives in photography.
• Analyze photographs for expressive and conceptual content, including composition, meaning, subtext and aesthetic style.
• Prepare a portfolio appropriate for application to a four-year institution.

CORE REQUIREMENTS: (15 HRS. MIN.)
ARTS 296 Arts and Design Portfolio (3)  
PHOT 111 Digital Photography I (3)  
PHOT 120 Black and White Film Photography I (3)  
PHOT 130 Non-Silver Photography I (3)  
PHOT 210 Digital Photography II (3)

RELATED REQUIREMENTS: (3 HRS. MIN.)
MART 180 Photoshop I (3)

APPROVED ELECTIVES: (9 HRS. MIN.)
Any PHOT class

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 27 CREDITS MIN.

CERTIFICATE IN  
FINE WOODWORKING

(39 hrs.)  
CIP: 48.0701  
School of Arts, Design, and Media Arts, 505-428-1731  
This program concentrates on the development of fine woodworking skills to prepare students for designing and building their own furniture or for employment in the furniture-making industry.

Students can earn the following degree related to this certificate:
• A.A.A. in Professional Crafts

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Safely use woodworking machinery to mill wood to accurate dimensions.
• Sharpen and use appropriate hand tools to augment the use of woodworking machines.
• Select and construct appropriate joinery to make various kinds of furniture.
• Discern the characteristics of wood and choose the right wood for a project.
• Demonstrate understanding of surface preparation and finishing techniques for various kinds of woods.
• Develop and demonstrate a personal aesthetic in furniture design.
• Create scaled, multi-view drawings, cut lists and procedure lists for woodworking projects.

CORE REQUIREMENTS: (27 HRS.)
WOOD 111  Introduction to the Fine Art of Woodworking (5)
WOOD 112  Introduction to Hand Tools (5)
WOOD 115  Introduction to Joinery (5)
WOOD 120  Characteristics of Wood (1)
WOOD 125  Introduction to Finishing (3)
WOOD 130  Furniture Design (3)
WOOD 220  Doors, Drawers and Hardware for Furniture (5)
[or]
WOOD 290  Advanced Furniture Making (5)

RELATED REQUIREMENTS: (3 HRS.)
ENGL 111  Composition and Rhetoric (3)
[or]
ENGL 119  Professional Communication (3)

APPROVED ELECTIVES: (9 HRS.)
NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 39 CREDITS

CERTIFICATE IN FITNESS INSTRUCTOR TRAINING
(16 hrs.) CIP: 31.0501
School of Fitness Education, 505-428-1651

Designed to give students the knowledge and understanding necessary to become effective personal fitness trainers and to prepare for the American Council on Exercise (ACE) Personal Trainer Certification exam. Course work presents a comprehensive system for designing individualized programs based on each client’s unique health, fitness, and performance goals. Students learn how to facilitate behavior change and adherence, self-efficacy and how to develop client rapport.

Students will learn how to design programs that help clients improve posture, movement, flexibility, balance, core function, cardiorespiratory fitness, and muscular endurance and strength. Students have to show proof of current American Heart Association or American Red Cross Adult CPR/AED certification. All courses listed can be applied toward the Associate of Applied Science in Exercise Science.

Students can earn the following degree related to this certificate:
• A.A.S. in Exercise Science

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Apply the basic principles of exercise science, behavior modification, nutrition, and weight management to help clients achieve a healthy lifestyle.
• Describe and apply basic elements of anatomy, applied kinesiology, biomechanics, and exercise physiology.
• Administer and interpret basic health screenings and fitness assessments to design safe exercise programs for apparently healthy populations.
• Summarize the scope of practice and professional responsibilities of a certified fitness professional.

CORE REQUIREMENTS: (11 HRS.)
EXSC 150  Fitness Instructor Training I (4)
EXSC 151  Fitness Instructor Training II (4)
EXSC 202  Instruction in Lifestyle Change (3)

APPROVED ELECTIVES: (5 HRS.)
Choose from the following:
EXSC 120  Instructional Methods: Pilates (.5)
EXSC 122  Instructional Methods: Youth Fitness (.5)
EXSC 123  Instructional Methods: Fitness Cycling (.5)
EXSC 124  Instructional Methods: Senior Fitness (.5)
EXSC 126  Instructional Methods: Personal Training (1)
EXSC 129  Instructional Methods: Group Exercise (1)
EXSC 132  Instructional Methods: Alternative Strength Training (.5)
EXSC 133  Instructional Methods: Training Techniques Review (.5)
EXSC 134  Instructional Methods: Outdoor Applications (.5)
HLED 112  Weight Management and Exercise (3)
HLED 113  Stress Management (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 16 CREDITS
CERTIFICATE IN

GENERAL ENGINEERING TECHNOLOGIES

(16 hrs. min.) CIP: 15.0000
School of Sciences, Health, Engineering and Math
505-428-1754

This certificate program is designed for those working in engineering technology or related fields. It assists students in providing support to engineers or assist in engineering functions. It is designed to provide a solid foundation in engineering technology and can lead to an associate or baccalaureate degree in Engineering or Engineering Technology. Students learn about engineering design methodology which includes design projects that integrate engineering technologies from civil and mechanical engineering software modeling (such as AutoCAD and SolidWorks) to laboratory experience in the advanced manufacturing lab and electronics lab.

Students can earn the following degrees related to this certificate:

• A.S. in General Engineering and Engineering Technologies  
• A.A.S. in General Engineering

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

• Evaluate and communicate design goals, constraints, and methodology within the engineering fields of discipline.
• Evaluate, construct, and utilize design models to identify and solve problems related to project management.
• Implement engineering design methodology to predict both primary and alternative solutions.
• Evaluate and solve engineering problems related to course content.
• Articulate and justify both technical considerations and solutions through oral, written, and graphical communication methods in engineering problems.
• Effectively solve problems in teams.
• Demonstrate an understanding of professional and ethical responsibility in the field of engineering.

CORE REQUIREMENTS: (16 Hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 111</td>
<td>Introduction to Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 121</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 160</td>
<td>Engineering Graphics and Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 260</td>
<td>Mechanical Engineering Design</td>
<td>2</td>
</tr>
<tr>
<td>ENGR 260L</td>
<td>Mechanical Engineering Design Lab</td>
<td>2</td>
</tr>
<tr>
<td>ENVR 113</td>
<td>Instrumentation and Controls</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 16 CREDITS

CERTIFICATE IN

GREEN BUILDING CONSTRUCTION SKILLS

(16 hrs.) CIP: 15.1001
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides the knowledge and skills needed for entry-level positions in the green building construction industry. Students focus on traditional construction skills with an emphasis on “green” practices to provide foundational learning that incorporates technology and sustainability into applied construction skills. Upon successful completion, students will be qualified to gain employment as both an entry-level office and field technician. This certificate leads into the Advanced Green Building Construction Skills certificate.

CORE REQUIREMENTS: (16 HRS.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 111</td>
<td>Construction Safety</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 112</td>
<td>Building Systems</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 193</td>
<td>Green Building Skills Practicum</td>
<td>3</td>
</tr>
<tr>
<td>ENEF 111</td>
<td>Healthy Homes</td>
<td>1</td>
</tr>
<tr>
<td>ENEF 114</td>
<td>House as a System</td>
<td>3</td>
</tr>
<tr>
<td>FACT 113</td>
<td>Basic Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>HPER 172L</td>
<td>Beginning Fitness</td>
<td>1</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 16 CREDITS

CERTIFICATE IN

GREEN BUILDING SYSTEMS

(19 hrs. min.) CIP: 15.0101
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This program provides students with knowledge and skills needed for entry-level positions in the green building construction industry. Students focus on computer-aided drafting and modeling, traditional construction skills and an emphasis on “green” practices to provide foundational learning that incorporates technology and sustainability into applied vocational skills. During completion of the program of study, students must gain employment in the construction field and incorporate their learning in “hands-on” practice.
successful completer will be qualified to gain employment as both an entry-level office and field technician.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

• Create, interpret and analyze construction documents related to residential construction, documents related to building and improvement projects using conventional and computer-aided modeling methods.
• Identify and explain fundamental “green building” and sustainability strategies in relationship to construction projects.
• Explain and illustrate building methods and components, especially those that have improvable environmental impact.
• Apply practical skills and knowledge while working on residential construction projects.

CERTIFICATE IN HEATING, VENTILATION AND AIR CONDITIONING

(31 hrs. min.) CIP: 47.0201

School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides technical training for students interested in careers in the heating, ventilation and air conditioning (HVAC) fields. Courses are designed to develop and improve job skills. This program prepares students seeking licensure as a journeyman HVAC to enter the apprentice phase.

Students can earn the following degree related to this certificate:

• A.A.S. in Building Science and Construction

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

• Provide leadership in creating and maintaining a safe working environment.
• Identify and explain HVAC methods, materials and systems, including green building and sustainability strategies.
• Interpret and analyze construction documents related to residential and commercial construction.
• Apply practical skills and knowledge while working on residential and commercial HVAC projects.

CORE REQUIREMENTS: (16 HRS.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 113</td>
<td>Introduction to Green Building</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 225</td>
<td>Green Building Policies, Codes and Incentives</td>
<td>2</td>
</tr>
<tr>
<td>BLDG 227</td>
<td>Concepts of LEED Certification</td>
<td>2</td>
</tr>
<tr>
<td>ENEF 114</td>
<td>House as a System</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 111</td>
<td>Introduction to Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 112</td>
<td>Introduction to Sustainable Energy Technologies</td>
<td>3</td>
</tr>
</tbody>
</table>

RELATED REQUIREMENTS: (3 HRS.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 212</td>
<td>Urban Design-Greening our Communities</td>
<td>3</td>
</tr>
<tr>
<td>BSAD 250</td>
<td>Sustainability in Business</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 19 CREDITS MIN.
CERTIFICATE IN

HOME HEALTH AIDE

(6.5 hrs. min.)
School of Sciences, Health, Engineering and Math
505-428-1323

This program prepares students to enter the home health care profession as an entry-level home health aide. Upon successful completion of this certificate, the student will meet all federal certification standards for both Home Health Aide and Nurse Aide and be prepared to sit for Home Health Aide competency exams and the New Mexico Nurse Aide Registry exam.

Prospective students who have been convicted of a felony are advised to contact the appropriate state board of nursing prior to admission to determine their eligibility for licensure. Fingerprinting for background checks, drug testing, and proof of recommended vaccination are required for the Home Health Aide class. All students must meet the stated requirements of each assigned clinical site to qualify for placement.

Students can earn the following degree related to this certificate:
• A.A.S. in Allied Health

CORE REQUIREMENTS: (6.5 HRS.)
AHAC 151 Basic Life Support for Healthcare Providers (.5)
HLCR 126 Home Health Aide (6)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 6.5 CREDITS

CERTIFICATE IN

HOSPITALITY AND TOURISM

(19 hrs.)
School of Business, Professional Studies and Education,
505-428-1308

This certificate is designed for students planning to enter the hospitality industry and for those already working in the industry by providing them with the requisite knowledge and techniques for becoming a professional in these areas.

Students can earn the following degree related to this certificate:
• A.A. in Hospitality and Tourism

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Apply effective techniques in hospitality and tourism supervision.
• Demonstrate appropriate communication skills for operational and human resource supervision.
• Describe the basic elements needed to forecast and create departmental budgets.
• Identify elements of a hospitality and tourism marketing plan.
• Demonstrate the use of standard operational processes.

CORE REQUIREMENTS: (19 HRS.)
CULA 115 Culinary Fundamentals (4)
HRMG 114 Introduction to Tourism (3)
HRMG 115 Customer Relations (3)
HRMG 116 Introduction to Hospitality Management (3)
HRMG 220 Dining Room Service and Beverage Management (3)
HRMG 240 Hospitality and Tourism Marketing (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 19 CREDITS
CERTIFICATE IN
INDEPENDENT FILMMAKING
(27 hrs.) CIP: 50.0602
School of Arts, Design, and Media Arts, 505-428-1738

Upon successful completion of this certificate students have a short film that they can take to film festivals and will use as a launching point for their work as a filmmaker and entrepreneur in the media industry. Students participate in an intensive program with film professionals in a capstone experience where they create a business plan, produce, direct, shoot, edit and publicly screen a short film. The program is application based and students are selected on their digital video portfolio work, previous successful course work in Film Crew I and II or professional and/or academic experience and letters of reference. The curriculum is designed for students who are interested in working in a collaborative and creative culture in mentorship with filmmaking professionals.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Work and collaborate with team members in all aspects of film production.
• Solve problems related to producing, directing, shooting and editing a short film.
• Create a business plan for directing and producing films.
• Apply filmmaking skills to complete a short film.
• Demonstrate professional readiness as a filmmaker.

CORE REQUIREMENTS: (27 HRS.)
FILM 240 Film Crew III (9)
FILM 241 Film Crew IV (9)
FILM 242 Film Crew V (9)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 27 CREDITS

CERTIFICATE IN
INFANT FAMILY STUDIES
(16 hrs.) CIP: 19.0706
School of Business, Professional Studies and Education, 505-428-1256

Successful completion of this certificate prepares students for work in the Early Childhood fields of Home Visiting and Early Intervention. This certificate provides students with the coursework necessary to apply for the New Mexico Infant Family Studies certificate offered through the New Mexico Office of Child Development. Students will gain knowledge of working with infants, toddlers and families in a relationship-based practice. This certificate includes two field-based practicum classes in spring and fall.

Students can earn the following degree related to this certificate:
• A.A. in Early Childhood Education
• A.A.S. in Early Childhood Education

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Demonstrate ability to define and apply caregiving practices and programming that support the optimal development of all infants and toddlers using a team approach.
• Demonstrate basic understanding of and respect for the family's role in the development of their infant and toddler within diversity of culture, community and ability.
• Demonstrate ability to carry out responsibilities with infants and families in a professional manner and engage as member of the profession.
• Demonstrate knowledge of child development in the context of primary relationships and in the domains of perceptual, motor, social, emotional, communication, adaptive, and cognitive growth for typically and atypically developing infants and toddlers.

CORE REQUIREMENTS: (16 HRS.)
ECED 111 Child Growth and Development (3)
ECED 123 Infant Toddler Growth and Development (Prenatal to 3) (3)
ECED 124L Infant Toddler Growth and Development Practicum (2)
ECED 125 Relationships and Reflective Practice in Infant Family Studies (3)
ECED 126L Relationships and Reflective Practice in Infant Family Studies Practicum (2)
ECED 127 Effective Principles and Practices in Infant Family Studies (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 16 CREDITS
CERTIFICATE IN
INFORMATION
TECHNOLOGY SUPPORT
FOR SMART GRIDS AND
MICRO GRIDS
(29 hrs. min.)
CIP: 11.1006
School of Sciences, Health, Engineering and Math
505-428-1754

Successful completion of this certificate prepares students to provide IT support for smart grid and micro grid technologies in the areas of hardware and software maintenance, networking, and computer security. The program also prepares students for certification tests in computer hardware and software, computer networks, and computer security.

Students can earn the following degree related to this certificate:
• A.A.S. in Computer and Information Technologies

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Identify the function of a variety of computer software applications.
• Provide accurate technical explanations of the role of the major components of a computer.
• Perform routine network administrative tasks, including network operating system (NOS) installations and upgrades, user administration, and resource sharing.
• Troubleshoot and repair various network and computer problems.
• Identify and correct computer security risks.

CORE REQUIREMENTS: (29 HRS.)
ELEC 111 Electronic Fundamentals (4)
ELEC 151 Power Generation, Transmission, and Distribution (3)
ENVR 112 Introduction to Sustainable Energy Technologies (3)
ENVR 113 Instrumentation and Controls (3)

[or]
ELEC 201 Smart Energy Management Systems (3)
ISCS 114 IT Essentials I: Computer Hardware and Software (4)
ISCS 122 Computer Networks (3)
ISCS 171 Computer and Security Fundamentals (3)
ISCS 273 Computer and Network Defense and Countermeasures (3)
ISCS 298 Internship (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 29 CREDITS

CERTIFICATE IN
JEWELRY/METAL ARTS
(30 hrs.)
CIP: 50.0713
School of Arts, Design, and Media Arts, 505-428-1731

The certificate in Jewelry/Metal Arts is designed as a workforce development degree that trains students to design and fabricate jewelry and enter the jewelry industry locally and/or internationally. Core courses offer a broad perspective including numerous techniques used in the production of jewelry using precious metals and stones. Electives focus on business practices and skills necessary for entrepreneurial endeavors.

Students can earn the following degree related to this certificate:
• A.A.A. in Professional Crafts

CORE REQUIREMENTS: (24 HRS.)
Choose from the following:
JEWL 114L Jewelry/Metal Arts I (3)
JEWL 130L Introduction to Enameling (3)
JEWL 158L Silversmithing I (3)
JEWL 159L Wax Carving for Jewelry (3)
JEWL 212L Advanced Stone Setting (3)
JEWL 217L Jewelry/Metal Arts II (3)
JEWL 218L Silversmithing II (3)
JEWL 220L Casting for Jewelry (3)
JEWL 233L CAD for Jewelry Design (3)
JEWL 275L Jewelry/Metal Arts III (3)
JEWL 294L Jewelry/Metal Arts: Advanced Projects (3)

APPROVED ELECTIVES: (6 HRS.)
Choose from the following:
AHST 201 Art History I (3)
AHST 202 Art History II (3)
ARTS 116L Three-Dimensional Design (3)
ARTS 125L    Art Practices I (3)
ARTS 280    Business Practices for Designers (3)
ARTS 298    Arts and Design Internship (2)
DRPT 118L    Drawing I (3)
PHOT 195    Photographing Artwork (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 30 CREDITS

CERTIFICATE IN

LAW OFFICE ADMINISTRATIVE ASSISTANT
(16 Hrs.)
CIP: 22.0301
School of Business, Professional Studies, and Education, 505-428-1308

This certificate prepares students as entry-level law office administrative assistants, a position leading to higher-level employment, for example as a legal executive assistant, legal secretary, or paralegal. Graduates are trained to assist in operating private law firms, courts and government agencies, corporations, and other businesses/organizations conducting law-related work. Students gain skills in preparing correspondence, word processing, utilizing legal filing systems, scheduling and coordinating depositions and meetings and similar activities integral to handling legal cases and providing multifaceted office support in fast-paced legal environments. Students also gain skills in professional communication, workplace behavior and proper office attire and grooming.

PROGRAM LEARNING OUTCOMES:
Upon completion of this program, students will be able to:
• Demonstrate a basic understanding of the American legal system.
• Describe the fundamentals of organizing documents and utilizing filing systems.
• Compose basic correspondence to communicate effectively with attorneys, clients, witnesses and the general public.
• Demonstrate organizational skills in legal office setting.
• Describe the law office administrative assistant’s role in maintaining the legal field's ethical and professional standards.

CORE REQUIREMENTS: (16 HRS.)
ENGL 111    Composition and Rhetoric (3)
ENGL 112    Composition and Literature (3)

[or]
ENGL 119    Professional Communication (3)
LEGL 111    Introduction to American Law (3)
for Paralegals
LEGL 114    Legal Secretarial Skills (3)
OFTC 111    Business Software Essentials (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 16 CREDITS MIN.
CERTIFICATE IN
LEGAL SECRETARY
(22 hrs. min.)
CIP: 22.0301
School of Business, Professional Studies and Education, 505-428-1308

This certificate prepares students for a career in law as a legal secretary and leads to higher level employment, including as a paralegal or executive legal secretary. Graduates are trained to facilitate operating legal offices and legal departments within courts, government agencies, and larger organizations. The program focuses on preparing legal correspondence, interoffice documents, conducting basic legal research, developing case files for litigation, and utilizing time management and organizational skills in a fast-paced environment.

PROGRAM LEARNING OUTCOMES:
Upon completion of this program, students will be able to:
• Describe the structure of the American legal system and how legal cases are processed.
• Describe the legal secretary’s role in utilizing time management and organizational skills in the effective operation of law offices and legal departments within governmental agencies and larger organizations.
• Compose legal correspondence and interoffice documents to communicate effectively with attorneys, clients, witnesses and the general public.
• Organize case files.
• Conduct basic legal research.
• Describe the legal secretary’s role in maintaining ethical and professional standards.

CORE REQUIREMENTS: (22 HRS.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
[or]
ENGL 119 Professional Communication (3)
LEGL 111 Introduction to American Law (3) for Paralegals
LEGL 112 Introduction to the Paralegal Profession (3)
LEGL 114 Legal Secretary Skills (3)
LEGL 121 Legal Research and Writing I (3)
OFTC 111 Business Software Essentials (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 22 CREDITS MIN.

CERTIFICATE IN
LIBERAL ARTS
FOR TRANSFER
(35 hrs. min.)
CIP: 24.0102
School of Liberal Arts, 505-428-1370

This certificate, designed for students who are undecided about their course of study, documents the completion of the lower division general education common transfer curriculum consistent with New Mexico state law. This transfer program is designed for students who plan to transfer from SFCC to a public four-year institution in New Mexico upon completion of their freshman and sophomore level general education course work.

While these courses are transferable, many universities prefer students take specific courses and demonstrate competency in certain areas. Students should consult with an academic adviser at that institution to determine the most appropriate course selections.

It is strongly advised that students complete an A.A. or A.S. degree at SFCC before transferring.

NOTE: The New Mexico Higher Education Department and state institutions have developed discipline specific general education transfer modules in Criminal Justice, Early Childhood Education, Business Administration, General Engineering and Teacher Education. Students interested in these degree areas should follow these specific program transfer modules.

Students can earn the following degree related to this certificate:
• A.A. in General Studies

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Understand and apply methods of scientific inquiry.
• Demonstrate an appreciation for and an understanding of the arts and humanities.
• Demonstrate an understanding of the history of the diverse social, economic and political models of society.
• Demonstrate precision, clarity and fluency in writing.
• Demonstrate accuracy, conciseness and coherence in spoken communication.
• Apply mathematical concepts to solve quantitative problems.
• Apply critical thinking and reasoning skills for problem solving.
• Demonstrate an awareness and understanding of gender, ethnic, minority, multi-cultural and global issues.

CORE REQUIREMENTS: (35 HRS.)
Communication (9 hrs.)
ENGL 111 Composition and Rhetoric (3)
ENGL 112 Composition and Literature (3)
[or]
ENGL 216 Technical Writing (3)
[and]
SPCH 111 Public Speaking (3)
[or]
SPCH 220 Interpersonal Communication (3)

Mathematics (3-4 hrs.)
Choose from the following:
MATH 121 College Algebra (4)
MATH 135 Introduction to Probability and Statistics (3)
MATH 150 Precalculus (4) or higher

Laboratory Science (8 hrs.)
Choose from the following:
ASTR 111 Introduction to Astronomy (4)
BIOL 111 Introduction to Biology (3)
BIOL 111L Introduction to Biology Lab (1)
CHEM 111 Introduction to Chemistry (3)
CHEM 111L Introduction to Chemistry Lab (1)
CHEM 121 General Chemistry I (3)
CHEM 121L General Chemistry Lab (1)
GEOL 111 Physical Geology (3)
GEOL 111L Physical Geology Lab (1)
GEOL 112 Historical Geology (3)
GEOL 112L Historical Geology Lab (1)
PHYS 121 General Physics I (3)
PHYS 121L General Physics I Lab (1)
PHYS 161 Calculus Physics I (3)
PHYS 161L Calculus Physics I Lab (1)
PHYS 162 Calculus Physics II (3)
PHYS 162L Calculus Physics II Lab (1)

Satisfaction of the College Core Curriculum in Humanities and Social/Behavioral Sciences to total a minimum of 15 total credit hours.

Social/Behavioral Sciences (6-9 hrs.)
Choose from the following:
ANTH 112 The Nature of Culture (3)
ANTH 113 World Archeology (3)
ANTH 207 Cultures of the Southwest (3)
ECON 200 Principles of Macroeconomics (3)
ECON 201 Principles of Microeconomics (3)
POLI 200 American Government & Politics (3)
POLI 211 New Mexico Government (3)
PSYC 111 Psychology I (3)
SOCI 111 Introduction to Sociology (3)

Humanities and Fine Arts (6-9 hrs.)
Choose from the following:
AHST 201 Art History I (3)
AHST 202 Art History II (3)
DRAM 111 Introduction to Drama and Theater (3)
ENGL 251 British Literature I (3)
ENGL 252 British Literature II (3)
ENGL 261 American Literature I (3)
ENGL 262 American Literature II (3)
ENGL 270 Literature of the Southwest (3)
ENGL 273 Native American Literature (3)
ENGL 286 The Novel (3)
ENGL 288 Introduction to Poetry (3)
HIST 111 Western Civilization I (3)
HIST 112 Western Civilization II (3)
HIST 161 U.S. History to 1877 (3)
HIST 162 U.S. History from 1877 (3)
HIST 260 History of New Mexico (3)
MUSC 115 Music Theory I (3)
MUSC 140 Music Appreciation (3)
PHIL 111 Introduction to Philosophy (3)
PHIL 155 Logic & Critical Thinking (3)
PHIL 220 Ethical Theory (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 35 CREDITS MIN.

CERTIFICATE IN
MANUAL TRANSMISSION AND DRIVETRAIN
(20 hrs. min.)
CIP: 47.0604
School of Trades, Advanced Technologies and Sustainability, 505-428-1664
Completion of this certificate provides the skills and training needed to earn an entry-level position at an automotive maintenance repair facility. Courses included in the certificate will prepare students to pass the Automotive Service Excellence Manual Drive Train and Axles (ASE A-3) exam.

Students can earn the following degree related to this certificate:
• A.A.S. Automotive Technology

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Diagnose automotive manual trans/transaxle and drivetrain systems.
• Interpret machining specifications and determine repair procedures.
• Diagnose and repair manual trans/transaxle to original equipment manufacturer (OEM) specification.
• Interpret computer control diagnostic trouble codes.
• Comply with all laws and regulations on disposal of materials and waste products.

CORE REQUIREMENTS: (20 HRS. MIN.)

ATEC 111L  Introduction to Automotive Service (2)
ATEC 112L  Engine Repair (4)
ATEC 116L  Automotive Electrical and Electronic Systems I (4)
ATEC 206L  Manual Transmission Transaxle Differential (4)
BLDG 115  Trades Mathematics (3)
[or]
MATH 119  Applications of Mathematics for Non-science Majors (3) or higher
ENGL 111  English Composition (3)
[or]
ENGL 119  Professional Communication (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 20 CREDITS

CERTIFICATE IN MANUFACTURING ENGINEERING TECHNOLOGIES

(18 HRS.) CIP: 15.0805

School of Sciences, Health, Engineering and Math 505-428-1763

The Introductory Manufacturing Engineering Technologies program is designed to educate technicians in the manufacturing field. Course work incorporates the theory and practice of manufacturing from tooling operations, safety and planning, and layout to engineering design methodology. Computer applications are part of the program including computer-aided drawing/modeling and computer-aided manufacturing.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Evaluate and communicate design goals, constraints, and methodology within the engineering fields of discipline.
• Evaluate, construct, and utilize design models to identify and solve problems related to project management.
• Implement engineering design methodology to predict both primary and alternative solutions.
• Evaluate and solve engineering problems related to course content.
• Articulate and justify both technical considerations and solutions through oral, written, and graphical communication methods in engineering problems.
• Effectively solve problems in teams.
• Demonstrate an understanding of professional and ethical responsibility in the field of engineering.

CORE REQUIREMENTS: (16 Hours)

ENGR 111  Introduction to Engineering (3)
ENGR 121  Engineering Graphics (3)
ENGR 260L  Mechanical Engineering Design Lab (2)
MATT 113  Manufacturing Safety and Measurement (1)
MATT 114  Introduction to Lathes (1)
MATT 115  Introduction to Mills (1)
MATT 116L  Introduction to Supporting Machine Tools and Principle (1)
MATT 117  Introduction Materials for Machining (1)
MATT 119  Introduction to Non-Traditional Machining (1)
MATT 154  Introduction to CNC Programming (2)
MATT 155  Introduction to Computer Numeric Control Mills (2)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 18 CREDITS MIN.

CERTIFICATE IN MECHANICAL ENGINEERING TECHNOLOGIES

(16 credits) CIP: 15.0805

School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate program is designed for those working in mechanical engineering technology or related fields. It is designed to provide a solid foundation in mechanical engineering technology and can lead to an associate or baccalaureate degree in Mechanical Engineering or Mechanical Engineering Technology. Students learn about Engineering Design Methodology which includes design
projects with prototypes that integrate engineering
technologies from software 3D modeling to laboratory
experience in advanced manufacturing lab and electronics lab.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Evaluate and communicate design goals, constraints, and
  methodology within the engineering fields of discipline.
• Evaluate, construct, and utilize design models to identify
  and solve problems related to project management.
• Implement engineering design methodology to
  predict both primary and alternative solutions.
• Evaluate and solve engineering problems related to
  course content.
• Articulate and justify both technical considerations
  and solutions through oral, written, and graphical
  communication methods in engineering problems.
• Effectively solve problems in teams.
• Demonstrate an understanding of professional and
  ethical responsibility in the field of engineering.

CORE REQUIREMENTS: (16 Hours)
ENGR 111 Intro to Engineering (3)
ENGR 121 Engineering Graphics (3)
ENGR 231 Engineering Graphics II (3)
ENVR 113 Instrumentation and Control (3)
ENGR 260 Mechanical Engineering Design (2)
ENGR 260L Mechanical Engineering Design Lab (2)

NOTE: See First-Year Student Success Course Requirement
on Page 8.

TOTAL 16 CREDITS MIN.

CERTIFICATE IN

MEDIA ARTS —

AUDIO PRODUCTION

(18 hrs. min.)
CIP: 10.0203
School of Arts, Design, and Media Arts, 505-428-1371

Students acquire basic skills related to audio recording
in the studio and/or field as well as digital audio creation
and editing. Students will have the necessary skills for
entry-level positions at professional audio, film, radio or
multi-media studios.

CORE REQUIREMENTS: (14 HRS. MIN.)
MART 119 Digital Presentation (3)
MART 160 Audio Production I (3)
MART 161 Introduction to Reason and Live (3)
MART 165 Audio Field Recording (2)
MART 260 Audio Production II (3)
MART 298 Internship(1) or approved work experience

APPROVED ELECTIVES: (4 HRS.)

NOTE: See First-Year Student Success Course Requirement
on Page 8.

TOTAL 18 CREDITS MIN.
CERTIFICATE IN MEDIA ARTS — GRAPHIC AND INTERACTIVE DESIGN

(22 hrs. min.)  CIP: 50.0409
School of Arts, Design, and Media Arts, 505-428-1371

Students acquire basic skills in graphic design, print media and web design. Students will be positioned for entry-level careers in advertising and news agencies, print and graphics businesses and web design companies.

Students can earn the following degree related to this certificate:
• A.A. Media Arts
• A.A.S. Media Arts

CORE REQUIREMENTS: (22 HRS. MIN.)
MART 118 Communication Design (3)
MART 121 Adobe Illustrator (3)
MART 123 Adobe InDesign (3)
MART 130 Web Design I (3)
MART 143 After Effects (3)
MART 180 Photoshop I (3)
MART 187 Electronic Color Theory and Practice (1)
MART 223 Typography (3)
MART 298 Internship (1) or approved work experience

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 22 CREDITS MIN.

CERTIFICATE IN MEDIA ARTS — WEB DESIGN

(22 hrs. min.)  CIP: 50.0102
School of Arts, Design, and Media Arts, 505-428-1371

Students will learn basic skills in XHTML and CSS, Adobe Dreamweaver, and Adobe Flash. They will learn best practices in current web design trends and technologies and be positioned for entry-level careers in web design/graphic design studios or advertising agencies.

CORE REQUIREMENTS: (22 HRS. MIN.)
MART 121 Illustrator (3)
MART 130 Web Design I (3)
MART 180 Photoshop I (3)
MART 186 Scanning Techniques (1)
MART 230 Web II: CSS Responsive Web Design (3)
MART 298 Internship (1) or approved work experience
[and]
Choose from the following (7 hrs. min.)
MART 194 Media Arts Seminar (1-4)
MART 228 Web Design in the Real World (2)
MART 229 Introduction to Wordpress (2)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 22 CREDIT MIN.

CERTIFICATE IN MEDICAL ASSISTING

(34.5 hrs.)  CIP: 51.0801
School of Sciences, Health, Engineering and Math
505-428-1763

This three-semester program encompasses the competencies needed by a professional medical assistant. Specific education includes performing administrative and clinical procedures in settings such as physician offices, clinics and ambulatory settings. Courses are sequenced to build skill level. Medical assisting is a growing occupation in New Mexico and the United States. This program of study is oriented to students who have an aptitude for organization and health care systems.

The goal of the program is to prepare entry-level medical assistants in the knowledge, skills and behavior learning domains essential to providing competent and caring services.
PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Perform major operational functions of the medical office, including basic medical bookkeeping, scheduling and other office functions.
• Communicate effectively and compassionately with patients of varying ages, cultures and education levels.
• Communicate effectively and professionally with medical personnel.
• Accurately and safely perform laboratory testing and specimen preparation.
• Measure vital signs and prepare patients for examinations and clinical tests.
• Demonstrate a basic understanding of the anatomy and physiology of the human body.
• Demonstrate an understanding of various biomedical legal and ethical issues.

PROGRAM PREREQUISITES
ENGL 111  Composition and Rhetoric (3)
[or]
ENGL 119  Professional Communication (3)
MATH 102  Basic Algebra (4)
[or]
BSAD 112  Business Math (3)
OFTC 111  Business Software Essentials (4)

NOTE: Skill Level Equivalents are prerequisites for entering the Certificate in Medical Assisting Program and must be completed before applying to the program. Other related requirements can be taken before or during the Medical Assistant Program.

CORE REQUIREMENTS: (27.5 HRS.)
AHAC 151  Basic Life Support for Healthcare Providers (.5)
HLCR 113  Medical Terminology (3)
HLCR 235  Pharmacology for Allied Health (2)
MAST 115  Medical Assistant Administrative Procedures (2)
MAST 120  Medical Assistant Clinical Procedures I (3)
MAST 125  Medical Assistant Laboratory Procedures I (2)
MAST 210  Medical Office Insurance and Finance (3)*
MAST 220  Medical Assistant Clinical Procedures II (3)*
MAST 225  Medical Assistant Laboratory Procedures II (2)*
MAST 290  Medical Assistant Capstone (1)
MAST 298  Medical Assistant Internship (3)
PHIL 246  Biomedical Ethics (3)

RELATED REQUIREMENTS: (7 HRS.)
BIOL 136  Non-Majors Anatomy and Physiology (3)
BIOL 136L  Non-Majors Anatomy and Physiology Lab (1)
PSYC 111  Psychology I (3)
[or]
PSYC 290  Developmental Psychology (3)

*These courses have core prerequisites

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 34.5 CREDITS

CERTIFICATE IN MEDICAL BILLING AND CODING
(24 hrs. min.) CIP: 51.0713
School of Sciences, Health, Engineering and Math
505-428-1837

Medical Billers and Coders are professionals skilled in classifying patient medical records. They transform verbal and written descriptions of disease, supplies, and procedures into alpha-numeric designations. Accuracy is extremely important to medical practices and hospital facilities because of its impact on revenues. Medical Billers and Coders are involved with reimbursement of health care insurance claims, maintenance of accurate statistics, and research. Both ambulatory and inpatient hospital facilities employ these professionals.

The Certificate in Medical Billing and Coding prepares students to take the American Health Information Management Association's (AHIMA) Certified Coding Associate (CCA) exam and/or the American Association of Professional Coders (AAPC) Certified Professional Coder (CPC) exam. These credentials (CCA and CPC) are entry-level credentials for students seeking employment in the field of medical billing and coding. Courses are sequenced to build skill level.

Eligibility:
• Taken the Accuplacer exams (English 109 and Math 101) if applicable for biology prerequisite.
• Completed all prerequisite courses with a C or higher.
• Submitted a completed Medical Billing and Coding Program application.
PROGRAM LEARNING OUTCOMES

Upon competition of this program, students will be able to:

- Interpret and apply diagnostic information from source documents/health records to coding and billing tasks using the most current International Classification of Disease (ICD), Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) references.
- Demonstrate adherence to compliance and regulatory requirements.
- Demonstrate basic billing skills required of entry-level coders and billers.
- Communicate effectively and professionally.
- Demonstrate a basic understanding of the anatomy and physiology of the human body and a thorough understanding of medical terminology.

PROGRAM PREREQUISITES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>HLCR 113</td>
<td>Medical Terminology (3)</td>
</tr>
<tr>
<td>BIOL 136</td>
<td>Non-Majors Anatomy and Physiology (3)</td>
</tr>
<tr>
<td>BIOL 136L</td>
<td>Non-Majors Anatomy and Physiology Lab (1)</td>
</tr>
<tr>
<td>OFTC 111</td>
<td>Business Software Essentials I (4)</td>
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CORE REQUIREMENTS (24 HRS. MIN.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>HITU 120</td>
<td>Introduction to Health Information Technology (3)</td>
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<tr>
<td>HITU 160</td>
<td>Pharmacology &amp; Laboratory Procedures (3)</td>
</tr>
<tr>
<td>HITU 170</td>
<td>Physician Coding (CPT-4) (3)</td>
</tr>
<tr>
<td>HITU 202</td>
<td>Coding Classification Systems I (4)</td>
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<tr>
<td>HITU 212</td>
<td>Coding Classification Systems II (3)</td>
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<tr>
<td>HITU 230</td>
<td>Reimbursement Methodologies (3)</td>
</tr>
<tr>
<td>HITU 266</td>
<td>Professional Practice Experience Coding (1)</td>
</tr>
<tr>
<td>HITU 272</td>
<td>Coding Seminar (1)</td>
</tr>
<tr>
<td>HLCR 130</td>
<td>Pathophysiology for Allied Health (3)</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 24 CREDITS MIN.

CERTIFICATE IN

MULTIMEDIA JOURNALISM

(18 hrs. min.) CIP: 09.0402
School of Arts, Design, and Media Arts, 505-428-1421

Students choosing this certificate acquire entry-level media and computer technical skills with a broad understanding of global sustainability, socio-economic politics and ethical reporting related to broadcast journalism. Students will work individually and in a team production environment to learn writing, communication and reporting skills necessary for employment in the news reporting fields of radio, television, social media and internet media. This certificate does not guarantee membership, employment or contract work.

CORE REQUIREMENTS: 18 HRS. MIN.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ENGL 111</td>
<td>Composition &amp; Rhetoric (3)</td>
</tr>
<tr>
<td>FILM 132</td>
<td>Television Production (3)</td>
</tr>
<tr>
<td>FILM 166</td>
<td>Radio Journalism (3)</td>
</tr>
<tr>
<td>FILM 200</td>
<td>Media and the Environment (3)</td>
</tr>
<tr>
<td>FILM 215</td>
<td>Social Media and Global Sustainability (3)</td>
</tr>
<tr>
<td>FILM 298</td>
<td>Internship (3)</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 18 CREDITS MIN.

CERTIFICATE IN

NURSING ASSISTANT

(5.5 hrs. min.) CIP: 51.3902
School of Sciences, Health, Engineering and Math 505-428-1763

This program prepares students to enter the nursing profession as an entry-level nursing assistant. Upon successful completion of this certificate, the student will meet all federal certification standards for a nursing assistant and be prepared to sit for the New Mexico Nurse Aide Registry exams.

Prospective students who have been convicted of a felony are advised to contact the appropriate state board of nursing prior to admission to determine their eligibility for licensure. Fingerprinting for background checks, drug testing, and proof of recommended vaccination are required for the Nurse Aide class. All students must meet the stated requirements of each assigned clinical site to qualify for placement.
Students can earn the following degree related to this certificate:

- A.A.S. Allied Health

**CORE REQUIREMENTS: (5.5 HRS.)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHAC 151</td>
<td>Basic Life Support for Healthcare Providers</td>
<td>.5</td>
</tr>
<tr>
<td>HLCR 125</td>
<td>Nurse Aide</td>
<td>5</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 5.5 credits**

**CERTIFICATE IN NUTRITION**

(22 hrs. min.) CIP: 19.0501

School of Fitness Education, 505-428-1651

This program is designed to broaden the knowledge base of individuals interested in nutrition or for those who work in food, nutrition or health-related areas such as WIC (Women, Infants and Children), public health, nursing, allied health, culinary arts, fitness, schools, farmers’ markets, etc.

**PROGRAM LEARNING OUTCOMES**

Upon completion of this program, students will be able to:

- Apply recognized nutrition tools and guidelines to menu planning and the selection and preparation of food.
- Analyze a menu or diet for nutritional adequacy.
- Summarize the basic functions, food sources, digestion and absorption of the major nutrients.
- Describe the nutritional concerns and requirements of each phase of the life cycle.
- Demonstrate a basic understanding of public health nutrition surveys, programs and policies.
- Summarize the impact of food choices on exercise performance, health, nutritional status and the global environment.

**Students can earn the following degree related to this certificate:**

- A.A.S. in Exercise Science

**CORE REQUIREMENTS: (16 HRS.)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXSC 202</td>
<td>Instruction in Lifestyle Change (3)</td>
<td></td>
</tr>
<tr>
<td>NUTR 121</td>
<td>Dietary Guidelines (1)</td>
<td></td>
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<tr>
<td>NUTR 200</td>
<td>Nutrition (3)</td>
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</tr>
<tr>
<td>NUTR 205</td>
<td>Nutrition in the Life Cycle (3)</td>
<td></td>
</tr>
<tr>
<td>NUTR 206</td>
<td>Community Nutrition (3)</td>
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</tr>
<tr>
<td>NUTR 215</td>
<td>Culinary Nutrition (3)</td>
<td></td>
</tr>
</tbody>
</table>

**APPROVED ELECTIVES: (6 HRS. MIN.)**

Choose from the following:

- HLED 112 Weight Management and Exercise (3)
- HLED 113 Stress Management (3)
- NUTR 209 Nutrition in Chronic Disease (3)
- NUTR 221 Diabetes Management (3)
- EXSC 203 Nutrition for Fitness and Sport (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

**TOTAL 22 CREDITS MIN.**

**CERTIFICATE IN PARALEGAL STUDIES**

(44 hrs. min.) CIP: 22.0302

School of Business, Professional Studies and Education, 505-428-1308

This program prepares students for employment as paralegals/legal assistants in private law firms, courts and government agencies, corporations, and other business/organizations conducting legal related work. Students learn law and legal principles, legal research and writing, case management, interviewing and investigating, preparation of legal documents, law office administration and legal ethics. Students seeking this certificate will be most successful in finding employment if they already have significant work experience in an office environment or prior college credits. Students without such background should consider completing the A.A.S. in Paralegal Studies instead of the Certificate program.

**PROGRAM LEARNING OUTCOMES**

Upon completion of this program, students will be able to:

- Explain the structure of the American legal system and how legal cases are processed.
- Analyze legal problems by conducting legal research, interpreting law, and composing persuasive written and oral legal arguments.
- Compose basic legal pleadings, legal memoranda and correspondence related to case processing.
- Demonstrate evidence gathering by obtaining discovery and interviewing clients and witnesses.
- Explain the paralegal’s role in providing office support that maintains the legal field’s ethical and professional standards.

**CORE REQUIREMENTS: (35 HRS.)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENGL 111</td>
<td>Composition and Rhetoric (3)</td>
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<tr>
<td>ENGL 112</td>
<td>Composition and Literature (3)</td>
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</tr>
</tbody>
</table>

137
CERTIFICATE IN

PARAMEDICINE

(49 hrs.)

CIP: 51.0904

School of Sciences, Health, Engineering and Math
505-428-1820

SFCC offers a paramedic training program. Through the use of scenario-based human patient simulation and case-based practice, students undergo an intensive, practical learning experience. This cohort program prepares students for the National Registry EMT’s-Paramedic (NRP) certification exam and New Mexico licensure. Licensed paramedics provide advanced life support in the pre-hospital environment.

Students can earn the following degree related to this certificate:
• A.A.S. in Paramedicine

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Provide appropriate care to pre-hospital patients presenting with injuries or illness.
• Apply medical-legal concepts as they relate to pre-hospital care.
• Demonstrate proficiency in and appropriately apply advanced life support skills and techniques.
• Demonstrate critical thinking skills to accurately diagnose and manage injuries and illness in a variety of settings.
• Provide safe, compassionate care and patient advocacy.

CORE REQUIREMENTS: (49 HRS.)

EMSI 240 Anatomy and Physiology for EMS (4)
EMSI 240L Anatomy and Physiology for EMS Lab (2)
EMSI 241 Pre-Hospital Environment (2)
EMSI 242 Pre-Hospital Pharmacology (3)
EMSI 242L Pre-Hospital Pharmacology Lab (2)
EMSI 243 Respiratory Emergencies (2)
EMSI 243L Respiratory Emergencies Lab (2)
EMSI 244 Trauma Emergency Care (3)
EMSI 244L Trauma Emergency Care Lab (2)
EMSI 246L Paramedic Clinical I (2)
EMSI 248 OB/GYN Emergencies (2)
EMSI 248L OB/GYN Emergencies Lab (1)
EMSI 249 Pediatric Emergencies (2)
EMSI 249L Pediatric Emergencies Lab (1)
EMSI 250 Medical Emergencies (3)
EMSI 250L Medical Emergencies Lab (3)
EMSI 251 Cardiac Emergencies (4)
EMSI 251L Cardiac Emergencies Lab (2)
EMSI 252L Paramedic Clinical II (2)
PREREQUISITES FOR ADMISSION TO THE PARAMEDIC COHORT PROGRAM:

Admission to the program requires both written and scenario testing. Two letters of recommendation are also required. Each applicant must have an active EMT-Intermediate license. Math 102 Basic Algebra or skill-level equivalent is also a prerequisite for program admission.

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 49 CREDITS

CERTIFICATE IN

PATIENT CARE ASSISTANT

(4.5 HRS.) CIP: 51.3902

School of Sciences, Health, Engineering and Math
505-428-1323

This one semester-program prepares students to enter the health care profession as an entry-level patient care assistant. Major topics include basic principles related to body systems, rehabilitation needs, personal care skills, safety, and special needs across the lifespan.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

• Describe basic body functions and dysfunctions.
• Demonstrate infection control and medical asepsis.
• Identify safety issues and emergency procedures in both home and institutional settings.
• Apply PCA skills in assisting patients.

CORE REQUIREMENTS (4.5 HRS.)

AHAC 151 Basic Life Support for Healthcare Providers (.5)
HLCR 118 Patient Care Assistant Training (3)
HLCR 119L Patient Care Assistant Training Clinical (1)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 4.5 CREDITS

CERTIFICATE IN

PATISSIER

(17 hrs.) CIP: 12.0501

School of Business, Professional Studies and Education,
505-428-1308

Students completing the Certificate in Patissier have the skills to create the modern repertoire of pastries, cakes, candies and ices and have mastered the techniques needed to work as a pastry chef in any kitchen.

CORE REQUIREMENTS: (17 HRS.)

CULA 113L Basic Baking I (1)
CULA 114 Commercial Baking (4)
CULA 212L Advanced Baking I (1)
CULA 221L Advanced Baking II (1)
CULA 232L Cake Making (1)
CULA 233L Cake Decorating (1)
CULA 234L Chocolate and Sugar Workshop (1)
CULA 235L The Plated Dessert (1)
CULA 250 Pastry Presentation and Display (4)
HRMG 118 Sanitation and Safety (2)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 17 CREDITS
CERTIFICATE IN PHLEBOTOMY
(11.5 hrs.) CIP: 51.1009
School of Sciences, Health, Engineering and Math
505-428-1763

This one-semester program is designed to provide students with the necessary skills for gainful employment as a phlebotomist, working under the supervision of a clinical laboratory supervisor. The phlebotomist is responsible for the proper collection, processing and testing of blood specimens and various other medical samples in accordance with OSHA safety regulations and standards. Upon successful completion of this program, the student will be eligible for application to the national licensing examination through the American Society for Clinical Pathology. Admission to this program requires an application process. For more information, contact 505-428-1763 at least one month before the beginning of fall or spring registration. Permission is required to enroll in the program. Prerequisite to the program: HLCR 113.

Prospective students who have been convicted of a felony are advised to contact the Department of Health prior to admission to determine their eligibility for certification. Fingerprinting for background checks, drug testing, and proof of recommended vaccinations are required once students are accepted into the program. All students must meet the stated requirements of each assigned clinical site to qualify for placement.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Communicate effectively and compassionately with patients.
• Communicate effectively and professionally with medical personnel.
• Demonstrate a basic understanding of relevant human anatomy and physiology.
• Document patient data in accordance with national standards.
• Apply aseptic techniques as well as infection control methodology.
• Perform safe and proper preparation, collection and processing of specimens.

CORE REQUIREMENTS: (11.5 HRS.)
AHAC151 Basic Life Support for Healthcare Providers (.5)
PHLB 113 Introduction to Phlebotomy (3)
PHLB 115L Clinical Phlebotomy I (3)
PHLB 117 Special Practices in Phlebotomy (3)
PHLB 198 Clinical Phlebotomy Internship (2)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 11.5 CREDITS

CERTIFICATE IN PLUMBING
(28 hrs. min.) CIP: 46.0503
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides technical training for students interested in careers as plumbers. Courses are designed to develop and improve job skills. This program prepares students who are seeking licensure as a journey plumber to enter the apprentice phase.

Students can earn the following degree related to this certificate:
• A.A.S. in Building Science and Construction

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Provide leadership in creating and maintaining a safe working environment.
• Identify and explain plumbing methods, materials and systems, including green building and sustainability strategies.
• Interpret and analyze construction documents related to residential and commercial construction.
• Apply practical skills and knowledge while working on residential and commercial plumbing projects.

CORE REQUIREMENTS: (22 HRS.)
BLDG 111 Construction Safety (3)
PLMB 111 Basic Plumbing/Safety/Pipe Fitting (2)
PLMB 121 Gas Piping and Combustion Venting (3)
PLMB 131 Service Plumbing, Repair, Maintenance and Remodel (2)
PLMB 211 Water Supply Systems and Backflow Prevention (3)
PLMB 221 Drain, Waste, Vent and Gray Water (3)
PLMB 231 Boilers and Hydronic Systems (2)
FACT 113 Basic Blueprint Reading (2)
FACT 114 Basic Electricity and Controls (2)

RELATED REQUIREMENTS: (6 HRS.)
BLDG 115 Trades Mathematics (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher
SOLR 131 Design and Installation of Solar Hot Water Systems (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 28 CREDITS
CERTIFICATE IN
POLICE SUPERVISION
(18 hrs.)
School of Business, Professional Studies and Education,
505-428-1689
This certificate provides police officers with course work to develop the supervisory skills needed for promotion within the police department. All certificate course work can be used toward obtaining an Associate in Applied Science in Criminal Justice.

CORE REQUIREMENTS: (15 HRS.)
CRJS 203 Criminal Law and Procedure (3)
[or]
CRJS 204 The Law and the Professional Investigator (3)
CRJS 205 Law Enforcement Supervision — First Line (3)
CRJS 206 Law Enforcement Supervision — Command Level (3)
CRJS 207 Law Enforcement Supervision — Executive Level (3)
CRJS 214 Police and Patrol (3)
[or]
CRJS 113 Introduction to Protective Services (3)

RELATED REQUIREMENTS: (3 HRS.)
Choose from the following:
CRJS 111 Introduction to Criminal Justice (3)
CRJS 201 Ethics in Law Enforcement (3)
BSAD 235 Human Relations in the Workplace (3)
SOCI 216 Race, Class and Gender (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 18 CREDITS

CERTIFICATE IN
PRACTICAL NURSING
(29 hrs.)
School of Sciences, Health, Engineering and Math
505-428-1323
This three-semester sequence within the Nursing Program prepares students to be eligible to take the National Council Licensure Examination for Practical Nursing (NCLEX-PN) and become a Practical Nurse (PN) or a Licensed Practical Nurse (LPN). LPN certification can open doors to work in many different industries and settings, including hospitals, medical and dental clinics, community centers, nursing homes, rehabilitation centers, schools, and armed forces. Admission into the Nursing Program is required.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Engage in professional practice appropriate to the role of the Practical Nurse that is patient centered and culturally appropriate for individuals, families and communities.
• Deliver nursing care appropriate to the role of the Practical Nurse that is evidence based across the lifespan.
• Engage in effective and appropriate inter-professional collaboration in the delivery of health care for quality patient outcomes in the role of the Practical Nurse.
• Demonstrate conscience in the role of the Practical Nurse through the application of professional practical nursing standards as well as ethical and legal decision-making.
• Use technologies for the management of information and in the delivery of patient care.

CORE REQUIREMENTS: (29 HRS. MIN.)
NURS 120 Introduction to Nursing Concepts (3)
NURS 125 Principles of Nursing Practice (4)
NURS 140 Health & Illness Concepts I (3)
NURS 145 Health Care Participant (3)
NURS 155 Nursing Pharmacology (3)
NURS 160 Assessment and Health Promotion (4)
NURS 200 Health and Illness Concepts II (3)
NURS 205 Professional Issues in Practical Nursing (3)
NURS 225 Care of Patients with Chronic Conditions (4)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 29 CREDITS MIN.
CERTIFICATE IN SCULPTURE

(29 hrs.) CIP: 50.0709
School of Arts, Design, and Media Arts, 505-428-1731

The Sculpture Certificate provides students with necessary skills to begin or advance a career in sculpture. Students will learn to operate the appropriate tools and machinery to realize their design ideas. Students will also learn the concepts necessary to prepare them for designing and building their own sculpture. Students will explore conceptual issues related to self-expression as part of the art making process.

Students can earn the following degree related to this certificate:

• A.A. in Fine Arts

CORE REQUIREMENTS: (23 HRS.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 116L</td>
<td>Three-Dimensional Design</td>
<td>(3)</td>
</tr>
<tr>
<td>ARTS 294L</td>
<td>Arts and Design Advanced Projects</td>
<td>(3)</td>
</tr>
<tr>
<td>DRPT 118L</td>
<td>Drawing I</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 115L</td>
<td>Basic Fabrication and Safety</td>
<td>(2)</td>
</tr>
<tr>
<td>SCUL 213L</td>
<td>Sculpture I</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 262</td>
<td>Metal Sculpture I</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 263L</td>
<td>Sculpture II</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 264L</td>
<td>Mixed Media Sculpture Assemblage</td>
<td>(3)</td>
</tr>
</tbody>
</table>

APPROVED ELECTIVES: (6 hrs.)

Choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHST 202</td>
<td>Art History II</td>
<td>(3)</td>
</tr>
<tr>
<td>AHST 207</td>
<td>Contemporary Art</td>
<td>(3)</td>
</tr>
<tr>
<td>ARTS 280</td>
<td>Business Practices for Designers</td>
<td>(3)</td>
</tr>
<tr>
<td>ARTS 298</td>
<td>Arts and Design Internship (1-3)</td>
<td>(3)</td>
</tr>
<tr>
<td>PHOT 195</td>
<td>Photographing Artwork</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 134</td>
<td>Forging for the Sculpture</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 260</td>
<td>Contemporary Bronze Sculpture</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 261L</td>
<td>Stone Sculpture</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 265L</td>
<td>Glass Sculpture</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 267L</td>
<td>Metal Sculpture II</td>
<td>(3)</td>
</tr>
<tr>
<td>SCUL 270L</td>
<td>Wood Sculpture</td>
<td>(3)</td>
</tr>
</tbody>
</table>

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 29 CREDITS MIN.

CERTIFICATE IN SOCIAL MEDIA SPECIALIST

(20 hrs. min.) CIP: 09.0701
School of Arts, Design, and Media Arts, 505-428-1421

Upon successful completion of this certificate students have the technical skills for entry-level employment in the field of social media. Students will utilize multiple social media platforms and integrate multiple hardware and software tools necessary to create media campaigns. Students will have the chance to prepare for social media professional certifications. The curriculum is designed for students who are interested in working in collaborative and creative culture environments with entertainment, journalism and media professionals.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:

• Use multiple social media and cloud-based programs to execute short social media campaigns.
• Design a social media campaign and the elements needed to create accounts and posts.
• Create and manage media, media storage, posts and blogs.
• Apply knowledge of ethics and law, including copyright and trademark law, to social media campaigns.
• Demonstrate professional readiness for a career as a social media specialist.
• Demonstrate the use of internet evaluation tools to assess the success of campaigns, including fundraising and e-commerce.

CORE REQUIREMENTS: (14 HRS.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MART 180</td>
<td>Photoshop I</td>
<td>(3)</td>
</tr>
<tr>
<td>MART 111</td>
<td>Introduction to Social Media Basics</td>
<td>(2)</td>
</tr>
<tr>
<td>MART 115</td>
<td>Social Media Basics</td>
<td>(2)</td>
</tr>
<tr>
<td>MART 200</td>
<td>Copyright, Media, and Society</td>
<td>(3)</td>
</tr>
<tr>
<td>MART 201</td>
<td>Applying Social Media Techniques I</td>
<td>(2)</td>
</tr>
<tr>
<td>MART 202</td>
<td>Applying Social Media Techniques II</td>
<td>(2)</td>
</tr>
</tbody>
</table>

APPROVED ELECTIVES: (6 HRS)

Choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 125L</td>
<td>Art Practices I</td>
<td>(3)</td>
</tr>
<tr>
<td>FILM 130</td>
<td>Video Production I</td>
<td>(3)</td>
</tr>
<tr>
<td>FILM 136</td>
<td>Women Make Media</td>
<td>(3)</td>
</tr>
<tr>
<td>FILM 150</td>
<td>Introduction to Film Studies</td>
<td>(3)</td>
</tr>
<tr>
<td>FILM 200</td>
<td>Media and the Environment</td>
<td>(3)</td>
</tr>
<tr>
<td>MART 130</td>
<td>Web Design I</td>
<td>(3)</td>
</tr>
<tr>
<td>PHOT 111</td>
<td>Digital Photography I</td>
<td>(3)</td>
</tr>
</tbody>
</table>
PHOT 150 Camera Use and the Art of Seeing (3)
PHOT 294 The Photobook (3)

NOTE: See “First-Year Student Success Course Requirement” on Page 8.

TOTAL 20 CREDITS MIN.

CERTIFICATE IN
SOLAR ENERGY
(29 hrs. min.)

School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides students with the skills required to design, plan, install and troubleshoot photovoltaic solar electric energy systems. The certificate includes a foundation in AC and DC electricity, grid tie applications, and an introduction to solar hydronic systems. Students will acquire skills needed to seek entry- and mid-level positions within the solar industry or apply solar energy skills and knowledge to the green building sector. The certificate prepares students for the North American Board of Certified Energy Practitioners (NABCEP) entry-level exam.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Provide leadership in creating and maintaining a safe working environment.
• Describe how solar energy systems function, including basic design and installation.
• Recognize wasteful practices and recommend sustainable alternatives.
• Measure and describe energy and its relationship to solar energy systems.
• Develop and articulate a definition of sustainability.
• Understand the principles of entrepreneurship and creating a sustainable small business.

CORE REQUIREMENTS: (25 HRS.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG 111</td>
<td>Construction Safety</td>
<td>3</td>
</tr>
<tr>
<td>BLDG 115</td>
<td>Trades Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 119</td>
<td>Applications of Mathematics for Non-science Majors</td>
<td>3 or higher</td>
</tr>
<tr>
<td>ENV R 112</td>
<td>Introduction to Sustainable Energy Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ENV R 113</td>
<td>Instrumentation and Controls Lab</td>
<td>3</td>
</tr>
<tr>
<td>ELEC 111</td>
<td>Electronic Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>ELTC 227</td>
<td>Introduction to the National Electrical Code</td>
<td>2</td>
</tr>
<tr>
<td>ENEF 114</td>
<td>House as a System</td>
<td>3</td>
</tr>
</tbody>
</table>

SOLR 111 Introduction to Solar Energy (1)
SOLR 121 Design and Installation of Photovoltaic Systems I (3)
SOLR 131 Design and Installation of Solar Hot Water Systems (3)

APPROVED ELECTIVES: (4 hrs. min.)

Solar Photovoltaic Focus (4 hrs.):
SOLR 221 Design and Installation of Photovoltaic Systems II (3)
SOLR 221D Solar Photovoltaic Design Lab (1)
SOLR 221I Solar Photovoltaic Installation Lab (1)

Solar Thermal Focus (4 hrs.):
SOLR 231 Advanced Solar Thermal Design (3)
SOLR 131I Solar Thermal Install Lab (1)
SOLR 231D Advanced Solar Thermal Design Lab (1)

NOTE: See First-Year Student Success Course Requirement on Page 8.

Students in the Sustainable Technologies programs who are required to take a First-Year Student Success course are recommended to take STEM 111.

TOTAL 29 CREDITS MIN.

CERTIFICATE IN
STEERING AND SUSPENSION
(20 hrs. min.)

School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides the skills and training needed to earn an entry-level position at an automotive maintenance repair facility. Courses will prepare students to pass the Automotive Service Excellence Maintenance Suspension and Steering (ASE A-4).

Students can earn the following degree related to this certificate:
• A.A.S. in Automotive Technology

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Diagnose automotive suspension and steering systems.
• Interpret geometric specifications and determine repair procedures.
• Diagnose and repair suspension and steering systems to
original equipment manufacturer (OEM) specifications.
• Interpret computer control diagnostic trouble codes
(DTCs).
• Demonstrate mastery of the computerized equipment.

CORE REQUIREMENTS: (20 HRS. MIN.)
ATEC 111L Introduction to Automotive Service (2)
ATEC 112L Engine Repair (4)
ATEC 115L Automotive Steering and Suspension Systems (4)
ATEC 116L Automotive Electrical and Electronic Systems I (4)
BLDG 115 Trades Mathematics (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher
ENGL 111 English Composition (3)
[or]
ENGL 119 Professional Communication (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 20 CREDITS

CERTIFICATE IN SUSTAINABLE TECHNOLOGIES

(34 hrs. min.) CIP: 04.0902
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

This certificate provides students with an understanding of the basic issues regarding sustainability, renewable energy and water conservation. Students will acquire skills needed to seek entry-level positions in a wide range of energy- and water-related businesses and/or consider starting their own business.

PROGRAM LEARNING OUTCOMES

Upon completion of this program, students will be able to:
• Provide leadership in creating and maintaining a safe working environment.
• Recognize wasteful practices and recommend sustainable alternatives
• Measure and describe energy and its relationship to sustainable energy systems.
• Develop and articulate a definition of sustainability.
• Understand the principles of entrepreneurship and creating a sustainable small business.

CORE REQUIREMENTS: (22 HRS.)
ARCH 111L Introduction to Architectural Graphics (3)
ELEC 111 Electronic Fundamentals (4)
ENVR 111 Introduction to Sustainable Energy (3)
ENVR 112 Introduction to Sustainable Energy Technologies (3)
ENVR 113 Instrumentation and Controls Lab (3)
ENVR 115 Introduction to Water Conservation Technologies (3)
ENVR 119 General Industry Health and Safety (3)

RELATED REQUIREMENTS: (12 HRS.)
BSAD 119 Entrepreneurial — Planning and Introduction (3)
ENGL 119 Professional Communications (3)
BLDG 115 Trades Mathematics (3)
[or]
MATH 119 Applications of Mathematics for Non-science Majors (3) or higher
PHIL 258 Environmental Ethics and Sustainability (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

Students in the Sustainable Technologies programs who are required to take a First-Year Student Success course are recommended to take STEM 111

TOTAL 34 CREDITS MIN.

TEACHER CERTIFICATION PROGRAMS

School of Business, Professional Studies and Education, 505-428-1256

These programs facilitate achievement of the New Mexico Public Education Department's entry-level teacher competencies. The competencies align with the National Council for the Accreditation of Teacher Education's (NCATE) standards, recognized by the U.S. Department of Education and the Interstate New Teacher Assessment and Support Consortium (INTASC) standards. Through these certification programs, qualified individuals can complete course work in early childhood, elementary, secondary, or special education. Upon successful completion of one of the aforementioned programs and required state exams, candidates are eligible to apply for level I teaching licenses with the New Mexico Public Education Department.

Admissions Requirements:
To qualify for the Teacher Academy Certification Program, the New Mexico Public Education Department requires
the following: Bachelor’s degree and, if seeking licensure in secondary education, 30 semester hours of credit in a particular field that pertains to the licensure sought; or master’s or doctorate degree including 12 semester hours of graduate credit in a particular field that pertains to the secondary licensure area sought.

Admission to the Teacher Academy also requires:

- Passing scores on NES Essential Skills I, II, III portion of the New Mexico Teacher Assessment. For information, visit www.nmta.nesinc.com or call 413-256-2884.
- Completion of the SFCC admissions application.
- Successful completion of EDUC 201A: Orientation to the Teaching Profession and EDUC 201B: The Critically Reflective Teacher. Candidates for early childhood licensure must complete EDUC 250: ECE Profession in New Mexico.
- Completion of the Teacher Academy application packet, including official college transcripts and three professional reference forms.

Call 505-428-1256 for a packet or download general information and application packets at www.sfcc.edu/programs/teacher_education/teacher_certification.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:

- Reflect critically upon their teaching practice for continuous improvement.
- Demonstrate professionalism.
- Recognize, address, and value diversity among students and contexts.
- Demonstrate effective collaboration and communication with students, colleagues, families and community members.

CERTIFICATE IN EARLY CHILDHOOD (AGE 3-GRADE 3) TEACHER CERTIFICATION (21 hrs.) CIP: 13.1210

CORE REQUIREMENTS: (21 HRS.)
EDUC 250  ECE Profession in New Mexico (1)*
EDUC 251  Foundations of Early Childhood (2)
EDUC 252  Family and Community Collaboration (3)
EDUC 253  Curriculum Development and Learning Environments in ECE (3)
EDUC 254  Assessment and Evaluation in ECE (3)
EDUC 255  Early Literacy I: Introduction to Theory and Models (3)
EDUC 256  Early Literacy II: Development and Implementation (3)
EDUC 257L Supervised Field Experience in ECE (3)

*ECED 111 or an equivalent is a prerequisite for acceptance into the Early Childhood Program and all other courses within this program.

TOTAL 21 CREDITS

CERTIFICATE IN ELEMENTARY EDUCATION TEACHER CERTIFICATION (K-8) (21 hrs.) CIP: 13.1202

CORE REQUIREMENTS: (21 HRS.)
EDUC 201A  Orientation to the Teaching Profession (1)**
EDUC 201B  The Critically Reflective Teacher (2)**
EDUC 202  Theories of Teaching and Learning (3)
EDUC 203  Curriculum and Assessment (3)
EDUC 204  Effective Teaching (3)
EDUC 205  Fundamentals of Reading Instruction (3)
EDUC 206E Teaching Reading for the Elementary Classroom (3)
EDUC 214 Supervised Field Experience (3)

**EDUC 201A and EDUC 201B are the prerequisites for acceptance into the Elementary and Secondary Education Programs and all other courses within these programs.

TOTAL 21 CREDITS
CERTIFICATE IN
SECONDARY EDUCATION TEACHER CERTIFICATION (7-12)
(18 hrs.) CIP: 13.1205

CORE REQUIREMENTS: (18 HRS.)
EDUC 201A Orientation to the Teaching Profession (1)**
EDUC 201B The Critically Reflective Teacher (2)**
EDUC 202 Theories of Teaching and Learning (3)
EDUC 203 Curriculum and Assessment (3)
EDUC 204 Effective Teaching (3)
EDUC 206S Reading in the Content Area (3)
EDUC 214 Supervised Field Experience (3)

**EDUC 201A and EDUC 201B are the prerequisites for acceptance into the Elementary and Secondary Education Programs and all other courses within these programs.

TOTAL 18 CREDITS

CERTIFICATE IN
SPECIAL EDUCATION TEACHER CERTIFICATION (K-12)
(21 hrs.) CIP: 13.1001

CORE REQUIREMENTS: (21 HRS.)
EDUC 203 Curriculum and Assessment (3)
EDUC 204 Effective Teaching (3)
EDUC 205 Fundamentals of Reading Instruction (3)
EDUC 208 Exceptionalities and Placement (3)
EDUC 209 Evaluation and IEP Process/Documentation (3)
EDUC 213 Reading for Special Learners (3)
EDUC 214 Supervised Field Experience (3)

The following courses are prerequisites for acceptance into the special education program unless transcripts demonstrate equivalent course work:
EDUC 201A Orientation to the Teaching Profession (1)
EDUC 201B The Critically Reflective Teacher (2)
EDUC 202 Theories of Teaching and Learning (3)

TOTAL 21 CREDITS

CERTIFICATE IN
TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL) TEACHER ENDORSEMENT
(12 hrs.) CIP: 13.1401

This certificate is a 12 credit-hour program. The Teacher Endorsement Concentration facilitates achievement of the New Mexico Public Education Department TESOL competencies and provides a means for New Mexico teachers to add the TESOL Endorsement to their teaching licenses. Participants must pass the New Mexico Teacher Assessment TESOL exam before applying for the TESOL endorsement with the NMPED.

CORE REQUIREMENTS: (6 HRS.)
EDUC 260 Language Learning and Teaching (3)
EDUC 262 Teaching English to Speakers of Other Languages (3)

Teacher License Endorsement Concentration
(6 HRS.)
Any foreign language courses (6)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 12 CREDITS
CERTIFICATE IN
TRAUMATIC STRESS AIDE
(15 hrs.)
CIP: 51.1503
School of Liberal Arts, 505-428-1370
This certificate provides an educational foundation for working in the field of trauma treatment, counseling and social work. Coursework focuses on post-traumatic stress disorder, including its diagnosis and treatment, crisis intervention, coping strategies and client stabilization and on compassion fatigue, often experienced by crisis workers or witnesses of a traumatic event.

Students can earn the following degree related to this certificate:
• A.A. in Human Services

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Identify the diagnostic criteria for PTSD.
• Apply the ABC model of crisis intervention.
• Describe effective community disaster interventions.
• Identify prevention strategies for compassion fatigue.
• Synthesize the process of debriefing emergency workers.

CORE REQUIREMENTS: (9 HRS.)
HUSV 280 Compassion Fatigue and Secondary Stress Disorder (3)
HUSV 285 Post-traumatic Stress Disorder, Diagnosis and Treatment (3)
HUSV 290 Crisis Intervention, Coping Strategies and Stabilization of Clients (3)

RELATED REQUIREMENTS: (6 HRS.)
Choose two from the following:
HUSV 111 Human Services Professions (3)
HUSV 130 Group Process and Counseling (3)
HUSV 170 Loss, Bereavement and Recovery (3)
HUSV 200 Psychology of Addictive Behavior (3)
HUSV 205 Effects of Drug Abuse (3)
HUSV 210 Substance Abuse: Assessment, Evaluation and Treatment (3)
HUSV 215 Families and Substance Abuse (3)
HUSV 225 Counseling Skills for Addiction Professionals (3)
HUSV 270 Case Management (3)
HUSV 298 Human Services Internship (3)
INTR 231 American Deaf Community (3)
PSYC 125 Introduction to Counseling Professions (3)
PSYC 240 Abnormal Psychology (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.
TOTAL 15 CREDITS

CERTIFICATE IN
WATER
TREATMENT OPERATION
(27 hrs. min.)
CIP: 15.0506
School of Trades, Advanced Technologies and Sustainability, 505-428-1664
This certificate provides technical training for students interested in careers as water system operators. Courses are designed to develop and improve on-the-job skills required to operate water treatment and distribution systems. The program prepares operators for the New Mexico Environment Department water certifications.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Provide leadership in creating and maintaining safe working environments.
• Describe the function, design and installation of water treatment systems.
• Recognize wasteful practices and recommend sustainable alternatives.
• Measure and describe energy and its relationship to water operations.

CORE REQUIREMENTS: (27 HRS.)
BLDG 111 Construction Safety (3)
WATR 111 Introduction to Water Treatment and Distribution Systems (2)
WATR 112 Applied Math for Water Operators (4)
WATR 160 Applied Chemistry for Water Treatment Operators (4)
WATR 166 Microbiology for Water Treatment Operators (4)
WATR 215 Permits, Regulations and Water Resource Management (3)
WATR 260 Advanced Water Treatment Technologies (4)
WATR 290 Water Operator Certification Review (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

Students in the Sustainable Technologies programs who are required to take a First-Year Student Success course are recommended to take STEM 111.
TOTAL 27 CREDITS
CERTIFICATE IN
WEB DEVELOPMENT
(18 hrs. min.) CIP: 11.0801
School of Sciences, Health, Engineering and Math
505-428-1862

Successful completion of this certificate prepares students to design, build, and deploy dynamic websites from the user, visual front end to the technical, back end. This hands-on, workforce training certificate will aid students wishing to enter the field of web development. Students develop skills using a variety of frameworks and cutting-edge tools. Topics include client and server side languages, database-driven sites, and the Linux environment. Each student exits the program with a customized digital portfolio and experience gained from an internship.

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Apply operating system tools for system management.
• Build operating system tools.
• Use programming languages to create applications that solve problems.

CORE REQUIREMENTS: (18 HRS.)
ISCS 115 Web Computing (3)
ISCS 116 Introduction to Linux (3)
[or]
ISCS 117 Linux Certification Preparation (3)
ISCS 212 Database Fundamentals (3)
ISCS 219 Web Programming I (3)
ISCS 229 Web Programming II (3)
ISCS 298 Internship (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 13 CREDITS MIN.

CERTIFICATE IN
WELDING
(41 hrs. min.) CIP: 48.0508
School of Trades, Advanced Technologies and Sustainability, 505-428-1664

Successful completion of this certificate provides students with entry-level skills and knowledge for the welding industry today. The foundation of knowledge and skills learned will enable students to quickly adapt to employer's needs or obtain certifications in whatever welding procedure needed. Knowledge base will include Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Tungsten Gas Arc Welding (TGAW), Oxy Acetylene Welding and Cutting (OAW, OAC) and allied processes.

Students can earn the following degree related to this certificate:
• A.A.S. in Welding Technologies

PROGRAM LEARNING OUTCOMES
Upon completion of this program, students will be able to:
• Provide leadership in creating and maintaining a safe working environment.
• Select tools, equipment and materials based on characteristics and properties for necessary welding procedures.
• Demonstrate proficiency in various welding processes (oxy-acetylene, shielded metal arc, gas metal arc, flux cored arc, gas tungsten, etc.) to assure adequate weld integrity and appearance.
• Interpret blueprint welding symbols to fabricate components.
• Apply basic math skills and geometry to correctly identify and solve welding problems.

CORE REQUIREMENTS: (41 HRS. MIN.)
FACT 113 Basic Blueprint Reading (2)
WELD 111 Shielded Metal Arc Welding I (4)
WELD 112 Shielded Metal Arc Welding II (4)
WELD 115 Oxyacet Welding, Cutting and Allied Processes (3)
WELD 121 Gas Tungsten Arc Welding I (4)
WELD 122 Gas Tungsten Arc Welding II (4)
WELD 131 Gas Metal and Flux Cored Welding I (4)
WELD 132 Gas Metal and Flux Cored Welding II (4)
WELD 141 Introduction to Metallurgy (2)
WELD 211 Shielded Metal Arc Welding III (4)
WELD 221 Gas Tungsten Arc and Gas Metal Arc Welding III (3)
WELD 261 Pipe Fabrication (3)

NOTE: See First-Year Student Success Course Requirement on Page 8.

TOTAL 41 CREDITS
COURSE DESCRIPTIONS

Courses are listed in alphabetical order by general subject and in numerical order within each general subject. Courses at the first-year level are numbered 111 to 199; those at the second-year level are numbered 200 to 299. All courses at SFCC numbered 100 through 110 are developmental in content and will not be counted toward graduation requirements.

Prerequisites represent the minimum skill level necessary for success in a course. If a student has the prerequisite skills but has gained them outside the classroom, they may see a faculty adviser for permission to enroll.

Prerequisites must be completed with a grade of C or better before a student may enroll in a course that requires them. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.

A math course taken more than three years ago cannot fulfill a prerequisite for a subsequent math course unless a student can demonstrate proficiency. A math or science course taken more than five years ago cannot be used to fulfill a prerequisite for another course. Students may fulfill math prerequisites by scoring at the appropriate level on the college’s math placement test.

For college-level courses, there is an assumption of college-level reading and writing skills, whether or not prerequisites are stated for a particular course.

SAMPLE COURSE DESCRIPTION

<table>
<thead>
<tr>
<th>The course subject and number</th>
<th>The title of the course</th>
<th>The number of credits for this course</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 135</td>
<td>INTRODUCTION TO PROBABILITY AND STATISTICS</td>
<td>(3)</td>
</tr>
</tbody>
</table>

An introductory course in statistical methodology. Exploratory, robust, nonparametric and classical methods (descriptive statistics, hypothesis testing, confidence intervals, paired differences, chi-square tests, correlation, linear regression and one-way ANOVA) and the applications of probability are studied. The course includes laboratory time in which students use calculators and/or computers to work on individual or group projects.

Prerequisite: MATH 109. Offered: Summer, Fall and Spring. NMCCNS: MATH 2113.
NMGECC: Area II. Two lecture hours and two lab hours.

New Mexico Common Course System has an alpha prefix that identifies readily to the subject area. The four digits in the number represent the specific course in that subject area with each digit having significance. See page 29 for more detail.
ACCOUNTING

ACCT 111  SMALL BUSINESS ACCOUNTING  (3)
A survey of the basic accounting principles and the accounting cycle as applied to a service enterprise. Topics include common accounting entries, financial statement preparation, bank reconciliation, cash management and payroll. Offered: Fall and Spring. Three lecture hours.

ACCT 121  PRINCIPLES OF ACCOUNTING I  (4)
(FINANCIAL)
An introduction to the fundamental principles and procedures involved in recording ordinary business transactions. Topics include accounting for assets, liabilities and sole-proprietor equity. Offered: Summer, Fall and Spring. Four lecture hours.

ACCT 122  PRINCIPLES OF ACCOUNTING II  (4)
(MANAGERIAL)
A continuation of the basic accounting process introduced in Principles of Accounting I. Topics include corporations, statements of cash flow, financial statement analysis, and managerial planning and control. Prerequisite: ACCT 121. Offered: Fall and Spring. Four lecture hours.

ACCT 124  PAYROLL ACCOUNTING  (3)
A study of basic labor law, salaries and wages, and the accounting processes required in payroll accounting. Students are exposed to the tax rules, tax rates and tax reports that form the core of payroll accounting. The class includes a practice set using a popular accounting software. Prerequisite: ACCT 111 or ACCT 121. Offered: Fall and Spring. Three lecture hours.

ACCT 125  COMPUTERIZED ACCOUNTING —  (3)
QUICKBOOKS
An introduction to performing the basic accounting cycle on the computer. Topics include accounting system setup, data entry, managing receivables and payables, depreciation and financial statement preparation. Prerequisite: ACCT 111 or ACCT 121. Offered: Summer, Fall and Spring. Three lecture hours.

ACCT 140  PERSONAL INCOME TAX PREPARATION  (2)
Introduces basic tax return preparation issues and the software to complete and electronically file basic tax returns for low-income taxpayers. Corequisite: ACCT 140L. Offered: Spring. Two lecture hours.

ACCT 140L  PERSONAL TAX PREPARATION LAB  (1)
Applies current tax code to prepare individual tax returns for low-income taxpayers. Minimum of 25 hours of volunteer tax return preparation work must be performed during the spring semester. May be taken twice for credit with permission. Graded as Pass/Fail. Corequisite: ACCT 140. Offered: Spring. Two lab hours.

ACCT 202  GOVERNMENTAL ACCOUNTING  (4)
The theory and practice of accounting for government and other nonprofit organizations. Topics include fund accounting, financial reporting and accounting for nonprofit entities. Prerequisite: ACCT 122. Offered: Occasionally. Four lecture hours.

ACCT 221  INTERMEDIATE ACCOUNTING  (4)
An in-depth analysis of fundamental accounting theory, the income statement, present and future value and the asset and current-liability sections of the balance sheet. Prerequisite: ACCT 122. Offered: Fall and Spring. Four lecture hour.

ADOBE CONSTRUCTION

ADOB 111  ADOBE CONSTRUCTION BASICS  (3)
History and overview of adobe construction techniques. Topics include monumental structures and settlements throughout the world and adobe practices that meet modern building codes. Students will examine construction and design techniques from foundation to roof. Students will make adobe bricks, build walls and construct other building components. Offered: Fall. Two lecture hours, two lab hours.

ADOB 112  ADOBE WALL CONSTRUCTION  (3)
An introduction to exterior and interior adobe wall construction techniques. Students will learn the requirements for wall thickness, height and foundation construction based on the New Mexico Earthen Building Code. Topics include the installation of windows and doors and lintels over openings, the construction of bond beams at the top of walls, methods for the attachment of roof structural members and design and construction of buttresses and arches. Offered: Fall. Two lecture hours, two lab hours.

ADOB 113  PASSIVE SOLAR ADOBE DESIGN  (2)
The integration of passive solar heating systems into the design of adobe homes. Topics include direct gain systems, Trombe Wall (indirect gain) systems and greenhouses/sunspaces. Students will learn the advantages and disadvantages of each system in order to choose among
them for use in different parts of a house or commercial structure. Students will calculate the proper sizing of systems as well as auxiliary back-up systems. Offered: Occasionally. Two lecture hours.

**ADOB 114  FLOOR DESIGN AND CONSTRUCTION (3)**
Traditional and modern Southwest floors and floor coverings. Topics include mud, brick, stone, concrete, tile, wood and sheet-goods flooring materials and applications. Students will design and build floor mock-ups. Suspended floors over crawl spaces or basements are covered as well as the sizing of joists and deck materials. Radiant floor heating systems are also discussed. Offered: Occasionally. Two lecture hours, two lab hours.

**ADOB 115  FINISH PRACTICES (3)**
Traditional and modern finishes used in the building of the exteriors and interiors of buildings of the Southwest. Topics include treatments of exposed adobe bricks; mud plaster by hand and trowel; plasters made with stabilized mud, lime, gypsum, cement and elastomerics. Wall insulation, vapor barriers, moisture protection, and the lath systems will be examined. The treatment of vigas, posts, corbels, exposed lintels and wood trim are also covered. Offered: Occasionally. Two lecture hours, two lab hours.

**ADOB 116  ROOF DESIGN AND CONSTRUCTION (3)**
Traditional Southwest designs of pitched and flat roofs on adobe buildings. Topics cover roofing materials, structure, and plans, including vigas, beams, joists, rafters, trusses. Ceiling materials, including latillas, rough boards, tongue-and-groove, are discussed along with details such as insulation, deck sheathing, canales and parapets. Two actual or mock-up roofs will be built. Offered: Occasionally. Two lecture hours, two lab hours.

**ADOB 118  PRESERVATION PRACTICES (3)**
The techniques of preservation, conservation, stabilization, restoration, remodeling, modernization and repurposing of adobe buildings. Consideration is also given to constructing additions to existing buildings. Topics include surveying and assessing existing buildings and the development of preservation plans. The US Secretary of the Interior’s Standards for Historic Preservation are discussed along with the New Mexico Code for Historical Earthen Buildings. Safety around old buildings is emphasized. Offered: Occasionally. Three lecture hours.

**ADOB 122  RAMMED EARTH CONSTRUCTION (2)**
An introduction to rammed earth construction techniques from around the world. This course examines various rammed earth construction methods including the use of small and large forms and manual and engine power. Topics also include the design of rammed earth walls that accommodate windows, doors, electrical, plumbing and heating ventilation and air conditioning (HVAC) systems. Offered: Occasionally. Two lecture hours.

**ADOB 198  ADOBE BUILDING PRACTICUM (1-3)**
Applied adobe experience. Practicum activities may take place on campus, on the worksite of an adobe building project, on an adobe preservation site or working with an adobe related non-profit or government entity. Permission required. Offered: Summer, Fall and Spring. One-two lecture hours.

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**ALTERNATIVE FUELS**

**ALTF 121  BIOFUELS I (4)**
Surveys the range of feedstocks that can be used to make biofuels and bioenergy. Students will learn how to safely make ethanol and biodiesel from plants and vegetable oil sources and will focus on the biology and processing of algae using several types of bioreactors. Students will prospect for local algae strains and learn how to use various monitoring and analytical tools. This class will tour commercial biofuels and algae operations in New Mexico. Prerequisite: ENVR 112. Offered: Fall and Spring. Three lecture hours, two lab hours.

**ALTF 161  INTRODUCTION TO ALGAE CULTIVATION (3)**
An introduction to algal biology and sustainable cultivation. Students learn media preparation, sterile technique, culture inoculation, and microscopy. Students demonstrate proficiency in scale-up from isolated strains to 10-liter photobioreactors. Standard monitoring equipment is used for the analysis of water and media chemistry, monitoring algal growth rates, and troubleshooting. Data collection, record keeping, and safety are emphasized throughout the course. Offered: Fall. Two lecture hours, two lab hours.

**ALTF 221  BIOFUELS II (4)**
Provides hands-on experience in biofuels production. Students will learn the various methods of manufacturing biofuels on a commercial scale. Topics include advanced production technologies, feedstock or algae species selection and pretreatment, quality control, energy balance and safety considerations. The course will explore various economic models for first, second and third generation biofuels and will examine the range of potential commercial algae products including fuel, food, nutraceuticals and other co-products. Students will work
with advanced monitoring, quality control equipment and data acquisition and analysis. Prerequisite: ALTF 121. Offered: Spring. Three lecture hours, two lab hours.

**ALTF 261  ADVANCED ALGAE CULTIVATION (3)**
A continuation of ALTF 161. Students scale up algae production from 10-Liter photobioreactors to large scale (1000 – 50,000 liter) algae production systems. Mass balance, carbon and water footprints, and system maintenance are covered. Students design a large-scale algalculture facility and present the project as a business plan. Advanced analytical methods and culturing techniques are presented throughout the course along with data collection, record keeping, and lab safety. Prerequisite: ALTF 161. Offered: Spring. Two lecture hours, two lab hours.

**ALTF 262  ALGAE HARVESTING (3)**
An applied course in the harvesting of algae biomass, analysis of product, and effective storage of product. Mechanical, chemical, autoflocculation, dissolved air flotation, and ultrasound methods are presented. Matching appropriate technology to the harvesting of different algae species is emphasized. Students are expected to develop a model system for harvesting algae with a competent return-on-investment analysis. Advanced analytical methods and harvesting techniques are presented throughout the course along with data collection, record keeping, and lab safety. Prerequisite: ALTF 261. Offered: Summer. Two lecture hours, two lab hours.

**ALTF 268  ALGAE CULTURE CAPSTONE (3)**
A course to provide students with opportunities to enlarge and complete their learning experience by spending time in a real working environment and/or through experiments of the student's design. Students can tailor the learning experience based upon individual goals through research projects and experimentation, assisting with laboratory experiments, and daily algalculture operations. Students must have completed a significant portion of core requirements to be eligible for this course. Offered: Occasionally. Three lecture hours.

**ALTF 298  BIOFUELS INTERNSHIP (1-3)**
Provides students with an opportunity to enlarge and complete their learning experience by spending time in a real working environment. Students much have completed a significant portion of core requirements to be eligible for this course. May be taken twice for a degree or certificate credit. Graded as Pass/Fail. Permission required. Prerequisite: ALTF 121. One-three lecture hours.

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**AMERICAN HEART ASSOCIATION**

**AHAC 150  HEARTSAVER FIRST AID AND CPR (.5)**
Heartsaver CPR and First Aid is targeted at non-medical personnel, people who simply want to learn life-saving skills, and individuals who may be called upon in the workplace to work on a safety or emergency response team. This is a community-friendly approach to safety, CPR and first aid. Offered: Summer, Fall and Spring. Half a lecture hour.

**AHAC 151  BASIC LIFE SUPPORT FOR HEALTHCARE PROVIDERS**
This class covers life-saving methods for health care professionals that include adult, infant, and child resuscitation, prevention of disease transmission and the use of a bag-valve mask. Upon successful completion of this course, students will receive BLS-CPR certification through the American Heart Association. Offered: Summer, Fall and Spring. Half a lecture hour.

**AHAC 280  BASIC LIFE SUPPORT HEALTHCARE PROVIDER INSTRUCTOR**
This course is for the certified health care provider who has mastered Basic Life Support knowledge and wishes to become a certified BLS Instructor. This course will provide the knowledge, skills and techniques to conduct a standard BLS/CPR course. Current BLS Healthcare Provider or CPR certification required. Permission required. Offered: Occasionally. Half a lecture hour.

**AHAC 281  ADVANCED CARDIAC LIFE SUPPORT (1)**
This course is for the currently certified health care provider who has mastered Advanced Cardiac Life Support (ACLS). Knowledge and skills required to evaluate and manage the first ten minutes of an adult ventricular fibrillation and tachycardia (VF/VT) arrest are introduced and practiced. The management of the ten core ACLS cases is incorporated and tested. Current health care provider certification required. Permission required. Offered: Occasionally. One lecture hour.

**AHAC 284  PEDIATRIC ADVANCED LIFE SUPPORT**
This course instructs health care providers in the management and care of pediatric emergencies. Current health care provider and CPR certifications required. Permission required. Offered: Occasionally. One lecture hour.
**AMERICAN SIGN LANGUAGE**

* AMSL 111 AMERICAN SIGN LANGUAGE I (4)
  An introductory course in American Sign Language (ASL) for the student with little or no previous experience with ASL. Class work includes videotext viewing, video production, group interaction preparing, organizing and signing a variety of situations using ASL. This course exposes students to Deaf culture and history and includes a required language lab component designed to accelerate, reinforce and support the study of ASL. The lab incorporates videos, functional-usage drills, open-conversation drills and open signing sessions. Offered: Summer, Fall and Spring. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours, two lab hours.

AMSL 112 AMERICAN SIGN LANGUAGE II (4)
A continuation of American Sign Language (ASL) I. Emphasis is on increasing acquisition of receptive and expressive sign skills. Class work includes videotext viewing, video production, and group interaction, preparing, organizing and signing a variety of situations using ASL and further exposes students to Deaf culture and history, and includes a required language lab component designed to accelerate, reinforce and support the study of ASL. The lab incorporates videos, functional-usage drills, open-conversation drills and open signing sessions. Prerequisite: AMSL 111. Offered: Summer, Fall and Spring. Three lecture hours, two lab hours.

AMSL 131 INTRODUCTION TO DEAF STUDIES (3)
Provides an overview of the historical, linguistic, cultural and sociological influences contributing to life for persons who are deaf in America. Students explore the European influences that have led to the development of American Sign Language and current educational philosophies. Other topics include etiologies, demographics and communication methods. Technology, organizations, and relevant legislation and trends are introduced. Offered: Spring. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

AMSL 135 BASIC AMERICAN SIGN LANGUAGE LINGUISTICS (3)
An introduction to grammar and linguistic systems of American Sign Language (ASL). The course will focus on proper usage of ASL within Deaf culture and will also expose students to phonology, morphology, lexicon, syntax, discourse, and language acquisition, aspects of using sign language, and how visual languages differ from and are similar to spoken language. Prerequisite: AMSL 112. Offered: Fall. Three lecture hours.

AMSL 211 AMERICAN SIGN LANGUAGE III (4)
An intermediate course in American Sign Language that expands expressive and receptive skills with use of ASL in conversation. The course provides a grammatical reinforcement of skills acquired in AMSL 112 and continues to expose students to Deaf Culture’s literature through video narratives, humor and poetry. Class work includes videotext viewing, video production, and group interaction, preparing, organizing and signing a variety of situations using ASL. This course also has a required language lab component designed to accelerate, reinforce and support the study program of ASL. The lab incorporates videos, functional-usage drills, open-conversation drills and open signing sessions. Prerequisite: AMSL 112. Offered: Fall. Three lecture hours, two lab hours.

AMSL 212 AMERICAN SIGN LANGUAGE IV (4)
A continuation of American Sign Language (ASL) III. Emphasis is on increasing knowledge of ASL grammatical structures and on reinforcement of skills. The course further exposes students to Deaf culture’s literature through narratives, humor and poetry. Class work includes videotext viewing, video production, and group interaction, preparing, organizing and signing a variety of situations using ASL. The course also includes a required language lab component designed to accelerate, reinforce and support the study program of ASL. The lab incorporates videos, functional-usage drills, open-conversation drills and open signing sessions. Prerequisite: AMSL 211. Offered: Spring. Three lecture hours, two lab hours.

AMSL 215 FINGERSPELLING AND NUMBERS (3)
Presents students with a general knowledge of various techniques of hand fingerspelling and number signing skills. Concentration on receptive and expressive skills along with focus on methods, theory, and skill development including speed, dexterity, clarity, and loan signs. Also includes advanced use of numbers, prefixes, suffixes and polysyllabic words. Prerequisite: AMSL 211. Offered: Spring. Three lecture hours.

AMSL 216 AMERICAN SIGN LANGUAGE CLASSIFIERS (3)
An advanced course in the American Sign Language (ASL)
morphemic system known as classifiers. The course is for advanced signers or interpreters with extensive interpretation experience who wish to increase classifier competence. Instruction involves a systematic and sequential approach to teaching classifiers. Students learn how to create mental pictures of what needs to be signed during interpretation by developing the basic building blocks of successfully signed narratives with classifiers. The course enhances signers’ existing vocabulary and grammar with classifiers to assist in their ability to conjure up mental representations of narratives effectively in three-dimensional images. Prerequisite: AMSL 211. Offered: Spring. Two lecture hours, two lab hours.

AMSL 217 ADVANCED FINGERSPELLING, NUMBERS AND CLASSIFIERS

Further studies in advanced fingerspelling, numbers, classifiers, and non-manual grammatical signals, including development of techniques with concentration on receptive and expressive skills. Additionally, the class focuses on the use of face, eyes, and head to convey grammatical information and continues work on methods, theory, and skill development with signs. Prerequisites: AMSL 215 and AMSL 216. Offered: Fall. Three lecture hours, two lab hours.

ANTHROPOLOGY

* ANTH 112 THE NATURE OF CULTURE (3)
An introduction to the field of cultural anthropology. Students explore the anthropological study of cultures and the diversity of cultural practices throughout the world. The worldwide diversity of language, social organization, marriage and family patterns, economics, religion and values are explored in music, visual media and printed internet texts. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. NMCCNS: ANTH 2113. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

* ANTH 207 CULTURES OF THE SOUTHWEST (3)
A study of the contemporary cultural and ethnic groups of the Southwest. Students explore the cultural and social patterns of American Indian, Hispanic and Anglo-American groups and their historical relationships. Prerequisite: ENGL 109. Offered: Occasionally. NMCCNS: ANTH 2313. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

ANTH 248 INDIGENOUS PEOPLES OF NORTH AMERICA (3)
An ethno-historical survey of North American Indian cultures. Major culture areas and selected case studies examine regional indigenous cultures of North America. Emphasis is on traditional cultures, the impact of European contact, contemporary problems and cultural issues. Cross-listed as HIST 248. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

ANTH 250 INDIGENOUS PEOPLES OF THE SOUTHWEST (3)
An ethno-historical survey of American Indian indigenous cultures of the southwestern United States and northwestern Mexico. The survey emphasizes traditional cultures and the impact of more than four centuries of Euro-American cultural contact. Cross-listed as HIST 250. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

ANTH 252 ANTHROPOLOGY OF FOOD (3)
This course explores the complex interrelationships among people, culture, society and food. Students will examine the connection between food and cultural practices from many perspectives, including historical, societal, anthropological, culinary and scientific. Prerequisite: ENGL 109. Offered: Spring. Three lecture hours.

ANTH 262 HUMAN EVOLUTIONARY BIOLOGY (3)
A study of the basic principles of evolution applied to the human species. This class explores the principles of heredity and organic evolution, the principles and methods of biological anthropology, the evolutionary context and fossil record of primate and human emergence, the characteristics and behavior of nonhuman primates, and the origins and significance of modern human biological variation. Cross-listed as BIOL 262. Prerequisite: ENGL 109. Corequisite: ANTH 262L. Offered: Spring. Three lecture hours.

ANTH 262L HUMAN EVOLUTIONARY BIOLOGY LAB (1)
A practical experience in the study and analysis of ancient and modern humans in comparison with other primates. Principles of human genetics, primate identification and taxonomic analysis, anthropometry, human osteology and introductory anthropological forensics are examined in a laboratory setting. Cross-listed as BIOL 262L. Prerequisite: ENGL 109. Corequisite: ANTH 262. Offered: Spring. Two lab hours.

* Approved by the NM Higher Education Department for transfer and application to general education requirements in any public two- or four-year educational institution in New Mexico. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year school
**ARABIC**

* **ARBC 111** ARABIC I (4)
An introduction to the Arabic language, with focus on reading and writing Arabic script, pronunciation and fundamentals of grammar and conversation. This course is intended for students with little or no previous exposure to written or spoken Arabic. Corequisite: ARBC111L. Offered: Fall. Four lecture hours.

* **ARBC 111L** ARABIC I LAB (1)
A required language lab designed to accelerate, reinforce and support concepts learned in ARBC 111. The lab may utilize audio- and videotapes, computer programs, conversation drills and open-dialogue sessions. The student masters pronunciation and conversation skills through individualized attention from the instructor and tutors. Graded as Pass/Fail. Corequisite: ARBC 111. Offered: Fall. Two lab hours.

**ARBC 112** ARABIC II (4)
A continuation of Arabic I, with focus on reading and writing Arabic script, pronunciation and fundamentals of grammar and conversation. This course is intended for students with previous exposure to written or spoken Arabic. Prerequisite: ARBC 111. Corequisite: ARBC 112L. Offered: Spring. Four lecture hours.

**ARBC 112L** ARABIC II LAB (1)
A required language lab designed to accelerate, reinforce and support concepts learned in ARBC 112. The lab may utilize audio- and videotapes, computer programs, conversation drills and open-dialogue sessions. Students master pronunciation and conversation skills through individualized attention from the instructor and tutors. Graded as Pass/Fail. Corequisite: ARBC 112. Offered: Spring. Two lab hours.

**ARBC 121** ARABIC III (4)
A continuation of Arabic II, with focus on pronunciation and Arabic grammar and conversation. This course is intended for students with previous exposure to written or spoken Arabic. Prerequisite: ARBC 112. Offered: Occasionally. Four lecture hours.

**ARBC 211L** ARABIC III LAB (1)
A required language lab designed to accelerate, reinforce and support concepts learned in ARBC 211. The lab may utilize audio- and videotapes, computer programs, conversation drills and open-dialogue sessions. Students master pronunciation and conversation skills through individualized attention from teacher and tutors. Graded as Pass/Fail. Corequisite: ARBC 211. Offered: Occasionally. Two lab hours.

**ARCHITECTURE**

**ARCH 111L** INTRODUCTION TO ARCHITECTURAL GRAPHICS (3)
Introduction to manual and digital drawing as well as modeling techniques for architectural and interior design. Students will learn how to represent composition, form and space by orthographic drawing, paraline and perspective views, and freehand sketching. Three-dimensional model building techniques will also be introduced. Offered: Fall. Six lab hours.

**ARCH 112L** BUILDING MATERIALS AND METHODS (3)
An examination of common building systems and subsystems. This includes: structural materials, thermal and moisture protection, roofing, glazing, finish systems, and equipment systems that are in common use within the industry. Offered: Fall. Six lab hours.

**ARCH 115L** DESIGN FUNDAMENTALS (3)
Introduces fundamental principles and processes of two-, three-, and four-dimensional design. Design aesthetics, perception, technique, composition, evaluation of materials and methods, practicing design methodologies, exploring design principles and theories, and graphic authorship are explored through various types of assignments. Offered: Fall. Six lab hours.
ARCH 117L  TECHNICAL DOCUMENTATION (3)
WITH AUTOCAD I
An introduction to basic computer-aided drafting concepts using AutoCAD. Students will learn drafting techniques that are in common use within the industry. Emphasis is placed on drawing setup, creating and modifying geometry, storing and retrieving files, placing, rotating, and scaling objects, adding text and dimensions, using layers, creating blocks, and interpreting and constructing plan, elevation, and section views. Offered: Fall and Spring. Six lab hours.

ARCH 120L  BUILDING INFORMATION MODELING WITH REVIT I
Introduction to Revit, Building Information Modeling (BIM), fundamental concepts. Students learn how to place, manipulate, and create intelligent building components that are fully parametric. In Revit, students create and manage various views, manage and place annotative objects, create construction documents, and use non-native files to create 3-D site information. This course will also demonstrate how BIM is becoming an industry standard due to its ability to connect architects, interior designers, consultants, and contractors to create beautiful, functional, and sustainable buildings. Offered: Spring. Six lab hours.

ARCH 123L  INTRODUCTION TO ARCHITECTURE (3)
Provides students with the tools and vocabulary of architectural design in order to analyze, interpret, and discuss design and the environment. Lectures and assignments introduce students to elements, principles and theories of architecture through their social, historical, and technical determinants. The course provides an introduction to the design profession. Offered: Fall. Six lab hours.

ARCH 126L  BUILDING INFORMATION MODELING WITH ARCHICAD I
Introduction to ArchiCAD (Building Information Modeling) (BIM) fundamental concepts. Topics will include how to place, manipulate, and create intelligent building components that are fully parametric, create and manage various 2-D and 3-D views, create and manage building component content, create construction documents, and create site and terrain models. Prerequisite: ARCH 120L. Offered: Fall. Six lab hours.

ARCH 128L  INTERIOR DESIGN I (3)
An introduction to the basic principles of interior design: materials, lighting, color, space planning, and sustainable design. Students will integrate these basic principles into project based assignments. Offered: Spring. Six lab hours.

ARCH 129L  SUSTAINABLE DESIGN STUDIO (3)
Introduction to sustainable design concepts. Lectures and assignments will present the framework for creative analysis, including systems thinking and synergistic integration of the three pillars of sustainability, environments, equity, and economy, and their relationship to building systems. Offered: Spring. Six lab hours.

ARCH 130L  BUILDING INFORMATION MODELING WITH REVIT II
Focuses on the more advanced operations of Revit, Building Information Modeling (BIM). Topics include how to place, manipulate, and create intelligent building components that are fully parametric, create and manage various 2-D and 3-D views, create and manage building component content, create construction documents, and create site and terrain models. Prerequisite: ARCH120. Offered: Fall. Six lab hours.

ARCH 132L  BUILDING INFORMATION MODELING WITH ARCHICAD II
Focuses on the more advanced operations of ArchiCAD, a type of Building Information Modeling (BIM). Topics include how to place, manipulate, and create intelligent building components that are fully parametric, create and manage various 2-D and 3-D views, create and manage building component content, create construction documents, and create site and terrain models. Prerequisite: ARCH 126L. Offered: Fall. Six lab hours.

ARCH 135L  TECHNICAL DOCUMENTATION (3)
WITH AUTOCAD II
Expands on the introduction to computer-aided drafting concepts using AutoCAD. Emphasis is placed on content management, creating blocks, and managing external references, annotation objects, and CAD standards. Students work with non-native imported objects, advanced modify commands, and expanding on the creation and analysis of plan, elevation, and section views. Prerequisite: ARCH 117L. Offered: Fall. Six lab hours.

ARCH 138L  INTERIOR DESIGN II (3)
An expansion on the principles of interior design: materials, lighting, color theory, space planning, and sustainable design. Students deepen their understanding of these principles and apply them to project-based assignments, working in a collaborative environment. Prerequisite: ARCH 128L. Offered: Fall. Three lecture hours.
ARCH 139  SKETCHING WORKSHOP  (1)
An introduction to sketching strategies and techniques using various media through instructor demonstration, experimentation, and coaching. Students first meet in the studio and then meet on location to practice sketching and review and assess together while enjoying the sights and sounds of Santa Fe. Students plan and prepare for a group gallery show/exhibit as the last meeting. Offered: Fall. Two lab hours.

ARCH 229  COMMERCIAL ENVIRONMENTAL DESIGN  (3)
Introduction to commercial space design. This course will include space planning, color selections, textile and furniture selection, lighting requirements, building materials and methods, and building codes for a commercial design project. Prerequisite: ARCH 111L. Corequisite: ARCH 123L or ARCH 128L. Offered: Spring. Three lecture hours.

ARTS

ARTS 111  ARTS AND DESIGN SURVEY  (3)
An introduction to disciplines within arts and design encompassing 2-Dimensional and 3-Dimensional studies. Projects will be based on a common conceptual theme for the semester. Students will gain a fundamental understanding of issues of aesthetics, innovation, critical interpretation and collaboration central to arts and design studies. Discussions and assigned readings will provide a critical overview of historical and cross-cultural examples. Offered: Occasionally. One lecture hour, four lab hours.

ARTS 112  EXPLORE ARTS AND DESIGN  (3)
Hands-on introduction to many aspects of art careers and disciplines including two and three-dimensional compositional fundamentals, and entrepreneurship. Students will gain a fundamental understanding of issues of aesthetics, innovation, critical interpretation, and collaboration which form the basis of arts and design studies. Central to the class will be a collaborative exhibition featuring students and programs from northern New Mexico in one or more of the many SFCC exhibition spaces. Offered: Occasionally. Two lecture hours, two lab hours.

ARTS 113L  TWO-DIMENSIONAL DESIGN  (3)
Introduction to the fundamentals of two-dimensional composition, basic color theory, elements of dynamic composition, vocabulary of visual arts and design, and development of visual conceptual skills. A variety of materials and techniques will be employed. Offered: Occasionally. Six lab hours.

ARTS 116L  THREE-DIMENSIONAL DESIGN  (3)
This introductory studio course covers the basic formal (aesthetic), spatial and physical aspects of 3-D form as they can be applied to sculptural and functional design. Students learn simple techniques to explore structure, mass, volume, scale, surface, form and function. Various media such as paper, wood, clay and/or metal may be used. Offered: Fall and Spring. Six lab hours.

ARTS 120L  COLOR THEORY  (3)
A perceptual and experiential in-depth study of global color theory and its application for artists and designers. Students explore the use of color in fine art, fashion, and the commercial design fields through the study of the principals of color interaction. Students work with subtractive and additive color models. The psychological effects and popular understanding of color are discussed. Color usage and meaning in different cultural, social and historic contexts are introduced. Offered: Occasionally. Six lab hours.

ARTS 125L  ART PRACTICES I  (3)
An introductory interdisciplinary course exploring the processes, ideas and diverse media of visual arts. The course addresses thematic concepts that are central to the nature of art making today. Art historical context and reference is used to give students a sense of the breadth and depth of artistic practice and inquiry. Students will investigate the use of LIGHT, FRAME and MARK, as well as the elements and principles of design. The course includes an introduction to color theory and to a variety of materials. Offered: Fall and Spring. Six lab hours.

ARTS 138  COLOR AND CULTURE  (3)
Color usage and meaning in different cultural, social and historic context. Use color effectively as an extraordinary visual and sensual stimulus, while gaining a fundamental understanding of color and culture. This course will focus on the potential of color to effect mood, product sales, and home environments, within diverse cultural contexts. Offered: Occasionally. Three lecture hours.

ARTS 151L  CREATIVE EXPRESSION  (3)
This course provides students with the opportunity to explore and discover their creativity through various techniques and media such as writing, sculpture, collage and printmaking. The course is designed for beginners as well as for experienced artists and writers. Offered: Fall and Spring. Six lab hours.
ARTS 185L TRADE MART FIELD TRIP (3)
Students tour the art, apparel and interior design markets to learn about the wholesale industry, marketing and points of distribution. Classes travel to trade marts and art markets such as Denver, Dallas, Chicago, Las Vegas, New York, Los Angeles and/or Europe. Due to limited space, preference is given to School of Arts and Design students. Permission required. Offered: Fall and Spring. Six lab hours.

ARTS 200 ARTIST AS ENTREPRENEUR (3)
Introduction to the process of creating marketable artwork and the development of entrepreneurial activities for the studio artist. Students will work with their own work, both pre-existing as well as new work produced in class, and its application to a variety of products, using a range of art media. Very basic business concepts for the start-up and promotion of an art entrepreneur activity and the sales of studio work are also discussed. Projects include display, exhibition, and related sales. Students may incur additional costs for some types of production. Offered: Occasionally. Two lecture hours, two lab hours.

ARTS 280 BUSINESS PRACTICES FOR DESIGNERS (3)
Principles and procedures for establishing a profitable design business. Students are trained to create an actual or theoretical business, including business formations, product design and costing, insurance and ethical practices. The course teaches students to identify and research E-commerce, trade and wholesale markets. Sustainable business practices will be covered. Offered: Occasionally. Three lecture hours.

ARTS 288 ARTS AND DESIGN SEMINAR (3)
A study of issues related to a discipline within the arts and/or design. The theme of the course may vary each time the course is offered. Students are challenged with a range of viewpoints related to the theme of the course. Aspects of the arts and/or design that create a bridge to other disciplines such as science, psychology, or philosophy are also a focus of this course. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

ARTS 294L ARTS AND DESIGN ADVANCED PROJECTS (1-5)
An in-depth forum to analyze aesthetic and conceptual issues relevant to each individual artist. Offered in sections per program area, the course provides a focused environment for students to work on advanced projects in their discipline. Emphasis is placed on the realization of each student’s unique vision and completing project(s) in arts and design. May be taken twice for degree or certificate credit. Permission required. Offered: Occasionally. Two-ten lab hours.

ARTS 295 STUDIO PRACTICE (2-3)
Intensive group and individual critique and discussion of studio work. The emphasis of this course is the interaction with peers across disciplines. Students are expected to be engaged in a cohesive and directed body of work and to be actively working towards completion of a degree or certificate in Arts, Design and Media Arts. Individual student studios are available for rental for the semester. Satisfactory class participation is required in order to maintain access to a student studio. May be taken once for credit and may be taken three times within an area of focus. Permission required. Offered: Fall and Spring. Two-three lecture hours, two-four lab hours.

ARTS 296 ARTS DESIGN PORTFOLIO (3)
Capstone course that prepares the degree or certificate seeking Arts and Design student for entry into a creative career. The class includes critique and development of the student’s work as well as the creation of resume, cover letter, artist statement, biography, press releases, portfolio development and presentation skills. The final project is a student submission of a portfolio and presentation of their work and the issues involved in its creation. Permission required. Offered: Occasionally. Two lecture hours, two lab hours.

ARTS 298 ART AND DESIGN INTERNSHIP (1-6)
On-the-job experience in the arts and design industry, including local galleries, non-profit arts centers, visual and performing arts environments, museums, youth organizations, and design and art studios. This course provides emerging artists and career-oriented students with college credit while being immersed in the creative occupation of their choosing. May be taken for up to six hours. Permission required. Offered: Summer, Fall and Spring. One-six lecture hours.

ART HISTORY

AHST 150 THE HISTORY OF GRAFFITI: FROM Glyph TO Fraff (3)
A survey of the origins and growth of cultural markings in the forms of imagery and language. Topics will include: the origins of the term graffiti, a survey of graffiti as cultural markings from earliest art to contemporary expressions, the reasons to make such markings, and the social context in which graffiti is created. Students will photograph examples of rock art and contemporary graffiti in their communities. Offered online only. Offered: Occasionally. Three lecture hours.
AHST 201  ART HISTORY I  (3)
Art History I is a survey of the visual arts of painting, sculpture and architecture of the Western world from the period of prehistoric times, through the art of the ancient Near East, Egyptian art, Aegean art, Greek art, Etruscan art, Roman art, Early Christian and Byzantine art, Islamic art, early Medieval art, Romanesque art, and ending with Gothic art of the 1300s. The course will describe the various periods and styles in art as they relate to the historical settings during which the works were created. Emphasis will be placed on the relationship of art to political, social, spiritual, intellectual, and cultural movements that effect their creation and development. May be taken twice for degree or certificate credit. Prerequisite: ENGL 109. Offered: Occasionally. NMCCNS: ARTS 2113. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

AHST 202  ART HISTORY II  (3)
A survey of the visual arts of painting, sculpture and architecture from the late Gothic period of the 1300s through the Renaissance, Baroque, Rococo, Neo-Classical, and Romantic periods and covering the movements in art of the 19th and 20th centuries. The course will describe the various periods in the visual arts as they relate to the historical settings during which the works were created and emphasis will be on the relationship of art to political, social, spiritual, intellectual and cultural movements that effect their development. May be taken twice for degree or certificate credit. Prerequisite: ENGL 109 and AHST 201. Offered: Occasionally. NMCCNS: ANTH 2123. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

AHST 203  HISTORY OF WOMEN ARTISTS: RENAISSANCE TO 21ST CENTURY  (3)
The first part of the course focuses on the little-known history of professional women artists who began to emerge in the Renaissance era and continued to rise to prominence in the 17th, 18th and 19th centuries. The second half of the course consists of in-depth studies of women artists whose visions have significantly helped to shape the direction of art in the 20th century and into the 21st. A series of visiting-artist presentations will also be part of a diverse curriculum comprising analysis of various readings about women artists, visual material, web site investigations of contemporary projects and class discussions of the evolving position of women within the historical continuum of art. May be taken twice for degree or certificate credit. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

AHST 204  MODERN ART  (3)
An overview of European and American modern painting, sculpture, and architecture from the mid-19th century through World War II. The major movements include Romanticism, Realism, Impressionism, Post-Impressionism, Fauvism, Art Nouveau, Abstraction, Expressionism, Cubism, Dada, Surrealism, Futurism, Constructivism, Bauhaus, and others. The course will describe the various movements in art as they relate to the historical settings during which the works were created. Emphasis will be placed on the relationship of art to the political, social, spiritual, intellectual, and cultural climate as it effects their creation and development. May be taken twice for degree or certificate credit. Prerequisite: ENGL 109. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

AHST 207  CONTEMPORARY ART  (3)
This course is a survey of the movements in European and American painting, sculpture, and architecture from the second half of the 20th century to contemporary times. The course will begin with an explanation of changes in European and American culture as a direct result of global conflict and the effects of these changes on movements in art. The main focus of the course however will be the postmodern era and its new genres, such as performance art, installation art, and the impact of multiculturalism, the feminist movement, and new technologies on the visual arts and culture. May be taken twice for degree or certificate credit. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

AHST 208  19TH AND 20TH CENTURY HISTORY OF PHOTOGRAPHY  (3)
Covers the history of photography from its discovery until the 1980s. The medium of photography is researched and discussed in relationship to its practitioners and movements in a social and historical context. Some of the many aspects of photography that are explored include aesthetic, documentary, street, staged, altered and commercial. This course emphasizes photography within and outside mainstream art movements. Site-specific works, multi-material approaches and new digital technologies are also addressed. Prerequisite: ENGL 109. Offered: Fall. Three lecture hours.

AHST 215  ARTISTIC TRADITIONS OF THE SOUTHWEST  (3)
This course examines the major artistic traditions and their historical bases in the area’s many cultures, from prehistoric times of the Southwest to the present. Through a combined anthropological and art history approach, slide lectures are supplemented by videos, fieldwork and visits to museums and art studios. May be taken twice for degree or certificate credit. Offered: Occasionally. Three lecture hours.
AHST 235  STUDY ABROAD: IMAGES AND INSIGHTS  (3)
A study abroad class in which students visit ancient sites in Greece. The influence of the classical Greek archetypes and their mythic patterns on human experience and behavior will be studied. The powerful inner forces of the archetypes personified by Greek gods, goddesses and heroes will be explored. The Archaic, Classical and Hellenistic images of the gods, goddesses, heroes and mythological stories as they are represented on architecture and in sculpture and painting will be examined from an art historical perspective. Art from the Byzantine period including Christian archetypal imagery in the form of icon painting will be introduced in both a historical and contemporary context. Students will be responsible for additional costs for this course, which will include airfare, travel costs while abroad, hotel, food and miscellaneous expenditures. Prerequisite: PSYC 111 or AHST 201 and permission. Offered: Occasionally. Three lecture hours.

ASTRONOMY

* ASTR 111 INTRODUCTION TO ASTRONOMY  (4)
A general introduction to the concepts of modern-day astronomy such as classic descriptive astronomy, geocentric to heliocentric models of the universe, light and electromagnetic spectra, optical telescopes, solar system and comparative planetology, formation and evolution of the sun and the stars, Milky Way galaxy, cosmology and the expansion of the universe and extraterrestrial life. Prerequisites: ENGL 109 and MATH 101. Offered: Summer, Fall and Spring. NMCCNS: ASTR 1113. NMGECC: Area III — Sciences. Three lecture hours, three lab hours.

AUTOMOTIVE TECHNOLOGY

ATEC 111L INTRODUCTION TO AUTOMOTIVE  (3)
Introduces the basic theories of operation for each automotive system and the diagnostic, testing, and repair procedures of the automobile. Fundamental skills and maintenance are addressed, as well as the application of the theory behind each automotive system. New and proposed strategies in engine fuels and vehicle power systems, an overview of current undercarriage systems technologies, and information on alternative fuels vehicles are just some of the topics covered. Instruction focuses on electronics utilized and shared within automotive operating systems. Test-out challenge available. Offered: Fall and Spring. Four lab hours.

ATEC 112L ENGINE REPAIR  (4)
The principles and operation of the gasoline powered internal combustion engine. Engines will be properly disassembled, inspected, measured, and reassembled. Safety is emphasized. Permission required. Offered Fall. Eight lab hours.

ATEC 114L AUTOMOTIVE BRAKE SYSTEM  (4)
Theory, diagnosis, and repair procedures of disc and drum brake systems. Instruction includes anti-lock brakes systems (ABS), machining of discs, drums, brake hydraulic components, electronic control systems, and related operating systems. Students prepare for industry certification in operation of rotor machine matching equipment. Safety is emphasized. Offered: Fall. Eight lab hours.

ATEC 115L AUTOMOTIVE STEERING AND SUSPENSION SYSTEMS  (4)
An introduction to steering geometry, front and rear suspension service, wheel alignment, power steering service, and wheel balancing. Safety is emphasized. Offered: Fall. Eight lab hours.

ATEC 116L AUTOMOTIVE ELECTRICAL/ ELECTRONIC SYSTEMS I  (4)
Fundamentals of electrical and electronics theory, power supplies, magnetism, current flow, Ohm's law, series, parallel, and series-parallel circuit calculations. Students use basic meters to diagnose circuits. Safety and environmental issues are emphasized. Offered: Fall. Eight lab hours.

ATEC 119L AUTOMOTIVE HEATING AND AIR CONDITIONING SYSTEMS  (4)
An introductory course covering automotive heating and heating systems. The use of test equipment is emphasized and students learn to diagnose, evacuate, recover refrigerant, and recharge air conditioning systems. Safety is emphasized. Prerequisite: ATEC 116L. Corequisite: ATEC 130L. Offered: Spring. Eight lab hours.

ATEC 125 AUTOMOTIVE MANAGEMENT  (3)
A course preparing students to enter the service management profession. Students gain an understanding of the basic repair operation of an automotive repair shop. Students receive training in service trends, safety, employee relations, and industry and business development

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trends. The course introduces students to basic skills in Excel, bookkeeping, computer-specific automotive programs, and communication skills. Prerequisite ATEC 111L. Offered: Fall. One lecture hour, four lab hours.

**ATEC 130L ON-BOARD DIAGNOSTIC SYSTEMS II (2)**
Introduces the basic theories related to understanding OBD-II, an in-depth system for diagnostics and service procedure. Students practice using scan tools for gathering and interpreting OBD-II diagnostic trouble codes (DTC). Permission required. Prerequisite: ATEC 116L. Offered: Fall. Four lab hours.

**ATEC 150L AUTOMOTIVE COMPUTER MANAGEMENT SYSTEMS I (4)**
An introduction with a focus on engine performance test equipment, fuel system operation, fuel injection design and operation, modules, sensors, switches, ignition systems design and operation, starting and charging system design and operation, and related operating systems. Topics include a systematic method of troubleshooting and repair On-Board Diagnostics II. Safety is emphasized. Prerequisites: ATEC 116L and ATEC 130L. Offered: Fall. Eight lab hours.

**ATEC 165 ALTERNATIVE FUEL VEHICLES (3)**
Introduction class on basic theories in the technology used in vehicles powered by ethanol, biodiesel, hydrogen, electricity, propane, and natural gas. Topics include the differences between various fuels and fuel systems, maintenance schedules, and AFVs components. Prerequisites: ATEC 116L and ATEC 150L. Offered: Spring. One lecture hour, four lab hours.

**ATEC 200L ELECTRICAL ELECTRONICS II (4)**
Continuing study of the diagnosis and repair of power distribution centers, primary electrical systems, including battery, starting, charging, lighting, gauges, horn, wipers, washers, accessories, and high voltage secondary electrical systems. Students gain mastery in the use of meters, schematics, standard troubleshooting procedures, and other tools used in electrical and electronic system diagnosis and repair. Prerequisite ATEC 116L. Offered: Spring. Eight lab hours.

**ATEC 201L COMPUTER SYSTEM MANAGEMENT II (4)**
Continuation course in the diagnosis and repair of multiple computer control systems and diagnostic test equipment. Students gain a fundamental understanding of fuel system operation, fuel injection, ignition systems, starting and charging systems, exhaust emissions, power distribution, and federal environmental standards. Students learn a systematic method of troubleshooting and utilization of diagnostic trees. Safety is emphasized. Prerequisite ATEC 150L. Offered: Spring. Eight lab hours.

**ATEC 206L MANUAL TRANSMISSION AND DIFFERENTIAL (4)**
The theory and repair of manual transmission, differentials, clutches, transaxles and drive axles are covered. Content includes torque, horsepower, gear ratio, and friction. Diagnosis and troubleshooting are stressed. Safety is emphasized. Prerequisite ATEC 116L. Offered: Spring. Eight lab hours.

**ATEC 208L AUTOMATIC TRANSMISSION TRANSAXLE DIFFERENTIAL (4)**
Operating principles of automatic transmissions, diagnosis, electrical and electronic controls, and repair. Instruction includes rebuilding transmissions and transaxles to Original Equipment Manufacturer specification, hydraulic operation, gear sets, friction clutch operation and design, transaxle design, and differential service and repair. Workplace safety is emphasized. Prerequisites: ATEC 116L and ATEC 150L. Offered: Spring. Eight lab hours.

**BIOLOGY**

* **BIOL 111 INTRODUCTION TO BIOLOGY (3)**
An introduction to cell biology, genetics, classification of organisms, evolutionary theory and ecology. This course is designed for non-science majors. Prerequisites: ENGL 109 and MATH 102. Corequisite: BIOL 111L. Offered: Fall and Spring. NMCCNS: BIOL 1113. Three lecture hours.

* **BIOL 111L INTRODUCTION TO BIOLOGY LAB (1)**
Lab experience for BIOL 111. The lab reinforces the biological concepts discussed in the lecture portion of this class. Corequisite: BIOL 111. Offered: Fall and Spring. NMCCNS: BIOL 1111. Three lab hours.

* **BIOL 114 ENVIRONMENTAL SCIENCE (3)**
A survey of environmental science including an introduction to the scientific method, basic ecology, the relationship of humans to the environment, energy resources, toxicology, politics and the environment, and the causes of and solutions to environmental problems including human overpopulation, resource depletion,
pollution, solid and hazardous waste, ozone depletion and global warming. Prerequisites: ENGL 109 and MATH 101. Corequisite: BIOL 114L. Offered: Summer, Fall and Spring. NMCCNS: ENVS 1113. NMGECC: Area III — Sciences. Three lecture hours.

* BIOL 114L ENVIRONMENTAL SCIENCE LAB (1)
Lab experience for BIOL 114. This course reinforces the concepts presented in the lecture course through activities including chemical and physical analyses, problem solving. Requires hiking on uneven terrain. Corequisite: BIOL 114. Offered: Summer, Fall and Spring. NMCCNS: ENVS 1113/ENVS 1111. NMGECC: Area III — Sciences. Three lab hours.

* BIOL 115 INTRODUCTION TO ECOLOGY AND FIELD BIOLOGY (4)
This field course is an introduction to the concepts and techniques used in ecology and field biology. Topics include classification of ecosystems, population ecology, general environmental measurements, communities and field techniques for sampling populations and measuring productivity and community structures. Prerequisites: ENGL 109 and MATH 101. Offered: Summer. NMGECC: Area III — Sciences. Three lecture hours, three lab hours.

*BIOL 116 INTRODUCTION TO CLIMATE STUDIES (4)
An introduction to climate science that provides background on Earth’s climate system, the scientific principles that govern climate, climate variability, and climate change with the implications for society. Prerequisites: ENGL 109 and MATH 102. Offered: Summer, Fall and Spring. NMGECC: Area III — Sciences. Three lecture hours, three lab hours.

BIOL 120 FOREST MANAGEMENT AND CONSERVATION (2)
Conservation work related to forestry, fire ecology, environmental policy, and wildlife management. The course utilizes hands-on opportunities through service work and mentorship from professionals in the aforementioned fields to give participants a well-rounded introduction to natural resource management. This course is for participants in the Forest Stewards Youth Corps (FSYC) program only. Permission required. Graded as Pass/Fail. Offered: Occasionally. Two lecture hours.

* BIOL 123 BIOLOGY FOR HEALTH SCIENCES (3)
An introduction to biological concepts for students interested in careers in the health sciences professions. Topics covered include cell chemistry, cell biology, genetics, mitosis and meiosis, and other related concepts. Emphasis will be on human systems and health. Not accepted toward a biology degree. Prerequisite: MATH 102 and ENGL 109. Corequisite: BIOL 123L. Offered: Summer, Fall and Spring. NMCCNS: BIOL 1213. NMGECC: Area III — Sciences. Three lecture hours.

* BIOL 123L BIOLOGY FOR HEALTH SCIENCES LAB (1)

BIOL 136 NON-MAJORS ANATOMY AND PHYSIOLOGY (3)
An introduction to human anatomy (structure) and physiology (function) of the human body. Includes study of basic chemistry, molecules, cellular, tissues, organs, organ systems and terminology related to these concepts. This course is designed for students studying exercise science, medical assisting, and similar programs, which require an introduction to Anatomy and Physiology. Prerequisites: ENGL 109 and MATH 101. Corequisite: BIOL 136L. Offered: Summer, Fall and Spring. Three lecture hours.

BIOL 136L NON-MAJORS ANATOMY AND PHYSIOLOGY LAB (1)

BIOL 201 CELL BIOLOGY (3)
First of a sequence of biology-major core classes. This course will cover scientific methods and basic cell structure and function in living organisms. Topics include, but are not limited to, basic biochemistry of living cells, tour of cell structures and functions, cell thermodynamics, enzymes, control of metabolic function, cellular respiration, photosynthesis, cell communication and the cell cycle. Prerequisites: CHEM 111 or CHEM 121 and ENGL 109. Corequisite: BIOL 201L. Offered: Fall. NMGECC: Area III — Sciences. Three lecture hours.

BIOL 201L CELL BIOLOGY LAB (1)
Lab and problems component to complement the lecture. Assignments will be given which explore topics from lecture. Students will discuss and present solutions to assignments and do hands-on experiments for some concepts. Corequisite: BIOL 201. Offered: Fall. NMGECC: Area III — Sciences. Three lab hours.

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* BIOL 202 GENETICS (3)
This intensive introduction to genetics explores how genes are passed on and expressed in living organisms. Covers chromosomal and molecular dynamics of inheritance, protein synthesis, the role of genes in development and contemporary issues in genetic engineering and genomics. Prerequisite: BIOL 201. Corequisite: BIOL 202L. Offered: Spring. NMGECC: Area III — Sciences. Three lecture hours.

* BIOL 202L GENETICS LAB (1)
This laboratory course will expand on concepts introduced in BIOL 202 through discussion sessions as well as hands-on laboratory experience. Emphasis will be placed on understanding natural processes of gene function, replication and transmission, as well as strategies for genetic analysis. Corequisite: BIOL 202. Offered: Spring. NMGECC: Area III — Sciences. Two lab hours.

BIOL 221 MICROBIOLOGY FOR HEALTH SCIENCES (3)
An introduction to microbiology for students entering health professions. This course includes cell structure, metabolism, growth, controls of growth, infectious epidemiology, etiology, pathogenicity, and relative virulence of infectious and parasitic diseases. Prerequisite: BIOL 123 and BIOL 123L or BIOL 201 and BIOL 201L and CHEM 111 and CHEM 111L or CHEM 121 and CHEM 121L and BIOL 230 and BIOL 230L. Corequisite: BIOL 221L. Offered: Fall and Spring. NMCCNS: BIOL 2413. Three lecture hours.

BIOL 221L MICROBIOLOGY FOR HEALTH SCIENCES LAB (1)
Laboratory experience to accompany BIOL 221. Students use aseptic laboratory techniques to transfer, grow, prepare, and stain microscopic slides of bacteria. Identification of microbes using microscopy and laboratory test is emphasized. Prerequisite: BIOL 123 and BIOL 123L or BIOL 201 and BIOL 201L and CHEM 111 and CHEM 111L or CHEM 121 and CHEM 121L and BIOL 230 and BIOL 230L. Corequisite: BIOL 221. Offered: Summer, Fall and Spring. NMCCNS: BIOL 2411. Three lab hours.

BIOL 230 HUMAN ANATOMY AND PHYSIOLOGY I (3)
Human anatomy and physiology for students entering health care professions. This course covers the structure and function of cells, tissues, integumentary, skeletal, muscular, and nervous systems, including physiological homeostasis. It is strongly recommended the student have at least a B in the prerequisite classes if taking online human anatomy and physiology. Prerequisite: BIOL 123 and BIOL 123L or BIOL 201 and BIOL 201L and CHEM 111 and CHEM 111L or CHEM 121 and CHEM 121L. Offered: Summer, Fall and Spring. NMCCNS: BIOL 2413. Three lecture hours.

BIOL 230L HUMAN ANATOMY AND PHYSIOLOGY I LAB
Lab experience to accompany BIOL 230. Examination of structure and function of cells, tissues, integument, skeletal, muscular, and nervous systems using microscope slides, models, preserved specimens. It is strongly recommended the student have at least a B in the prerequisite classes if taking online human anatomy and physiology. Prerequisite: BIOL 123 and BIOL 123L or BIOL 201 and BIOL 201L and CHEM 111 and CHEM 111L or CHEM 121 and CHEM 121L. Offered: Summer, Fall and Spring. NMCCNS: BIOL 2411. Three lab hours.

BIOL 231 HUMAN ANATOMY AND PHYSIOLOGY II (3)
A continuation of human anatomy and physiology for students entering health care professions. This course covers the structure and function of blood, endocrine, cardiovascular, respiratory, digestive, urinary, fluids and electrolytes, reproductive and immune systems, including physiological homeostasis. It is strongly recommended the student have at least a B in the prerequisite classes if taking online anatomy and physiology. Prerequisite: BIOL 123 and BIOL 123L or BIOL 201 and BIOL 201L and CHEM 111 and CHEM 111L or CHEM 121 and CHEM 121L and BIOL 230 and BIOL 230L. Corequisite: BIOL 231. Offered: Summer, Fall and Spring. NMCCNS: BIOL 2421. Three lecture hours.

BIOL 231L HUMAN ANATOMY AND PHYSIOLOGY II LAB
Lab experience to accompany BIOL 231. The lab examines structure and function of the blood, endocrine, cardiovascular, respiratory, digestive, urinary, reproductive, and immune systems using microscopic slides, models, and preserved specimens. It is strongly recommended the student have at least a B in the prerequisite classes if taking online anatomy and physiology. Prerequisite: BIOL 123 and BIOL 123L or BIOL 201 and BIOL 201L and CHEM 111 and CHEM 111L or CHEM 121 and CHEM 121L and BIOL 230 and BIOL 230L. Corequisite: BIOL 231. Offered: Summer, Fall and Spring. NMCCNS: BIOL 2421. Three lab hours.

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BUILDING CONSTRUCTION

BLDG 111 CONSTRUCTION SAFETY (3)
A comprehensive introduction to construction safety, including OSHA requirements. Students are given an introduction to OSHA and the Focus Four Hazards; OSHA 30 hours for general construction is a component of this class. Other topics include managing construction health and safety, personal protective equipment, the safe use of tools, fall protection and accident prevention. Offered: Summer, Fall and Spring. Three lecture hours.

BLDG 112 BUILDING SYSTEMS (3)
An investigation into the process of home construction, including terminology, key components and the flow of building a home. Students study flow charts, inspection trigger points, lead times for ordering and scheduling, subcontractor interactions and dependencies. A working knowledge of terminology related to construction is gained through classroom and hands-on experience. Offered: Occasionally. Three lecture hours.

BLDG 113 INTRODUCTION TO GREEN BUILDING (3)
This course will provide students with an overview of the history, development and environmental issues relating to the emergence of the Green Building sector of the construction industry. It will also provide students with a basic understanding of Green Building considerations such as site planning, energy generation and efficiency, material selection, building envelope, waste management and water conservation and management and how they affect a construction project. Offered: Fall. Three lecture hours.

BLDG 114 CONSTRUCTION METHODS AND MATERIALS I (3)
Introduction to construction materials, methods, and their applications. Students are introduced to the fundamentals of construction math, blueprints, building specifications, optical leveling equipment, hand tools, portable power tools, and stationary power tools, in a sequence of learning activities designed for students to acquire entry-level skills and knowledge of the construction industry. Prerequisite: BLDG 111. Offered Occasionally. Three lecture hours.

BLDG 115 TRADES MATHEMATICS (3)
Applied numeracy skills required for the trades industry. This course includes the practical application of measurement and calculation, trade industry formulas, drawings, scheduling, budgeting and accounting, and data analysis. Offered: Occasionally. Two lecture hours, two lab hours.

BLDG 116 APPLIED CONSTRUCTION I (4)
An applied course in foundation, footing, and stem-wall construction. Other topics include cutting and assembly of structural material for floor, wall, and roof systems in accordance with the International Building Code (IBC). Prerequisite: BLDG 111. Offered: Occasionally. One lecture hour, six lab hours.

BLDG 118 CONSTRUCTION METHODS AND MATERIALS II (3)
A study of trade practices for the installation of exterior wall and roof finishes. Other topics include the installation of windows and doors in accordance with the International Building Code (IBC). Students learn about insulation, drywall, taping and texturing, and other interior finish work. Prerequisite: BLDG 111. Offered: Occasionally. Three lecture hours.

BLDG 121 APPLIED CONSTRUCTION II (4)
An applied course in the installation of exterior wall and roof finishes, windows, and doors in accordance with the International Building Code (IBC). Students also practice insulation techniques, drywall installation, taping and texture of drywall, trim work, and other finish work in a safety-focused environment. Prerequisite: BLDG 111. Offered: Occasionally. One lecture hour, six lab hours.

BLDG 122 BUILDING SYSTEMS II (3)
Focuses on building systems, subsystems and components and how they are assembled and protected using both hand-drafting and conventional methods. Types, properties and qualities of various building systems and materials are examined, including steel and reinforced-concrete structural systems, roofing, glazing and non-residential finish systems. Prerequisite: BLDG 112. Offered: Occasionally. Two lecture hours, two lab hours.

BLDG 123 BUILDING INFORMATION MODELING (3)
This course provides advanced competencies in creating, manipulating and presenting 3-Dimensional models in CAD software programs. Students use desktop software to create models and solids. Students learn to use 3-Dimensional models to create graphic presentations and technical drawings. Offered: Fall. Three lecture hours.

BLDG 193 GREEN BUILDING SKILLS PRACTICUM (1-3)
This course provides students with an ability to correlate
actual work experience with SFCC coursework in building and construction technologies programs of study. Through on-the-job experience, students will gain a greater vision of what it means to be employed in the building construction industry that will assist the completer in gaining and retaining employment after program completion. Offered: Occasionally. One-three lecture hours.

**BLDG 201 CONSTRUCTION METHODS (3) AND MATERIALS III**

An advanced class in the establishment of footings, slabs, stem walls, vertical and horizontal framework, tilt-up wall systems, and the reinforcement of concrete. Prerequisite: BLDG 111. Offered: Occasionally. Three lecture hours.

**BLDG 203 APPLIED CONSTRUCTION III (4)**

An advanced class in the performance of safety inspections on equipment and procedures in rigging operations. Students evaluate the establishment of footings, slabs, stem walls, vertical and horizontal formwork, and tilt-up wall systems, and study the properties and reinforcing of concrete to International Building Code (IBC) standards. Prerequisite: BLDG 112. Offered: Occasionally. One lecture hour, six lab hours.

**BLDG 212 CONSTRUCTION MANAGEMENT I (3)**

An introduction to residential building construction-site observation, quantity surveying, cost analysis, subcontractor and material prices solicitation and summary and tabulation for a total bid price. Offered: Fall. Three lecture hours.

**BLDG 225 GREEN BUILDING POLICIES, CODES AND INCENTIVES (2)**

This course introduces green building practices based upon the Uniform Building Code and Life Safety Code. It informs the student of current green building policies and incentives on the local, state and national and international levels. Offered: Spring. Two lecture hours.

**BUSINESS ADMINISTRATION**

**BSAD 111 INTRODUCTION TO BUSINESS (3)**

This course explores the nature of the business world in a local, national and global context. Topics include ownership and organizational models, ethics and social responsibility and an overview of the principles of management, human resources, marketing and finance. Offered: Summer, Fall, and Spring. Three lecture hours.

**BSAD 112 BUSINESS MATH (3)**

The course introduces basic mathematical skills related to business applications and accounting. This includes such topics as pricing, payroll, simple and compound interest, depreciation, inventory, overhead, future and present values, and annuities. Prerequisite: MATH 101. Offered: Fall and Spring. Three lecture hours.

**BSAD 119 THE CULTURE AND TECHNIQUE OF ENTREPRENEURSHIP (3)**

An introductory level, project-based course exploring the dynamic domain of entrepreneurship from concept identification to the creation of a pitch for a start-up. Topics include the entrepreneurial mindset, business models, e-commerce, crowdfunding and marketing, finance and funding and pitching a start-up. The course serves as a stand-alone, cursory overview of the discipline or as a prerequisite to an in-depth study of the discipline in the Certificate of Entrepreneurship. Offered: Fall, Spring and Summer.

**BSAD 211 PRINCIPLES OF MANAGEMENT (3)**

A study of the history, concepts, and activities of managers within organizations. Emphasis on ethical decision making, planning, organizing, leading and controlling. Prerequisite: ENGL 109. Offered: Summer, Fall, and Spring. NMCCNS: MGMT 2113. Three lecture hours.

**BSAD 219 BUSINESS MODELS (3)**

A continuing course in the entrepreneurship series exploring the core terminology and concepts used by entrepreneurs when developing a business model. Topics include customer segments and value propositions, channels and customer relationships, revenue streams, cost structure and key resources, activities and partnerships. Prerequisite: BSAD 119. Offered: Fall.

**BSAD 220 E-COMMERCE, CROWDFUNDING AND MARKETING (3)**

A continuing course in the entrepreneurship series examining e-commerce, crowdfunding and social media as sustainable marketing strategies for a new entrepreneurial venture. Topics include target markets, current and pending regulations, equity, reward and debt-based options and culminate in the creation of a viable marketing plan. Prerequisite: BSAD 119. Offered: Spring.

**BSAD 221 ENTREPRENEURSHIP — BUSINESS MODEL (3)**

This online course uses the market research and feasibility assessment of the franchise business model and other
models to develop a complete and personal entrepreneurial business plan. Emphasis is on writing the vision and mission statement, the company overview, the product/service strategy, the marketing plan, the financial plan and executive summary using various business models. Offered: Fall. Three lecture hours.

**BSAD 223 FINANCE AND FUNDING (3) FOR START-UPS**
A continuing course in the entrepreneurship series addressing the financial concepts and tools needed by an entrepreneur to make sound business decisions throughout the start-up process. Topics include financial statements, financial ratio analysis, financial pro forma, funding sources, exit strategy and financial plans. Prerequisite: BSAD 119. Offered: Spring. Three lecture hours.

**BSAD 224 PITCHING YOUR START-UP (1)**
A capstone course in the entrepreneurship certificate. Students will have the opportunity to pitch their start-up idea and receive feedback from potential investors and select community members. Prerequisites: BSAD 119, BSAD 219, BSAD 220, BSAD 222. Offered: Summer. One lecture hour.

**SAD 232 BUSINESS LAW I (3)**
Fundamental legal principles and how they apply to business. The course provides a survey of the source of law and various areas of law, including ethics, social responsibility, contracts, Article 2 of the Uniform Commercial Code, negligence, intentional torts, ethics, business organizations, employment law, alternative dispute resolution and strict liability. Students learn both the federal and New Mexico court systems and procedures. Prerequisite: ENGL 109. Offered: Fall and Spring. Three lecture hours.

* **BSAD 235 HUMAN RELATIONS IN THE WORKPLACE (3)**
The study of basic business behavior patterns — the human aspects of business, as distinguished from economic and technical aspects — and how they influence productivity, morale and management practice. Topics include human relations, supervisor communication, value clarification and goal setting. Prerequisite: ENGL 109. Offered: Summer Fall and Spring. Three lecture hours.

**BSAD 240 PRINCIPLES OF MARKETING (3)**
An introduction to the methods, policies, and organizations involved in the exchange of goods and services between producers and consumers. Topics include the social, economic, and legal environments in which marketing operates; consumer behavior including professional, ethical and social responsibility; market research, market segmentation, and target marketing; strategic marketing in domestic and international environments; and product planning, pricing, promotion, and distribution. Interdisciplinary techniques in management, creative thinking, and decision making are also addressed. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. NMCCNS: MKTG 2113. Three lecture hours.

**BSAD 245 CORPORATE FINANCE (3)**
An introductory course designed to explain the substantive parts of financial management. Topics discussed include time value of money; sources and uses of short and long-term funds; determination of capital requirements; obtaining capital; financial forecasting; lease or buy decisions; application of capital and cash budgeting techniques; and risk analysis. This course incorporates the application of financial analysis tools and techniques needed for business decision making. Prerequisites: ACCT 111 or ACCT 121. Offered: Fall and Spring. NMCCNS: BFIN 2113. Three lecture hours.

**BSAD 260 BUSINESS STATISTICAL ANALYSIS (4)**
A hands-on course involving the collection, tabulation, and analysis of business data in decision-making. Topics include numerical descriptive measures, basic probability, discrete and continuous probability distributions, sampling methods, confidence interval estimation, one-sample and two-sample hypothesis testing, and regression analysis. Students use statistical software. Prerequisite: MATH 109. Offered: Summer, Fall and Spring. Four lecture hours.

**BSAD 270 BUSINESS ETHICS (3)**
An exploration of ethical theory as applied to individual and organizational behavior in business. Historic and contemporary ethical theories are studied. Business concerns including conflicts of interest, employer/employee relations, whistle blowing and corporate loyalty, workplace privacy, discrimination, corporate social responsibility, sustainability and financial misconduct are analyzed and discussed. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. Three lecture hours.

**BSAD 298 BUSINESS ADMINISTRATION INTERNSHIP (1-3)**
Provides students with applied experience in the field of...
CERAMICS

CLAY 127L  HAND BUILDING  (3)
FUNCTIONAL CERAMICS
Introductory course exploring the fun and useful process of making decorative, functional, hand-built ceramics. Students are introduced to a variety of hand-building techniques and design aesthetics. These techniques and designs are applied to the making of functional ware, producing elegant, fun and useful objects. Students develop a deeper aesthetic understanding of how to design and make decorative, functional objects in clay. May be taken twice for degree or certificate credit. Offered: Occasionally. Six lab hours.

CLAY 128L  CLAY HAND BUILDING I  (3)
Fundamental, physical and aesthetic qualities of clay and ceramic coloration. Traditional hand-building techniques and coloration are introduced. A series of very specific assignments leads the student through these techniques to develop the knowledge to execute almost any desired form. An introduction to the vocabulary of art, sculpture and ceramic terms and the aesthetics of form and color are integral parts of the class structure. May be taken twice for degree or certificate credit. Offered: Occasionally. Six lab hours.

CLAY 129L  CERAMICS: WHEEL THROWING I  (3)
An introduction to the fundamental principles of throwing clay forms on a ceramics wheel. The course emphasizes functional as well as sculptural aesthetics associated with the wheel. May be taken twice for degree or certificate credit. Offered: Occasionally. Six lab hours.

CLAY 136L  CERAMIC COLOR ON FORM  (3)
The process of formulating and applying color on ceramic forms. Engobes, sintered engobes, underglazes, slips, stains, terra sigilattas and glazes will be explored. Pattern, monochrome, polychrome, abstract application and other approaches to ceramic painting will also be introduced. May be taken twice for degree or certificate credit. Prerequisite: CLAY 128L. Offered: Occasionally. Six lab hours.

CLAY 172L  MICACEOUS POTTERY I  (2)
Micaceous clay is a unique type of clay found in northern New Mexico. It has been used for centuries by Jicarilla, Apache, Pueblo and Hispanic potters to produce cooling vessels. This course presents the history of its traditional use as well as non-traditional techniques for working with this clay. Students produce a variety of open bowls, closed bowls and lidded forms using hand-building techniques, electric kilns and open-pit firing processes. May be taken twice for degree or certificate credit. Course may not be repeated more than four times. Offered: Occasionally. Four lab hours.

CLAY 177L  PUEBLO POTTERY  (3)
Offers the student an experience in Elements of the Earth/ Pin Kwi yo, the traditional techniques of Pueblo Pottery. The student will learn the traditional approach to respectfully gathering and processing clay along with ancient methods of forming Pueblo Pottery vessels. Surface decoration, including designing, carving, incising, and painting with natural pigments is an integral course element. Ancient firing methods will be used. Offered: Occasionally. Six lab hours.

CLAY 211L  EXTREME POTTERY  (3)
Learn to combine more advanced use of the potter's wheel and hand building methods to develop vessel and sculptural forms beyond what would be considered traditional and conventional. The course emphasizes the exploration of contemporary form and color with works in clay. May be taken twice for degree or certificate credit. Prerequisite: CLAY 129L. Offered: Occasionally. Six lab hours.

CLAY 214L  CLAY HAND BUILDING II  (3)
An intermediate-level ceramic sculpture course offering further study into the various hand building techniques for executing clay sculpture on a medium to large scale. Class assignments are theme specific emphasizing sequential development of a particular sculptural concept. Colorings include slips, engobes, terra sigilattas and glazes are offered as possibilities for surface treatment. Large scale works will be investigated as an addition to medium sized work. Firing ranges, clay bodies and how to fire a clay sculpture will be discussed. May be taken twice for degree or certificate credit. Prerequisite: CLAY 128L. Offered: Occasionally. Six lab hours.

CLAY 216L  CERAMICS: WHEEL THROWING II  (3)
Intermediate level course that offers a study of current approaches to the potter's wheel as a tool for creating functional and sculptural forms. The foundation of this course is a series of sequential projects designed to increase a student's skill level on the wheel. Functional as well as
sculptural concepts will be investigated. An introduction into clay bodies and glazes augments the disciplined throwing. This course is designed to advance the throwing abilities of students who already have a strong foundation in wheel-throwing basics. May be taken twice for degree or certificate credit. Prerequisite: CLAY 129L. Offered: Occasionally. Six lab hours.

CLAY 220L CERAMICS GLAZE FORMULATION (3)
Provides the ceramic artist with the skills needed to understand, develop and control the glazes used in the ceramic process. Materials, mixing, testing methods and basic formula comparisons will be covered. May be taken twice for degree or certificate credit. Prerequisite: CLAY 128L or CLAY 129L. Offered: Occasionally. Six lab hours.

CLAY 226L ADVANCED WHEEL THROWING (3)
Advanced study of historical and contemporary approaches to the potter’s wheel as a tool for creating functional vessels, non-functional vessels, and sculptural forms. The focus of the class is large-scale and altered throwing techniques, and the utilization of thrown parts in the construction of hand built forms as well as traditional production methods. Glaze, slip, and other surface applications are researched and incorporated in order to create a successful surface/form design. Prerequisite: CLAY 216L. Offered: Occasionally. Six lab hours.

CLAY 280L CERAMICS: INTEGRATIVE PROJECTS (3)
Skill development in preparation for application to an undergraduate university program or for commercial practice in the field of ceramics. Students are taught how to create a coherent body of work, stay consistent within an established concept, and develop the ability to speak and write articulately within the medium of ceramic art. Students are guided in identifying their special areas of skill and competency through the process of critical self-evaluation. May be taken twice for degree or certificate credit. Prerequisite: CLAY 128L or CLAY 129L. Offered: Occasionally. Six lab hours.

CHEMISTRY

* CHEM 111 INTRODUCTION TO CHEMISTRY (3)
A general introduction to concepts in chemistry such as quantitative measurement, physical and chemical properties, heat, atomic theory, the periodic table, bonding, nomenclature and solutions. Prerequisites: ENGL 109 and MATH 102. Corequisite: CHEM 111L. Offered: Summer, Fall and Spring. NMCCNS: CHEM 1113. NMGECC: Area III — Sciences. Three lecture hours.

* CHEM 111L INTRODUCTION TO CHEMISTRY LAB (1)
Lab experience for CHEM 111. The lab emphasizes hands-on investigations that support concepts discussed in CHEM 111. Corequisite: CHEM 111. Offered: Summer, Fall and Spring. NMCCNS: CHEM 1111. NMGECC: Area III — Sciences. Three lab hours.

* CHEM 121 GENERAL CHEMISTRY I (3)
An introduction to general chemistry concepts for science majors. Topics include stoichiometry, bond theory, molecular structure and forces, quantum mechanics theory and atomic structure, aqueous solutions and gas laws. Prerequisite: MATH 121. Corequisite: CHEM 121L. Offered: Fall and Spring. NMCCNS: CHEM 1213. NMGECC: Area III — Sciences. Three lecture hours.

* CHEM 121L GENERAL CHEMISTRY I LAB (1)
Laboratory experience for CHEM 121. Emphasis is on firsthand observations that support concepts from CHEM 121. Corequisite: CHEM 121. Offered: Fall and Spring. NMCCNS: CHEM 1211. NMGECC: Area III — Sciences. Three lab hours.

* CHEM 122 GENERAL CHEMISTRY II (3)
A continuation of Chemistry I. Topics include chemical equilibria, thermodynamics, acid-base chemistry, nuclear chemistry and a survey of biochemistry and organic chemistry. Prerequisite: CHEM 121. Corequisite: CHEM 122L. Offered: Fall and Spring. NMCCNS: CHEM 1223. NMGECC: Area III — Sciences. Three lecture hours.

* CHEM 122L GENERAL CHEMISTRY II LAB (1)
Laboratory experience for CHEM 122. Emphasis is on firsthand observations that support concepts from CHEM 122. Corequisite: CHEM 122. Offered: Fall and Spring. NMCCNS: CHEM 1221. NMGECC: Area III — Sciences. Two lab hours.

CHEM 212 INTEGRATED ORGANIC/BIOCHEMISTRY (4)
This survey course focuses on the major principles of organic and biochemistry with emphasis on topics related to the health sciences. Prerequisite: CHEM 111 or CHEM 121. Corequisite: CHEM 212L. Offered: Fall and Spring. Four lecture hours.

* Approved by the NM Higher Education Department for transfer and application to general education requirements in any public two- or four-year educational institution in New Mexico. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year school
CHEM 212L INTEGRATED ORGANIC AND BIOCHEMISTRY LAB
Laboratory experience for CHEM 212. Emphasis is on firsthand observations that support concepts from CHEM 212. Corequisite: CHEM 212. Offered: Fall and Spring. Three lab hours.

CHINESE

CHIN 111 BEGINNING MANDARIN I (4)
A beginning Mandarin course designed to introduce the Mandarin sound system, basic vocabulary, and Mandarin characters. This course is recommended for students who have had little or no experience in the Chinese language. Offered: Fall. Four lecture hours.

CHIN 112 BEGINNING MANDARIN II (4)
Chinese 112 consists of continued listening, speaking, reading and writing in Mandarin Chinese. This course focuses on the vocabulary and grammar dealing with daily activities. Prerequisite: CHIN 111. Offered: Spring. Four lecture hours.

CHIN 121L CHINESE LAB (1)
A self-paced language lab designed to accelerate, reinforce and support all levels of Chinese. The course provides an opportunity to practice and strengthen listening, speaking, reading, and writing skills through the use of software, audio and video tapes, and other technologies. Graded as Pass/Fail. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

CRIMINAL JUSTICE

CRJS 111 INTRODUCTION TO CRIMINAL JUSTICE (3)
This course covers the history and philosophy of the criminal justice system and the purpose and functions of its components (police, courts, and corrections). The causes and extent of crime and the functions of the juvenile justice and private security systems are examined. Offered: Occasionally. Three lecture hours.

CRJS 113 INTRODUCTION TO PROTECTIVE SERVICES (3)
A survey in concepts, principles, leadership, and practices of local law enforcement. The course is designed to prepare students for entry into local protective services and examines the structure, purpose, scope of authority, and jurisdictions of local law enforcement agencies.

CRJS 115 FOUNDATIONS OF PROFESSIONAL INVESTIGATION (3)
An introduction to the investigative profession, including how professional investigators assist attorneys, businesses and the public with a variety of cases. Students study the investigative process and conduct, the skills and traits required of professional investigators as well as the methodology that investigators use in both civil and criminal cases. Offered: Occasionally. Three lecture hours.

CRJS 119 CRIME SCENE INVESTIGATION I (3)
An introduction to crime scene investigation, from first response to documenting crime scene evidence. Students learn how to search the crime scene, record findings, collection and preservation of evidence, and preparation of evidence for courtroom presentation. Offered: Occasionally. Three lecture hours.

CRJS 120 COURTROOM TESTIMONY (3)
Preparation for effective court appearances. Students learn techniques necessary for expert, effective testimony and the techniques used to attack and discredit police officers on the witness stand. Mock trial practice provides students with experience in methods for presenting a court case, methods used by both defense and prosecuting attorneys and an understanding of why defense attorneys ask the questions they do. Prerequisite: CRJS 111 or permission. Offered: Occasionally. Three lecture hours.

CRJS 121 REPORT WRITING FOR CRIMINAL JUSTICE (3)
Fundamentals of writing a concise and accurate police report. Students will learn the fundamentals of written communication, using proven methods, current techniques, proper mechanics and processes necessary for quality police report writing. Prerequisite: CRJS 111. Offered: Occasionally. Three lecture hours.

CRJS 133 INTRODUCTION TO CYBERCRIME (3)
An examination of the nature and scope of cybercrime. Students study major theories and explore strategies necessary to deal with common types of fraudulent schemes, as well as laws that have been enacted for computer
crime. Causes, victimization, legal issues, control strategies, and societal costs regarding the “computer-crime” problem will also be explored and evaluated. The course encourages analytical thinking and reasoning about computer crime topics and relevant legal issues so that students can identify, analyze and solve problems in the continually emerging cybercrime and cyberlaw issues and trends. Offered: Occasionally. Three lecture hours.

CRJS 135 FORENSIC SCIENCE I
An introduction to the modern crime laboratory and the application of science in criminal investigations. The course presents the techniques, limitations and significance of crime-laboratory analyses, with emphasis on physical evidence and how it relates to the crime-solving process. Offered: Fall. Four lecture hours.

CRJS 201 ETHICS OF LAW ENFORCEMENT
Explores the application of ethics, discretion, and sensitivity to the police profession. Students learn the theory and importance of ethical concepts in the application of philosophical and ethical theories in today's law enforcement systems and their relationship to current and future ethical issues. Offered: Occasionally. Three lecture hour.

CRJS 203 CRIMINAL LAW AND PROCEDURE
This course covers U.S. criminal law and procedures, including the philosophy and social basis of U.S. criminal law, the classification of crime, the elements of and parties to a crime, defenses against criminal responsibility and the laws of arrest, search and seizure. Offered: Fall. NMCCNS: CRJI 2053. Three lecture hours.

CRJS 204 THE LAW AND THE PROFESSIONAL INVESTIGATOR
Explores the scope and role of the investigator within the legal system. Students learn how to apply investigative skills to a range of legal matters, including civil, domestic and criminal actions. The course examines how investigative civil and criminal cases proceed, as well as legal strategies, terminology and laws pertaining to investigative practices. Offered: Occasionally. Three lecture hours.

CRJS 205 LAW ENFORCEMENT SUPERVISION — FIRST LINE
This course covers the principles of supervision for law enforcement first-line supervisors. It includes the role and functions of first-line supervisors; leadership skills; the hiring, growth, training and promotion of subordinates; handling personnel problems; and problem solving. Offered: Occasionally. Three lecture hours.

CRJS 206 LAW ENFORCEMENT MANAGEMENT — COMMAND LEVEL
The course covers the principles of management for law enforcement mid-level managers. It includes the role of a manager in running current operations of a law enforcement agency, as well as the management skills necessary to prepare the agency to meet future commitments. Offered: Occasionally. Three lecture hours.

CRJS 207 LAW ENFORCEMENT SUPERVISION — EXECUTIVE LEVEL
This course is designed for executive-level managers of law enforcement or those that desire to work in an executive manager's position. The course will cover accreditation practices, ethics, policies and procedures, internal affairs, budget practices and new technology. Offered: Occasionally. Three lecture hours.

CRJS 209 PROBATION, PAROLE AND COMMUNITY CORRECTIONS
A survey and analysis of probation, parole, other community reintegration procedures, halfway houses, community treatment centers, volunteer programs and graduated release. Special emphasis is placed upon the functions, possibilities and problems of community-based programs. Offered: Occasionally. Three lecture hours.

CRJS 214 POLICE AND PATROL PROCEDURES
This course covers the role and functions of police officers, including the basic tasks of preventing crime, enforcing the laws, protecting the innocent, and providing services while utilizing various patrol techniques. In addition, the course will discuss officer safety, use of force and the law enforcement code of ethics. Offered: Occasionally. Three lecture hours.

CRJS 215 INVESTIGATIVE SURVEILLANCE
Basic surveillance techniques and how to plan and conduct a typical surveillance assignment. Students learn when to use a particular technique and how to select and use the appropriate technology. Students also learn how to prepare and present results of surveillance activities to clients, courts and law enforcement agencies. Offered: Occasionally. Three lecture hours.

CRJS 223 AMERICAN CORRECTIONAL SYSTEMS
This course covers the history and philosophy of adult and juvenile corrections. It examines institutional and community-based corrections, reintegration of offenders into society, correctional administration and legal issues, and future challenges to the correctional system. Offered: Spring. Three lecture hours.
CRJS 231  CRIMINAL INVESTIGATIONS  (3)
A study of the relationship of physical evidence to the process of criminal investigations. The course includes the interrelationships and significance of physical evidence as applied to the investigation of serious crimes; the identification, collection and preservation of physical evidence; and the introduction of evidence into the criminal trial process. It also covers sources of information, interviewing and interrogation. Offered: Occasionally. Three lecture hours.

CRJS 232  CRIME PROFILING  (3)
An examination of the techniques for applying socio-psychological profiling in modern criminal investigations. The uses of inductive and deductive profiling within the criminal justice system are examined. Offered: Occasionally. Three lecture hours.

CRJS 236  FORENSIC SCIENCE II  (4)
A continuation of the study of the modern crime laboratory and the application of science in criminal investigations. The course includes a presentation of techniques, limitations and significance of crime laboratory analysis, with emphasis on physical evidence and how it relates to the crime-solving process. Offered: Occasionally. Three lecture hours.

CRJS 251  DEATH INVESTIGATION  (3)
This course covers the principles of the medico-legal system in handling the investigation of the cause, manner and mechanism of death. It includes the determination of time of death, documentation of injuries, identification of the deceased, the deduction of how injuries occurred and the collection of evidence. Prerequisite: CRJS 111. Offered: Fall. Three lecture hours.

CRJS 298  CRIMINAL JUSTICE INTERNSHIP  (1-3)
An opportunity for students to gain experience in criminal justice services. Students close to completing coursework participate in an internship with a prospective employer and are introduced to daily operational aspects of criminal justice service. A background check and permission are required. Offered: Occasionally. One-three lecture hours.

CULINARY ARTS

CULA 112L  BREAD BAKING I  (1)
This class will introduce students to the techniques, terms and equipment used in artisan bread making. Students will have the opportunity to work with a variety of starters and flours. Students will gain hands-on experience working with a variety of doughs. Offered: Occasionally. Two lab hours.

CULA 113L  BASIC BAKING I  (1)
This course teaches students how to use baking equipment and tools. Students prepare a variety of pies, cakes and basic pastries from scratch. Offered: Summer, Fall and Spring. Two lab hours.

CULA 114  COMMERCIAL BAKING  (4)
An advanced, hands-on course in bakeshop production. Emphasis is placed on producing high-quality baked goods using professional techniques. Offered: Summer, Fall and Spring. Three lecture hours, two lab hours.

CULA 115  CULINARY FUNDAMENTALS I  (4)
Introduces the many skills necessary to become a professional chef. Topics include professionalism, safety and sanitation habits, an understanding of food products, food trends and knife skills. The basics of protein and vegetable fabrication, preparation, heat application and varied cooking techniques are covered. Corequisite: HRMG 118. Offered: Fall. Three lecture hours, two lab hours.

CULA 123L  SOUPS AND SAUCES  (1)
A course in the basic sauces, including béchamel, egg emulsion, velouté, espagnole and tomato sauces. Soup stocks are covered in depth, as well as consommé, cream soups, chowders and vegetable soups. Students learn how various stocks and sauces form the basis of a wide variety of dishes. Offered: Occasionally. Two lab hours.

CULA 125L  ALTERNATIVE BAKING  (1)
Wheat-free and alternative baking of desserts. This course addresses the myriad health issues stemming from wheat allergies, sugar sensitivities as well as vegan desserts. Prerequisite: CULA 113L. Offered: Occasionally. Two lab hours.

CULA 125L  ALTERNATIVE BAKING  (1)
An advanced introduction to the fundamental types of pastry and bakeshop ingredients. Students learn to produce basic professional pastry elements and use them to assemble simple desserts and baked goods. Offered: Occasionally. Two lab hours.

CULA 133L  BASIC BAKING II  (1)
A hands-on introduction to the fundamental types of pastry and bakeshop ingredients. Students learn to produce basic professional pastry elements and use them to assemble simple desserts and baked goods. Offered: Occasionally. Two lab hours.

CULA 151  CULINARY FUNDAMENTALS II  (4)
Advanced study of professional chef skills. Applies knowledge gained in Culinary Fundamentals I to fabricate, prepare and create more complex menus using advanced techniques. Prerequisite: CULA 115. Offered: Spring. Three lecture hours, two lab hours.

CULA 212L  ADVANCED BAKING I  (1)
Techniques of making pastries and desserts. Students
learn pastry components with versatile preparations which may be used to prepare several bakeshop items. Offered: Occasionally. Two lab hours.

**CULA 214L  SEAFOOD COOKING** (1)
An advanced class designed to teach the identification, selection, handling and proper preparation of a variety of seafood, including fresh- and salt-water fish, bivalves and mollusks, crustaceans, echinoderms and/or cephalopods. Recipes include a variety of hot and cold seafood dishes and cover cooked, raw and marinated seafood products. Students are provided with established recipes and are required to develop original recipes. Types of seafood used in the course may vary depending upon product availability. Offered: Occasionally. Two lab hours.

**CULA 215  INTERNATIONAL CUISINE** (4)
This class is designed to provide students with hands-on experience with cooking the cuisines of the world. The uses of regional ingredients and techniques are explored in the preparation of traditional, classical and contemporary dishes from the areas covered in class. Prerequisites: CULA 151. Offered: Spring. Three lecture hours, two lab hours.

**CULA 216L  FRENCH CUISINE** (1)
A hands-on course covering the various regions of France. Students will cook foods from the areas covered in class and learn proper preparation techniques for nouvelle and more traditional cuisine. Offered: Occasionally. Two lab hours.

**CULA 217L  ASIAN CUISINE** (1)
A hands-on course covering the variety of regional foods of Asia, including the cuisines of Thailand, China, Japan and India. The uses of Asian ingredients and seasonings are explored in the preparation of traditional dishes and contemporary fusion and Pacific Rim cuisine. Offered: Occasionally. Two lab hours.

**CULA 219  VEGETARIAN CUISINE** (2)
Covers vegetarian cooking techniques using various forms of complimentary proteins and other non-meat alternatives. Students prepare an assortment of vegetarian dishes from appetizers to desserts. Offered: Fall. One lecture hour, two lab hours.

**CULA 220L  FOOD TRENDS WORKSHOP** (1)
An examination and exploration of new trends in food preparation, ingredients, ethnic/fusion cuisine, seasonings, cooking techniques and nutrition theories. Students prepare foods with a view toward experimentation with the latest trends and with the goal of developing new recipes for consistent production of up-to-the-minute menu items. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**CULA 221L  ADVANCED BAKING II** (1)
An advanced, hands-on course emphasizing benchmark elements of pastry. Students prepare classic bakery-case items and desserts using a variety of doughs, batters, creams, and fillings. Prerequisite: CULA 212L. Offered: Fall and Spring. Two lab hours.

**CULA 222L  ITALIAN CUISINE** (1)
A hands-on course covering the various regions of Italy. Students will cook foods from the areas covered in class and learn proper preparation techniques for modern and more traditional cuisine. Offered: Occasionally. Two lab hours.

**CULA 223L  AFRICAN CUISINE** (1)
An exploration of the cuisines of the African continent. Traditional and contemporary recipes are covered, from the couscous of Morocco, the savory stews of the eastern plains and the sophisticated cuisine of Senegal to the Creolized foods of Mauritius and the Seychelles and the Afrikaner barbecues of South Africa. Offered: Occasionally. Two lab hours.

**CULA 224L  PROFESSIONAL SAUTÉ** (1)
This course covers how to prepare fish, poultry, meats and vegetables. Students learn the mise en place preparation method and its basic techniques. Offered: Spring. Two lab hours.

**CULA 225  WINE, BEVERAGE AND FOOD PAIRING** (1)
This course will introduce SFCC Culinary Arts Program students to the world of food, wine, and other beverages (beer, sake, coffee, tea, etc.) and focus on pairing food with beverages. Students will gain a solid understanding of how to make and knowledgeably discuss food-and-wine pairings and how to comfortably recommend a beverage that will go well with the meal he or she is serving. While the emphasis will be on wine and food integration, adequate time will be devoted to other beverages. Whether a student intends to work in a professional kitchen, become a chef, or be a professional server, beverage manager, or food researcher, knowledge of wine (and other beverages) is essential. Today, more than ever, responsibly promoting, marketing, and upselling alcoholic beverages is critical to any restaurant's bottom line. Prerequisite: CULA 115 or permission. Offered: Occasionally. One lecture hour.

**CULA 226L  SOUTHWEST CUISINE** (1)
A hands-on course covering the variety of foods of the
American Southwest, including the influences of Mexican, Spanish and Native American traditions in Southwestern and New Mexican food. The uses of seasonings, masa harina, chiles, meats, fruits and vegetables are explored in the preparation of traditional and innovative cuisine, including appetizers, entrees, desserts and salads. Offered: Occasionally. Two lab hours.

CULA 229L  JEWISH FOOD  (1)
This is a survey of Jewish cuisine throughout the world, including techniques, methods and ingredients common to Jewish foods. Traditional and holiday foods are covered (non-kosher kitchen). The course also includes discussion of historical context and dietary concerns. Offered: Occasionally. Two lab hours.

CULA 232L  CAKE MAKING  (1)
An advanced, hands-on course. Students will prepare a variety of both classical and home-style cake recipes including genoise, charlotte russe, dacquoise and angel food, plus the syrups, fondants and icings used in the modern pastry station. Emphasis will be placed on producing high-quality pastry using professional techniques. Prerequisite: CULA 113L or permission. Offered: Fall and Spring. Two lab hours.

CULA 233L  CAKE DECORATING  (1)
An advanced, hands-on course. Students will prepare a variety of classical and home-style syrups, fondants and icings and practice their use. Emphasis will be placed on beauty, dexterity and style in the creation of professional-level finished cakes. Prerequisite: CULA 232L or permission. Offered: Fall and Spring. Two lab hours.

CULA 234L  CHOCOLATE AND SUGAR WORKSHOP  (1)
An advanced, hands-on course. Students learn the chemical composition of sugar and chocolate, and will practice a variety of techniques for creating structural design elements from the two materials. Emphasis will be placed on developing a practical understanding of the nature and use of sugar and chocolate in the professional kitchen. Prerequisite: CULA 113L or permission. Offered: Fall and Spring. Two lab hours.

CULA 235L  THE PLATED DESSERT  (1)
An advanced, hands-on course. Students will prepare a variety of design elements, including syrups, coulis, sugars and chocolates, and practice their use by constructing numerous plated desserts and dessert displays. Emphasis will be placed on combining taste, texture and visual appeal to create distinctive and professional plate designs. Prerequisite: CULA 113L or permission. Offered: Fall and Spring. Two lab hours.

CULA 240L  THE ART OF PRESENTATION  (1)
A course designed to give students a beginning in presentation and styling. The art of garnishing, plate design, composition and color, buffet structure, creating a buffet menu, placement on the buffet, pastry bag use, table settings and napkin folding are some of the methods and techniques covered. Prerequisites: CULA 151 and permission. Offered: Occasionally. Two lab hours.

CULA 242L  AMERICAN COUNTRY COOKING  (1)
A hands-on course covering the various regions and genres loosely classified as American country cooking, including mid-Atlantic Amish, Mennonite and Shaker traditions; Cajun, Creole and low-country styles; cowboy meals; and classic home cooking. Students prepare farmhouse-style baked goods, barbecues, Sunday dinners and traditional holiday treats using classical country techniques and typical ingredients. Offered: Occasionally. Two lab hours.

CULA 243L  ADVANCED CAKE DECORATION AND DISPLAY  (1)
An advanced, hands-on course emphasizing classical and contemporary decoration for elaborate cake displays. Students prepare multi-tiered and stacked cakes. Emphasis is placed on advanced décor techniques, elements of design, and methods of transport and presentation. Course includes information on client consultation, cake pricing and cake business practices. Prerequisite: CULA 233L. Offered: Occasionally. Two lab hours.

CULA 246L  ADVANCED GARDE-MANGER  (1)
A hands-on course covering advanced garde-manger techniques of charcuterie, ices and sorbets, banquet displays and garniture. Students concentrate on developing the skills necessary for working in top-level, fine-dining restaurants in America or Europe. Emphasis is on mise en place, timing and attention to detail. Offered: Occasionally. Two lab hours.

CULA 248L  INTERNATIONAL BAKING AND PASTRY  (2)
Students learn to make traditional desserts and breads from the world's diverse cultures. Students practice fundamental baking skills using regional ingredients and techniques. Related food history and cultural relevance are taught in context with pastry production. Prerequisite: CULA 113L. Offered: Occasionally. Four lab hours.
CULA 250  PASTRY PRESENTATION  (4)
AND DISPLAY
This is an advanced capstone course covering a variety of pastries and baked goods with an emphasis on final presentation and display. Students learn to plan, prepare and present final projects. They will work with pastry doughs, sugars, chocolates and other products, using advanced techniques and equipment. Prerequisite: CULA 235L. Offered: Occasionally. Two lecture hours, four lab hours.

CULA 251  RESTAURANT CONCEPT  (4)
This is a capstone class designed to demonstrate the students’ competencies gained throughout the previous three semesters of study. After a lecture component in restaurant start up and design, students complete a mid-year project in which they design a new business concept, including location, floor plan, equipment purchases, legal and tax matters and menu design. They write a restaurant menu, a marketing plan and a business plan that includes financial statements and projected budgets for the first year of operation. The second part of the class is a practicum in which each student presents a four-course meal from the menu in their business plan. This part of the class gives the student hands-on practice in management and supervision skills, as well as in large-quantity banquet production. Prerequisite: CULA 151 or ENGL 111. Offered: Summer. Two lecture hours, four lab hours.

CULA 256L  HISTORY AND USES OF SPICES  (1)
This course will introduce students to the history and uses of spices, herbs, oils, and vinegars. During this course, students will learn to identify spices and herbs and learn to apply them in cooking. We will taste different types of qualities of vinegars and oils, and learn the history and process of making them. Offered: Occasionally. Two lab hours.

CULA 257L  FUNDAMENTALS OF MEAT FABRICATION AND BUTCHERY  (1)
Students learn the difference between primal and sub-primal beef cuts and fabricate poultry, pork and fish cuts. Students explore different methods of cookery based on individual cuts. Emphasis on hands-on learning. Offered: Spring. Two lab hours.

CULA 299  CULINARY EXTERNSHIP  (2)
This externship is designed to provide future culinarians entering the workplace with comprehensive training in the practical and theoretical aspects of work required in a highly skilled profession. This 10-week hands-on program exposes students to the different workstations of a kitchen operation. After each station is completed, students are evaluated by the sponsoring chef for competency and comprehension of tasks learned. Prerequisites: CULA 151L and HRMG 118 and permission. Offered: Summer, Fall and Spring. Two lecture hours.

DANCE

DANC 143L  BELLY DANCE  (1)
Introduction to Middle Eastern (Belly) Dance, or Raks Sharqi, using basic steps, movements and rhythms of Turkish, Egyptian, and pan-North African dance forms. The choreography in this class includes many basic steps and arm movements and experimentation with taksim or solo improvisation. Emphasis is on posture and presence, strength in technique, confidence in performance and improvisation. Simple zils or finger cymbal and veil dancing will also be introduced. Identification of basic rhythms and styles of the music and dance will be discussed. Each class period will include both technical and personal work, encouraging each dancer to find individual style and internal connection within this form of dance. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

DANC 146L  BEGINNING SALSA AND SWING  (1)
This class for beginners starts with the fundamentals of salsa and swing styles of dance. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

DANC 155L  HIP-HOP DANCE  (1)
This course provides an atmosphere of safety and encouragement in which students can express creativity and individuality through hip-hop dance. The class is open to beginning and intermediate students. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

DANC 171L  JAZZ I  (1)
This course is for students with a basic knowledge of dance technique. They work to attain muscle control and strength as well as increased flexibility. Further awareness of proper body alignment for injury prevention is emphasized. Jazz choreography, style and terminology are taught at a secondary level. Offered: Occasionally. Two lab hours.

DANC 172L  BALLET I  (2)
This course is for students with a basic knowledge of ballet technique. Correct ballet placement, alignment, and an increase in muscular strength and control are emphasized, along with expanding students’ ballet vocabulary in preparation for intermediate-level work. Variable credit. Offered: Occasionally. Four lab hours.
DANC 173L FLAMENCO I (1)
Beginning flamenco dance class designed to broaden the student’s awareness of the art of flamenco. Students develop basic technique in order to pursue further study. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

DANC 174L MODERN DANCE I (2)
Modern Dance techniques and styles. Students are introduced to proper warm-up techniques, body alignment, control and flexibility. Students work with various rhythms and combinations of movements. The course emphasizes dance technique and creative experience. The history, terminology and philosophy of Modern Dance are also discussed. Offered: Occasionally. Four lab hours.

DANC 243L INTERMEDIATE BELLY DANCE (1)
An opportunity to focus, sharpen, and expand the technical skills, dance vocabulary and personal presence of each dancer in this dance form. Primary attention is paid to arms, hands, body placement, fluidity and movement. Students continue to develop their work with finger cymbals, taksim — solo improvisation, veil dancing and some basic music structure. Cultural and stylistic differences of this dance as it manifests in various countries and cultures will be introduced. May be taken twice for degree or certificate credit. Prerequisite: DANC 143L Offered: Occasionally. Two lab hours.

DENTAL ASSISTING

DAST 121 DENTAL ASSISTING I (2)
An introduction to the career of dental assisting with emphasis on its history, organization and guidelines. This class covers dental ethics, the law, charting, terminology, techniques of prevention, disease transmission and infection control, hazardous communication management, principles and techniques of disinfection and sterilization, regulatory and advisory agencies, chemical safety, dental unit water lines and ergonomics. Permission required. Offered: Fall. Two lecture hours.

DAST 122 DENTAL MATERIALS (2)
Covers the composition, properties, classifications, uses, and manipulation of materials commonly used in dentistry. Topics also include legal, ethical, and safety issues related to the use of dental materials. Permission required. Corequisite: DAST 122L. Offered: Fall. Two lecture hours.

DAST 122L DENTAL MATERIALS LAB (1)
Lab experience for DAST 122. The lab emphasizes first-hand observations and hands-on performance of skill competencies that support the concepts taught in DAST 122. Permission required. Corequisite: DAST 122. Offered: Fall. Two lab hours.

DAST 123 DENTAL RADIOGRAPHY I (2)
An in-depth course covering the science of dental radiology. It includes historical background, radiation physics, biology, radiation health protection techniques; radiation exposure monitoring, dental x-ray machine components, parts and composition of dental film; intraoral and extraoral exposures; manual, automatic and digital processing procedures, darkroom procedures, mounting survey of dental images; and placing and exposing dental images on mannequins and a variety of patients. It also includes recognizing, identifying and correcting exposure or processing errors, and identifying anatomical landmarks and pathologies. It also covers legal and ethical issues, quality assurance, and infection control procedures. Successful completion qualifies the student to take the national certification examination for radiation health and safety. Permission required. Corequisite: DAST 123L. Offered: Fall. Two lecture hours.

DAST 123L DENTAL RADIOGRAPHY I LAB (1)
Lab and pre-clinical experience for DAST 123. The lab emphasizes first-hand observations and hands-on performance of skill competencies that support the concepts taught in DAST 123. Permission required. Corequisite: DAST 123. Offered: Fall. Two lab hours.

DAST 124 DENTAL SCIENCES I (3)
A survey of general and dental human anatomy and physiology. It addresses the structure and function of the head and neck region. It also includes an overview of the dentition, oral cavity, tooth morphology, embryology, and histology. Permission required. Offered: Fall. Three lecture hours.

DAST 125 CLINICAL PROCEDURES I (2)
Fundamental principles of chair-side assisting for various dental procedures. Students learn about the types, handling, setting, delivering, and retrieving of dental instruments; dental office set up and environment; delivering dental care; moisture control; and an introduction to anesthesia and pain control. Emphasis is on infection-control procedures, management of hazardous materials, and chair-side psychology. This course also includes an introduction to expanded function
duties, including the legal and ethical aspects of chair-side dental assisting. Corequisite: DAST 125L. Offered: Fall. Two lecture hours.

**DAST 125L CLINICAL PROCEDURES I LAB (1)**
Lab and pre-clinical experience for DAST 125. The lab emphasizes first-hand observations and hands-on performance of skill competencies that support the concepts taught in DAST 125. Corequisite: DAST 125. Offered: Fall. Two lab hours.

**DAST 131 DENTAL SCIENCES II (3)**
An in-depth study of dental caries, periodontal diseases, and preventive dentistry. Topics include patient education, plaque control programs, fluoride, dental sealants, flossing and brushing techniques, and nutrition-related to dental health. Participants study oral pathology, including oral defects and microorganisms and their effects on the human body, with recognition and identification of pathological conditions that most frequently occur orally. Students learn about patient records, vital signs, oral diagnosis, and treatment planning. They acquire knowledge about dealing with medically and physically compromised patients. Study of pharmacology includes drug requirements, agencies, and regulations; drug prescriptions; drug actions, side effects, indications and contraindications; common drugs used in dentistry; properties of anesthetics; and drugs and agents used to treat dental-related infections. This course also includes in-depth knowledge of management of dental and medical emergencies. Permission required. Prerequisites: DAST 124. Corequisite: DAST 131L. Offered: Spring. Three lecture hours.

**DAST 131L DENTAL SCIENCES II LAB (1)**
Lab and pre-clinical experience for DAST 131. The lab emphasizes hands-on practice to support concepts learned in DAST 131. Permission required. Prerequisite: DAST 124. Corequisite: DAST 131. Offered: Spring. Two lab hours.

**DAST 133 DENTAL PRACTICE MANAGEMENT (2)**
A survey of dental practice management, including communication in the dental office, business operating systems, office policies and procedures, business ethics and jurisprudence, inventory systems, supply ordering, maintenance and retention of business records, management of patient information, cybersecurity, recall systems, public relations, marketing, and financial management in the dental office. Permission required. Offered: Spring. Two lecture hours.

**DAST 134 CLINICAL PROCEDURES II (2)**
A continuation of Clinical Procedures I in which students strengthen chairside dental assisting for all recognized dental specialties. Students develop in-depth knowledge in expanded function duties, including legal and ethical implications, patient education, and future trends. The course covers the theory of expanded functions of coronal polishing, placement of fluoride, and placement of dental sealants as prescribed in the rules and regulations of the New Mexico Board of Dental Health Care. Permission required. Prerequisite: DAST 125. Corequisite: DAST 134L. Offered: Spring. Two lecture hours.

**DAST 134L CLINICAL PROCEDURES II LAB (2)**
Lab and pre-clinical experience for DAST 134. The lab emphasizes firsthand observations and hands-on performance of skill competencies that support the concepts learned in DAST 134. Permission required. Prerequisite: DAST 125L. Corequisite: DAST 134. Offered: Spring. Four lab hours.

**DAST 141 DENTAL EDUCATION ISSUES (1)**
An orientation to Dental Clinical Practicum II, which includes familiarization with various dental specialty settings, operations, and evaluation procedures. Students review chairside procedures, share their experiences, and discuss national and state credentials, current concepts in dental and medical health technology and trends, dental careers, employment opportunities, personality types, emotional intelligence, cultural diversity, and the New Mexico Dental Practice Act. Permission required. Offered: Summer. One lecture hour.

**DAST 193 DENTAL CLINICAL PRACTICUM I (2)**
Applied clinical experience in general chairside and various specialty dental settings. As part of the Commission on Dental Accreditation’s requirement of 300 clinical internship hours, students practice clinical applications of all the dental didactic and lab courses, including various dental applications, dental office management, community dental health, and state-approved expanded functions. This course also includes seminars to discuss clinical rotation experiences and measures to take care of any deficiencies. Permission required. Prerequisites: DAST 123 and DAST 123L. Offered: Spring. Four lab hours.

**DAST 222 COMMUNITY DENTAL HEALTH (2)**
Introduction to dental public-health education, including prevalence and incidence of dental diseases, epidemiology, biostatistics, prevention, promotion, care-delivery, and improving quality of life through organized efforts. Community-based experience, with a culturally diverse population and research, is an essential component of this course. Permission required. Offered: Spring. Two lecture hours.
DAST 293  DENTAL CLINICAL PRACTICUM II  (5)
A continuation of Dental Clinical Practicum I, including the opportunity for clinical application of dental-assisting skills in an office and a variety of clinical settings as part of the Commission on Dental Accreditation’s requirement of 300 clinical internship hours. Permission required. Prerequisite: DAST 193. Offered: Summer. Ten lab hours.

DAST 294  DENTAL PROFESSIONALS SEMINAR  (1-2)
A review of the basic principles of various professional topics in the dental setting. Graded as Pass/Fail. Permission required. Offered: Summer. One-two lecture hours.

DRAFTING TECHNOLOGY

DRFT 111  DRAFTING I  (3)
An introduction to basic computer-aided drafting concepts using AutoCAD. Students learn drafting techniques that are in common use within the architecture, engineering and construction industries. Emphasis is placed on drawing setup, creating and modifying geometry, storing and retrieving files, placing, rotating, and scaling objects, adding text and dimensions, using layers, creating blocks. Students interpret and construct plans including elevation and section views. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

DRFT 112  BUILDING MATERIALS AND METHODS  (3)
An examination of common building systems and subsystems using computer-aided drafting. Topics include structural materials, thermal and moisture protection, roofing, glazing, finish systems, heating, air-conditioning ventilation (HVAC) systems. Prerequisite: DRFT 111 or concurrency. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

DRFT 121  DRAFTING II  (3)
A continuation of drafting fundamentals. Topics include content management, creating blocks, managing external references, annotation objects, CAD Standards, working with non-native imported objects and advanced modify commands. Students interpret and construct plans including elevation and section views. Prerequisite: DRFT 111. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

DRFT 123  COMPUTER-AIDED MODELING  (3)
This course provides knowledge and practice in creating 3-Dimensional models in CAD software programs. Students use desktop software to create conceptual models and solids. Students learn to use 3-Dimensional models to create graphical presentations and technical drawings. Offered: Spring. Three lecture hours.

DRFT 128  COMPUTER-AIDED DRAFTING PROJECT  (2)
This course provides an instructor-led lab setting in which students can apply project design methods. Students work at their own pace to complete, plot and present solo or team-based projects. Prerequisite: DRFT 111. Offered: Occasionally. Two lecture hours.

DRFT 132  BUILDING INFORMATION MODELING I  (3)
An introduction to Building Information Modeling (BIM) concepts. Topics include how to place, manipulate, and create intelligent building components that are fully parametric, create and manage various views, manage and place annotative objects, and use non-native files to create 3-D site information. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

DRFT 216  CIVIL 3-D MODELING  (3)
This course provides knowledge and practice in the methods and standards employed to develop technical drawings for various types of structural engineering projects. Utilization of CAD programs for the completion of assignments is expected and relied upon for successful completion. Prerequisite: DRFT 111. Offered: Fall. Three lecture hours.

DRFT 221  CONSTRUCTION DOCUMENTS AND GRAPHICS  (3)
An examination of the assembly of construction documents (CDs) and notes. Topics include assembly of a drawing set, fundamental architectural components, interior design graphics standards and building engineering graphics standards. Key building codes are presented and applied in construction projects. Prerequisite: DRFT 212. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.
## DRAMA

* DRAM 111 INTRODUCTION TO THEATER AND DRAMA  (3)

An introductory drama course presenting a broad overview of theater as a fine art. The course covers historical perspectives, theatrical spaces, theater artists, dramatic forms, and theater criticism and review. Offered: Fall and Spring. NMCCNS: THTR 1013. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

### DRAM 160L ACTING I  (3)

A basic theater course in acting techniques, including improvisation, stage movement, pantomime and delivery. Variable credit. Offered: Summer, Fall and Spring. Six lab hours.

### DRAM 260L ACTING II  (3)

A continuation of Acting I for students who want additional experience. Special attention is given to movement and voice. May be taken twice for degree or certificate credit. Prerequisite: DRAM 160L. Offered: Occasionally. Six lab hours.

## DRAWING AND PAINTING

### DRPT 118L DRAWING I  (3)

An introduction to the basic concepts and materials of drawing, with an emphasis on drawing from observation and imagination. Linear and atmospheric perspective, compositional dynamics, line quality, and value relationships are the focus of the course. Students are introduced to a variety of drawing materials and techniques. Offered: Summer, Fall and Spring. Six lab hours.

### DRPT 121L PAINTING I  (3)

An introduction to the techniques and safe studio practice for oil and acrylic painting. A range of painting techniques is introduced, and various painting situations presented, including still life, reference form imagination and abstraction. Students also discuss contemporary issues and historical issues in painting. Prerequisite: DRPT 118L. Offered: Fall and Spring. Six lab hours.

### DRPT 122L PAINTING MEDIA: ANCIENT AND CONTEMPORARY  (3)

Students work with bulk powdered pigments and other materials called for in ancient and contemporary recipes to make a variety of painting media. Four to five different media are covered each semester. In addition, students will make their own “grounds” and “supports.” A solid understanding of the materials related to painting, health and safety issues, and basic techniques related to each medium will be covered in this course. May be taken twice for degree or certificate credit. Offered: Occasionally. Six lab hours.

### DRPT 130L WATERCOLOR I  (3)

An introductory course in watercolor presenting the study of design concepts, color exercises and the application of fundamental watercolor techniques. Students will work from a variety of subject matter, including abstraction. Students will work largely from observation, to gain an understanding of how the use of light and shadow, color and spatial manipulation can describe form. Introduction to various papers, brushes and tools. Traditional and contemporary approaches to watercolor painting are presented. Prerequisite: DRPT 118L. Offered: Occasionally. Six lab hours.

### DRPT 180L DRAWING SPACE  (3)

A drawing course focusing on ways to create the illusion of deep and shallow space within a 2-Dimensional format. Students will work with applied linear perspective, including three-point and creative dynamic perspective, atmospheric perspective and the use of color to manipulate space. Art historic and culturally specific approaches to visual space will be explored. Prerequisite: DRPT 118L. Offered: Occasionally. Six lab hours.

### DRPT 219L DRAWING II  (3)

Intermediate level course with an emphasis on descriptive and perceptual drawing skills. Introduction to colored media and color as an element of composition. Introduction to conceptual issues related to contemporary drawing. Projects include introduction to the figure and portraiture, abstraction, visual narrative and visual metaphor. Prerequisite: DRPT 118L. Offered: Occasionally. Six lab hours.

### DRPT 220L DRAWING FOR ANIMATION  (3)

An intermediate level course in drawing for animation and cartooning. Students work with drawing as a progressive storytelling medium, with introduction to storyboarding for film as well as the graphic novel. Students are introduced to the work of cartoonists and animators whose work has been historically influential in the field. This course provides students with the drawing skills needed

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* Approved by the NM Higher Education Department for transfer and application to general education requirements in any public two- or four-year educational institution in New Mexico. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year school
for successful use of digital animation tools. Prerequisite: DRPT 118L. Offered: Occasionally. Six lab hours.

**DRPT 221L FIGURE DRAWING (3)**
Study of the human form as a primary vehicle for addressing formal and conceptual issues in drawing. Will work with a variety of media to focus on proportion, structure and visual expression of the figure. Prerequisite: DRPT 219L. Occasionally. Six lab hours.

**DRPT 222L FIGURE PAINTING (3)**
An introduction to painting the human figure from direct observation, using varied painting media. Emphasis is placed on the expressive and thematic potential of the human form's gestural, structural and anatomical forces. May be taken twice for degree or certificate credit. Prerequisite: DRPT 121L and DRPT 221L. Offered: Occasionally. Six lab hours.

**DRPT 223L ILLUSTRATION I (3)**
An intermediate-level course which introduces students to the discipline of narrative illustration; a visual translation of the written word. Students are challenged to use a variety of visual sources in order to create imagery which clearly communicates a given concept or story to an audience. The complex relationship among art director, editor, client, and illustrator within the publishing industry is explored. Students are introduced to a range of approaches and a variety of examples by professional illustrators. Prerequisite DRPT 219L. Offered: Occasionally. Six lab hours.

**DRPT 224L LANDSCAPE PAINTING (3)**
A contemporary approach to landscape painting in oil or acrylic. On-site and studio work will focus on both the natural world and landscapes of the imagination. Students are encouraged to pursue and develop their own personal direction with the landscape as a reference. May be taken twice for degree or certificate credit. Prerequisite: DRPT 121L. Offered: Occasionally. Six lab hours.

**DRPT 225L PAINTING II (3)**
Students continue the explorations they began in Painting I with a greater focus on developing their own personal expression through conceptual and technical experimentation and development. Painting assignments will be provided by faculty, with creative student interpretation encouraged. Prerequisite: DRPT 121L. Offered: Occasionally. Six lab hours.

**DRPT 226L FINE ARTS COLLAGE (3)**
This course will focus on the fine art collage/mixed media applications and will explore experimental processes, incorporating the adhering of papers and other materials to a support along with painting and drawing media. Art historical influences will be emphasized. Offered: Occasionally. Six lab hours.

**DRPT 227L ABSTRACT PAINTING (3)**
Students analyze and apply to their own work the various concepts, styles and techniques of contemporary abstract painting, including deconstruction of subject matter, collage, mixed media, textural layering, lyrical and hard edge abstract expressionism, and minimalism. Experimental color usage, paint application techniques, development of surface techniques and the use of varying surfaces along with art historical references will be covered. Students will complete a portfolio of abstract works. Prerequisites: DRPT 121L. Offered: Occasionally. Six lab hours.

**DRPT 228L ANIMAL LIFE DRAWING AND PAINTING (3)**
Drawing and painting students explore the structure, movement and form of a variety of animals. In addition, the artistic tradition of the animal as a part of two-dimensional art as human metaphor, as a metaphor for nature, as a symbol of the fabulous or surreal will be explored. The course will involve field trips as well as in-studio work. The course will involve on-site observational work as well as supplemental anatomical study. A small body of developed imagery based on these explorations will result. May be taken twice for degree or certificate credit. Prerequisite: DRPT 118L or DRPT 121L. Offered: Occasionally. Six lab hours.

**DRPT 230L WATERCOLOR II (3)**
An intermediate level painting course offering the student an in-depth study of expanded watercolor techniques building upon the introductory coursework done in Watercolor I, with a greater emphasis on developing a student's personal expression through conceptual and technical experimentation. Prerequisite DRPT 130L. Offered: Occasionally. Six lab hours.

**DRPT 233L ILLUSTRATION II (3)**
Continuation of DRPT 223L with a more focused exploration of specific types of typical illustration assignments. Based on a set of parameters, students create visual imagery for clients whose projects include institutional, editorial, advertising, and packaging. Prerequisite: DRPT 223L. Offered: Occasionally. Six lab hours.

**DRPT 280L DRAWING AND PAINTING ADVANCED PROJECTS (3)**
Intermediate to advanced level drawing and/or painting studio course. The course is structured around a common theme or mode of inquiry or combination of media, relevant
to contemporary painting and/or drawing. Art historical context is discussed. Individual expression and exploration of painting and/or drawing is encouraged and expected. Prerequisite: DRPT 121L. Offered: Occasionally. Six lab hours.

**EARLY CHILDHOOD EDUCATION**

**ECED 111 CHILD GROWTH, DEVELOPMENT AND LEARNING**

An introductory course in the growth, development and learning of young children, prenatal through age eight. This course provides students with the theoretical foundation for becoming competent early childhood professionals. The course includes knowledge of how young children grow, develop and learn. Major theories of child development are integrated with all domains of development, including biological-physical, social, cultural, emotional, cognitive and language. The adult's role in supporting each child's growth, development and learning is emphasized. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. NMCCNS: ECED 111. Three lecture hours.

**ECED 112 HEALTH, SAFETY AND NUTRITION**

Provides information related to standards and practices that promote children's physical and mental well-being, sound nutritional practices and maintenance of safe learning environments. It includes information for developing sound health and safety management procedures for indoor and outdoor learning environments for young children. The course examines the many scheduling factors that are important for children's total development, healthy nutrition, physical activity and rest. Prerequisite: ENGL 109. Offered: Fall and Summer. NMCCNS: ECED 112. Two lecture hours.

**ECED 113 FAMILY AND COMMUNITY COLLABORATION I**

A beginning course that examines the involvement of families and communities from diverse cultural and linguistic backgrounds in early childhood programs. Ways to establish collaborative relationships with families in early childhood settings are discussed. Families’ goals and desires for their children will be supported through culturally responsive strategies. Prerequisite: ECED 111. Offered: Spring. NMCCNS: ECED 113. Three lecture hours.

**ECED 114 ASSESSMENT OF CHILDREN AND EVALUATION OF PROGRAMS**

Familiarizes students with a variety of culturally appropriate assessment methods and instruments, including systematic observation of typically and non-typically developing children. The course addresses the development and use of formative and summative assessment and evaluation instruments to ensure comprehensive quality of the total environment for children, families and the community. Students develop skills for evaluating the assessment process and involving other teachers, professionals and families in the process. Prerequisite: ECED 111. Offered: Spring. NMCCNS: ECED 114. Three lecture hours.

**ECED 123 INFANT/TODDLER GROWTH AND DEVELOPMENT**

Provides both basic knowledge of typically and atypically developing young children from the prenatal period to 36 months and a foundational understanding for the promotion of the health, well-being, and development of all infants and toddlers within the context of family, community, and cultural environments. The course examines infancy and toddlerhood with an emphasis on the interrelationship of cognitive, physical, social and emotional development, mental health, and early parent-child relationships. Prerequisite: ENGL 109. Corequisite: ECED 124L. Offered: Spring. Three lecture hours.

**ECED 124L INFANT TODDLER GROWTH DEVELOPMENT PRACTICUM**

Application of knowledge gained from ECED 123 Infant Toddler Growth and Development in an early childhood care and education setting. Prerequisite: ENGL 109. Corequisite: ECED 123. Offered: Spring. Three lab hours.

**ECED 125 RELATIONSHIP AND REFLECTIVE PRACTICE IN IFS**

An intermediate-level course intended to define and implement basic elements of relationship building with families and colleagues with a goal of quality programming for infants, and toddlers. The lenses of reflective practice and reflective supervision are presented as avenues for working collaboratively with families and peers. Prerequisite: ENGL 109. Corequisite: ECED 126L. Offered: Fall. Three lecture hours.

**ECED 126L RELATIONSHIP AND REFLECTIVE PRACTICE IN IFS**

Application of knowledge gained in ECED 125 Relationships and Reflective Practice in Infant Family

**ECED 127 PRINCIPLES AND PRACTICES IN INFANT FAMILY STUDIES**
Intended to assist students to understand infant and toddler development in the context of relationships. This course defines and implements basic elements of quality programming for all infants and toddlers in safe, healthy, responsive caring environments, including the child’s home. The experiences in identified settings will support strong nurturing relationships, cultural competence, diverse learning needs and styles of every child, appropriate guidance techniques and partnership with the families, cultures, and community represented. Students are assisted through the course in gaining the ability to observe, discuss, and implement basic elements of quality programming for infants and toddlers in home, small-group, or whole-group care situations. Prerequisite: ENGL 109. Offered: Summer. Three lecture hours.

**ECED 134L CHILDHOOD DEVELOPMENT FIELD EXPERIENCE**
Field experience that meets the requirements of the Child Development Certificate issued by the New Mexico Children Youth and Families Department (CYFD). Students apply developmentally appropriate practices, establish partnerships with families, and design programs/curriculum that are culturally and linguistically appropriate. Prerequisites: ECED 112 and ECED 113 and ECED 114. Offered: Summer, Fall and Spring. Four lab hours.

**ECED 211 INTRODUCTION TO LANGUAGE, LITERACY AND READING**
Prepares early childhood professionals for promoting children's emergent literacy and reading development. Through a developmental approach, the course addresses ways in which early childhood professionals can foster young children’s oral language development, phonic awareness, literacy problem-solving skills, fluency, vocabulary, and comprehension. This course provides the foundation for early childhood professionals to become knowledgeable about literacy development in young children. Instructional approaches and theory-based and research-based strategies to support the emergent literacy and reading skills of native speakers and English language learners will be presented. Prerequisite: ECED 111. Offered: Spring. NMCCNS: READ 2113. Three lecture hours.

**ECED 215 PROFESSIONALISM**
Provides a broad-based orientation to the field of early care and education. Early childhood history, philosophy, ethics and advocacy are introduced. Basic principles of early childhood systems are explored. Multiple perspectives on early care and education are introduced. Professional responsibilities such as cultural responsiveness and reflective practice are examined. Prerequisite: ENGL 109. Offered: Fall. Two lecture hours.

**ECED 216A CURRICULUM DEVELOPMENT THROUGH PLAY/BIRTH-AGE 4 (PRE-K)**
Beginning curriculum course places play at the center of curriculum in developmentally appropriate early childhood programs. It addresses content that is relevant for children birth through age four in developmentally and culturally sensitive ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with special needs and the development of IFSPs is included. Curriculum development in all areas, including literacy, numeracy, the arts, health, science, social skills and adaptive learning for children, birth through age four, is emphasized. Prerequisite: ECED 111 and ECED 114. Corequisite: ECED 216B. Offered: Fall. NMCCNS: ECED 2163. Three lecture hours.

**ECED 216B PRACTICUM CURRICULUM DEVELOPMENT THROUGH PLAY/BIRTH-AGE 4 (PRE-K)**
The beginning practicum course is a co-requisite with the course Curriculum Development through Play-Birth through Age 4. The field-based component of this course will provide experiences that address curriculum content that is relevant for children, birth through age four, in developmentally and culturally sensitive ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with special needs and the development of IFSPs is included. Curriculum development in all areas, including literacy, numeracy, the arts, health, science, social skills, and adaptive learning for children, birth through age four, is emphasized. Prerequisite: ECED 111. Corequisite: ECED 216A. Offered: Fall. NMCCNS: ECED 2162. Four lab hours.

**ECED 217A CURRICULUM DEVELOPMENT AND IMPLEMENTATION AGE 3-GRADE 3**
A curriculum course that focuses on the learning environment and the implementation of curriculum in early childhood programs. Students will use their knowledge of content, developmentally appropriate practices, and language and culture to design and implement experiences and environments that promote optimal development and learning for children from birth...
through eight years of age, including children with special needs. Various curriculum models and teaching and learning strategies will be included. Prerequisite: ECED 111 and ECED 114. Corequisite: ECED 217B. Offered: Spring. NMCCNS: ECED 2173. Three lecture hours.

**ECED 217B CURRICULUM DEVELOPMENT AND IMPLEMENTATION PRACTICUM AGE 3-GRADE 3**

A beginning practicum course that is a corequisite with the course Curriculum Development and Implementation: Age 3 through Grade 3. The field-based component of this course will provide experiences that address developmentally appropriate curriculum content in early childhood programs, age three through third grade. Development and implementation of curriculum in all content areas, including literacy, numeracy, the arts, health and emotional wellness, science, motor and social skills is emphasized. Information on adapting content areas to meet the needs of children with special needs and the development of IEPs is included. Prerequisite: ECED 111. Corequisite: ECED 217A. Offered: Spring. NMCCNS: ECED 2172. Four lab hours.

**ECED 218 GUIDING YOUNG CHILDREN (3)**

Explores various theories of child guidance and the practical application of each. It provides developmentally appropriate methods for guiding children and effective strategies and suggestions for facilitating positive social interactions. Strategies for preventing challenging behaviors through the use of environment, routines and schedule will be presented. Emphasis is placed on helping children become self-responsible, competent, independent and cooperative learners and including families as part of the guidance approach. Prerequisite: ECED 111. Offered: Fall. Three lecture hours.

**EARLY CHILDHOOD MULTICULTURAL EDUCATION**

**ECME 111 FOUNDATIONS OF EARLY CHILDHOOD (3)**

An introduction for entry-level professionals in the field of early care, education and family support. This course meets New Mexico licensing standards for entry-level curriculum and addresses the seven competency areas for early childhood education. The 45-hour entry level course may be used as part of the 120 clock hours of child study required by the CDA. Graded as Pass/Fail. Offered: Summer, Fall and Spring. Three lecture hours.

**ECME 163 WORKING WITH CHALLENGING BEHAVIORS (1)**

An introductory course in working with children from birth through 8 years who are difficult to raise or teach because of their different temperaments. Students learn how to deal with children who are fidgety and unable to be still, who are easily over stimulated and impulsive, and who exhibit aggressive, highly distractible and unpredictable behaviors. Graded as Pass/Fail. Offered: Occasionally. One lecture hour.

**ECME 191 WORKING WITH INFANTS AND TODDLERS (1)**

This course introduces the student to the basic principles of infant/toddlers’ physical, emotional, social and cognitive development. Students will discuss and identify activities and environments that are physically safe, emotionally nurturing and intellectually stimulating for children aged two years and under. Offered: Occasionally. One lecture hour.

**ECONOMICS**

* **ECON 200 PRINCIPLES OF MACROECONOMICS (3)**

An introduction to principles of economics focusing on forces driving the economy at the national level. Students discuss levels of production, employment, and prices. The class examines monetary and fiscal policy and alternative views of managing the economy. Sustainability is a theme of the course. Prerequisite: MATH 102 or BSAD 112. Offered: Summer, Fall and Spring. NMCCNS: ECON 2113. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

* **ECON 201 PRINCIPLES OF MICROECONOMICS (3)**

An introduction to principles of economics focusing on how individual producers and consumers make decisions in various organized market structures. Topics include the price system, market performance, efficiency, and government policy. Sustainability is a theme of the course. Prerequisite: MATH 102 or BSAD 112. Offered: Summer, Fall and Spring. NMCCNS: ECON 2123. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

* Approved by the NM Higher Education Department for transfer and application to general education requirements in any public two- or four-year educational institution in New Mexico. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year school.
EDUCATION

EDUC 111  INTRODUCTION TO EDUCATION  (3)
An orientation to the profession of teaching. Topics include
the role of education in society and the role, preparation
and certification of teachers. Weekly observations in a
school are required. Prerequisite: ENGL 109. Corequisite:
EDUC 112L. Offered: Fall and Spring. Three lecture hours.

EDUC 112L  FIELD-BASED  (1)
TEACHING OBSERVATIONS
This course gives students the opportunity to observe
classroom environments and determine a classroom
teacher’s responsibilities. The class combines observation
with an on-campus seminar. Graded as Pass/Fail. Corequisite:
EDUC 111. Offered: Fall and Spring. Two lab hours.

EDUC 201A  ORIENTATION TO THE  (1)
TEACHING PROFESSION
An orientation to the teaching profession and to the
conceptual framework for the Teacher Academy Teacher
Certification Program. Students reflect on their individual
dispositions and on their experiences as learners in order
to examine perceptions and assumptions they hold about
teaching and learning. In addition, students examine the
ways in which teacher beliefs influence learning. Additional
topics include Teacher Academy conceptual framework,
core values, teacher candidate competencies and
proficiencies, demands of the profession, leadership, teacher
reflection and aspects of education. This course includes a
structured five-hour field component. Permission required.
Offered: Fall and Spring. One lecture hour.

EDUC 201B  THE CRITICALLY  (2)
REFLECTIVE TEACHER
An exploration of the role of critically reflective teachers
in diverse educational settings. Students demonstrate
a commitment to the development and practice of
self-directed reflection as applied to teaching and
learning. Students explore how reflection-in-action and
reflection-on-action guide instructional decision-making.
This course includes a 10-hour field component. Prerequisite: 
EDUC 201A. Offered: Summer, Fall and Spring. Two lecture hours.

EDUC 202  THEORIES OF  (3)
TEACHING AND LEARNING
Examines the teaching and learning process in relation to
historical, theoretical, philosophical and social foundations
of education. Students develop an awareness of expected
developmental progressions and ranges of individual
variation within the physical, social, emotional, moral,
and cognitive domains. Students learn how to apply
instructional strategies that promote learning. This
course includes a structured 10-hour field component.
Prerequisite: EDUC 201B. Offered: Summer, Fall and Spring.
Three lecture hours.

EDUC 203  CURRICULUM AND ASSESSMENT  (3)
Focuses on planning effective instruction, designing and
analyzing meaningful assessment based on students’ needs
and on district and state standards. Specific strategies
focus on differentiating instruction, designing a
conceptually-based curriculum, and analyzing standards
for alignment with curriculum content and outcomes.
Students learn how to use assessment data to direct their
teaching practices and curriculum development. This
course includes a structured 10-hour field component.
Prerequisite: EDUC 201B. Offered: Summer, Fall and Spring.
Three lecture hours.

EDUC 204  EFFECTIVE TEACHING  (3)
Focuses on effective instructional processes, techniques and
procedures to help teachers lead their classrooms toward
high levels of student success. Students learn practical keys
and strategies for increased student motivation and learning
in a diverse classroom. The processes of social, emotional,
physical and cognitive development from birth through
adolescence and their implications for student learning
are reviewed. Students examine a variety of classroom
management models for understanding classroom behaviors
and educational strategies that are effective in helping
all students succeed. This course includes a structured
10-hour field component. Prerequisite: EDUC 201B.
Offered: Summer, Fall and Spring. Three lecture hours.

EDUC 205  FUNDAMENTALS OF  (3)
READING INSTRUCTION
Prepares students to apply research-based techniques
in the development and implementation of a literacy
program including phonics, phonemic awareness,
fluency, vocabulary and comprehension. Students are
introduced to a literature-based curriculum and explore
developmentally-appropriate reading techniques as
applied to the reading process. Students explore and
understand theory and research on the effective teaching
of reading and writing, the components of language
and the cognitive characteristics of readers. This course
includes a structured 10-hour field component. Prerequisite: 
EDUC 201B. Offered: Summer, Fall and Spring. Three lecture hours.

EDUC 206E  TEACHING READING FOR THE  (3)
ELEMENTARY CLASSROOM
An exploration of developmentally, culturally and linguistically
appropriate, formal and informal research-based assessments
and teaching strategies in the teaching of reading in grades K-8. This course includes a structured 10-hour field component. Prerequisites: EDUC 201B and EDUC 205. Offered: Summer, Fall and Spring. Three lecture hours.

EDUC 206S TEACHING READING IN THE CONTENT AREA (3)
An exploration of developmentally, culturally and linguistically appropriate, formal and informal research-based assessments and teaching strategies in the teaching of reading at the secondary level. Students learn teaching strategies that emphasize the construction of meaning in texts, reading and study skills, and reading and writing and information literacy across the curriculum. This course includes a structured 10-hour field component. Prerequisite: EDUC 201B. Offered: Summer, Fall and Spring. Three lecture hours.

EDUC 208 EXCEPTIONALITIES AND PLACEMENT (3)
Focuses on the meanings and concepts of disabilities that affect learning. Students gain an understanding of each of the exceptionalities and the developmental stages involved in motor, language, social-emotional, sensory and cognitive domains. Students learn components of identification, assessment, educational planning and implementation of instruction for students with disabilities within the context of public schools. This course includes a structured 10-hour field component. Prerequisite: EDUC 201B. Offered: Fall and Spring. Three lecture hours.

EDUC 209 EVALUATION AND IEP (3)
The screening evaluation, eligibility and re-evaluation process for students with special needs. There is special emphasis on the Process of Special Education in the public schools, including referral, assessment, determining eligibility, instructional interventions and evaluation of student progress. Students learn about developing Individual Education Plans, writing goals and objectives, and the legal mandates for serving students with disabilities. A primary focus of the course is considering special education in the context of inclusive schooling. This course includes a structured 10-hour field component. Prerequisite: EDUC 201B. Offered: Summer and Spring. Three lecture hours.

EDUC 213 READING FOR SPECIAL LEARNERS (3)
This course provides an understanding of concepts of procedures for teaching reading to students with special needs. Emphasis is placed on formal and informal reading assessments, effective reading practices, research-based reading programs, oral language development, decoding strategies, phonemic awareness and vocabulary acquisition. Prerequisite: EDUC 201B and EDUC 205. Offered: Fall and Spring. Three lecture hours.

EDUC 214L SUPERVISED FIELD EXPERIENCE (3)
Provides students with the opportunity to analyze, critique and reflect upon their field experience through dialogue with others, and the study of research-based effective instructional strategies. Guided discussions address classroom management, student learning, lesson planning, parent communications and professional development. Students will engage in applied classroom research to assess and improve upon the efficacy of their instructional practices. Students are observed teaching in the field placement and assessed on the New Mexico Teacher Competencies. This course requires a minimum of 150 hours of field experience and is competency-based. Permission required. Offered: Fall and Spring. Six lab hours.

EDUC 220 INTRODUCTION TO BILINGUAL EDUCATION (3)
A historical overview of bilingual education with a focus on current trends and practices. Special attention is given to programs in New Mexico. Designed for teachers and other education professionals. Offered: Occasionally. Three lecture hours.

EDUC 222 METHODS AND MATERIALS FOR THE BILINGUAL/MULTICULTURAL CLASS (3)
In this course, students will explore the applicability of numerous theories of first- and second-language acquisition. Students will explore various methods, approaches, techniques and strategies for teaching, and emphasis is placed on utilizing teaching methods that are appropriate to diverse populations of students in diverse classroom settings. Offered: Occasionally. Three lecture hours.

EDUC 228 TECHNOLOGY FOR THE CLASSROOM (3)
This course provides an overview of technology as a way of enhancing instruction and the assessment of student learning in Pre-K through 12 grade classrooms. Students will examine and evaluate a variety of instructional software and become familiar with the internet as a research tool. Students will have extensive lab experiences with software applications, basic web creation tools and with other teaching and learning technologies. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

EDUC 250 EARLY CHILDHOOD EDUCATION PROFESSION IN NEW MEXICO (1)
An introduction to the early childhood profession in New Mexico. Students develop a definition of advocacy for excellence in state early childhood programs and discuss the diverse communities of New Mexico. Students examine state and national professional codes of ethics and conduct
as well as federal, state and local regulations and legislation regarding programs of service for young children. Critical reflection of one's own professional and educational practices is emphasized along with professional development opportunities that would enhance knowledge and skills in working with young children. Permission required. Offered: Occasionally. One lecture hour.

EDUC 251 FOUNDATIONS OF EARLY CHILDHOOD (2)
Focuses on historical, philosophical and social foundations of the early childhood education profession and how these foundations influence current thought and practices. A particular emphasis will be placed on developmental issues for children, birth through the age of eight. Topics include a survey of the history of early childhood education and professionalism, ethical codes of conduct, and issues of advocacy in the field. Upon completion of the course, students will articulate a well-designed personal early childhood education philosophy that supports practices of inclusion and cultural and linguistic diversity in early education. This course requires 10 hours of fieldwork in an early childhood program approved by the instructor. Permission required. Offered: Occasionally. Two lecture hours.

EDUC 252 FAMILY AND COMMUNITY COLLABORATION (3)
An analysis of family, school and community resources and collaboration as related to early childhood education and family-centered practices. The focus is on emotionally healthy and physically safe environment for young children from age three to grade three, in partnership with their families. Strategies to improve communication and collaboration are emphasized with a focus on family systems, cultural diversity, economic conditions, school systems, community services, political forces, advocacy groups and other factors that impact young children and their families. This course requires 10 hours of fieldwork in an early childhood program approved by the instructor. Prerequisites: EDUC 251 and ECED 111. Offered: Summer. Three lecture hours.

EDUC 253 CURRICULUM DEVELOPMENT LEARNING ENVIRONMENT IN ECE (3)
An integration of knowledge of child development and learning theory with early childhood curriculum content for young children from age three to grade three. Students study the principles of designing and evaluating curriculum that is developmentally appropriate for young children. Content includes arts, literacy, mathematics, physical education, health, social studies, science and technology. Integrated curriculum that is supportive of language, home experiences and cultural values will be emphasized. This course requires 10 hours of fieldwork in an early childhood classroom approved by the instructor. Prerequisites: EDUC 251 and ECED 111. Offered: Fall and Spring. Three lecture hours.

EDUC 254 ASSESSMENT AND EVALUATION IN EARLY CHILDHOOD EDUCATION (3)
Provides students with the ability to use a variety of assessment methods to determine the developmental levels and needs of young children age three to grade three. Learners are introduced to the meaning and uses of authentic assessment as well as various tools and assessment strategies. The course teaches students to interpret observational and assessment data to monitor young children's progress, guide instructional practice, and identify and refer at-risk children. This course requires 10 hours of fieldwork in an early childhood classroom approved by the instructor. Prerequisites: EDUC 251 and ECED 111. Offered: Fall and Spring. Three lecture hours.

EDUC 255 EARLY LITERACY I: INTRODUCTION TO THEORY AND MODELS (3)
Focuses on theories and approaches to reading instruction for young children. Major topics in the course include early and emergent reading theories, stages of reading and emergent literacy at each developmental sequence of language and literacy, which includes the influence of culture and home factors. Reading assessment practices require documentation of multiple sources including cultural and linguistic differences and diverse ways of learning. This course requires 10 hours of fieldwork in an early childhood classroom approved by the instructor. Prerequisites: EDUC 251 and ECED 111. Offered: Summer. Three lecture hours.

EDUC 256 EARLY LITERACY II: DEVELOPMENT AND IMPLEMENTATION (3)
An exploration of principles that enhance the development and implementation of emergent literacy practices with young children. These principles include direct instruction, experiential learning, listening to and sharing stories, and book readings. Students also learn how to modify the literacy environment and to encourage family participation. Literacy principles and best practices become the basis for the discussion and activities supporting effective instructional strategies. This course requires 10 hours of fieldwork in an early childhood classroom approved by the instructor. Prerequisite: EDUC 251 and EDUC 255. Corequisite: EDUC 257L. Fall and Spring: Occasionally. Three lecture hours.
EDUC 257L  SUPERVISED FIELD EXPERIENCE IN (3) EARLY CHILDHOOD EDUCATION

An opportunity to analyze, critique and reflect upon their selected field experiences in programs for children birth through grade three through dialogue with other students in the same field experience settings and the college instructor. Guided discussions address classroom management, student learning, lesson planning, assessment, parent communications and professional development. Students will engage in applied classroom research to assess and improve upon the efficacy of their instructional practices. Additional areas include standards-based and developmentally appropriate early childhood education methodology, professional issues, ethics and portfolio preparation. This course requires a minimum of 150 hours of field experience in an early childhood setting. Application for Field Experience due the semester prior to placement. Permission required. Corequisite: EDUC 256. Offered: Occasionally. Six lab hours.

EDUC 260  LANGUAGE (3) LEARNING AND TEACHING

In this course, participants explore how first and second languages are learned. Through a linguistic lens, participants compare first and second language acquisition traits. In doing so, participants uncover the fundamental principles of language learning, the factors that influence language acquisition, and practical classroom applications of this knowledge. Participants study the evolution of language teaching methodologies, identify effective language teaching strategies and techniques, and determine how to use them in their specific contexts. Additionally, participants direct this knowledge to understand the population of students served in the state of New Mexico and to create a classroom that supports the success of the English Language Learner (ELL). Offered: Fall. Three lecture hours.

EDUC 261  INTERCULTURAL COMMUNICATION (3) FOR EDUCATORS

In this course, participants explore the role culture plays in shaping one’s worldview and in dictating how one interacts with others. By examining different cultures, participants develop an articulate understanding of the four facets of culture (Knowledge, Attitude, Skills and Awareness) and how they may support or disrupt one’s learning experience. Participants also identify how diversity and multiculturalism have shaped the evolution of the state of New Mexico. Through the exploration of cultural traits, participants develop greater cultural sensitivity and strong intercultural skills. Participants learn how to create a classroom environment that supports intercultural communication, celebrates diversity, and teaches cultural sensitivity. Offered: Summer. Three lecture hours.

EDUC 262  TEACHING ENGLISH (3) TO SPEAKERS OF OTHER LANGUAGES

In this course, participants focus on the practical classroom applications of second language acquisition theories. Participants explore how each of the four skills (speaking, listening, reading, and writing) develops within second language learners. In addition to examining how receptive and productive skills should be taught, participants acquire a variety of effective teaching strategies they can use in their classrooms. Emphasis is placed on strategies and techniques teachers can use to support every English Language Learner (ELL) in building fluency and accuracy in each of the four skills. Furthermore, participants study English language syntax and acquire strategies to teach the form, meaning, and use of English language grammar. One common thread throughout the course is an attention to strategies that help promote literacy in all of the skills. Offered: Occasionally. Three lecture hours.

EDUC 264  CONNECTING (3) CONTENT AND LANGUAGE

In this course, participants focus on the theories and practical strategies used to encourage second language development in the inclusive, content-area classroom. Special attention is paid to sheltered instructional techniques and differentiating instructional practices. Participants learn how to modify content, context, and procedures to meet the individual needs of non-native English speakers in the English-speaking classroom. Participants explore current vocabulary acquisition theories along with their practical classroom applications. Participants acquire a variety of vocabulary teaching strategies and techniques. Prerequisites: EDUC 262 and EDUC 263. Corequisite: EDUC 265. Offered: Occasionally. Three lecture hours.

EDUC 290  EDUCATION SEMINAR (1-3)

Covers selected topics, theories, methods and strategies for the professional development of educators. Students will engage in self-assessment activities related to the selected topic. Topics vary from semester to semester. Graded as Pass/Fail. Offered: Occasionally. Three lecture hours.
ELECTRICAL

ELCT 227  NATIONAL ELECTRICAL CODES  (2)
Provides students with a basic understanding of the National Electrical Codes and how they apply to renewable energy systems such as photovoltaic electrical generating systems. Offered: Occasionally. Two lecture hours.

ELECTRONICS

ELEC 111  ELECTRONIC FUNDAMENTALS  (4)
Beginning with the atomic nature of electricity, the topics progress through a study of resistors, an introduction to direct current, Ohm's law, fundamental circuits, networks and component applications. Laboratory exercises help develop skills in constructing circuits from schematic diagrams and in the use of DC power supplies and multimeters. Provides a basic understanding of DC and AC fundamentals of electricity (circuit elements, Kirchhoff and Ohm's laws), basic components that make up various energy systems and learn to evaluate electrical systems, as well as their applications in both traditional and sustainable energy systems. Prerequisite: MATH 102. Offered: Spring. Three lecture hours, two lab hours.

ELEC 121  ELECTRONIC FUNDAMENTALS II  (4)
Provides students with an in-depth understanding of DC and AC electricity concepts (circuit theorems; circuit analysis; phasors, RL, RC and RLC circuits, resonance filters, three phase systems, etc.). Students will become proficient with a broad range of components present in various DC and AC electrical applications and learn to analyze more complex electrical systems. Prerequisite: ELEC 111. Offered: Spring. Two lecture hours, four lab hours.

ELEC 122  DIGITAL CIRCUITS  (4)
A study of the fundamental concepts and application of digital logic circuits, number systems and Boolean algebra. This course focuses on how basic logic gates, MSI and LSI circuits are used to develop operational digital circuits. Prerequisite: Math 102. Offered: Spring. Two lecture hours, four lab hours.

ELEC 151  POWER GENERATION, TRANSMISSION AND DISTRIBUTION  (3)
Provides a firm technical foundation for students interested in design, operation, and management of electric power systems. The course covers the technical, economic, and environmental considerations of power generation, transmission, distribution, and consumption and provides an introduction to power engineering. Prerequisites: ELEC 111. Offered: Fall and Spring. Two lecture hours, two lab hours.

ELEC 201  SMART ENERGY MANAGEMENT SYSTEMS  (3)
Introduces the student to the structural elements of a power generation and distribution system with intelligent energy system enhancements. The purpose of this course is to gain practical experience monitoring and analyzing generation, distribution, and demand aspects of a smart grid and micro grid. The course is project-based, with students becoming familiar with smart grid and micro grid assets on the SFCC campus or a nearby community. Students gain experience with smart grid monitoring and control technologies and participate in the analysis and planning of sustainable electrical systems. Prerequisite: ELEC 151. Offered: Spring. Three lecture hours.

EMERGENCY MEDICAL SERVICES INSTITUTE

EMSI 111L  INTRODUCTION TO PUBLIC SAFETY  (3)
This course allows students to explore potential careers in public safety and to gain an understanding of the role of each discipline in their communities. Exploration of firefighting, emergency medical services and law enforcement are a few of the areas where a participant can see real-life experiences with the public, speak with and mentor with a particular discipline and gain insight into how each of these disciplines work together in their communities and potential career opportunities. Offered: Occasionally. Two lecture hours, two lab hours.

EMSI 153  EMERGENCY MEDICAL RESPONDERS — FIRST RESPONDER  (6)
An introductory course for personnel who may arrive first at the scene of an accident or emergency. First Responders/Emergency Medical Responders (EMRs) are trained to recognize treatment needs and begin treatment of ill and injured patients utilizing specialized equipment. First Responders interface with the larger Emergency Medical Services (EMS) system in their role as care providers. Completion of this course prepares successful students to take the National Registry of Emergency Medical Technicians (EMTs) EMR exam and be licensed as New Mexico First Responders. Corequisite: AHAC 151. Offered: Occasionally. Six lecture hours.
EMSI 160  EMT — BASIC  (8)
An entry level course that prepares students to respond to and provide care for ill or injured patients. It includes an overview of the human body, basic life support, airway management, trauma, medical and environmental emergencies, medical/legal aspects and other related topics. All students must provide proof of required vaccinations prior to being accepted into the program. Permission required. Prerequisite: ENGL 109. Corequisite: EMSI 160L and EMSI 161L. Offered: Summer, Fall and Spring. Eight lecture hours.

EMSI 160L  EMT — BASIC LAB  (3)
This course is designed as the lab component of EMSI 160. It provides lab experience and practice in basic emergency medical procedures. Corequisite: EMSI 160 and EMSI 161L. Offered: Fall and Spring. Six lab hours.

EMSI 161L  EMT — BASIC CLINICAL  (1)
A course required of all SFCC EMT — Basic students to complete their patient contact and clinical care requirements for licensure. Students rotate through various hospital departments as well as spend time on ambulances, refining skills acquired in the lecture and lab components of the EMT-Basic course. Students have specific criteria for skill and assessment achievement that they must meet to pass the course. Corequisites: EMSI 160 and EMSI 160L. Offered: Summer, Fall and Spring. Two lab hours.

EMSI 220  ADVANCED EMT  (6)
An advanced-level course building on the information students learned in EMT Basic (EMSI 160). Classroom and lab experiences are used to teach physiology, hydration, fluid and electrolyte balance, and interventions for shock. Theory related to skills such as venipuncture, administration of selected drugs, advanced anatomy and basic cardiac knowledge is taught. All students must provide proof of required vaccinations prior to being accepted into the program. Corequisite: EMSI 220L and EMSI 221L. Offered: Occasionally. Six lecture hours.

EMSI 220L  ADVANCED EMT LAB  (4)
The lab component of EMSI 220 gives students experience in caring for patients with impaired physiological functioning. Clinical experiences focus on emergency care and mastered skills. EMT-B licensure and permission required. Corequisite: EMSI 220 and EMSI 221L. Offered: Summer, Fall and Spring. Eight lab hours.

EMSI 221L  ADVANCED EMT CLINICAL  (3)
An advanced course required of all SFCC Advanced EMT students to complete their patient contact and clinical care requirements for licensure. Students rotate through various hospital departments as well as spend time on ambulances, refining skills acquired in the lecture and lab components of the Advanced EMT course. Students have specific criteria for skill and assessment achievement that they must meet to pass the course. Corequisites: EMSI 220 and EMSI 220L. Offered: Summer, Fall and Spring. Six lab hours.

EMSI 240  ANATOMY AND PHYSIOLOGY  FOR EMSI  (4)
The study of structure and function of the human body in a pre-hospital setting along with exploration of pathology are emphasized. Permission and admission to paramedic program required. Corequisite: EMSI 240L. Offered: Occasionally. Four lecture hours.

EMSI 240L  ANATOMY AND PHYSIOLOGY FOR EMSI LAB  (2)
The study of structure and function of the human body in a pre-hospital setting through lecture, labs, and cadaver lab. The course explores anatomy, physiology and pathology. Permission and admission to paramedic program required. Corequisite: EMSI 240. Offered: Occasionally. Four lab hours.

EMSI 241  PRE-HOSPITAL ENVIRONMENT  (2)
A review of the roles and responsibilities of emergency medical service (EMS) providers, EMS systems, EMS communications, medical legal issues and well-being of the paramedic. Admission to paramedic program and permission required. Offered: Occasionally. Two lecture hours.

EMSI 242  PRE-HOSPITAL PHARMACOLOGY  (3)
The study of the administration of drugs utilized in pre-hospital care, including physiologic actions, pharmacodynamics, pharmacokinetics, therapeutic effects, interactions with other drugs, dosages and techniques. Admission to paramedic program and permission required. Corequisite: EMSI 242L. Offered: Occasionally. Three lecture hours.
EMSI 242L  PRE-HOSPITAL PHARMACOLOGY LAB  (3)
Practicing the administration of drugs utilized in pre-hospital care, including physiologic actions, pharmacodynamics, pharmacokinetics, therapeutic effects, interactions with other drugs, dosages and techniques. Admission to paramedic program and permission required. Corequisite: EMSI 242. Offered: Occasionally. Four lab hours.

EMSI 243  RESPIRATORY EMERGENCIES  (2)
Focuses on respiratory anatomy, physiology, pathophysiology and pre-hospital respiratory patient assessment and interventions. Admission to paramedic program and permission required. Corequisite: EMSI 243. Offered: Occasionally. Two lecture hours.

EMSI 243L  RESPIRATORY EMERGENCIES LAB  (2)
Focuses on the management and treatment of respiratory diseases and application of knowledge gained in EMSI 243. Admission to paramedic program and permission required. Corequisite: EMSI 243. Offered: Occasionally. Four lab hours

EMSI 244  TRAUMA EMERGENCY CARE  (3)
An exploration of pre-hospital trauma management and prevention. Topics include mechanism of injury and patient assessment and care. Admission to paramedic program and permission required. Corequisite: EMSI 244L. Offered: Occasionally. Three lecture hours.

EMSI 244L  TRAUMA EMERGENCY CARE LAB  (2)
An exploration of the practice of pre-hospital trauma care, including patient assessment and management, bandaging, splinting, and airway management. Admission to paramedic program and permission required. Corequisite: EMSI 244. Offered: Occasionally. Four lab hours.

EMSI 246L  PARAMEDIC CLINICAL I  (2)
A course providing paramedic students with clinical opportunities to observe and practice clinically relevant pre-hospital advanced life support skills in clinical settings under the preceptorship of clinical faculty. Admission to paramedic program and permission required. Offered: Occasionally. Four lab hours.

EMSI 248  OB/GYN EMERGENCIES  (2)
A course that covers reproductive anatomy and physiology, as well as obstetrical and gynecological (OB/GYN) emergencies, pre-hospital assessment and management of those issues. Admission to paramedic program and permission required. Prerequisite: EMSI 240. Corequisite: EMSI 248L. Offered: Occasionally. Two lecture hour.

EMSI 248L  OB/GYN EMERGENCIES LAB  (1)
A hands-on course in the skills, assessment and tools needed to manage obstetrical and gynecological emergencies and the pre-hospital assessment. Admission to paramedic program and permission required. Corequisite: EMSI 248. Offered: Occasionally. Two lab hours.

EMSI 249  PEDIATRIC EMERGENCIES  (2)
This course covers the growth and development of pediatric from infancy to adolescence and the specialized care of patients with pediatric emergencies. Admission to paramedic program required. Corequisite: EMSI 249. Offered: Occasionally. Two lecture hours.

EMSI 249L  PEDIATRIC EMERGENCIES LAB  (1)
A course that teaches students to manage pediatric emergencies in the pre-hospital environment. Admission to paramedic program and permission required. Corequisite: EMSI 249. Offered: Occasionally. Two lab hours

EMSI 250  MEDICAL EMERGENCIES  (3)
A course that covers patient assessment, anatomy and physiology, pathology of non-cardiac, non-obstetric/pediatric medical emergencies. Includes environmental and chemical emergencies, poisoning, infectious diseases, and endocrine, digestive and renal system illnesses. Admission to paramedic program and permission required. Corequisite: EMSI 250L. Offered: Occasionally. Three lecture hours.

EMSI 250L  MEDICAL EMERGENCIES LAB  (3)
A course that covers the practice of assessment, management and treatment of non-cardiac, non-OB/Peds medical emergencies. Includes environmental, chemical, poisoning, infectious influences, endocrine/digestive and renal system illnesses. Admission to paramedic program and permission required. Corequisite: EMSI 250L. Offered: Occasionally. Six lab hours.

EMSI 251  CARDIAC EMERGENCIES  (4)
Focuses on patient assessment with extensive discussion of cardiac anatomy, physiology and pathology. There is an emphasis on advanced pre-hospital assessment and management of cardiac patients. Admission to paramedic program and permission required. Prerequisite: EMSI 240. Corequisite: EMSI 251L. Offered: Occasionally. Four lecture hours.
EMSI 251L  CARDIAC EMERGENCIES LAB  (2)
Focuses on the practice of advanced pre-hospital cardiac care. The assessment, treatment and management of pre-hospital cardiac patients will be covered. Admission to paramedic program and permission required. Corequisite: EMSI 251. Offered: Occasionally. Four lab hours.

EMSI 252L  PARAMEDIC CLINICAL II  (2)
A course providing paramedic students with additional clinical opportunities to observe and practice relevant pre-hospital advanced life support skills in clinical settings under the preceptorship of clinical faculty. Admission to paramedic program and permission required. Offered: Occasionally. Four lab hours.

EMSI 298  EMT-PARAMEDIC FIELD INTERNSHIP  (5)
Students practice pre-hospital advanced emergency care on assigned regional advanced support field units under the preceptorship and supervision of program faculty. Admission to the paramedic program is required. Prerequisite: EMSI 252. Offered: Occasionally. Five lecture hours.

ENERGY EFFICIENCY

ENEF 111  HEALTHY HOMES  (1)
An explanation of the connections between housing and our health, focusing on the seven principles of healthy housing. Connections to creating a healthy sustainable world are made and health concepts such as risk and hazard are explored. Successful completion of this class gives the student the Essentials of Healthy Homes certification from the National Center for Healthy Housing. Offered: Occasionally. One lecture hour.

ENEF 114  HOUSE AS A SYSTEM  (3)
An introduction to the concept of the interconnectedness of the house. Students learn to incorporate concepts of building science, indoor environmental quality and energy efficiency, as it relates to buildings and key issues relating to sustainability. Key elements include health and safety, including ventilation, pollutants and the effects of moisture. Offered: Occasionally. Three lecture hours.

ENGINEERING TECHNOLOGY

ENGR 111  INTRODUCTION TO ENGINEERING  (3)
This course introduces the engineering design process using a project-oriented, team-based approach. An understanding of how one aspect of design influences another and the responsibilities of designers, technicians and engineers along with an exploration into the educational requirements and careers of professional engineers are included. Specific topics encompass making sound decisions, the ability to communicate effectively, defining and solving problems and functioning efficiently in a team environment. Prerequisite: MATH 102. Offered: Fall. Three lecture hours.

ENGR 121  ENGINEERING GRAPHICS  (3)
This course provides an introduction to the careers of civil engineering and drafting technologies. Students design, construct and test models related to engineering using both hand sketching and computer drafting and modeling tools to learn methods of graphical communication. Offered: Spring. Three lecture hours.

ENGR 122  ENGINEERING METHODS  (3)
Engineering graphics and computational skills with computer applications. Students are introduced to the uses of technical drawing, CAD and spreadsheets to solve engineering problems. Four hours of lab per week. Corequisite: MATH 150. Offered: Spring. Three lecture hours.

ENGR 125  ENGINEERING PROGRAMMING FUNDAMENTALS  (3)
An application of fundamental computer programming concepts for solving engineering problems. Topics include the use of C and MATLAB for consideration of abstract machine models with an emphasis on memory hierarchy, basic programming constructs, functions, parameter passing, pointers and arrays, file I/O, bit level operations and interfacing to external devices. Students will participate in a team-based final project to control and operate a robotic device. Corequisite: MATH 150. Offered: Spring. Three lecture hours.

ENGR 160  ENGINEERING GRAPHICS AND DESIGN  (3)
An introduction to engineering graphics and computer-aided design (CAD) with a focus on applications in civil engineering and construction. Students taking this course learn to use AutoCAD to draft professional-quality, discipline-specific, scalable drawings. Topics include the concepts of model and paper space, proper use of dimensioning tools, layer/line type management, and the use of viewpoint management. Fall and Spring. Three lecture hours.

ENGR 212  ENGINEERING STATICS  (3)
Static systems of particles and rigid bodies in two and three dimensions, using vector algebra and graphical methods as analytic tools. Topics include centroids, distributed loads, trusses, frames and friction. Corequisite: MATH 163. Offered: Fall. Three lecture hours.
ENGR 215  ENGINEERING PROGRAMMING (3)
USING MATLAB
Students are introduced to computer programming in the MATLAB environment. Students will design, test and debug programs to develop and apply an understanding of the relationship between computing and engineering problem solving. Prerequisite: MATH 150. Offered: Fall. Two lecture hours, two lab hours.

ENGR 221  ENGINEERING DYNAMICS (3)
This course is a continuation of the study of engineering mechanics, focusing on dynamics. The course focuses on kinematics and dynamic behavior of solid bodies using vector methods. Prerequisite: ENGR 212. Offered: Occasionally. Three lecture hours.

ENGR 222  ENGINEERING CIRCUIT ANALYSIS (3)

ENGR 222L  ENGINEERING CIRCUIT ANALYSIS LAB (2)
Students are introduced to laboratory practices and the use of test equipment. Students will gain measurement skills on basic electrical components using ohmmeters, voltmeters, ammeters and oscilloscopes and perform circuit simulations. Corequisite: ENGR 222. Offered: Spring. One lecture hour, two lab hours.

ENGR 231  ENGINEERING GRAPHICS II (3)
The second semester of engineering graphics using computer aided 3-D software modeling tools. Students will learn product design with integration of appropriate building materials. Students are introduced to finite element analysis through the 3-D modeling. Prerequisite: ENGR 121. Offered: Spring. Three lecture hours.

ENGR 246  ELECTRONIC DEVICES I (4)
Introduction to solid-state device concepts, as well as operational amplifiers. Topics include diodes, rectifiers, circuit construction, schematic design and various types of operational amplifiers. Lab work is used to develop skills in circuit implementation and use of test equipment. Prerequisites: ELEC 121 or ENGR 222. Offered: Occasionally. Two lecture hours, four lab hours.

ENGR 260  MECHANICAL ENGINEERING DESIGN (2)
Focuses on manufacturing design processes integrated with project management, economics, and ethics. Engineering design principles, manufacturing methods, and industrial processes are introduced, including casting, forming and machining. Topics include applications of industrial materials such as composition, fabrication and characteristics. Prerequisite: ENGR 121. Corequisite: ENGR 260L. Offered: Fall and Spring. Two lecture hours.

ENGR 260L  MECHANICAL ENGINEERING DESIGN LAB (2)
Laboratory course that supports the application of concepts taught in ENGR 260. Manufacturing methods and industrial processes are introduced, including casting, forming and machining. Lab work content develops students’ ability to perform basic machining processes. Prerequisite: ENGR 121. Corequisite: ENGR 260. Offered: Fall and Spring. Four lab hours.

ENGR 282  DIGITAL ELECTRONICS (4)
Intermediate survey of digital concepts. Topics include digital integrated circuits (IC) applications, multiplexers, Very High-Speed Integrated Circuit Hardware Description Language (VHDL), counters, arithmetic circuits, as well as microprocessor fundamentals. Lab work implements digital circuits application with common testing equipment and schematic designs. Prerequisite: ELEC 121 or ENGR 222. Offered: Occasionally. Two lecture hours, four lab hours.

ENGR 298  INTERNSHIP (1-3)
This course provides students with an opportunity to enlarge and complete their learning experience by taking an unpaid position in a working environment. Students should have completed a significant portion of program core requirements to be eligible for this program and must work closely with a faculty adviser regarding employment specifics. Graded as Pass/Fail. Variable credit. Prerequisite: Permission. Offered: Spring. One-three lecture hours.
ENGLISH

ENGL 102L  PUNCTUATION AND GRAMMAR REVIEW
A general review of basic grammar and punctuation for students and professionals. Students will learn to identify common grammatical and sentence structure errors and will practice creating correctly punctuated and grammatically sound sentences. Offered: Fall and Spring. Two lab hours.

ENGL 105  ADVANCED ENGLISH AS A SECOND LANGUAGE
A course that helps students improve their speaking, reading, writing and listening comprehension skills in English. Frequent conferences on specific assignments complement instructional units, exercises and practice tests. Eligible for PR grade. Permission required. Offered: Fall and Spring. Four lecture hours.

ENGL 105L  ADVANCED ESL GRAMMAR AND CONVERSATION
This course provides conversation practice, grammar review, and an introduction to community college study for students who have tested out of Adult Basic Education ESL classes. ESL students who are concurrently taking higher-level reading and writing courses are also highly encouraged to take this course to support their fluency and correctness in writing essays. Listening, speaking, reading and writing practice emphasize verb tenses and other grammar structures, vocabulary development and fluency. Eligible for PR grade. Prerequisite: appropriate placement score. Offered: Fall and Spring. Four lab hours.

ENGL 106  LANGUAGE SKILLS: ESL WRITING
This course is designed to develop ESL students’ reading, writing, listening and speaking skills. Students read and discuss multicultural texts and strengthen their writing through language experience, free writing, drafting, peer response, revising and editing. Grammar topics include simple, progressive and perfect verb tenses, modals, articles and prepositions, and gerunds and infinitives. This course helps students prepare for further study in SFCC’s developmental reading and writing program. Eligible for PR grade. Prerequisite: English 105L or appropriate placement score. Offered: Fall and Spring. Four lecture hours.

ENGL 107  BASIC READING AND WRITING
This course introduces students to the writing process and helps them increase reading speed and comprehension. Students practice prewriting, drafting, revising and editing material for different audiences and purposes. By reading and writing stories, news articles, poems and plays, students learn spelling, sentence structure, grammar and punctuation, pre-reading methods, textbook-marking skills and vocabulary. Eligible for a PR grade. Prerequisite: ENGL 106. Offered: Fall and Spring. Four lecture hours.

ENGL 108  ENGLISH FUNDAMENTALS
A course providing students with an introduction to basic grammar, punctuation and usage along with intensive work with the writing process, using prewriting, drafting, revising and editing techniques. This course includes work on reading comprehension skills and practice in writing unified, organized and well-developed paragraphs and essays. Prerequisites: ENGL 107 and READ 100L. READ 100L may be taken concurrently or appropriate placement score on ACCUPLACER. Offered: Summer, Fall and Spring. Four lecture hours.

ENGL 109  ENGLISH REVIEW
A course providing students with a review of basic grammar, punctuation and syntax. Students practice writing well-developed essays, focusing on prewriting, drafting, revising and editing techniques. This course prepares student to write in different disciplines, and introduces analytical reading skills and research writing basics. Prerequisites: ENGL 108 and READ 101L. READ
ENGL 101L may be taken as a concurrently or appropriate placement score on ACCUPLACER. Offered: Summer, Fall and Spring. Four lecture hours.

* ENGL 111  COMPOSITION AND RHETORIC (3)
A composition course that centers on reading and writing college-level essays and the exercise of critical thinking. Emphasis is on strategies for development and organization of the essay and on proper use and documentation of outside sources. The student seeking a degree or certificate must include ENGL 111 among the first 20 hours of course work numbered 111 or higher (not including AEST courses and HUDV courses). Word-processing or typing skills recommended. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. NMCCNS: ENGL 1113. NMGECC: Area I — Communications. Three lecture hours.

* ENGL 112  COMPOSITION AND LITERATURE (3)
A college-level composition course that continues the study of critical thinking and analytic writing begun in ENGL 111. ENGL 112 also introduces students to great works of world literature from various historical periods. The course culminates in a substantial, documented research paper. Word processing or typing skills required. Prerequisite: ENGL 111. Offered: Summer, Fall and Spring. NMCCNS: ENGL 1123. NMGECC: Area I — Communications. Three lecture hours.

* ENGL 119  PROFESSIONAL COMMUNICATION (3)
An introduction to written and oral professional communications. The course includes practice in preparation of letters, memoranda, progress and other reports, minutes, basic graphics, instructions, interviews, small group communications and oral presentations. Word-processing skills are required. Prerequisite: ENGL 109. Offered: Fall and Spring. Three lecture hours.

ENGL 120  EXPLORING CREATIVE WRITING (3)
An introduction to creative writing including fiction creative nonfiction and poetry. Students will learn to develop story lines, characters, voice, dialogue and point of view, as well as how to use imagery, sounds and poetic forms. Graded as Pass/Fail. Offered: Fall and Spring. Three lecture hours.

* ENGL 210  FILM AND LITERATURE (3)
An introductory film class involving analysis and discussion of specific films and the literary works that inspired them. The course emphasizes the relationship between the medium of film and the written word.

Discussion focuses on such literary concepts as characterization and theme and such cinematic concepts as lighting, setting and camera work. Prerequisite: ENGL 111. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* ENGL 216  TECHNICAL WRITING (3)
A composition course involving instruction in writing scientific, technical, professional and/or business reports. The course includes practice in the preparation of the abstract, technical definition and description, process analysis (instructions and manuals), visual aids, memoranda, informal reports, formal letters, the résumé and oral presentation. The course culminates in the writing and presentation of a formal, researched problem-solving report. Word-processing and computer skills are required. Prerequisite: ENGL 111. Offered: Summer, Fall and Spring. NMCCNS: ENGL 2113. NMGECC: Area I — Communications. Three lecture hours.

ENGL 221  BEGINNING CREATIVE WRITING — FICTION (3)
A workshop offering analysis, criticism, guidance and support of students' creative efforts in fiction writing. Does not satisfy general studies requirements in the humanities. Prerequisite: ENGL 111. Offered: Occasionally. NMCCNS: ENGL 2123. Three lecture hours.

ENGL 222  CREATIVE WRITING — POETRY (3)
A writing workshop offering analysis, criticism, guidance and support of students' creative efforts in writing poetry. Does not satisfy general studies requirements in the humanities. Prerequisite: ENGL 111. Offered: Occasionally. Three lecture hours.

ENGL 225  INTERMEDIATE CREATIVE WRITING — FICTION (3)
A creative writing intensive that focuses on the structure of fiction and techniques of critical workshop. This course does not satisfy general studies requirements in the humanities. Prerequisite: ENGL 221. Offered: Occasionally. Three lecture hours.

ENGL 227  THE MEMOIR AND PERSONAL ESSAY (3)
A writing workshop that will focus on the structure of creative non-fiction and the techniques of criticism. Students will be required to complete five literary essays or 100 pages, of a memoir or longer work. They will function as editors of each other's work. Students will revise work to a finished polished draft. Prerequisite: ENGL 111 or permission. Offered: Occasionally. Three lecture hours.

* Approved by the NM Higher Education Department for transfer and application to general education requirements in any public two- or four-year educational institution in New Mexico. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year school
ENGL 228 CREATIVE NONFICTION: WRITING ON LOCATION
A place-based writing workshop conducted on location, exploring themes related to sustainable living, global perspectives, cultural diversity, and other current issues. Each semester’s location provides opportunities for community engagement. Students will observe and participate in activities on location, interview others engaged with the location, research ideas and issues connected to the location, and write informal and formal creative nonfiction based on their experiences and research. Coursework includes exploration of venues for publishing nonfiction essays and articles, and culminates in the preparation and submission of a publishable piece to a suitable venue. Prerequisite: ENGL 111. Offered: Occasionally. Three lecture hours.

ENGL 232 INTERMEDIATE CREATIVE WRITING POETRY
A creative-writing intensive that focuses on the structure of poetry and the techniques of critical workshop. This course broadens and deepens creative-writing students’ expertise; it does not satisfy general studies requirements in the humanities. Prerequisite: ENGL 222. Offered: Occasionally. Three lecture hours.

* ENGL 239 MYTH AND LITERATURE
An introduction to the origin, development and uses of the classical mythologies of ancient Greece and Rome. Mythic themes are explored through both primary and secondary readings and include myths of creation, death and rebirth, fertility, the quest and the hero cycle. The course also addresses elemental archetypes embedded in myth and the importance of classical mythology in the study of literature. Prerequisite: ENGL 111. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* ENGL 253 INTRODUCTION TO SHAKESPEARE
A study of a selected group of tragedies, comedies and histories by William Shakespeare. The course emphasizes critical reading and class discussion. Prerequisite: ENGL 111. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* ENGL 273 NATIVE AMERICAN LITERATURE
The study of the literature of Native North Americans, including both traditional, oral literature, such as myths and songs, and contemporary genres of poetry, fiction, personal narrative and oratory. In addition we will look at issues relevant to the study of Native American literature such as authenticity in oral and written records. Offered only online. Prerequisite: ENGL 111. Offered: Occasionally. NMCCNS: ENGL 2733. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* ENGL 286 THE NOVEL
An in-depth study of the novel and novella using various critical approaches, both traditional and contemporary. Readings will vary on a course-by-course basis and may range in focus based on chronology, nationality, region, gender or ethnicity. The course may be offered with a thematic approach, such as crime, science fiction and fantasy, or magic realism. May be taken twice for degree or certificate credit. Prerequisite: ENGL 111. Offered: Occasionally. NMCCNS: ENGL 2323. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* ENGL 287 THE SHORT STORY
An in-depth study of short fiction, using various critical approaches. Readings include an eclectic selection of short stories and novellas from America, Britain and other nations. The course emphasizes critical reading and class discussion. Prerequisite: ENGL 111. Offered: Occasionally. Three lecture hours.

* ENGL 288 INTRODUCTION TO POETRY
A formal study of poetry and specific poems, with emphasis on the elements of imagery, metaphor, irony, rhyme, meter, form, symbol and myth, as well as the prevailing theories of each major literary period or age. Emphasis is on American and British poetry; however, the course also includes some poetry in translation. Prerequisite: ENGL 111. Offered: Occasionally. NMCCNS: ENGL 2313. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

ENGL 290 CREATIVE WRITING PORTFOLIO
A capstone course for the creative writing certificate and concentration. This course consists of individual or small group tutorial in creative writing with a focus on the revision and completion of a manuscript-length project in poetry, fiction, or literary nonfiction. Students are required to complete a minimum of fifty pages consisting of five literary essays/short stories or a memoir, novel, or poetry collection. Students revise work to a finished, polished draft. There is also an introduction to the business of writing, including market research and the mechanics of submission. Permission from the department is required. Prerequisites: ENGL 221 and ENGL 222. Offered: Occasionally. Three lecture hours.

* Approved by the NM Higher Education Department for transfer and application to general education requirements in any public two- or four-year educational institution in New Mexico. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year school.
ENGL 298 LITERARY MAGAZINE INTERNSHIP: (3) SANTA FE LITERARY REVIEW
A magazine internship with the Santa Fe Literary Review on campus. Students will gain experience with editorial tasks at all levels from reading unsolicited work to making final decisions. Topics include acceptances and rejections, working with writers, production schedule with printers and designers, event planning, distribution and public relations. Does not satisfy general studies requirement in the humanities. May be taken four times for credit. Permission required. Offered: Fall and Spring. Three lecture hours.

ENVIRONMENTAL TECHNOLOGIES

ENVR 111 INTRODUCTION TO SUSTAINABILITY (3)
An introduction to the roots and history of the sustainability movement and to sustainability in communities, design, science, commerce and resource management. Students will meet professionals working in a variety of fields relating to sustainability and discuss the use of sustainability principles to solve complex contemporary problems facing our communities involving food, water, energy and other community needs. Offered: Summer, Fall and Spring. Three lecture hours.

ENVR 112 INTRODUCTION TO SUSTAINABLE ENERGY TECHNOLOGIES (3)
Designed to provide students with a basic understanding of sustainability as an environmental and economic concept. The course will describe and analyze current and emerging sustainable-energy technologies. Additionally information about basic skill requirements required to begin working in renewable energy fields is provided. Offered: Fall and Spring. Three lecture hours.

ENVR 113 INSTRUMENTATION AND CONTROLS (3)
An introduction to instrumentation, measurement and control practices. Students will gain skills for accurately and precisely measuring temperature, pressure, water and heat flow, voltage, current and other parameters needed to troubleshoot and maintain energy and water systems. Offered: Spring. Two lecture hours, two lab hours.

ENVR 115 INTRODUCTION TO WATER CONSERVATION (3)
An introduction to the wide range of water conservation technologies and a basic understanding of the resources and skills needed to work in the field. Offered: Spring. Three lecture hours.

ENVR 215 ACTIVE WATER HARVESTING AND DISTRIBUTION SYSTEMS (3)
Fundamentals of water technologies, system planning and design. Content in this projects-based class includes development practices, indoor and outdoor conservation, rainwater harvesting, grey water and effluent recycling. The development of sustainable system design and deployment are highlighted. Offered: Spring. Three lecture hours.

ENVR 216 WATER SHED MANAGEMENT (3)
An in-depth class on the diverse aspects of water shed management. The course reviews the various ways individuals and organizations strive to balance the human use of water shed resources with natural resource protections and maximization. It explores the technology, policy making and best practices used to achieve optimum water shed management. Visits to local water sheds are included. Offered: Spring. Three lecture hours.

ENVR 217 WATER AUDITING AND EVALUATION (3)
The technologies, methods and systems used to audit the flow and quality of water resources and the human demand for water resources. The course reviews methods, techniques and systems used for evaluating the effectiveness of water conservation programs, wastewater reclamation systems, collection and distribution systems, and household water usage. Visits to water and wastewater facilities are included. Prerequisite: ENVR 115. Corequisite: ENVR 217L. Offered: Occasionally. Three lecture hours.

ENVR 217L WATER SYSTEMS AUDITING AND EVALUATION LAB (1)
A lab course in which students do data entry, calculations, sampling and analysis of the projects they have defined in ENVR 217. Students visit water or wastewater facilities or conservation organizations or committees and work individually or in groups to compile and compare data on their water or wastewater facility or organization. Familiarity with Excel and/or Access required. Prerequisite: ENVR 115. Corequisite: ENVR 217. Offered: Occasionally. Two lab hours.

ENVR 298 INTERNSHIP (1-4)
Provides students with an opportunity to enlarge and complete their learning experience by spending time in a real working environment. Students must have completed a significant portion of core requirements to be eligible for this course. Offered: Occasionally. One-four lecture hours.
EXERCISE SCIENCE

EXSC 116 LEGAL AND PROFESSIONAL RESPONSIBILITIES/MARKETING
This course is designed to introduce students to various business-operation skills of management, marketing and safety. May be taken twice for degree or certificate credit. Permission required. Offered: Occasionally. One lecture hour.

EXSC 120 INSTRUCTIONAL METHODS: PILATES (.5)
A course designed to prepare fitness and exercise professionals to teach Pilates mat classes at varying skill levels to generally healthy adults. May be taken twice for degree or certificate credit. Permission required. Offered: Fall. Half lecture hour.

EXSC 122 INSTRUCTIONAL METHODS: YOUTH FITNESS
This course exposes students to the principles and techniques of teaching fitness to children and young adults. May be taken twice for degree or certificate credit. Permission required. Offered: Fall. Half lecture hour.

EXSC 123 INSTRUCTIONAL METHODS: FITNESS CYCLING
Fundamentals of designing indoor fitness cycling classes. Emphasis is placed on equipment safety, riding techniques, music selection, exercise class formats. May be taken twice for degree or certificate credit. Permission required. Offered: Fall. Half lecture hour.

EXSC 124 INSTRUCTIONAL METHODS: SENIOR FITNESS
Fundamentals of exercise leadership, prescription and design for senior fitness programs. May be taken twice for degree or certificate credit. Permission required. Offered: Fall. Half lecture hour.

EXSC 126 INSTRUCTIONAL METHODS: PERSONAL TRAINING
This course gives students instructional methods of personal fitness training. Instructional techniques for fitness development and methods for leading an exercise session, including design, instruction and evaluation, are the foundation of the class. May be taken twice for degree or certificate credit. Permission required. Offered: Spring. Half lecture hour.

EXSC 129 INSTRUCTIONAL METHODS: GROUP EXERCISE
This course covers the theoretical bases underlying physical fitness and instruction techniques for fitness development in group classes. Emphasis is on hands-on learning of methods for leading a group exercise class, including visual and auditory cues, dance routines and patterns. Students learn to design and teach fitness classes in bench step, aerobics, kickboxing, resistance training and core strengthening. This class also covers adherence and motivation to exercise. Current trends in exercise class modes and formats are examined. Safety and injury prevention are emphasized. May be taken twice for degree or certificate credit. Permission required. Offered: Spring. One lecture hour.

EXSC 132 INSTRUCTIONAL METHODS: ALTERNATIVE STRENGTH TRAINING
This course will cover the fundamentals, theories and application of alternative strength training methods such as stability ball, medicine ball, resistance band and functional training. This course will also cover efficient use of these exercises and methods to target needs and goals of individualized exercise programs. Emphasis is placed on actual experience, exercise safety, progression and proper technique of alternative training modalities. May be taken twice for degree or certificate credit. Permission required. Offered: Fall. One lecture hour.

EXSC 133 INSTRUCTIONAL METHODS: TRAINING TECHNIQUES REVIEW
This course reviews essential personal training and group fitness techniques relevant to national personal training certification exams and practical application. Topics include postural alignment, biomechanics, proper spotting techniques, and exercise recommendations/modification. May be taken twice for degree or certificate credit. Offered: Spring. Half lecture hour.

EXSC 134 INSTRUCTIONAL METHODS: OUTDOOR APPLICATIONS
This course examines methods and components of athletic training and outdoor leadership in an experiential environment. Topics include risk-management, group facilitation, exposure, and conditional outdoor leadership theories. May be taken twice for degree or certificate credit. Permission required. Offered: Fall. Half lecture hour.

EXSC 150 FITNESS INSTRUCTOR TRAINING I (4)
Designed for students who want to pursue the American Council on Exercise (ACE) personal fitness trainer certification and/or the SFCC Fitness Instructor Training (FIT) Certificate. This course focuses on facilitating rapport with clients, exercise adherence, self-efficacy and behavior change. Human anatomy, kinesiology, exercise physiology and nutrition will be introduced, as they pertain to the personal fitness trainer scope of practice. This is part one
EXSC 151  FITNESS INSTRUCTOR TRAINING II  (4)
Designed for students who want to pursue the American Council on Exercise (ACE) personal fitness trainer certification and/or the SFCC Fitness Instructor Training (FIT) Certificate. This course focuses on applying the integrated fitness model to program design, functional and physiological assessments, mind-body exercises and different training modalities. This course also addresses adaptations for common injuries, legal and professional guidelines and responsibilities, business fundamentals, and ACE certification review. This is part two of the two-part core requirements for the FIT Certificate. Prerequisite: EXSC 150. Offered: Spring. Four lecture hours.

EXSC 200  EXERCISE PHYSIOLOGY  (3)
A survey of scientific principles, methodologies and research as applied to exercise and physical fitness. The emphasis is on physiological responses and adaptations to exercise. Basic elements of anatomy and physiology are also included. Prerequisite: ENGL 109. Offered: Spring. Three lecture hours.

EXSC 201  STRUCTURAL KINESIOLOGY  (4)
Students learn about anatomy, kinesiology and biomechanics as they relate to sport and exercise. Special attention is focused on the practical implications of human movement and how they relate to developing scientifically-based exercise programs. Prerequisite: ENGL 109. Offered: Fall. Three lecture hours, two lab hours.

EXSC 202  INSTRUCTION IN LIFESTYLE CHANGE  (3)
Health-risk appraisals and their application to lifestyle change. Topics include weight control, stress management, smoking cessation and the principles of exercise adherence. Emphasis is on techniques in behavior modification, motivation, teaching and counseling, and behavior change as lifestyle change. Offered: Summer, Fall and Spring. Three lecture hours.

EXSC 203  NUTRITION FOR FITNESS AND SPORT  (3)
An introduction to the basic principles of nutrition, including functions, interactions and human requirements of nutrients and their roles in maintaining optimum health in the exercising adult. The effects of exercise on nutritional requirements and guidelines for their use are emphasized. The efficacy and potential risks of various ergogenic aids are reviewed. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. Three lecture hours.

EXSC 210  PREVENTION AND CARE OF EXERCISE INJURY  (3)
Methods for the injury-prevention design of exercise settings and exercise programs are covered in this course. Students explore the use of physical conditioning techniques to prevent injury and discuss current exercise fads and myths that promote injury. The course presents methods for injury recognition and evaluation, the on-site care of exercise injuries and emergency procedures. May be taken twice for degree or certificate credit. Must have certifications in CPR and first aid. Offered: Spring. Three lecture hours.

EXSC 220  FITNESS AND EXERCISE TESTING  (3)
Techniques for conducting safe and sound physical fitness assessments. Tests for assessing cardiorespiratory fitness, muscular strength, power and endurance, flexibility, body composition, functional fitness and pulmonary capacity are included. Metabolic calculations and conversions are explained, as well as safety guidelines and equipment use and maintenance. Prerequisites: ENGL 109 and MATH 102. Offered: Fall. One lecture hour, four lab hours.

EXSC 230  PHYSICAL FITNESS PROGRAMMING AND INSTRUCTION  (3)
Theoretical bases underlying physical fitness programming and instruction. Methods for leading an exercise class, as well as personal fitness training, including recruitment, adherence and motivation are studied. Current exercise class modes and formats will be examined, as well as trends in personal training. Legal and professional responsibilities of the fitness professional will be studied. Safety and injury prevention are emphasized. Prerequisites: ENGL 109 and MATH 102. Offered: Spring. One lecture hour, four lab hours.

EXSC 293L  PRACTICUM  (1)
The student serves as an instructional assistant in a physical education activity class. Course objectives are individualized to the student's needs. The student assists in a class from any of these activity class clusters: Aerobic activities, strength and conditioning activities, recreational/sport activities, dance activities, aquatic activities and yoga/martial arts activities. May be taken twice for degree or certificate credit. Prerequisite: EXSC 230. Offered: Summer, Fall and Spring. Two lab hours.

EXSC 298  INTERNSHIP  (1)
Internship in a fitness education facility. Students will become familiar with daily operations, facility maintenance and class administration. Permission required. Prerequisite: EXSC 230. Offered: Summer, Fall and Spring. Two lecture hours.
EXPANDED FUNCTIONS
DENTAL AUXILIARY

EFDA 250  RESTORATIVE FUNCTIONS  (2)
This course covers foundational knowledge in general and dental anatomy and physiology, dental materials, placing and shaping direct restorations, fitting and shaping of stainless steel crowns, dental impressions, isolation and occlusion function. These principles will be specifically applied to amalgam and composite restorations. This course will be intense to allow us to begin placing restorations on prepared typodont teeth, as soon as possible. Offered: Summer, Fall and Spring. Two lecture hours.

EFDA 250L  RESTORATIVE FUNCTIONS LAB  (1)
An introduction to the manipulation and placement of restorative materials, fitting and shaping stainless steel crowns, taking a single tooth final impression and practicing other skills for expanded functions dental auxiliary (EFDA) as approved by the New Mexico Board of Dental Health Care. Students will apply concepts from dental anatomy and materials science to restorative procedures. Graded as Pass/Fail. Permission required. Offered: Summer, Fall and Spring. Two lab hours

EFDA 293  RESTORATIVE CLINICAL PRACTICUM  (4)
A clinical course providing practice in expanded functions dental auxiliary (EFDA) skills. Emphasis is on the placement of amalgam and composite restorations on patients. Clinical experience will be provided in an affiliated clinical site. This course also includes seminars to discuss clinical experiences and measures to take care of any deficiencies. Permission required. Offered: Summer, Fall and Spring. Eight lab hours

EFDA 294  DENTAL PROFESSIONALS SEMINAR  (2)
This self-paced, online course gives administrative dental professionals a strong background in and thorough understanding of how the dental insurance process works. Students gain knowledge and relevant, up-to-date information that enables them to excel as dental insurance billing and coding professionals. Permission required. Offered: Summer, fall and spring. Two lecture hours.

EFDA 295A  DENTAL RADIATION
HEALTH AND SAFETY EXAM  (1)
A review of course content previously learned through attending a program or on-site training. In a fast-paced format, instructors review topics in order to present all the information within the scheduled time frame. The student will focus on radiation health and safety. The course will include information on state licensure requirements for dental professionals including the national board examination and continuing education requirements. Graded as Pass/Fail. Permission required. Offered: Summer, Fall and Spring. On lecture hour.

EFDA 295B  DENTAL INFECTION CONTROL  (1)
REVIEW
A review of course content previously learned through attending a program or on-site training. Instructors, in a fast-paced format, review topics in order to present all the information within the scheduled time frame. The student will focus on infection control in dental office. The course will include information on state licensure requirements for dental professionals including the national board examination and continuing education requirements. Graded as Pass/Fail. Permission required. Offered: Summer, Fall and Spring. One lecture hour.

EFDA 295C  GENERAL CHAIRSIDE REVIEW  (1)
A review of course content previously learned through attending a program or on-site training. Instructors, in a fast-paced format, review topics in order to present all the information within the scheduled time frame. The student will focus on general chairside procedures in a dental office. The course will include information on state licensure requirements for dental professionals including the national board examination and continuing education requirements. Graded as Pass/Fail. Permission required. Offered: Summer, Fall and Spring. One lecture hour.

EFDA 296  DENTAL FLUORIDE, POLISHING AND SEALANTS REVIEW  (1)
A review of course content previously learned through attending a program or on-site training. Instructors, in a fast-paced format, review topics in order to present all the information within the scheduled time frame. The student will focus on dental fluoride applications, dental sealants application and coronal polishing. The course will include information on state licensure requirements for dental professionals including the national board examination and continuing education requirements. Graded as Pass/Fail. Permission required. Offered: Summer, Fall and Spring. One lecture hour.

FACILITY TECHNOLOGIES

FACT 113  BASIC BLUEPRINT READING  (2)
Introduction of symbols, scaled measurements and specifications necessary for reading construction plans.
Plumbing drawings are analyzed and interpreted. Practice of basic methods of sketching and design. Material and take-off lists are prepared. Prerequisite: Work Keys score of 3 in Applied Math, Reading for Information and Locating Information. Offered: Fall. One lecture hour, two lab hours.

FACT 114 BASIC ELECTRICITY AND CONTROLS (2)
Presents principles of electricity, measurements, safety, wiring procedures, schematics, components of basic circuits, and principles and practices in electricity. Offered: Spring. One lecture hour, two lab hours.

FACT 198 FACT INTERNSHIP (2)
This course provides students with an opportunity to enlarge and complete their learning experience by taking an unpaid position in a working environment. Students should have completed a significant portion of program core requirements to be eligible for this program and must work closely with a faculty adviser regarding employment specifics. Offered: Occasionally. Two lecture hours.

FASHION DESIGN

FASH 113 PRODUCTION SEWING (3)
Introduction to sewing concepts. Students learn to operate machinery and understand assembly and construction techniques. May be taken twice for degree or certificate credit. Offered: Occasionally. Three lecture hours.

FASH 120 FLAT PATTERN (3)
Students learn techniques for flat-pattern drafting and design interpretation by making a pattern, drafting a sloper and producing a muslin of new designs. May be taken twice for degree or certificate credit. Offered: Fall. Three lecture hours.

FASH 121 PATTERNMAKING — DRAPING (3)
The course covers techniques for pattern drafting and design interpretation by using the dress form and the draping method of pattern drafting exclusively. Offered: Spring. Three lecture hours.

FASH 130 FASHION ILLUSTRATION (3)
Introduction to sketching as applied to the fashion industry. Students learn life drawing with an emphasis on proportion and fluidity of pose, how to develop a croquis and how to illustrate design ideas on paper. May be taken twice for degree or certificate. Offered: Fall. Three lecture hours.

FASH 133 DESIGN WORKSHOP (1)
Course enables designers to refine their construction skills. Focus is on the fine construction techniques of haute couture. Graded as Pass/Fail. Offered: Occasionally. One lecture hour.

FASH 150 HISTORY OF FASHION (3)
Survey of the history of clothing—of fabrics, styles and fashion—beginning with ancient civilizations and winding up on Seventh Avenue. Offered: Occasionally. Three lecture hours.

FASH 155 COSTUME DESIGN FOR FILM AND STAGE (3)
Introduction to the design and production of costumes for the theater. Using a planned performance, students work with the costume designer to design costumes. Topics include design, construction techniques, production and assembly. Offered: Occasionally. Three lecture hours.

FASH 160 INTRODUCTION TO FASHION DESIGN (3)
Introduction to the apparel industry, including aesthetics and practical realities. Familiarization with fashion illustration, collections, careers, product sourcing, fashion marketing and sustainable design. Offered: Fall. Three lecture hours.

FASH 170 TEXTILES: STUDY OF FABRICS (3)
Basic information about textiles for the designer. The five main characteristics of textiles are covered: fiber arrangement, yarn structure, fabric structure, color, and finish. The course includes a comparison of the environmental impact of various fiber choices and dyes. Offered: Occasionally.

FASH 222 ADVANCED FLAT PATTERN AND DRAPING (3)
Advanced patternmaking techniques using both the flat pattern and draping methods of pattern development are taught. Students' original design ideas are translated from sketch to muslin to finished garment. Prerequisites: FASH 120 and FASH 121. Offered: Occasionally. Three lecture hours.

FASH 224 INTRODUCTION TO COMPUTER FASHION DESIGN (3)
Students are introduced to computers for fashion and accessory design, textile design and product development. May be taken twice for degree or certificate. Prerequisite: FASH 130. Offered: Occasionally. Three lecture hours.

FASH 240 SAMPLE DESIGN (3)
Intensive training in apparel production as practiced in the apparel industry. Major topics include the basic block used in fashion design, costing, grading, sample production
and design trends. Students design a sample collection and participate in line production. Prerequisite: FASH 120 or FASH 121 or permission. Offered: Occasionally. Three lecture hours.

**FASH 248 GLOBAL INFLUENCES ON FASHION (3)**
A studio design class exploring geographic, historical, and cultural influences on fashion with an emphasis on a selection of traditional and contemporary styles from around the world, including Europe, Asia, the Middle East, Indigenous America, and Africa. Collections at the Museum of International Folk Art are used to supplement class lectures. May be taken twice for degree or certificate credit. Offered: Occasionally. One lecture hour, four lab hours.

**FASH 260 FASHION COLLECTION STUDIO (3)**
Applied, intensive studio course for the motivated entrepreneur/designer. Student designers develop collections via the croquis process and then select a specific collection of fall, holiday/resort, spring or summer to realize via draping, drafting, fabrication, construction and presentation. The course culminates in a final project/portfolio. Prerequisites: FASH 120 and FASH 240. Offered: Occasionally. Three lecture hours.

**FILM**

**FILM 119 BEGINNING MAKE-UP ARTISTRY (3)**
Production aspects of make-up for film and television. Students learn the basic concepts of foundation, color, glamour and special effects make-up and participate in hands-on practical application of make-up for models and actors. Offered: Occasionally. Two lecture hours, two lab hours.

**FILM 130 VIDEO PRODUCTION I (3)**
Fundamentals of digital film production. Students learn skills in video production including operation of cameras, lights and audio equipment. Work is done in the studio as well as the field. Offered: Fall and Spring. Two lecture hours, two lab hours.

**FILM 131 EDITING I (3)**
An entry level course in non-linear video editing. Students explore the aesthetics and technical aspects of digital video editing using non-linear editing software. Topics include log and capture, software and hardware, media management and professional film terminology. Students must have working knowledge of Macintosh computers. Offered: Summer, Fall and Spring. Three lecture hours.

**FILM 132 TELEVISION PRODUCTION (3)**
An introduction to basic digital video production skills related to broadcast journalism offered in partnership with Santa Fe Community (SFCTV) public access television station. Topics include pre-production, documentary research, news gathering, video and sound production, interviewing, editing and television and on-demand broadcasting. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. Two Lecture hours, two lab hours.

**FILM 135 GIRLS MAKE MEDIA (3)**
The class focuses on directing, producing, shooting and editing through hands-on workshops. Students in the class will work individually and in teams to create small films. Classes are designed to create media literacy pertaining to female-focused subjects and create feminine voice through altruistic behavior. Designed for young women ages 14-21. Offered: Occasionally. Three lecture hours.

**FILM 136 WOMEN MAKE MEDIA (3)**
Designed for women ages 18+. The class focuses on directing, producing, shooting and editing through hands-on workshops. Students in the class will work individually and in teams to create small films. Classes are designed to create media literacy pertaining to female-focused subjects and create feminine voice through altruistic behavior. Offered: Occasionally. Three lecture hours.

**FILM 140 FILM CREW I (4)**
An introduction to New Mexico's film industry. This course will be taught by working professionals. Content will be lecture and hands-on. Students complete the semester by working as part of a film crew as below-the-line film crew members. Corequisite: FILM 140L. Offered: Fall and Spring. Three lecture hours, two lab hours.

**FILM 140L FILM CREW I LAB (1)**
In this film safety and health co-requisite lab for FILM 140 students are exposed to importance of safe on set operation, safety training, training in basic nutrition, and environmental concerns specific to film set work. Students will complete technical hands-on workshops for equipment operation necessary for on-location film shoot that is completed in FILM 140 Film Crew I. Students will be responsible for fees required for certification. Corequisite: FILM 140. Offered: Summer, Fall and Spring. Two lab hours.

**FILM 141 FILM CREW II (4)**
The second of three courses (FILM 140, FILM 141 and FILM 240) designed to train students to become working members of film crews. It will be taught by working film
professionals. Content will be lecture and hands-on. Students complete the semester by working as part of an actual film crew as below-the-line and above-the-line crew members. Prerequisite: FILM 140 and FILM 140L. Offered: Fall and Spring. Three lecture hours, two lab hours.

FILM 145 PERFORMANCE FOR FILM AND MEDIA I
Introduction to acting skills and techniques unique to film, television and web-based productions. The class includes writing and performing a monologue for the screen, partner scene work, audition preparation and professional filmmaking terminology. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

FILM 150 INTRODUCTION TO FILM STUDIES
This course will introduce students to the fundamentals of film studies and criticism through screenings of a wide array of international films. Topics to be covered include a brief history of cinema, screenwriting, film production and film criticism. Attention will also be given to technical vocabulary, screenplay structure, and the writing of film criticism. Offered: Occasionally. Three lecture hours.

FILM 155 FILM HISTORY
Explore the evolution of film by surveying the studios, directors, actors and writers that created the most influential films from the last 120 years. The technical, political and socio-economic influences that shaped what was produced for the screen will be examined. Offered: Fall and Spring. Three lecture hours.

FILM 160 FILM THEORY AND CRITICISM
An exploration of the nature of film as a complex cultural, psychological and political medium through the discussion of key theoretical and critical approaches. Includes realist theory, genre criticism, auteur theory, structuralism, feminist theory and journalistic criticism. The course combines weekly feature-length viewings with lectures, group discussions and written assignments. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

FILM 166 RADIO JOURNALISM
An introduction to radio journalism offered in partnership with KSFR 101.1FM Santa Fe public radio station. Students work with professional news journalists to learn the trade and tools used in broadcast and podcast news radio. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

FILM 175 SCREENWRITING I
An introduction to writing scripts for media and film. Students are introduced to narrative film structure and produce a script. Prerequisite: ENGL 109. Offered: Fall and Spring. Three lecture hours.

FILM 190 DIRECTING I
Introduction to the creative process of a film director. Students will participate in hands-on workshops and develop stories for motion media, create screenplays and work with actors in short scenes using current technologies in film, television and web-based media production. Offered: Spring. Two lecture hours, two lab hours.

FILM 192 INDEPENDENT FILM
An exploration of the form, history and impact of motion pictures as an art form, an economic force and a representative form of communications as observed through the lens of independent film. View examples of various categories of independent films and explore issues related to the social, historical, business and cultural aspects of the medium. Topics include genre studies from road movies to grindhouse and a focus on auteurs from Cassavetes to Van Sant. Offered: Occasionally. Three lecture hours.

FILM 195 CONTEMPORARY AND POSTMODERN FILM
An examination of the social and political context of the postmodern era of filmmaking. This class explores postmodern filmmaking techniques, aesthetic choices and stylistic devices. Includes the work of Quentin Tarantino, the Coen Brothers, Ridley Scott, Spike Jonze and Charlie Kaufman. Offered: Occasionally. Three lecture hours.

FILM 200 MEDIA AND THE ENVIRONMENT
The study of documentary filmmaking in the fields of ecology, anthropology and socio-political journalism. Explore socially conscious stories and the roles filmmakers play in the emerging fields surrounding environmental journalism. The class will focus on the forms, structures and styles of documentaries as well as on the historical, social and cultural context of the genre. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

FILM 210 DOCUMENTARY FILM PRODUCTION I
An introduction to planning and producing a short documentary film. In this workshop-based class, students work individually and in teams. Prerequisites: FILM 130 or FILM 135 or FILM 136 and FILM 131. Offered Occasionally. Two lecture hours, two lab hours.

FILM 211 DOCUMENTARY FILM PRODUCTION II
A second-level workshop class in which students work
individually and in teams learning and utilizing the necessary skills to plan, produce, shoot and edit a short documentary film. Students will learn the business of documentary filmmaking and begin the processes needed for distribution. Prerequisite: FILM 210. Offered: Occasionally. Three lecture hours.

**FILM 215 SOCIAL MEDIA AND GLOBAL SUSTAINABILITY**

An exploration of anthropological, ecological and sociological aspects of sustainability as it relates to media literacy and its impact on global climate change. Through hands-on workshops, field trips and experiential learning students participate in ethnographic videomaking that is then distributed through social media websites. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

**FILM 219 ADVANCED MAKE-UP ARTISTRY**

Advanced skills for professional application of make-up for film and television. Students learn the advanced concepts of foundation, color, glamour and special effects make-up and participate in hands-on practical application of make-up for models and actors, including prosthetic make-up and air brushing. Prerequisite: FILM 119. Offered: Occasionally. Two lecture hours, two lab hours.

**FILM 230 VIDEO PRODUCTION II**

An in-depth exploration of digital video production, including camera, lighting and sound production techniques for studio and field production. This class will help the filmmaker visualize and execute a digital film in a real-world team environment. Prerequisite: FILM 130 or FILM 135 or FILM 136 and FILM 131. Offered: Occasionally. Two lecture hours, two lab hours.

**FILM 231 EDITING II**

A second level class in non-linear video editing. Training includes various non-linear software tools expanding on concepts learned in Editing I. Students will complete individual short editing projects. Students will provide their own removable hard drive. Prerequisite: FILM 131. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

**FILM 232 EDITING III**

Application of editing theory, story structure and aesthetic techniques needed to create effective short films. Students work as individuals and in teams to improve their visual storytelling techniques and understand effective editing choices. Students must have a working knowledge of Final Cut Pro, Adobe Premiere Pro or Avid. May be taken twice for degree or certificate credit. Prerequisite: FILM 231 or permission. Offered: Occasionally. Two lecture hours, two lab hours.

**FILM 233 EDITING IV**

Workshop style class where students demonstrate mastery in editing theory, story structure and aesthetic techniques to create effective short films. Students work as individuals and in teams to master their visual storytelling techniques and understand effective editing choices. Students must have a working knowledge of Final Cut Pro, Premiere Pro or Avid. May be taken twice for degree or certificate credit. Prerequisite: FILM 232. Offered: Fall and Spring. Two lecture hours, two lab hours.

**FILM 236 SOUND FOR FILM**

An introduction to the skills of a sound utility technician on a motion picture set. Students will learn the process of designing a soundtrack for film and recording live audio dialogue for use in post-production editing as well as learning the components of orchestration, foley, audio dialogue replacement and dialogue synchronization used to support and enhance the overall visual entertainment experience. Prerequisites: MART 160 and FILM 131. Offered: Spring. Two lecture hours, two lab hours.

**FILM 239 PRODUCING AND DIRECTING THE INDEPENDENT FILM**

The study of pre-production, production and post-production processes needed to produce and direct the independent motion picture. Students will complete a script breakdown, shooting schedule, budget and design a distribution roll-out plan. Students will discuss and analyze contractuals, film unions and crew management. Offered: Occasionally. Three lecture hours.

**FILM 240 FILM CREW III**

This is the third of three courses (FILM 140, FILM 141 and FILM 240) designed to train students to become working members of film crews. Students work in teams to complete a short motion picture. This course will be taught by working film union professionals. Content will be lecture and hands-on. Students complete the semester by working as part of an actual film crew. Offered in collaboration with IATSE film union and NM Film Office designed to train below-the-line film crew members. Prerequisite: FILM 141 and permission. Offered: Occasionally. Seven lecture hours, four lab hours.

**FILM 241 FILM CREW IV**

The first of two courses that span a full academic year. In Film Crew IV, students who have been accepted will produce and direct their film and/or media project. Students will work with instructors during this process and have
access to equipment, technology and student crew members to complete their production. Students must have completed their pre-production for their project and have followed the submission guidelines published by the college before taking this class. Permission required. Prerequisites: FILM 240 and FILM 298. Offered: Occasionally. Seven lecture hours, four lab hours.

FILM 242 FILM CREW V (9)
The second of two courses that span a full academic year. In Film Crew V, students who have been accepted will complete the post-production process for their film and/or media project. Students will work with mentors during this process and have access to equipment, technology and student crew members to complete their production. Students will have a deadline for completion set by the instructors. Upon completion all students must participate in the college's end of the year screening program as well as submit to four film festivals statewide. Permission required. Prerequisite: FILM 241. Offered: Occasionally. Seven lecture hours, four lab hours.

FILM 245 PERFORMANCE FOR FILM AND MEDIA II (3)
A second level class that reviews on-camera techniques for performers. Students perform in a short film scene directed by student directors, write and perform short monologues. Prerequisites: FILM 145. Offered: Spring. Two lecture hours, two lab hours.

FILM 250 INTERNATIONAL HORROR CINEMA (3)
In-depth analysis of international horror cinema in which students explore important contributions from foreign countries to the horror genre. Rare films offer insight into the development of cinema's portrayal of the terrifying from ghosts to homicidal maniacs, from social judgment to repressed sexuality. Offered: Occasionally. Three lecture hours.

FILM 255 INTERNATIONAL CINEMA (3)
A cinematic exploration of other nations, cultures and ways of perception. Films from around the world provide the basis for such topics as the historical development of a nation's cinema through the eyes of its leading directors; an in-depth focus on the works of a foreign filmmaker; a multi-cultural comparison of films thematically linked; and other subjects related to appreciating international cinema. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

FILM 270 FILM CREW SEMINAR (.5-3)
Industry specific seminars focused on particular craft areas in the film industry. Seminars are hands-on practical classes.

Students may take the seminar class up to four times for degree credit. Offered: Occasionally. One-six lab hours.

FILM 275 SCRIPTWRITING II (3)
A second-level course exploring the feature length screenplay. Students will learn the techniques of marketing a script, pitching ideas, and finding and working with a Hollywood agent. Prerequisite: FILM 175. Offered: Fall and Spring. Three lecture hours.

FILM 280 DIGITAL CINEMATOGRAPHY I (3)
Teaches intermediate skills for digital video motion photography. Students will learn lighting with tungsten and HMI instruments for documentary and narrative filmmaking as well as camera techniques including movement, composition and art direction. Prerequisite: FILM 130 and FILM 140 and FILM 130 or FILM 135 or FILM 136. Offered: Occasionally. Two lecture hours, two lab hours.

FILM 281 DIGITAL CINEMATOGRAPHY II (3)
Teaches professional skills for digital video motion photography. Students use professional camera, lighting, and grip equipment; develop digital acquisition workflow for post-production; work in small film crews; and apply professional cinema techniques to image acquisition. Prerequisite: FILM 280. Corequisite: FILM 281L. Offered: Occasionally. Two lecture hours, two lab hours.

FILM 281L DIGITAL CINEMATOGRAPHY LAB (1)
A corequisite course for FILM 281, FILM 282, and FILM 283. The focus of the lab is professional preparation of camera, lighting, and sound equipment for digital cinematography classwork. Students work in teams to assemble industry standard film equipment, test operation of equipment, and troubleshoot necessary maintenance and repairs. Prerequisite: FILM 280. Offered: Summer, Fall and Spring. Two lab hours.

FILM 282 DIGITAL CINEMATOGRAPHY III (3)
Teaches professional skills for digital video motion photography. Students use professional camera, lighting, and grip equipment; develop digital acquisition workflow for post-production; hire and manage small film crews; and apply professional cinema techniques to image acquisition. Focus is on developing professional skills for camera assisting, media management, and electrical distribution. Prerequisite: FILM 281. Corequisite: FILM 281L. Offered: Occasionally. Two lecture hours, lab hours.

FILM 283 DIGITAL CINEMATOGRAPHY IV (3)
Teaches professional skills for digital video motion photography. Students practice professional skills in
cinematography within a team-based environment. Classes are held on location throughout Santa Fe County and are designed for students to develop their skills to support directors of photography, key grips, best boys, gaffers, and post-production supervisors while executing small digital video projects. This class is designed for students wishing to work in camera, grip, electrical, or post-production film jobs. Students must have completed FILM 140 and FILM 140L or equivalent film technician program. Prerequisite: FILM 282. Corequisite: FILM 281L. Offered: Occasionally. Two lecture hours, two lab hours.

**FILM 290 DIRECTING II (3)**
A second level course in directing techniques used in film, television and web-based productions. Designed for students with some acting and directing training. Students participate in hands-on workshops and create, direct and act in short films using current technologies in film, television and web-based media production. Prerequisites: FILM 145 and FILM 190. Offered: Fall. Two lecture hours, two lab hours.

**FILM 298 FILM CREW INTERNSHIP (3)**
Internship students work on various film projects from Hollywood films to independent features to public service announcements. Student must complete 150 internship hours in the course of one semester. All students participating in the internship program must have a “B” or better in Film Crew Training I and complete a Production Assistant Workshop. Prerequisite: FILM 140. Offered: Summer, Fall and Spring. Three lecture hours.

## FINE WOODWORKING

**WOOD 111 INTRODUCTION TO THE FINE ART OF WOODWORKING (5)**
In the process of building a table, students will learn about wood as a medium for realizing their designs. Topics covered include choosing the wood to complement the design, milling techniques, mortise and tenon joinery, surface preparation and application of water-based finishes. Students will learn the safe use of the radial arm saw, jointer, planer, table saw, bandsaw, drill press, horizontal boring machine and router. Offered: Fall and Spring. Two lecture hours, six lab hours.

**WOOD 112 INTRODUCTION TO HAND TOOLS (5)**
An introduction to the maintenance, sharpening and use of basic hand tools including chisels, planes, spoke-shaves, marking knives, hand saws and scrapers. Various sharpening systems are discussed. Students build a wooden handplane and practice hand tool use. Prerequisite: WOOD 111 or may be taken concurrently. Offered: Fall and Spring. Two lecture hours, six lab hours.

**WOOD 115 INTRODUCTION TO JOINERY (5)**
Introduces traditional joinery techniques including edge, miters, dowel, mortise and tenon variations, bridle, bread boards, and frame and panel work. Students layout, cut and fit each of these joints. Prerequisite: WOOD 111. Offered: Fall and Spring. Two lecture hours, six lab hours.

**WOOD 116 DOVETAILS (5)**
Introduces dovetail joinery for drawers and case work. Students learn to layout and cut dovetails with hand saw and chisels, the tablesaw, and a router jig. After practicing all three methods, students design and build a project utilizing dovetail joinery. Prerequisite: WOOD 112. Offered: Occasionally. Two lecture hours, six lab hours.

**WOOD 120 CHARACTERISTICS OF WOOD (1)**
This course focuses on wood as a material. It covers the visual aspects of different species as well as their working characteristics. Topics include wood structure, graphics, the moisture in wood and choosing the right wood for a project. Offered: Fall. One lecture hour.

**WOOD 125 INTRODUCTION TO FINISHING (3)**
Introduces wood finishes, including penetrating oil finishes and film finishes such as shellac, lacquer, varnish, and water-based finish. Surface preparation, stains, dyes, and hand and spray application methods are covered. Special attention will be given to the advantages of low-toxic water-based finishes, and the health and environmental issues concerning solvent-based finishes. Offered: Spring. One lecture hour, four lab hours.

**WOOD 130 FURNITURE DESIGN (3)**
Encourages the uninhibited accumulation of ideas in a sketchbook and the development of each student’s individual design aesthetic. Basic requirements for furniture, orthographic drawing, principles of design, recent furniture history, and model making are covered. Prerequisite: WOOD 111 Offered: Fall. Two lecture hours, two lab hours.

**WOOD 135 BANDSAWN VENEERS (5)**
An introduction to the use of bandsawn veneers in furniture construction. Students execute a project of their own design that incorporates bandsawn veneers. May be taken twice for degree or certificate credit. Prerequisite: WOOD 111. Offered: Occasionally. Two lecture hours, six lab hours.
WOOD 145 BENT LAMINATION  (5)
An introduction to the use of bent lamination in furniture construction. Students will build a project of their own design using the techniques. Prerequisite: WOOD 111. Offered: Occasionally. Two lecture hours, six lab hours.

WOOD 155 BUILD A WORKBENCH  (4)
Covers fabrication of an instructor-designed workbench for each student that incorporates a laminated maple top, maple dog holes, bench dogs, end rails, and tool tray on a poplar trestle-style base. This versatile bench is designed for one or two metal vises with shop-made wooden vise pads. Note: Significant additional fee will be charged to cover materials and hardware. Vises may be ordered individually at the beginning of class. This fee is not included in the tuition. Prerequisite: WOOD 111. Offered: Occasionally. Two lecture hours, four lab hours.

WOOD 160 INTRODUCTION TO WOOD TURNING  (3)
Teaches the elementary concepts and methodologies of turning wood on the lathe using a hands-on approach. Students learn the art of woodturning through design and production of turned projects. Offered: Fall and Spring. One lecture hour, four lab hours.

WOOD 161 ADVANCED WOODTURNING  (3)
Builds on basic skills learned in WOOD 160. Students explore dimensioned turnings from patterns, production of accurate multiples, and creative spindle and bowl techniques in the pursuit of a personal design aesthetic. Prerequisite: WOOD 160. Offered: Fall and Spring. One lecture hour, four lab hours.

WOOD 162L WOODTURNING STUDIO  (2)
Builds on previously learned skills to design and turn individually conceived projects. Students explore form and surface treatment as they develop a personal aesthetic. Prerequisite: WOOD 161. Offered: Fall and Spring. Four lab hours.

WOOD 165 WOODWORKING MACHINERY MAINTENANCE  (3)
Students will learn about the setup, maintenance and minor repair of stationary and portable power tools in the woodworking shop. In addition, there will be discussion about shop layout and setup considerations. Prerequisite: WOOD 111. Offered: Occasionally. One lecture hour, four lab hours.

WOOD 166 ROUTER JOINERY  (3)
An introduction to using the router to make mortise and tenon joints, dovetails, sliding dovetails, bent lamination joinery, and many other joints. Students will learn how to build the jigs and templates, which make the router an indispensable tool. Prerequisite: WOOD 111. Offered: Occasionally. One lecture hour, four lab hours.

WOOD 170 INTRODUCTION TO WOODCARVING  (3)
Cover the selection of appropriate types of wood, project design, correct use and sharpening of carving tools, and basic carving methods. Relief, chip, and sculptural carving are introduced through exercises. Offered: Fall and Spring. One lecture hour, four lab hours.

WOOD 171 ADVANCED WOODCARVING  (3)
Builds on skills learned previously to create expressive wood carvings. Students work with considerable independence to design, fabricate, and carve elements for furniture or free-standing pieces. Prerequisite: WOOD 170. Offered: Fall and Spring. One lecture hour, four lab hours.

WOOD 180 BASIC WOODWORKING PROJECTS  (3)
Introduction planning a woodworking project with consideration to design, type of wood, joinery, process, tool needs, and finish. Students design and build a project of their choice. Prerequisite: WOOD 111. Offered: Fall and Spring. One lecture hour, four lab hours.

WOOD 181 SUMMER PROJECTS  (2)
An introduction to planning a woodworking project and introduces planning a woodworking project with consideration to design, type of wood, joinery, process, tool needs and finish. Students design and build (or continue) a project of their choice, utilizing their own lumber. Prerequisite: WOOD 111. Offered: Occasionally. One lecture hour, two lab hours.

WOOD 220 DOORS, DRAWERS AND HARDWARE FOR FURNITURE  (5)
Surveys various cabinet designs and carcase construction methods, and introduces the designing, building, and installing of doors, drawers, and hardware. Students design and build a cabinet that incorporates a door, drawer, and hardware. Prerequisite: WOOD 115. Offered: Occasionally. Two lecture hours, six lab hours.

WOOD 223 CHAIR MAKING  (5)
Students will learn about the unique structural and aesthetic challenges presented in chair making. Topics include design criteria for chairs; compound angle joinery, floating-tenons, shaping techniques and a discussion of upholstery possibilities. Students will construct a chair of an assigned design, modifying size, scale and shaping details to fit their personal taste. Prerequisite: WOOD 111. Offered: Occasionally. Two lecture hours, Six lab hours.

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WOOD 270  CLASSICAL GUITAR MAKING  (5)
Covers all aspects of building a classical guitar. Students begin with the tone woods and the work-board form and proceed to bend the sides, construct the rosette, brace the top, assemble the body, shape the neck, band the edge, fret the fingerboard, add the bridge and tuners, make final adjustments and finish. Cost includes materials for each student to build a finished instrument. Prerequisite: WOOD 112. Offered: Occasionally. Two lecture hours, six lab hours.

WOOD 280  ADVANCED WOODWORKING PROJECTS  (5)
An advanced class for students with a good foundation in project planning, machine and hand-tool use and traditional joinery skills. Students will design and build a project of their choice. Prerequisite: WOOD 115 or permission. Offered: Occasionally. Two lecture hours, six lab hours.

WOOD 290  ADVANCED FURNITURE MAKING  (5)
Covers construction of a capstone furniture project, similar to a journeyman's piece, based on design and technical skills learned over the course of the woodworking program. Students consult with the instructor to conceive, design, build and present a major furniture work. Prerequisites: WOOD 115 and WOOD 130. Offered: Fall and Spring. Two lecture hours, six lab hours.

WOOD 295L  FURNITURE STUDIO  (5)
Consists of designing and building a major piece of furniture with an entrepreneurial mindset. After consulting with the instructor, students work with considerable independence, while tracking time and materials. Permission required. Prerequisite: WOOD 290. Offered: Occasionally. Ten lab hours.

FIRST YEAR STUDENT SUCCESS

FYSS 111  EXCELLED IN COLLEGE  (3)
A three-credit course designed to help students develop in-depth skills necessary for achieving educational, personal, and career goals. Topics will include goal setting and time management; personal learning styles; active reading; note-taking and study strategies; listening, comprehension, and communication skills; health and stress management; campus and community resources; basic computer literacy skills, financial aid and literacy; critical and creative problem solving; and career exploration. FYSS 111 is required for all new and transfer degree-seeking students with fewer than 15 college credits, who have scored at or below 65 on the Accuplacer Reading test. Offered: Summer, Fall and Spring. Three lecture hours.

FYSS 116  STRATEGIES FOR SUCCESS IN COLLEGE  (1)
An interactive one-credit course that introduces students to skills and resources that will help them develop a strong foundation for success in college. Students will engage and reflect on topics including academic strategies, campus and community resources, personal health and stress management, financial strategies, and career exploration. FYSS 116 is required for all new and transfer degree-seeking students with fewer than 15 college credits, who have scored above 65 on the Accuplacer Reading test. Offered: Summer, Fall and Spring. One lecture hour.

FRENCH

* FREN 111  FRENCH I  (4)
An introductory course for students with little or no previous exposure to written or spoken French. The development of conversation skills is a major goal, although reading and writing are also stressed. Offered: Summer, Fall and Spring. NMCCNS: FREN 1113. NMGECC: Area V — Humanities and Fine Arts. Four lecture hours.

* FREN 112  FRENCH II  (4)
A continuation of French I, involving further study of the structure of the language. The course offers extensive oral and written practice, with readings on French culture. Prerequisite: FREN 111. Offered: Spring. NMCCNS: FREN 1123. NMGECC: Area V — Humanities and Fine Arts. Four lecture hours.

* FREN 121L  FRENCH LAB  (1)
A self-paced language lab designed to accelerate, reinforce and support all levels of French. The course provides an opportunity to practice and strengthen listening, speaking, reading and writing skills through the use of software, audio and video tapes, and other technologies. Graded as Pass/Fail. Offered: Summer, Fall and Spring. Two lab hours.

FREN 150  CONVERSATIONAL FRENCH I  (3)
This third-semester French course emphasizes oral communication, idiomatic usage and the development of vocabulary, with a review of basic syntax. The course

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incorporates reading selections and writing exercises. Prerequisite: FREN 112. Offered: Occasionally. Three lecture hours.

* FREN 211 INTERMEDIATE FRENCH I (3)
This course presents a review of grammar and then focuses on expanding conversational skills and further developing reading and writing. Prerequisite: FREN 112. Offered: Fall. NMGECC: AREA V — Humanities and Fine Arts. Three lecture hours.

GALLERY

GLRY 133 ART COLLECTIONS MANAGEMENT (3)
An introduction to care and management of art collections. The specific types of art covered in this introductory course will be contemporary art and ethnographic artifacts. Students learn principles of museum collections management and registration, object cataloging, collections security, ethics, storage and handling methods, storage materials, standards governing access to collections, environmental conditions, object conservation and digitization of museum collections. May be taken twice for degree or certificate credit. Offered: Occasionally. One lecture hour, four lab hours.

GLRY 140 ARTS ORGANIZATIONS (3)
An in-depth survey of various types of arts organizations including foundations, public and private collections, arts commissions and non-profit organizations. The course will focus on the roles of government funding and private philanthropy in support of the arts as well as organizational structures, funding sources and other issues unique to various types of arts organizations. Students will gain a fundamental perspective of arts organizations useful for future career choices. Class includes field trips and classroom visits by arts professionals. Appropriate for students interested in arts administration in fine and commercial arts, crafts, and design. Offered: Occasionally. Three lecture hours.

GLRY 161 GALLERY PRACTICES (3)
Presents the information and principles of art gallery operations and helps students develop the skills and concepts crucial to day-to-day gallery management. Object care and handling, exhibition layout and installation, conservation issues, professional standards, legal issues, publicity and marketing, and lighting are among the issues covered. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lecture hours, two lab hours.

GLRY 162 CONTEMPORARY ART GALLERY ISSUES (3)
Focuses on the complexities of the contemporary art world. In a creative, interactive format, students will gain tools for understanding contemporary art and gallery issues. Social, political, artistic, financial, and marketing realities are among the topics presented. Offered: Occasionally. One lecture hour, four lab hours.

GLRY 163 PROFESSIONAL MATTING AND FRAMING (2)
This course teaches students and artists the art of professional and custom picture framing. Students learn to measure, cut, hinge fit and finish pictures using conservation and museum techniques. May be taken twice for degree or certificate credit. Offered: Occasionally. Four lab hours.

GLRY 165 ART EXHIBITIONS AND THE CULTURAL LANDSCAPE (3)
An examination of the social, cultural and political complexities of art and exhibitions. The course will focus on issues related to the exhibition of ethnographic, devotional, and contemporary art and objects as well as other genres of expression. Guest speakers and research on regional, national and global issues, including censorship and cultural sensitivity, challenge students to consider a wide range of viewpoints. Offered: Occasionally. Three lecture hours.

GLRY 175 LEGAL AND BUSINESS ISSUES IN THE ARTS (3)
A survey of topical legal and business issues and related best practices for galleries, arts organizations, collectors, and artists. Students gain an understanding of the methods for protection and development of legal and business strategies for art-related businesses. Students are introduced to current public policy and issues concerning art dealers, auction houses, museums, artists, collectors, and other businesses related to fine art. Topics include the Visual Artist's Rights Act, moral rights, issues of theft and title, ownership as it relates to copyright and work for hire, a review of sample contracts, censorship, artistic freedom and its limits. Offered: Occasionally. Three lecture hours.

GLRY 210 ART CRITICISM (2)
Critical writing in the arts as it relates to magazines, newspapers and journals and on the web that explore discourse and analysis of contemporary arts. This course entails reading from national and international art journals and magazines. Selected essays by contemporary authors and art critics will be reviewed. Students also have the...
opportunity to meet with art critics, debate ideas and have their critical writings examined and analyzed in a supportive atmosphere. May be taken for degree or certificate credit. Prerequisite: ENGL 109 or permission. Offered: Occasionally. Three lecture hours.

**GEOLOGY**

* **GEOL 111** PHYSICAL GEOLOGY (3)
  An introduction to the concepts and terminology of geology. Topics include the origin of the universe and the solar system, planetary geology, oceanography, meteorology and the formation of glaciers, rivers, volcanoes and deserts. Prerequisite: MATH 102. Corequisite: GEOL 111L. Offered: Fall. NMCCNS: GEOL 1113. NMGECC: Area III — Sciences. Three lab hours.

* **GEOL 111L** PHYSICAL GEOLOGY LAB (1)
  Lab experience for GEOL 111 that includes exercises in understanding land formation, natural catastrophes, meteorology, planetary geology and oceanography. Corequisite: GEOL 111. Offered: Fall. NMCCNS: GEOL 1111. NMGECC: Area III — Sciences. Three lab hours.

* **GEOL 112** HISTORICAL GEOLOGY (3)
  An introduction to the physical and biological evolution of the Earth. Topics include the origin of the oceans and atmospheres, the origin and evolution of life, fossils, mineral deposits and hydrocarbons, and the evolution of dinosaurs and animal life. Prerequisite: MATH 102. Corequisite: GEOL 112L. Offered: Fall and Spring. NMCCNS: GEOL 1213. NMGECC: Area III — Sciences. Three lecture hours.

* **GEOL 112L** HISTORICAL GEOLOGY LAB (1)
  Lab experience for GEOL 112. Included in exercises are the physical and biological evolution of the Earth, the origin of the oceans and atmospheres, and the origin and evolution of life. Corequisite: GEOL 112. Offered: Fall and Spring. NMCCNS: GEOL 1211. NMGECC: Area III — Sciences. Three lab hours.

**GERMAN**

* **GERM 111** GERMAN I (4)
  An introductory course for the student with little or no previous exposure to written or spoken German. The development of conversational skills is a major goal; reading and writing are also stressed. Offered: Fall. NMCCNS: GERM 1113. NMGECC: Area V — Humanities and Fine Arts. Four lecture hours.

* **GERM 112** GERMAN II (4)
  A continuation of German I with emphasis on reading, writing and speaking skills. Prerequisite: GERM 111. Offered: Occasionally. NMCCNS: GERM 1121/GERM 1123. NMGECC: Area V — Humanities and Fine Arts. Four lecture hours.

* **GERM 121L** GERMAN LAB (1)
  A self-paced language lab designed to accelerate, reinforce and support all levels of German. The course provides an opportunity to practice and strengthen listening, speaking, reading and writing skills through the use of software, audio and video tapes, and other technologies. Graded as Pass/Fail. Offered: Summer, Fall and Spring. Two lab hours.

**GREENHOUSE MANAGEMENT**

* **GRHS 121** GREENHOUSE DESIGN AND OPERATIONS (3)
  Controlled environment agriculture for commercial agricultural production and hobby-scale greenhouses. This includes fundamental aspects of greenhouse designs and styles, climate control systems, heating, cooling, ventilation, environmental considerations, energy consumption, lighting, and economic viability. Participants gain a thorough understanding of greenhouse systems and how to determine greenhouse viability and energy consumption. Offered: Fall and Spring. Two lecture hours, two lab hours.

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GRHS 123  INTRODUCTION TO SOILLESS (4) PRODUCTION SYSTEMS
An introduction to growing plants without soil. This includes an in-depth look at different types of systems, hydroponic and aquaponic, for growing various crops in recirculating and drain to waste systems. Students gain an understanding of how these systems operate, and hands-on practical experience growing plants using multiple systems. Topics include the lineage of hydroponics and aquaponics, from the early history to the current state of each industry, water quality, nutrient dynamics, light requirements, and appropriate plant variety for system types. At the conclusion of this course, students will be able to design a variety of production systems for specific agricultural crops. Offered: Fall and Spring. Three lecture hours, two lab hours.

GRHS 125 HYDROPONIC PLANT GROWTH (3)
Fundamental principals of hydroponic plant growth. This course covers cellular/molecular biology as applicable to plant growth, plant physiology, nutrient requirements and biochemical nutrient uptake activities. Soil components, properties, microbiology and nutrient dynamics in soil systems are studied to understand hydroponic plant growth and production. Other topics include water quality parameters such as pH and electrical conductivity (EC) and their relationship to nutrient availability. At the conclusion of this course, students will be able to create custom nutrient solutions from mineral salts, and have practical experience growing hydroponic plants. Offered: Fall and Spring. Two lecture hours, two lab hours.

GRHS 127 HYDROPONIC CROP PRODUCTION (4)
Growing hydroponic vegetables and herbs. Students apply knowledge and skills from the introductory study of hydroponic systems and plants to grow hydroponic vegetables and herbs. Topics include plant propagation, plant specific requirements, integrated pest management (IPM), identifying nutrient deficiencies and toxicities, organic hydroponics and nutrient and compost teas, and product marketability. Prerequisites: GRHS 123 and GRHS 125. Offered: Fall and Spring. Two lecture hours, four lab hours.

GRHS 128 BIOPESTICIDES - APPLICATION AND SAFETY (2)
An introduction to the preparation of biochemical controls, bio- and chemical pesticides, and basic plant disease identification. The course also covers appropriate equipment and its use for health and safety. Topics include water quality parameters (pH and electrical conductivity) and proper use of pesticides to avoid contamination of water supplies. At the conclusion of this course, students are able to prepare an integrated pest management program (IPM) for hydroponic, controlled environment, and organic agriculture. The course prepares students to take the National Core Exam and New Mexico Department of Agriculture (NMDA) Category 3A/3B Pesticide Application Licensure exams. Offered: Fall. One lecture hour, two lab hours.

GRHS 132L INTRODUCTION TO CEA OPERATIONAL PROCEDURES (1)
An experiential course providing opportunities for hands-on repetition necessary to master tasks common to hydroponic and aquaponic production in a Controlled Environment Agriculture (CEA) facility. These tasks include water quality testing, seeding, transplanting, scouting for pests, nutrient issues on crops, and the general maintenance and upkeep of equipment. May be taken twice for degree or certificate credit. Graded as Pass/Fail. Permission required. Offered: Summer, Fall and Spring. Two lab hours.

GRHS 221 AQUAPONICS (4)
Growing aquaponic vegetables and herbs using this sustainable, water efficient method. Students learn about the integration of hydroponic plant production with aquaculture (fish farming). Aquaponic systems support symbiotic relationships using effluent from fish to grow plants with the key link between these processes being microbial activity. Students gain experience with integrated multi-trophic aquaculture (IMTA) production systems. Students learn the nitrogen cycle and its key components, monitor water quality and nutrient dynamics, diagnose and treat diseases, and explore the economics of integrated systems. Prerequisites: GRHS 123 and GRHS 125. Offered: Fall and Spring. Two lecture hours, four lab hours.

GRHS 223 GREENHOUSE FODDER PRODUCTION (3)
Gain practical experience in the production of fodder (sprouted grains of wheatgrass, barley and oats) in a greenhouse to provide the diets of most farm animals for small to medium scale enterprises. Students experiment with growing sprouted grain to produce localized feedstock for domesticated livestock such as cows, goats, sheep, horses, chickens, rabbits and pigs. Small-scale production of short-term microgreens and specialty crops using industry-standard methodology. Students gain experience in all stages of the growing process, from seed to post-harvest, learn to identify challenges such as mold, fungus, and poor seed quality, and design a fodder-growing plan for production. Offered: Occasionally. One lecture hour, four lab hours.
GRHS 298  GREENHOUSE INTERNSHIP  (1-4)
An opportunity to continue into advanced hydroponic and aquaponic techniques. This allows students to custom tailor the experience based upon individual goals through research projects and experimentation, assisting with lab experiments, and daily greenhouse operations. Graded as Pass/Fail. Offered: Summer, Fall and Spring. One-four lecture hours.

HEALTH CARE

HLCR 111  INTRODUCTION TO HEALTH CAREERS  (3)
This course introduces students to various health professions and the behaviors and skills necessary for success in the health field. Students will explore basic concepts in anatomy and physiology, the major components of health care delivery system, roles and responsibilities of health care professionals and the educational requirements needed for each career presented. The course is composed of lecture, hands-on lab activities and observational experiences in actual health care settings. Offered: Occasionally. Three lecture hours.

HLCR 113  MEDICAL TERMINOLOGY  (3)
A study of the terminology used in anatomy, physiology, pathology, surgery and pharmacology. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Three lecture hours.

HLCR 115  COMMUNITY HEALTH WORKER TRAINING  (5)
An introductory course that trains students to become community health workers (CHW) who assist individuals and communities in adopting and maintaining positive health behaviors. Topics include the roles of the CHW, adult learning principles, and skill development in such areas as advocacy, health coaching and leadership development. Offered: Summer, Fall and Spring. Four lecture hours, two lab hours.

HLCR 116  COMMUNITY HEALTH WORKER TRAINING II  (5)
Completes the training required to apply for the Community Health Worker certificate offered by the state of New Mexico. Topics include effective communication skills, clinical support skills, service coordination skills, and community assessment. Prerequisites: ENGL 109 and HLCR 115. Offered: Occasionally. Four lecture hours, two lab hours.

HLCR 118  PATIENT CARE ASSISTANT TRAINING  (3)
Prepares students to enter the healthcare profession as an entry-level personal care assistant (PCA). Topics include the role of the PCA, infection control, personal care skills, home care safety, and caring for specific populations. Basic principles related to body systems and rehabilitation needs are also covered. This course prepares students to assist in personal care activities with clients in the home, hospital or community setting. Offered: Occasionally. Two lecture hours, two lab hours.

HLCR 125  NURSE AIDE  (5)
Upon successful completion of this class, the student will meet all federal certification standards for both Home Health Aide and Nurse Aide and be prepared to sit for the Nurse Aide Certification Evaluation Service. Included are basic principles related to body systems, rehabilitation needs, personal care skills, safety and the special needs of families, children and the elderly. Offered: Summer, Fall and Spring. Four lecture hours, two lab hours.

HLCR 126  HOME HEALTH AIDE  (5)
A course that meets all federal certification standards for Home Health Aide and Certified Nurse Aid. Provide routine, personal health care, such as bathing, dressing, or grooming, to elderly, convalescent, or disabled persons in the homes of patients or in a residential care facility. Included are basic principles related to body systems, rehabilitation needs, personal care skills, basic nutrition and meal planning/preparation, safety and the special needs of families, children and the elderly. Offered: Summer, Fall and Spring. Four lecture hours. Two lab hours.

HLCR 130  PATHOPHYSIOLOGY FOR ALLIED HEALTH  (3)
An introduction to the nature of disease and its effect on human body systems. This course deals with disease processes affecting the human body via an integrated approach to specific disease entities. Topics also include injuries and disorders related to all body systems. Prerequisite: BIOL 136 and BIOL 136L. Offered: Summer, Fall and Spring. Three lecture hours.

HLCR 163  FAMILY OBESITY PREVENTION TRAINING  (4)
Provides obesity prevention training for the Community Health Worker. This course provides instruction on how CHWs and other healthcare professionals can work with clients and families in the area of obesity prevention with an emphasis on childhood obesity. The course covers obesity prevention competencies, including health education, motivational interviewing, health coaching, physical and food environments,
community resources and navigation, food choices and behaviors, physical activity promotion, clinical skills, and health information technology. Students must be employed in the field in order to complete the required field work. Permission required. Prerequisite: HLCR 116. Offered: Occasionally. Four lecture hours.

HLCR 215 MENTAL HEALTH FIRST AID (.5)
Prepares students to respond in a mental health emergency, and to offer support to someone who appears to be in emotional distress. The topics are taken from a national curriculum managed by the National Council for Behavioral Health that teaches skills to identify, understand, and respond to signs of mental illness and substance abuse disorders. Completion of this course leads to a certificate in Mental Health First Aid. Offered: Occasionally. Half a lecture hour.

HLCR 232 PATHOPHYSIOLOGY (4)
An introduction to human pathophysiology building upon the student's prior basic knowledge of anatomy and physiology. Topics cover changes that occur in the human body when normal structure and/or function is altered within. Emphasis on specific disease processes and pathophysiological changes related to disease and illness. Prerequisite BIOL 231 and BIOL 231L. Offered: Summer, Fall and Spring. Four lecture hours.

HLCR 235 PHARMACOLOGY FOR ALLIED HEALTH (3)
Introduces students to classifying medications into correct drug categories and applying basic pharmacology principles. Students identify common medications, methods of medication preparation, storage and administration of medications. Documentation and legal standards are also discussed. Prerequisite: ENGL 109. Offered: Spring. Three lecture hours.

HLED 111 LIFETIME HEALTH AND WELLNESS (3)
A class designed to provide students with current information, on health and wellness and guidelines on how to implement healthy behaviors on a daily basis. Students are encouraged to take a critical look at their current health behaviors in order to develop and maintain healthy habits. Offered: Fall and Spring. Three lecture hours.

HLED 112 WEIGHT MANAGEMENT AND EXERCISE (3)
A class designed to assist in body fat loss through adequate nutrition, physical activity, and behavior modification. Emphasis is placed on developing an exercise routine for weight management using a step counter/pedometer. Healthy ways to increase lean body mass will be explored. Offered: Summer, Fall, Spring. Three lecture hours.

HLED 113 STRESS MANAGEMENT (3)
Introduces students to the pathophysiology of stress. Emphasis will be placed on the detrimental effects of stress on the body, as well as on the impact of stress-eating on the body. A variety of stress management techniques will be explored to promote enhanced well-being. Offered: Fall and spring. Three lecture hours.

HLED 114 FITNESS AND WELLNESS (1)
An introduction to current physical activity guidelines emphasizing activities that improve the five health-related components of fitness. Current principles and guidelines of fitness and nutrition are used as the foundation for designing exercise programs to meet the student's unique fitness and wellness needs. Offered: Summer, Fall and Spring. One lecture hour.

HLED 127 AMERICAN RED CROSS FIRST AID (CPR/AED) CERTIFICATION (.5)
Helps participants recognize and respond appropriately to cardiac, breathing and first aid emergencies. This course teaches skills to give immediate care to a suddenly injured or ill person until more advanced medical personnel arrive and take over. Upon the successful completion of the required skills and written exam, students will receive an American Red Cross (ARC) First Aid/CPR/AED certificate. Offered: Occasionally. Half lecture hour.

HLCR 116 MEDICAL LAW, ETHICS AND PROFESSIONAL ISSUES (3)
Legal guidelines for health care professionals and practice, medical ethics and related issues as well as professional components are introduced in this course. Federal and state regulations, Medicare and Medicaid, Advance Directives, HIPPA, professional codes of ethics, licensing and certification as well as credentialing are also taught. Offered: Occasionally. Three lecture hours.

HEALTH EDUCATION

HLED 111 LIFETIME HEALTH AND WELLNESS (3)
A class designed to provide students with current
Training certificate, which will include the certifications of ARC First Aid at the workplace and ARC CPR for the professional rescuer. Students must be 15 years old, swim 300 yards and complete a timed event. Offered: Summer, Fall and Spring. Two lecture hours.

**HLED 135  LIFEGUARD RECERTIFICATION  (1)**
Will give currently American Red Cross (ARC) certified lifeguards a review of current ARC certification content and will train students to successfully complete the knowledge and skill evaluations required for ARC recertification. At the successful completion of the required skills and written exam, students will receive an ARC Lifeguard Training certificate, which will include the certifications of ARC First Aid in the workplace and ARC CPR for the professional rescuer. Must provide proof of current ARC Lifeguard certification required. Offered: Occasionally. One lecture hour.

**HLED 137  WATER SAFETY INSTRUCTION CERTIFICATION  (2)**
Will train students in the Water Safety Instruction program of the American Red Cross (ARC). Students will gain the knowledge in teaching people how to be safe in, on or around water and teaching individuals of different ages and abilities how to swim. At the successful completion of the required skills and written exam, students will receive an ARC Water Safety Instruction certificate. Permission required. Offered: Occasionally. One lecture hour, two lab hours.

**HLED 140  BABYSITTER'S TRAINING CERTIFICATION  (.5)**
Provides youth who are planning to babysit with the knowledge and skills necessary to safely and responsibly give care for children and infants. This class will help students develop leadership skills and learn how to develop a babysitting business, keep themselves and others safe and help children behave. At the successful completion of the required skills and written exam, students will receive the American Red Cross (ARC) Babysitter's Training certificate, which includes ARC Infant/ Child First Aid and CPR. Permission required. Offered: Occasionally. Half lecture hour.

**HEALTH INFORMATION TECHNOLOGY**

**HITP 120  INTRODUCTION TO HEALTH INFORMATION TECHNOLOGY  (3)**
An in-depth study of the origin, use, content, format, and management of health records in a variety of settings. The student is introduced to the various health care organizations that are responsible for providing health care in America and how health information is a vital component of the health care delivery system. This class focuses on storage and retrieval systems, numbering and filing systems, record retention, and the basic functions on the HIM (Health Information Management) department, including quantitative analysis, abstracting, incomplete chart control and release of information. Indices and special registries will also be studied. Offered: Summer, Fall and Spring. Three lecture hours.

**HITP 160  PHARMACOLOGY AND LABORATORY PROCEDURES  (3)**
Designed specifically for allied health majors to enable them to obtain a basic knowledge and understanding of clinical and diagnostic laboratory tests as performed in the acute care setting and the basics of pharmacology. Learners identify the classification, uses, and action of the most commonly prescribed drugs for conditions affecting each body system. Information is presented using appropriate medical and health terminology so that students at all levels continue to be exposed to the language of the healthcare environment. Permission required. Offered: Summer, Fall and Spring. Three lecture hours.

**HITP 170  PHYSICIAN CODING (CPT-4)  (3)**
Designed to provide the student with opportunities to learn and apply basic Current Procedural Terminology (CPT-4) codes and Healthcare Common Procedure Coding System (HCPCS) principles and guidelines to code outpatient visits. Permission required. Offered: Summer, Fall and Spring. Three lecture hours.

**HITP 202  CODING CLASSIFICATION SYSTEMS I  (4)**
A study of nomenclatures and classification systems with emphasis on the most recent revisions of ICD-10-CM and ICD-10-PCS (International Classification of Diseases, Revision 10) and the application of coding guidelines used to accurately assign codes from these classification systems in different healthcare settings. Students study ICD-10-CM, and ICD-10-PCS coding conventions and principles. Permission required. Corequisite: HITP 170. Offered: Fall and Spring. Four lecture hours.

**HITP 212  CODING CLASSIFICATION SYSTEMS II  (3)**
HITP 230  REIMBURSEMENT METHODOLOGIES (3)
A detailed study of health care reimbursement issues. Included will be the basic instructions for filing various types of insurance. Topics also include legal considerations associated with insurance billing, third party billing, and the reimbursement process. Permission required. Prerequisite: HITP 202. Offered: Fall and Spring. Three lecture hours.

HITP 266L  PROFESSIONAL PRACTICE EXPERIENCE CODING (1)
A professional practice learning experience in medical coding with a simulated computer application. Coding is done using the International Classification of Disease (ICD-9-CM, ICD-10CM, ICD-10-PCS, and CPT-4) classification systems. The application of coding guidelines is used to accurately assign diagnostic codes in all healthcare settings. Permission required. Prerequisite: HITP 212. Offered: Summer, Fall and Spring. Two lab hours.

HITP 272  CODING SEMINAR (1)
Prepares prospective coding certificate graduates for the Certified Coding Associate (CCA) exam and/or the American Association of Professional Coders (AAPC) Certified Professional Coder Apprentice (CPC) exam. Job interview skills, resume writing, and professionalism are emphasized. Permission required. Prerequisite: HITP 230. Offered: Summer, Fall and Spring. One lecture hour.

HEALTH, PHYSICAL EDUCATION AND RECREATION

HPER 111L  BEGINNING YOGA ♥ (1)
An introduction to Hatha yoga techniques of stretching, breathing and meditation to relieve stress and promote health. This class is progressive and leads to the development of personalized yoga practice. Offered: Summer, Fall and Spring. Two lab hours.

HPER 112L  GENTLE YOGA (1)
An introduction to basic Hatha yoga posture, breathing techniques and meditation. The positions are taught step-by-step, with one class building upon the next. The class is structured to use modified versions of basic yoga postures in a slow-paced environment. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 113L  GENTLE PILATES (1)
This course is designed as an introduction to Pilates movement and breathing techniques. The class is structured to use modified Pilates movement patterns to fit the senior population and students who benefit from a slower paced class. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 114L  THE METHOD BASED ON PILATES (1)
The Method Pilates is based on the movements of Joseph Pilates, sand will help students develop balance and control, coordination, breath, concentration, centering, precision and flowing movement. Students identify and strengthen their weakest links. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 116L  ABDOMINAL CONDITIONING (1)
This course is designed for students at any level who desire to increase abdominal muscular endurance using a variety of modalities: floorwork, fitballs, medicine balls, dumbbells and benches. Emphasis is on safe exercise progression and technique in a format that focuses on abdominal conditioning. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 117L  BEGINNING BODY SCULPTING ♥ (1)
Designed for individuals to achieve aerobic fitness as well as muscular endurance, this class focuses on correct body alignment and exercise technique. Students will perform exercises to music in a group setting, using a variety of fitness equipment. Offered: Summer, Fall and Spring. Two lab hours.

HPER 118L  BEGINNING AEROBICS (1)
This class introduces the basic principles of aerobic fitness dance, stressing all components of physical fitness (flexibility, cardiovascular endurance, muscular endurance, and strength and body composition). Students will experience a variety of training techniques specially designed for the beginning exerciser. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

HPER 120L  MULTI-LEVEL TENNIS ♥ (1)
Guided practice in beginning and advanced strokes, etiquette, rules and strategies in both the singles and the doubles game. This class is suitable for the beginning as well as the advanced tennis player. Offered: Summer, Fall and Spring. Two lab hours.
HPER 121L  WARM WATER EXERCISE  (1)
Water is an ideal environment for a safe and comfortable workout. This course is designed for people with a broad range of conditions such as joint stiffness and arthritis. Students focus on flexibility, strength, coordination, fluidity of movement and prevention of muscular imbalances. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

HPER 122L  BEGINNING AEROBIC KICKBOXING  (1)
This course is for students at any level who desire to increase cardiovascular fitness, flexibility and muscular endurance in an aerobic format that uses kicking, jumping and boxing movements. Emphasis is on safe exercise progression and technique in a format utilizing aerobic kickboxing. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 124L  BEGINNING COED VOLLEYBALL  (1)
This course continues the development of the student's volleyball skills, with emphasis on defensive and offensive strategies involving rules and tactics. May be taken twice for degree or certificate credit. Offered: Fall and Spring. Two lab hours.

HPER 127L  PICKLEBALL  (1)
Guided practice in strokes, serves, rules and strategies of pickleball. This racket sport is played on a badminton court with special pickleball paddles and a net and has rules similar to tennis. This game is accessible to the competitive as well as the beginning adult player. Offered: Occasionally. Two lab hours.

HPER 130L  BEGINNING SWIMMING  (1)
Designed as an introduction to the basic skills required in learning to swim. Adjustment to water, floating, breath control, rhythmic breathing, the basic swimming strokes and personal water safety are emphasized. Emphasis is also given to activities that improve the five health-related components of fitness and designing an aquatic routine to meet the student's unique health and fitness needs. Student must be 16 years of age or older to enroll. Offered: Summer, Fall and Spring. Two lab hours.

HPER 132L  AQUA ZUMBA  (1)
Combines fast and slow Latin rhythms with easy-to-follow moves in the aquatics environment. The routines feature aerobic interval training sessions to tone and sculpt the body. The class format will integrate some of the basic principles of aerobic, interval and resistance training to maximize caloric output. Students are encouraged to exercise at their own level of ability. May be taken twice for degree or certificate credit. Offered: Fall and Spring. Two lab hours.

HPER 134L  CONDITIONING:  (1)
ABDOMINALS, HIPS AND THIGHS
This class is designed for the beginning as well as the continuing student. Emphasis is placed on strengthening and toning the abdominal muscle group, muscles surrounding the hips and thigh muscles. Activities include core strengthening exercises, mat work, and the use of the fitball, exercise tubing and the medicine ball. Students are encouraged to work at their own fitness level in a noncompetitive environment. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 136L  SHALLOW WATER AEROBICS  (1)
Students participate in aerobic activity and conditioning exercises. The class provides an introduction to a variety of water-exercise workouts, which may include the following equipment: HydroFit resistance and buoyancy cuffs, hand buoys, noodles and stretch cords. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 137L  DEEP-WATER AEROBICS  (1)
Students participate in aerobic activity and conditioning exercises performed totally in deep water. Emphasis is on safe exercise technique and individual exercise progression. Flotation devices and exercise equipment are an integral part of this no-impact workout program. Students must be comfortable in deep water without flotation assistance and be comfortable submersing their face in deep water. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 138L  SENIOR AQUATICS  (1)
Water is an ideal environment for a safe and comfortable workout. People with a broad range of conditions including joint stiffness and arthritis can benefit from aquatic exercises because water's natural buoyancy offers a measure of support. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 139L  DEEP AND SHALLOW COMBO  (1)
This vertical water-exercise class uses the entire length of the pool. Students will move between shallow and deep water. Students are introduced to and encouraged to use the variety of equipment available for a total-body workout. Students must be comfortable in deep and shallow water, be comfortable submersing their face in water and be able to tread water without added flotation.
equipment. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**HPER 140L  ZUMBA FITNESS**  (1)
Fusion of Latin rhythms with easy to follow moves to create a dynamic and enjoyable fitness program. The routines feature aerobic interval training sessions to tone and sculpt the body in a non-competitive environment. Offered: Occasionally. Two lab hours.

**HPER 141L  ZUMBA TONING**  (1)
Zumba Toning blends body-sculpting techniques with modified, slower paced Zumba moves, fusing Latin and World rhythms. Class uses weighted, maraca-like Zumba Toning Sticks or light dumbbells to enhance rhythm and build muscle endurance and strength. Offered: Occasionally. Two lab hours.

**HPER 142L  FLEXIBILITY AND CONDITIONING  (1)**
FOR SENIORS
Students focus on flexibility, strength, coordination, mental concentration, fluidity of movement and the prevention of muscular imbalances. The emphasis is on a series of related, non-weight bearing exercises emphasizing correct body alignment. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**HPER 148L  BRAZILIAN JIU JITSU**  (1)
This course is an introduction to self-defense, using Brazilian Jiu Jitsu. Students will learn the basic moves of Brazilian Jiu Jitsu: controls, escapes and submission. Emphasis is placed on safety and injury prevention. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**HPER 150L  SELF DEFENSE**  (1)
An intense program of physical fitness stressing self-awareness, defensive skills, offensive skills, coordination, self-control, endurance and martial technique. Students learn various techniques of martial arts, coordinating the use of both hands and feet and have opportunities to practice in simulated assault situations. May be taken twice for degree or certificate credit. Offered: Fall and Spring. Two lab hours.

**HPER 151L  MARTIAL ARTS**  (1)
A program designed to familiarize students with many of the martial systems practiced throughout the world. Techniques from arts such as Myanma Let-Hwei (Burmese boxing), Chun-K, Do Hapkido, Brazilian Jiu-Jitsu, Presas Arnis and many others are covered. Students develop the skills needed for basic self-defense and improve their strength, flexibility and endurance. May be taken twice for degree or certificate credit. Offered: Fall and Spring. Two lab hours.

**HPER 152L  TAI CHI I**  (1)
An Introduction to Tai Chi designed to expose students to energy movement through the body for health, defense and longevity. Students practice physical and energy movements and are introduced to part I of the Wu style Tai Chi short form. Offered: Fall and Spring. Two lab hours.

**HPER 153L  THE NIA TECHNIQUE**  (1)
The Nia Technique is a form of fusion fitness that incorporates elements of dance, martial and healing arts into a class that is part choreographed and part free-form. Beyond the fun and the solid aerobic workout, classes focus on self-expression, healing and developing mindfulness. This course will address individual needs and provide appropriate props to ensure an enjoyable learning experience. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**HPER 154L  STRENGTH, STRETCH AND RELAXATION**  (1)
The focus of this class is on progressive strengthening, stretching and relaxation exercises designed to stimulate and tone sluggish muscles. Students learn correct body position and exercise technique. The body's natural breathing rhythms are explored to decrease unwanted tensions and energy blockages. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**HPER 158L  SNOWSHOEING**  (1)
An introduction and development of basic skills and knowledge essential to snowshoeing. Overall fitness, train selection, and outdoor focused exercise safety are integral subjects of the course. Students must be able to maintain the pace of the course and stay with the group, as part of the course requirements. Offered: Spring. Two lab hours.

**HPER 160L  FITNESS CYCLING**  (1)
Designed for individuals of various fitness levels who would like an aerobic conditioning class on stationary bicycles. Fitness cycling is an excellent exercise to improve one's cardiorespiratory fitness and muscular endurance. Offered: Summer, Fall and Spring. Two lab hours.

**HPER 162L  SUSPENSION TRAINING**  (1)
An introduction to suspension training that uses gravity and your own body weight to build strength, power,
balance, coordination, flexibility, and joint stability, while increasing bone density. Suspension training utilizes gravity and movement to generate neuromuscular responses to changes in body position and body levers. Offered: Summer, Fall and Spring. Two lab hours.

HPER 165L BEGINNING HIKING ♥ (1)
Introduction to the basic skills and knowledge essential to hiking. Overall fitness, map-reading, environmental awareness, and outdoor safety considerations are emphasized. Students should be aware of the strenuous nature of this course which includes physical activity on unimproved mountain or desert trails. Students must be able to maintain the pace of the course and stay with the group, as part of the course requirements. Offered: Summer, Fall and Spring. Two lab hours.

HPER 166L BEGINNING COED STRENGTH TRAINING ♥ (1)
Basic skills and techniques of strength training such as proper warm-up, safety, spotting, and resistance-training routines. Special attention is given to developing an individual fitness program. These programs will be based on the health-related components of fitness as well as the fitness principles. Nutritional needs will be addressed using the latest dietary guidelines. Offered: Summer, Fall and Spring. Two lab hours.

HPER 167L WOMEN'S STRENGTH TRAINING (1)
An introduction to the health and fitness benefits that strength training provides for women. Students are guided through the process of developing individual strength and fitness programs based on their personal fitness goals. Instruction in exercise and technique is complemented by information about related topics in women's health and fitness. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 169L BEGINNING CIRCUIT TRAINING (1)
This course combines strength training and aerobics to provide a total-body workout within a single class format. Primary activity consists of alternating aerobic exercise with work on strength-training machines. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 171L STRENGTH TRAINING FOR SENIORS (1)
An introduction to strength-training techniques for seniors. The course concentrates on development of muscular strength, conditioning and fitness. Safety in both technique and exercise progression is emphasized. The course includes a discussion on how strength training can enhance health after 50. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

HPER 172L BEGINNING FITNESS PROGRAM ♥ (1)
Designed for individuals with little or no exercise and fitness training experience. Emphasis is given to activities that improve the five health-related components of fitness. Current principles and guidelines of fitness, exercise and nutrition will be the foundation for designing exercise programs to meet the student's unique health and fitness needs. Student must be 16 years of age or older to enroll. Offered: Summer, Fall and Spring. Two lab hours.

HPER 173L SWIMMING FITNESS PROGRAM ♥ (1)
Designed for students who are interested in achieving health and fitness by swimming, this class is especially beneficial for those who want an aerobic workout with less stress on the joints. Emphasis is given to activities that improve the five health-related components of fitness and designing exercise programs to meet the student's unique health and fitness needs. Student must be 16 years of age or older to enroll. Offered: Summer, Fall and Spring. Two lab hours.

HPER 175L FITNESS FOR FIREFIGHTERS (1-2)
This is a physical activity class designed specifically for firefighters. Special attention is given to developing the functional strength, power, flexibility, and cardiovascular and muscular endurance that the occupation demands. Students are introduced to the basic principles of strength and conditioning, biomechanics, injury prevention and program development. Orientation is required. May be taken twice for degree or certificate credit. Offered: Occasionally. Two-Four lab hours.

HPER 177L CO-ED INDOOR SOCCER (1)
This course is for students interested in improving individual playing skills, game strategies and conditioning of soccer. Emphasis is on the development of individual and team skills through competition. Drills, team strategies and games are arranged to allow the active and integral participation of beginning and experienced players. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

HPER 180L BOOT CAMP FITNESS (1)
This class is specially designed for students who want to improve their power, speed, coordination, agility, strength and cardiovascular endurance in a challenging class format. Students will experience nontraditional training modalities
such as medicine ball, hurdles, jump ropes and various terrain training in an indoor/outdoor setting. Students should be free of any chronic and/or acute injuries. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

**HPER 181L  CARDIO CHISEL  (1)**

A class to introduce the basic principles of aerobic fitness combined with muscle conditioning and toning. This class emphasizes cardio conditioning by participation in aerobic dance, kickboxing and step aerobics, with muscle conditioning using such equipment as light hand weights, rubber exercise bands and fit balls. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**HPER 210L  MEDITATION AND YOGA  (1)**

A four day workshop designed to introduce the student to Zen meditation and Iyengar Yoga. In the spirit of a traditional retreat, students will learn and practice Zen-style sitting and walking meditation, along with practicing yoga. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**HPER 211L  INTERMEDIATE YOGA  (1)**

This class is designed for the experienced yoga student. More advanced yoga postures such as the handstand, headstand and upward bow, along with meditation and beginning pranayama are practiced. May be taken twice for degree or certificate credit. Prerequisite: HPER 111L. Offered: Fall and Spring. Two lab hours.

**HPER 212L  MULTI-LEVEL YOGA  (1)**

This course combines beginning and intermediate-level yoga techniques of stretching, strengthening, meditation and breathing to promote health and well-being, for those who have some familiarity with yoga. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

**HPER 213L  INTERMEDIATE PILATES  (1)**

Building on the course content of The Method Based on Pilates, students further develop their balance, control and coordination. The focus of this class is learning precise, flowing movements through mat exercise choreography. May be taken twice for degree or certificate credit. Prerequisite: HPER 114L. Offered: Fall and Spring. Two lab hours.

**HPER 229L  INTERMEDIATE SWIMMING  (1)**

This course is designed to perfect basic swimming skills and introduce the more-advanced skills in preparation for learning to swim as a lifetime fitness activity, and/or to prepare for taking advanced swimming and water-safety courses. Emphasis is on stroke techniques, swimming drills and developing endurance. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

**HPER 231L  ADVANCED SWIMMING AND CONDITIONING  (1)**

This course is designed for the serious swimmer. Students gain knowledge of swimming through swim equipment, drills, proper biomechanics and scientific principles related to the physiological effects of exercising. Students learn about the benefits of periodization and a well-rounded exercise program. Attention is focused on developing cardiovascular conditioning and muscular endurance. Students must be able to accurately swim all four competitive strokes and swim 500 meters freestyle continuously. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.

**HPER 236L  AQUA BOOT CAMP  (1)**

Designed for students who desire a high-intensity, non-choreographed workout in deep water. A variety of equipment is used to enhance this challenging total body workout. Students should be free of chronic or acute physical limitations and should be comfortable in a horizontal or vertical position in deep water without flotation devices. Offered: Occasionally. Two lab hours.

**HPER 252L  TAI CHI II  (1)**

A program of tai chi designed for students to further their study of physical and energy movements for health, defense and longevity. Students will be introduced to part II of the Wu style Tai Chi short form. Offered: Spring. Two lab hours.

**HPER 257L  NORDIC SKIING TOURING  (1)**

An intermediate cross-country ski class that concentrates on developing efficient touring technique, with emphasis on the ability to stop and turn on the downhill. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

**HPER 265L  INTERMEDIATE HIKING  (1)**

A high-altitude (5,000'-12,000') hiking class that exposes students to more challenging terrain and longer hikes than HPER 165L Hiking. Overall fitness, orienteering and preparedness are integral subjects. Students must be free of chronic and/or acute injuries. May be taken twice for degree or certificate credit. Offered: Occasionally. Two lab hours.
HEATING, VENTILATION AND AIR CONDITIONING

HVAC 111 BASIC COMMERCIAL REFRIGERATION
An introduction to commercial refrigeration systems. This course will introduce students to the theory of heat, tubing and brazing, pressure/temperature/volume relationships in the refrigeration cycle, types of refrigeration systems, system components, tools and instruments, system charging, and recovering and evacuation procedures. Offered: Spring. One lecture hour, two lab hours.

HVAC 121 AIR CONDITIONING AND ELECTRIC MOTOR APPLICATION
An in-depth study of air conditioning, heat pumps, and electric motors and controls. Students will also study heat gain, package systems, split systems, reverse-cycle refrigeration and related topics. Offered: Spring. Two lecture hours, four lab hours.

HVAC 131 APPLICATION OF REFRIGERATION SYSTEMS
A comprehensive study of commercial refrigeration systems and their relationship to the Heating, Ventilation, Air Conditioning and Refrigeration (HVAC-R) industry. Students will study commercial control systems, switching logic and troubleshooting. Offered: Spring. Two lecture hours, four lab hours.

HVAC 211 REFRIGERANT MANAGEMENT
The study of safe handling practices and procedures for refrigerant management as set forth by the refrigeration industry and the Environmental Protection Agency (EPA). Students will prepare for and take the Universal CFC Refrigerant Handlers Certification exam. This certification is required to handle and service all types of refrigeration equipment containing and using refrigerants. Students must pass the exam and be able to successfully perform evacuation, recovery, and charging of systems for Type 1, Type 2 and Type 3 procedures. Offered: Spring. One lecture hour, two lab hours.

HVAC 221 GAS HEATING FURNACES
The study and application of gas furnaces including installation, operation, service, maintenance and controls. The course will include service, maintenance and troubleshooting. Offered: Spring. One lecture hour, two lab hours.

HVAC 231 AIR MOVEMENT, DISTRIBUTION, HEAT LOAD CALCULATIONS
A study of heat loss and heat load calculations for commercial and residential buildings, including airflow in ductwork and air properties. Offered: Spring. Three lecture hours, two lab hours.

HISTORY

* HIST 111 WESTERN CIVILIZATION I
A survey of western civilization from its beginnings in the ancient Near East up to the seventeenth century. This course explores social, political, religious, intellectual, philosophic, scientific, and artistic influences that have shaped the western tradition. The historical impact of environmental and geographic influences and concepts such as sustainability will also be explored. This course emphasizes a multicultural perspective to illustrate the rich cultural diversity that is part of western heritage. Western civilization is placed in its historical and global contexts by examining the interrelationships within the west and between different regions and civilizations in different historical eras. Prerequisite: ENGL 109. Offered: Fall and Spring. NMCCNS: HIST 1053. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* HIST 112 WESTERN CIVILIZATION II
A survey of western civilization from the seventeenth century to the present. This course explores the social, political, religious, intellectual, philosophic, scientific, and artistic influences that have shaped the Western tradition. The historical impact of environmental and geographic influences and concepts such as sustainability are explored. This course emphasizes a multicultural perspective to illustrate the rich cultural diversity that is part of western heritage. Western civilization is placed in its global context by examining the interrelationships between different regions and civilizations. Prerequisite: ENGL 109. Offered: Fall and Spring. NMCCNS: HIST 1063. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* HIST 161 UNITED STATES HISTORY TO 1877
A survey of the history of the United States from its origins through Reconstruction. This course explores the social, political, intellectual, economic, and cultural developments that shape American history. The historical impact of geography, environmental change and concepts such as sustainability are also explored. This course employs a multicultural perspective that emphasizes the diversity of

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American experiences. American history is placed within the larger context of global history. Prerequisite: ENGL 109. Offered: Fall and Spring. NMCCNS: HIST 1113. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

*HIST 162 UNITED STATES HISTORY (3)
FROM 1877 TO THE PRESENT
A survey of the history of the United States from the end of Reconstruction to the present. This course explores the social, political, intellectual, economic, and cultural developments that shape American history. The historical impact of geography, environmental change and concepts such as sustainability are also explored. This course employs a multicultural perspective that emphasizes the diversity of American experiences. American history is placed within the larger context of global history. Prerequisite: ENGL 109. Offered: Fall and Spring. NMCCNS: HIST 1123. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

HIST 252 NATIVE AMERICAN HISTORY AND CULTURE (3)
An introductory survey of the history and cultures of Native peoples of North America from pre-Columbian times to the present. This course explores the diverse perspectives of Native American groups as well as their interactions with Africans, Europeans, and their descendants, in order to gain historical perspective. Political, economic, culture, environment, and gender, as well as Native American perspectives are explored, with a focus on selected representative Indian nations/groups in what would become the United States, including the indigenous peoples of the southwest. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

*HIST 260 HISTORY OF NEW MEXICO (3)
A survey of New Mexico’s history from the earliest known prehistory of the region through the present. Students will focus on the political, economic, social and cultural history of New Mexico. Prerequisite: ENGL 109. Offered: Fall. NMCCNS: HIST 2113. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

HIST 265 UNITED STATES HISPANIC HISTORY AND CULTURE (3)
An introduction to the history and evolution of the Mexican-American political and cultural movements in the United States. The course is presented in a chronological framework as it addresses the myths surrounding the Chicano experience, not only in the Southwest but also in other areas of the United States where this ethnic group has expanded its efforts to participate in the greater American mainstream. Emphasis includes the Chicano movement of the 1960s and 1970s and subsequent developments in cultural self-determination. Prerequisite: ENGL 109. Offered: Spring. Three lecture hours.

HOSPITALITY AND TOURISM

HRMG 114 INTRODUCTION TO TOURISM (3)
An introduction to tourism in the areas of leisure, travel, recreation, and hospitality and an examination of the components of the tourism industry, including transportation, accommodation, food and beverage, and attractions. The course focuses on key concepts, principles, practices, and issues in tourism and the perspectives of travelers and destinations. In this foundational course, students are provided an overview to understand tourism’s economic, socio-cultural, and environmental impacts on communities. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

HRMG 115 CUSTOMER RELATIONS AND SERVICE (3)
An in-depth study of courtesy and communication as essential functions of the hospitality industry, emphasizing personal and interpersonal relationships in a work environment. Students acquire skills in human relations, management by objectives and methods of improving communications, service, the service arena, service applications, problem-solving theory, sustaining service levels and service recovery. Offered: Spring. Three lecture hours.

HRMG 116 INTRODUCTION TO HOSPITALITY MANAGEMENT (3)
An introductory course examining the multifaceted elements of hospitality management by exploring all aspects of the field, including hotels and lodging, food-service and restaurants, travel and tourism, meetings, conventions, and expositions, leisure and recreation, and special events. While the focus is on basic hospitality and management principles, this course also explores the impact of current social, economic, technological, and political factors on operations in the field. Further, students are offered information on the array of careers available in the various segments of the hospitality industry. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

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HRMG 118  SANITATION AND SAFETY  (2)
Presents a systems approach to answering public health concerns, reducing sanitation risks, and ensuring satisfaction for the dining public. Offered: Fall and Spring. Two lecture hours.

HRMG 130  PURCHASING/FOOD AND BEVERAGE CONTROL  (3)
This course covers how to develop and implement an effective purchasing program. Focus is on issues pertaining to suppliers, selection, negotiations and evaluations. This includes principles and procedures involved in an efficient food and beverage cost control system. Prerequisites: ENGL 109 and MATH 101. Offered: Occasionally. Three lecture hours.

HRMG 210  HOSPITALITY SUPERVISION  (3)
This course is designed to provide students with the principles of supervision as they apply specifically to the hospitality industry. Course covers topics such as supervisor and management process, effective communications, supervisory responsibilities, importance of job orientation and training, establishing productivity standards, controlling labor costs, coaching and evaluation of employees, discipline, motivation of employees, managing conflict, time management and future trends in management. Offered: Occasionally. Three lecture hours.

HRMG 220  FINE DINING ROOM SERVICE AND BEVERAGE MANAGEMENT  (3)
An introduction to fine dining room service and beverage management. Topics include restaurant industry statistics, income opportunities, tip calculation, and responsible Internal Revenue Service (IRS) reporting. Students learn professional appearance, table settings, and types of food and beverage service. Guest communication skills, new technologies and equipment of service, professional courtesies, and handling of customer complaints are demonstrated to and by the students. Banquet, catering, and buffet service skills are explained and demonstrated. Wine, beer, spirits, and legal alcohol service are covered. The class includes visits to fine restaurants, wineries, and breweries. Offered: Spring. Three lecture hours.

HRMG 240  HOSPITALITY AND TOURISM MARKETING  (3)
An introduction to the principles and methods of marketing for hotels, restaurants, and other tourism related businesses. Topics include methodologies for market segmentation, marketing research, sales techniques for intangibles, advertising, public relations, identifying competitors, packaging, pricing strategies, revenue management, travel purchasing both direct and online, contract negotiating, and the future of hospitality marketing. Prerequisite: HRMG 116. Offered: Occasionally. Three lecture hours.

HRMG 245  HOSPITALITY AND RESTAURANT MANAGEMENT  (3)
Practical approach to management in the hospitality industry. Course content includes management and market strategies, human resources management, crisis and risk management and leadership profiles. Offered: Occasionally. Three lecture hours.

HRMG 298  HOSPITALITY INTERNSHIP  (2-4)
Provides students with an opportunity to enlarge and complete their learning experience by spending time in a real working environment in the hospitality industry. Students must have completed a significant portion of core requirements to be eligible for this course. Permission required. Prerequisite: HRMG 116 and CULA 115. Offered: Summer, Fall and Spring. Two-four lecture hours.

HUMAN DEVELOPMENT

HUDV 125  JOB SEARCH SKILLS  (1)
Assists the job seeker by identifying practical steps in job hunting. Guidelines for conducting a job search are discussed, including resume writing, effective interviewing techniques and follow-up. Students have access to information on specific career choices, occupational requirements and the job market outlook. Permission required. Graded as Pass/Fail. Offered: Fall.

HUDV 160  WOMEN IN TRANSITION  (1)
An exploration of issues important to women who are making changes in their personal circumstances. Topics may include personal wellness, psychological strength, legal issues, community resources, parenting skills, support services, educational opportunities and communication skills. Experts on these issues make presentations in a workshop format. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

HUDV 170  VOLUNTEER IN THE COMMUNITY  (.5-3)
In this individualized course, students have an opportunity to design, implement and evaluate a service project within the community. Students learn concepts and principles of service and get support and feedback as needed. With the permission of their degree advisers, students can use up to six credits of HUDV 170 toward their degree requirements. May be taken twice for degree or certificate credit.
Permission required. Variable credit. Graded as Pass/Fail. Offered: Fall and Spring. Half hour to three lab hours.

HUDV 260  STUDENT LEADERSHIP  (3)
An introduction to theories and skills of practicing collaborative leadership in a multicultural environment. Focus is on the applied practice of leadership using project-based learning through SFCC Student Government Association or through other leadership groups. May be taken for up to six credit hours toward a degree or certificate. Offered: Occasionally. Three lecture hours.

* HUDV 270  SERVICE LEADERSHIP  (3)
This course examines the dynamics of leadership in action. Readings on effective leadership models, communication styles, and conflict-resolution methods inform students as they design, implement, and evaluate a leadership project. Students apply concepts and develop leadership and service skills through their internship experience in a nonprofit organization. With the permission of their degree advisers, students can use up to six credits of HUDV 170 or HUDV 270 toward their degree requirements. Offered: Fall and Spring. NMGEC: Area IV — Social and Behavioral Sciences. Three lecture hours.

* HUDV 296  COMMUNITY DEVELOPMENT  (3)
This course aims to provide a broad understanding of issues relevant to improving the quality of life in communities. Topics include economic and cultural forces, social change processes, community research methods, and model programs. This course exposes students to theory and practice of community change so they can develop the skills needed to work as professional community leaders, program administrators, and/or contemporary engaged citizens Offered: Occasionally. Three lecture hours.

HUMAN SERVICES

HUSV 111  HUMAN SERVICES PROFESSIONS  (3)
A survey of the helping professions, with emphasis on the field of social work, and its context of practice. It examines the influence of personal and professional values and ethics on the helping relationship. Students review cases that illustrate the nature of the human services professions and visit agencies to get first hand exposure to the field. Students also identify strategies to enhance helper creativity and good health and to prevent burnout. Offered: Fall and Spring. Three lecture hours.

HUSV 130  GROUP PROCESS AND COUNSELING  (3)
This course is an introduction to group process and counseling. The emphasis is on understanding group dynamics and group leadership pertaining to each stage of group development. Students learn to write group proposals as well as group facilitating techniques, especially pertaining to groups for children, adolescents, adults, and the elderly. Ethical considerations for group counseling are also explored. Offered: Spring. Three lecture hours.

HUSV 150  COUNSELING ETHICS  (.5)
This course studies ethical theory as applied to counseling situations in our complex and litigious society. Ethical dilemmas such as dual relationships, boundaries, limits of confidentiality, progress notes and agency staffing are presented. Practical applications of professional ethics are discussed and analyzed. Graded as Pass/Fail. Offered: Fall. Half lecture hour.

HUSV 151  PREVENTION ETHICS  (.5)
Prevention Ethics will fulfill the ethics requirement for Prevention Specialists. This course will cover the main topics in the Prevention Ethics code by the New Mexico Credentialing Board for Professional Behavioral Health. Topics will include competency, integrity and confidentiality. Graded as Pass/Fail. Offered: Spring. Half lecture hour.

HUSV 153  CONFLICT RESOLUTION FOR HUMAN SERVICES  (3)
An introduction to the fundamentals and life skills of conflict management: positive and productive communication, self-evaluation, and appropriate resolution strategies. It examines personal values, cultural influences, communication style, and conflict management styles with an emphasis on gaining an understanding of the causes of conflict and resources for resolving conflict. This course is recognized by the State Office of Alternative Dispute Prevention and Resolution as required training for all volunteer mediators. Offered: Fall and Spring. Three lecture hours.

HUSV 170  LOSS, BEREAVEMENT AND THE FAMILY  (3)
This course will explore loss, bereavement and recovery in the context of the family. It will include identifying the stages of grief; normal losses in the life cycle; complicated bereavement; differences in child and adult bereavement; effective measures to help bereaved families; and cultural differences in bereavement. Offered: Occasionally. Three lecture hours.

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HUSV 200  PSYCHOLOGY OF ADDICTIVE BEHAVIOR  (3)
An exploration of research and theories related to the psychological, behavioral and physiological bases of addiction and recovery. A variety of common addictive disorders are examined, including addictions to alcohol, eating, smoking, gambling, work, sex and drugs. Students examine the impact of addictions on families, the workplace and society as well as on the individual. Offered: Fall. Three lecture hours.

HUSV 205  EFFECTS OF DRUG ABUSE  (3)
This course acquaints students with psychoactive drug classification and with the physiological, biochemical and psychological effects of mind-altering drugs. The course also describes the characteristics of several types of mental illness, how they are impacted by chemical dependency, and how a psycho-educational approach may be used in treatment. Offered: Spring. Three lecture hours.

HUSV 210  SUBSTANCE-ABUSE: ASSESSMENT, EVALUATION AND TREATMENT  (3)
This course presents a study of symptoms and manifestations of substance abuse as they relate to evaluation, assessment, treatment and referral, including intervention, case history, treatment plans, relapse treatment, follow-up and continued support processes. Offered: Spring. Three lecture hours.

HUSV 215  SUBSTANCE IN FAMILIES  (3)
This course examines substance abuse within the context of a family system. It includes aspects such as developing a substance abuse family identity, typical problem-solving behaviors in substance-abuse families, daily routine regulators of home life, family ritual disruptions and intergenerational transmission of substance-abuse patterns. Offered: Spring. Three lecture hours.

HUSV 220  SUBSTANCE ABUSE PREVENTION  (3)
This course presents an overview of the history, principles, and approaches to the field of substance prevention. Topics include promotion of healthy lifestyle choice, community collaboration, public policy, and effective prevention planning. This course meets the State of New Mexico Alcohol, Tobacco, and Other Drugs (ATODA) requirements and prepares students to become candidates for certification as prevention interns. Offered: Summer. Three lecture hours.

HUSV 225  COUNSELING SKILLS FOR ADDICTION PROFESSIONALS  (3)
Focused study of the applied skills, techniques, and varied approaches to the addiction treatment continuum of care. The emphasis is on understanding individual, group, and family dynamics, gaining effective helping strategies and interpersonal skills. Students also become familiar with counseling approaches that meet the current standard of care in a range of treatment settings. Offered: Occasionally. Three lecture hours.

HUSV 260  COALITIONS, COMMUNITY DEVELOPMENT AND GRANT WRITING  (3)
An exploration of best practices relating to community development, coalition building and grant writing. Students will learn roles and responsibilities of organizing a community and building effective coalitions to address social problems. The emphasis will be on assessing community needs, grant writing, growing the organization, cultural inclusiveness, and evaluation of data. Offered: Fall. Three lecture hours.

HUSV 270  CASE MANAGEMENT  (3)
This course is designed to introduce students to the role of the case manager in human services. The emphasis is on the client assessment process, service planning and delivery, and client advocacy. Illustrations of case management in different kinds of agencies are reviewed. Effective intake interviewing, documentation and referral skills are also highlighted, as is the impact of managed care on the practice of case management today. Offered: Fall and Spring. Three lecture hours.

HUSV 280  COMPASSION FATIGUE AND SECONDARY STRESS DISORDER  (3)
An examination of the possible “cost of caring” among those who help persons who have suffered trauma. “Compassion Fatigue” is a user-friendly term for secondary traumatic stress disorder. It applies to those emotionally affected by the trauma of another, such as those working with children, veterans, victims of domestic violence, terrorism, and major disaster survivors. Prevention strategies, effective treatment methods and plans for recovery will be considered. Offered: Spring. Three lecture hours.

HUSV 285  POST-TRAUMATIC STRESS DISORDER: DIAGNOSIS AND TREATMENT  (3)
An exploration of post-traumatic stress disorder (PTSD) diagnosis, treatment and recovery. This course will examine contributing factors to the development of PTSD including exposure to natural disasters, abuse, bullying, and violence; emigrations under duress; persecution and/or political unrest; terrorism and war. In addition, protective factors such as familial and social support, community networks, and the role of spirituality will be explored. Acute
traumatic stress reactions will be differentiated from PTSD. May be taken twice for degree or certificate credit. Offered: Fall. Three lecture hours.

**HUSV 290 CRISIS INTERVENTION, COPING STRATEGIES AND STABILIZATION**

This course is an introduction to crisis intervention for human services workers. It will explore the history of crisis intervention, crisis intervention models, ethical issues, cultural sensitivity, suicide assessment, developmental crises, crises of loss, HIV/AIDS, domestic violence, and community disasters. Offered: Fall. Three lecture hours.

**HUSV 298 HUMAN SERVICES INTERNSHIP**

The capstone course for the Human Services degree. This course provides students with applied experience in the field of human services. Students complete 130 hours with a human services organization, write a learning plan, review professional and ethical guidelines and boundaries, present a case study, and write a reflection paper. Students gain experience interacting with diverse people in community service settings. Prerequisite: HUSV 111 and permission. Offered: Fall and Spring. Three lecture hours.

**HUMANITIES**

**HUMS 150 INTRODUCTION TO CULTURE AND GENDER STUDIES**

This interdisciplinary course introduces students to the study of culture and gender. Culture and gender pervade our everyday lives and shape our realities in profound ways. Politics, history, science, the arts, media, education, and human development shape and are shaped by culture and gender. This course provides a framework for ongoing study in the area and is required for students who intend to pursue an AA in General Studies with a concentration in Culture and Gender Studies. Prerequisite: ENGL 109. Offered: Fall. Three lecture hours.

**HUMS 191 MEDIA AND CULTURE**

An overview of the history of the mass media and media arts and their relation to society and culture. Emphasis is placed on an examination of media as a form of communication and expression. Prerequisite: ENGL 109. Offered: Fall. Three lecture hours.

**HUMS 200 MEDIA AND GENDER**

An overview of media's construction of gender and gender stereotyping and its influence on American society and culture. The course will explore various media such as magazines, television, film and the internet and the history of these media forms and how stereotyping gender depictions impact our society. Prerequisite: ENGL 109. Offered: Spring. Three lecture hours.

* **Hums 211 HUMANITIES I, GREECE AND ROME: THE CLASSICAL AGE**

An interdisciplinary survey of early and classical Greek and Roman civilization as the foundation of modern history. Each civilization will be viewed through its literature, art, religion, history, and philosophy. Humanities I and II can be taken independently. Prerequisite: ENGL 109. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* **HUMS 212 HUMANITIES II: EXPLORING WORLD CULTURES**

An interdisciplinary survey of selected cultures both past and present to explore the morals, values, arts, and philosophy that underlie those cultures. Humanities I and II can be taken independently. Prerequisite: ENGL 109. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

**INFORMATION SYSTEMS COMPUTER SCIENCE**

**ISCS 111 INTRODUCTION TO COMPUTERS AND TECHNOLOGY**

A foundational course in general computer literacy. Topics include introduction to hardware, software, internet, computer language paradigms, and information systems. Students explore desktop applications, peripheral devices and emerging technologies that are used in everyday computing. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

**ISCS 113 INTRODUCTION TO COMPUTER SCIENCE**

Computer science course using computer modeling to introduce computer science concepts and computational thinking. Students will use computer science to solve real-world problems. Computer programming exercises and activities build to capstone computational science projects. Subjects include iterative design, build, test development cycles, computer science concepts and

* Approved by the NM Higher Education Department for transfer and application to general education requirements in any public two- or four-year educational institution in New Mexico. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year school.
processes and tools used in creating models of local phenomena as complex systems. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

**ISCS 114 IT ESSENTIALS I: HARDWARE AND SOFTWARE**

A foundational course in entry-level personal computer (PC) hardware and software. Hardware topics include basic hardware installation and configuration of personal computers, mobile devices, laptops, and printers, as well as basic networking and skills related to troubleshooting hardware. Software topics include installation and configuration of operating systems, basic security, administration, and network configuration. The course includes preparation for A+ certification. Offered: Fall and Spring. Two lecture hours, four lab hours.

**ISCS 115 INTRODUCTION TO WEB COMPUTING**

An introductory course to computing principles using JavaScript and its mathematical functions. Students get a hands-on introduction to client-side programming. Topics include programming paradigms, computer language syntax, libraries, control structures, data structures, and basic web development. Students use a shell environment, execute commands and perform file permissions all while creating dynamic websites. Additional topics include client-server architecture, HTML (HyperText Markup Language), XHTML (EXtensible HyperText Markup Language) and CSS (Cascading Style Sheets). Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

**ISCS 116 INTRODUCTION TO LINUX**

An introduction to the popular Linux operating system, a variant of UNIX. Linux powers the majority of the world's supercomputers, most servers, and millions of devices. Students gain hands-on experience with remote login using a secure shell to navigate the Linux file system and directories. Students create directories and files, as well as perform directory and file operations. A text editor is introduced that gives students an opportunity to explore file creation, file permissions, and searching and extracting data from files. Students learn how to implement Linux utilities and perform simple shell commands. In addition, students create scripts and simple programs and perform basic system security. Revision control systems are introduced using Git. Additional topics may be included. Offered: Fall. Two lecture hours, two lab hours.

**ISCS 117 LINUX CERTIFICATION PREPARATION**

An introduction to Linux, a variant of UNIX. Linux is a leading operating system on servers and mainframe computers. It is used in the areas of website development, programming, supercomputing, system administration and open source software. This course can be used as foundation for a certification exam. Topics include remote login, standards, file system structure, file permissions and operations, pipe and command utilities such as find and grep, UNIX shells, shell scripts, processes (users and kernel), Linux internals and text editors. Students will design and develop simple web pages. Offered: Occasionally. Three lecture hours.

**ISCS 120 INTRODUCTION TO PROGRAMMING I**

An introduction to programming using the programming language, Python. Students experience programming through two dimensional graphics, animations and image manipulations. In addition, the course will cover the practical aspects of script programming through web development. Topics include programming paradigms, programming using an Integrative Development Environment (IDE), documentation skills, algorithmic problem-solving, coding and debugging methodologies. No prior programming experience is required. Offered: Summer, Fall and Spring. Three lecture hours, two lab hours.

**ISCS 122 COMPUTER NETWORKS**

A foundational course that prepares students to take an entry-level network certification exam (Network Pro from TestOut) and provides a general introduction to the full range of network technologies. Students are introduced to installing, configuring, and troubleshooting networked environments. Topics include cloud computing, virtual networking, the seven-layer OSI (Open System Interconnection) model, network topologies, management, and security. Prerequisite: ISCS 114. Offered: Spring. Two lecture hours, two lab hours.

**ISCS 125 INTRODUCTION TO PROGRAMMING II**

An introduction to problem-solving methods and algorithm development using Java, a high level programming language. Students learn how to design, code, debug and document programs using modern engineering techniques and a market standard Integrated Development Environment (IDE). This course can be used as a foundation for the Java certification exam. Prerequisite: ISCS 120. Offered: Fall and Spring. Three lecture hours, two lab hours.

**ISCS 127 COMPUTER AND SECURITY FUNDAMENTALS**

A comprehensive overview of network security and network technologies. Topics include network communication tools,
network attacks, cryptography, organizational security, disaster recovery and cyber ethics. In addition, foundational concepts of computer forensics are introduced. Offered: Occasionally. Three lecture hours.

**ISCS 175  DISASTER RECOVERY**  (3)
An introduction to business continuity and disaster recovery. Students are presented with an enterprise-wide approach to developing a disaster recovery plan. Topics include methods to identify vulnerabilities, appropriate countermeasures and business resumption. Offered: Occasionally. Three lecture hours.

**ISCS 212  DATABASE FUNDAMENTALS**  (3)
An introduction to database management systems. Emphasis is on the relational data model. Topics include query languages, relational design theory, file structures, and query optimization. Students will create a database and implement a data manipulation language to exploit its contents. Offered: Spring. Two lecture hours, two lab hours.

**ISCS 215  INTERMEDIATE PROGRAMMING**  (3)
An introduction to programming from an object-oriented perspective. Students will develop programs with the understanding of object-oriented concepts such as: objects, classes, methods, encapsulation and polymorphism. Topics include simple data structures, graphical user interfaces, arrays and exception handling. Prerequisite: ISCS 125. Offered: Fall. Two lecture hours, two lab hours.

**ISCS 219  WEB PROGRAMMING I**  (3)
An intermediate course in web programming. Students learn the fundamentals of a server-side programming language. Topics include a server-side language and how it functions in the client-server architecture. Students create basic dynamic web pages and applications writing scripts that will manage data. Students should be comfortable with HTML (HyperText Markup Language), XHTML (Extensible HyperText Markup Language) and CSS (Cascading Style Sheets) and one programming language. Prerequisite: ISCS 115. Offered: Occasionally. Two lecture hours, two lab hours.

**ISCS 225  ADVANCED PROGRAMMING AND DATA STRUCTURES**  (3)
Advanced object-oriented programming course that further implements concepts presented in ISCS 215. It polishes the programming sequence with advanced programming techniques. Emphasis is given to advanced data structures and software engineering. Topics include algorithm optimization, recursion, searching, sorting, Big O notation, stacks, queues and trees. Prerequisite: ISCS 125. Offered: Spring. Two lecture hours, two lab hours.

**ISCS 229  WEB PROGRAMMING II**  (3)
An advanced course in web programming. Students investigate web server software, server-side programming languages, basic database design, information retrieval and security. Students learn how to read and write information between the server and the client and build dynamic websites that update search results. Cutting-edge technologies are examined and implemented. Previous experience with a programming language and Linux are strongly recommended. Prerequisite ISCS 219 and ISCS 219. Offered: Occasionally. Two lecture hours, two lab hours.

**ISCS 241  DATA ORGANIZATION AND IMPLEMENTATION**  (3)
An introduction to data organization and implementation. Topics include C programming language, Linux operating system, C standard library, data organization, memory allocation, functions, control flow, data structures, accessing information, system programming and input/output. Students should be familiar with basic concepts of computer programming prior to taking this course. Prerequisite: ISCS 116 or ISCS 117 and ISCS 120. Offered: Fall and Spring. Two lecture hours, two labs.

**ISCS 271  FIREWALLS**  (3)
An introduction to the design and implementation of firewalls. Topics include basic firewall concepts and their function within the environment of a Cisco router, Microsoft server, and UNIX platform. Emphasis is given to basic steps and the implementation of firewall configuration strategies that reflect an overall security approach. Students taking this course, in conjunction with additional coursework, fulfill the requirements to complete the Computer and Network Security Certificate. Prerequisite: ISCS 114 and ISC 116 or ISCS 117. May be taken concurrently. Offered: Occasionally. Three lecture hours.

**ISCS 273  COMPUTER AND NETWORK DEFENSE AND COUNTERMEASURES**  (3)
An examination of the tools, techniques and technologies used in the securing of information assets. Students receive in-depth information about the software and hardware components of information security and assurance. Topics include intrusion detection, the design of a security policy, the Common Vulnerabilities and Exposures (CVE) standard, and the strengthening of network control by managing security events. Prerequisite: ISCS 114 and ISCS 171. Offered: Occasionally. Three lecture hours.
ISCS 275  CYBER ETHICS  (3)
An introduction to cyber ethics, professionalism, and career development specific to information systems. Topics include ethical frameworks, moral dilemmas and social problems that arise in cyberspace. Students examine regulatory responses to online behavior, the government need to intervene and future problems of cyber security. Students are given a foundation for making career choices and using best practices in the workplace. Offered: Occasionally. Three lecture hours.

ISCS 298  INTERNSHIP  (1-3)
Opportunity for students to complete their learning experience by participating in unpaid or stipend work with an employer. Students must have completed a significant portion of the program core requirements to be eligible. Students must obtain permission from their faculty adviser before beginning their internship program. Offered: Summer, Fall and Spring. One — three lecture hours.

INTERPRETING

INTR 111  INTRODUCTION/PROFESSIONAL SIGN LANGUAGE INTERPRETING  (3)
A foundation course that introduces the profession of sign language interpreting. This course discusses the role, function, responsibilities, and communication strategies of the ASL interpreters, including the situational application of national standards and the Code of Professional Conduct. It will also include major topics including history, organizations, and ethics, interpreting settings, certification, career information and current trends in the field. Prerequisite: AMSL 111 or permission. Offered: Spring. Three lecture hours.

INTR 112  CONSECUTIVE INTERPRETING  (4)
Intensive practice of consecutive (following dialogue) ASL to English, and English to ASL using a variety of vocabulary and linguistic situations including source language analysis and application of appropriate techniques. Prerequisite: INTR 111. Offered: Fall. Three lecture hours.

INTR 113  SIMULTANEOUS INTERPRETING  (4)
Intensive practice of simultaneous (immediate) ASL to English and English to ASL using a variety of vocabulary and linguistic situations, including source language analysis and application of appropriate techniques. Prerequisites: INTR 111. Offered: Spring. Three lecture hours, two lab hours.

INTR 211  INTERACTIVE INTERPRETING  (3)
Interactive learning and skills focused on development of ASL interpreting. Topics include vocabulary, text analysis, linguistic development, study of the interpreting process and with emphasis on advanced techniques and principles for specific interpreting environments. Provides advanced in-depth discussion and application of techniques and principles for specific interpreting situations and expanded concentration on expressive and receptive manual communication skills. Students will use live models, videotapes and interaction with deaf community members to improve skills. Prerequisite: INTR 111. Offered: Spring. Three lecture hours.

INTR 230  CRITICAL THINKING AND ANALYSIS (3) SKILLS FOR ASL INTERPRETERS
A course focusing on analysis and assessment of matters of fact, opinion, and judgment along with practical skills for thinking more clearly and making more effective decisions within interpreting situations. With Demand-Control Schema, students can apply different types of thinking for improved analysis and problem solving in environmental, interpersonal, paralinguistic, and intrapersonal interpreting situations. Prerequisite: INTR 111. Offered: Fall.

INTR 232  CROSS-CULTURAL ISSUES OF INTERPRETING  (3)
A comparison and contrast of cultural perspectives on language, culture and communication among the Deaf community and among the majority hearing community. Topics include identity, social interaction, group norms and values, and their impact on the interpreting process. Prerequisite: INTR 111. Offered: Fall. Three lecture hours.

INTR 250  INTERPRETING V: EDUCATIONAL INTERPRETING  (3)
An overview of educational interpreting. Students discuss ethical standards and techniques of educational interpreting that are appropriate to various student populations in K-12, post-secondary and adult basic education settings. Prerequisite: INTR 111. Offered: Fall. Three lecture hours.

INTR 251  COMMUNITY INTERPRETING  (3)
An overview of community interpreting. Students focus on the nature and structure of interpreting within the general community, with particular attention to the work of freelance or agency-based interpreters. This course prepares students to provide interpreting services in a variety of career settings, including medical, post-secondary education, legal, social services, and business. Prerequisite: INTR 111. Offered: Spring. Three lecture hours.
INTR 293 ASL INTERPRETING PRACTICUM (3)
An ASL interpreting practicum in which students conduct supervised interpreting in mock interpreting situations with mentor feedback and applied observations of working professional interpreters. Students gain further understanding of the certification and licensure process as well as continuing education credit units (CEUs). This course is required before INTR 298. Permission required. Prerequisite: INTR 112. Offered: Fall. Three lecture hours.

INTR 298 INTERPRETING INTERNSHIP (1-4)
A capstone and practicum course designed to give students practice in all the combined skills required for professional interpreting in a variety of situations and role play opportunities. Students will gain further understanding of the certification and licensure process, as well as continuing education credit units. A supervised practicum in preparation for future interpreting assignments in a variety of community and academic settings. Interpreting hours may be both on and off campus. Students meet for seminar discussions at arranged hours set by the instructor and meet a minimum requirement of observations of interpreted events. This course is required for all program completers. Permission required. Offered: Spring. One-four lecture hours.

ITALIAN

* ITAL 111 ITALIAN I (4)
An introductory course for the student with little or no previous exposure to written or spoken Italian. Students develop basic conversational skills through intensive oral/aural practice as well as through reading and writing assignments. Offered: Fall. NMGECC: Area V — Humanities and Fine Arts. Four lecture hours.

* ITAL 112 ITALIAN II (4)
A continuation of Italian I, involving further study of the structure of the language. Students receive extensive oral/aural reading and writing practice. Prerequisite: ITAL 111. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Four lecture hours.

ITAL 121L ITALIAN LAB (1)
A self-paced language lab designed to accelerate, reinforce and support all levels of Italian. The course provides an opportunity to practice and strengthen listening, speaking, reading and writing skills through the use of software, audio and video tapes, and other technologies. Graded as Pass/Fail. Offered: Summer, Fall and Spring. Two lab hours.

JAPANESE

JAPN 101 INTRODUCTION TO JAPANESE (2)
Introduces students to the sound system, pronunciation and basic vocabulary necessary for communication in Japanese. This course is recommended for students who have had no previous exposure to Japanese or any other foreign language. This course is not for college transfer credit. Offered: Occasionally. Two lecture hours.

* JAPN 111 JAPANESE I (4)
An introductory course for students with little or no previous exposure to the Japanese language. While conversational skills are emphasized, students are also introduced to the various Japanese scripts. Offered: Summer, Fall and Spring. NMGECC: Area V — Humanities and Fine Arts. Four lecture hours.

* JAPN 112 JAPANESE II (4)
A second-semester course in Japanese for students with elementary skills in the language. Conversational skills are emphasized; students use Japanese scripts and writings and learn traditional characters. Prerequisite: JAPN 111. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Four lecture hours.

JAPN 121L JAPANESE LANGUAGE LAB (1)
A self-paced language lab designed to accelerate, reinforce and support all levels of Japanese. The course provides an opportunity to practice and strengthen listening, speaking, reading and writing skills through the use of software, audio and video tapes, and other technologies. Graded as Pass/Fail. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

JAPN 211 INTERMEDIATE JAPANESE (3)
An intermediate Japanese course with the focus on pronunciation, grammar and conversation. This course is intended for students with previous exposure to written or spoken Japanese and will include discussions of Japanese society, culture and geography in relation to the Japanese language. Prerequisite: JAPN 112. Offered: Occasionally. Three lecture hours.

JEWELRY

JEWL 114L JEWELRY/METAL ARTS I (3)
An introduction to the basic techniques, materials and
tools traditionally used in the creation of jewelry and/or small-scale sculptural objects. Students learn the techniques of fabrication, including sawing, filing, piercing, soldering, basic chain construction, cabochon stone setting and finishing. Students work mainly with sterling silver. May be taken twice for degree or certificate credit. Offered: Occasionally. Six lab hours.

**JEWL 130L  INTRODUCTION TO ENAMELING  (3)**

An introduction to the art of enameling on metal. Students will learn to choose and prepare metals for enameling and explore the wide variety of enamels available including powered enamels, watercolor and liquid (porcelain) enamels. Using these materials, students will apply drawing and painting techniques, work with textured metal and controlled firing textures. Basic metalsmithing techniques will be employed to integrate enamels into jewelry by the use of bezels, prongs and cold-connections. Prerequisite: JEWL 114L. Offered: Occasionally. Six lab hours.

**JEWL 158L  SILVERSMITHING I  (3)**

This course is designed to introduce students to the fundamental techniques involved in silversmithing, the essence of which is to take a flat piece of metal and by means of different hammers, stakes and other simple tools, to transform it into an object of use or beauty. Students will be taught the techniques of sinking, chasing, repoussé and forging. May be taken twice for degree or certificate credit. Offered: Fall and Spring. Six lab hours.

**JEWL 159L  WAX CARVING FOR JEWELRY  (3)**

This course is designed to introduce students to the basic techniques, materials and tools used in the wax carving and modeling of jewelry and small-scale sculptural objects. Students develop the tools and techniques necessary to interpret their designs into workable modes. Projects challenge students not only in terms of learning new techniques, but also through specific ideas, themes or concepts involved in making jewelry and art. May be taken twice for degree or certificate credit. Prerequisite: JEWL 114L. Offered: Occasionally. Six lab hours.

**JEWL 212L  ADVANCED STONE SETTING  (3)**

This course is designed to give students an intensive hands-on approach to stone setting. Demonstrations will be given in prong setting, cluster setting, thick bezel setting, pave, channel setting, and burnish setting. After each demonstration the student will practice the technique. Students will also be taught to create a finished piece of jewelry including pre-polishing, stone setting, clean up, and final polishing. Tool making appropriate to the craft will be taught. Safety precautions relative to the tools and equipment used will be stressed. By the end of the class students will have learned a number of new stone setting techniques and improved their ability with techniques they may have already known. May be taken twice for degree or certificate credit. Prerequisite: JEWL 217L. Offered: Occasionally. Six lab hours.

**JEWL 217L  JEWELRY/METAL ARTS II  (3)**

As a continuation of JEWL 114L, this course reviews the techniques and processes already encountered and goes on to explore more complex and technically demanding skills. Instruction includes the construction of containers, both box and cylindrical forms with hinges, clasps and rivets, and the forming of precious metals with hydraulic die-forming equipment. Students also create a piece using the lost-wax casting method and learn to set faceted stones in bezels. May be taken twice for degree or certificate credit. Prerequisite: JEWL 114L. Offered: Occasionally. Six lab hours.

**JEWL 218L  SILVERSMITHING II  (3)**

This course is designed as a continuation of Silversmithing I (JEWL 158L) in which students will improve their skills in the arts of sinking, repoussé and forging. In addition, raising will be taught which is an advanced silversmithing technique employed for the formation of metal objects such as teapots, pitchers, vases and similar vessel forms. May be taken twice for degree or certificate credit. Prerequisite: JEWL 158L. Offered: Occasionally. Six lab hours.

**JEWL 220L  CASTING FOR JEWELRY  (3)**

An introduction to the ancient art of casting and wax-model making that focuses on the tools, equipment, materials and processes traditionally used in creating forms in silver. The course includes demonstrations on designing and creating wax models for the casting process and many techniques of vacuum and direct-casting methods. Emphasis is on casting and experimenting with design in wax and cast forms. May be taken twice for degree or certificate credit. Prerequisite: JEWL 114L. Offered: Occasionally. Six lab hours.

**JEWL 233L  CAD FOR JEWELRY DESIGN  (3)**

Intensive computer-based approach to jewelry design. Students will learn to design textures, surfaces, forms, placement of stones, settings and a wide range of other jewelry techniques using computer-aided design (CAD). The processes of machining and producing a finished product will be discussed. Gemvision software will be used to introduce students to state of the art processes used by the jewelry industry worldwide. Students will create wax or plastic models that can be cast in silver or gold. Prerequisites: JEWL 159L and JEWL 212L or permission. Offered: Occasionally. Three lecture hours.
JEWL 275L  JEWELRY/METAL ARTS III (3)
This course is designed for students who wish to develop skills learned at the beginning and intermediate levels in preparation for application to an undergraduate university program or gallery representation. The course focuses on the preparation of a coherent body of work and the development of an individual approach and aesthetic, with emphasis on self-expression and self-motivation. Students are taught how to prepare a portfolio, how to write a resume and how to secure recommendations. Students will develop the ability to speak and write articulately about their work and personal direction as well as to professionally critique the work of others. Students are guided in identifying their special areas of skill and competency and in the process of critical self-evaluation. Prerequisite: JEWL 217L or permission. Offered: Occasionally. Six lab hours.

JEWL 294L  JEWELRY/METAL ARTS: ADVANCED PROJECTS (3)
An in-depth forum to analyze aesthetic and conceptual concerns relevant to the practice of Jewelry/Metal Arts. The course is structured around a common theme or mode of inquiry relevant to the practices and techniques particular to jewelry/metal art work. Emphasis is placed on the realization of each student's unique vision and completion of projects. Creativity and the development of a personal style of self-expression are encouraged. Prerequisite: JEWL 114L. Offered: Occasionally. Three lecture hours.

MACHINING AND TOOLING TECHNOLOGY

MATT 113  MANUFACTURING SAFETY AND MEASUREMENT (1)
A course focusing on shop safety and the use of measuring tools and equipment found in fabrication processes. This course is required for any future courses in the advanced manufacturing lab. Topics include the manufacturing project planning process, safety standards for using the manufacturing lab, and metrology. Offered: Summer, Fall and Spring. One lecture hour.

MATT 114  INTRODUCTION TO LATHES (2)
Introduction to using a manual lathe while making selected products from prints to complete projects applying quality control. Topics include lathe safety and maintenance, use of a manual lathe, set-ups and machining on a lathe, and product quality control. Prerequisite: MATT 113. Offered: Summer, Fall and Spring. One lecture hour, two lab hours.

MATT 115  INTRODUCTION TO MILLS (2)
Introduction to using a manual milling machine while making selected products from prints to complete projects using quality control. Topics include milling machine safety and maintenance, use, setup and machining on a mill, and product quality control. Prerequisite: MATT 113. Offered: Summer, Fall and Spring. Two lab hours.

MATT 116  INTRODUCTION TO SUPPORTING MACHINE TOOLS AND PRINCIPLES (1)
Introduction to support machine tools, including rockwell hardness testers, arbor presses, broaches, reamers, counter bores, files, and deburring tools. Topics include the safety and maintenance of hand tools, the setup and calibration of the machines, and quality control of the product. Prerequisite: MATT 113. Offered: Summer, Fall and Spring. Two lab hours.

MATT 119  INTRODUCTION TO NON-TRADITIONAL MACHINING (1)
Introduction to using a 3D printer, laser engraver, thermal forming machine, and other machines while making selected products, from prints to complete projects, using quality control. Topics include safety, parts, and maintenance of non-traditional machines, project planning, setup, and programming. Prerequisite: MATT 113. Offered: Summer, Fall and Spring. Two lab hours.

MATT 154  INTRODUCTION TO CNC PROGRAMMING (2)
Prepares students to compile a Computer Numerical Control (CNC) program using RS-274 (G-code) programming language that is required for most CNC machinery, including for SFCC’s CNC equipment. Students develop the ability to create, read, and modify CNC (RS-274) programs. In addition, this course provides the methodology to accept models of various formats, import them to Fusion360, and produce a functional RS-274 (G-Code) program that is required for most CNC machinery. Prerequisites: MATT 113 and MATT 114 and MATT 115. Offered: Fall. One lecture hour, two lab hours.

MATT 155  INTRODUCTION TO COMPUTER NUMERIC CONTROL MILLS (2)
Introduction to using a computer numeric control (CNC) milling machine while making selected products from prints to complete projects using quality control. Topics include safety, parts, and maintenance of a CNC mill, CNC mill setup, programming of a CNC mill, and project planning. Prerequisites: MATT 113 and MATT 115. Offered: Summer, Fall and Spring. One lecture hour, two lab hours.
MATT 160  INTRODUCTION TO COMPUTER NUMBERIC CONTROL LATHES (2)
InIntroduction to the use of a Computer Numeric Control (CNC) Lathe. Students make selected components from prints, the quality of which is verified using methods learned in MATT 113. Topics include safety, machine controls, operation, and maintenance of a CNC lathe, RS-274 programming language, conversational programming, and project planning. Prerequisites: MATT 113 and MATT 114 and MATT 116L. Offered: Spring. One lecture hour, two lab hours.

MATT 165  MANUFACTURING TECHNOLOGY CAPSTONE (2)
A capstone experience for machining and tooling students. In this course, students apply the skills acquired in previous courses to fabricate and assemble a final project from a design provided by the instructor or from their own instructor-approved design. Prerequisite: MATT 113 and MATT 114 and MATT 115. Offered: Spring. One lecture hours, two lab hours.

MATHEMATICS

MATH 101  PRE-ALGEBRA (4)
Prepares students for algebra and business math. Topics include performing operations with fractions, decimals, proportions, percentages, and integers; solving linear equations and using formulas; using and converting standard and metric units; and creating and interpreting graphs. Students will use their math skills and a scientific calculator to solve problems from other disciplines and from everyday life. Eligible for PR grade. Prerequisite: MATH 100 or appropriate placement score. Offered: Summer, Fall, Spring. Four lecture hours.

MATH 101S  PRE-ALGEBRA WORKSHOP (2)
A hands-on course to support students in MATH 101. Students will participate in activities and projects to solidify their understanding of mathematical concepts and relationships. Students will strengthen their basic math and study skills. Graded as Pass/Fail. Corequisite: MATH 101. Prerequisite: MATH 100 or appropriate placement score. Offered: Summer, Fall, Spring. One lecture hour, two lab hours.

MATH 102  BASIC ALGEBRA (4)
An introduction to the fundamental algebraic laws and concepts. Topics include linear equations and inequalities; polynomials, exponents, roots and scientific notation; and graphing and the coordinate system. Students will use algebra to solve problems from other disciplines and from everyday life. Eligible for PR grade. Prerequisite: MATH 101 or appropriate placement score. Offered: Summer, Fall, Spring. Four lecture hours.

MATH 104L  EMPORIUM MATH LAB (1)
An emporium math course held in a computer lab with access to one-on-one assistance. It is designed to help students accelerate through the developmental math course sequence, improve placement, or support their performance in their current math course. Students will have self-paced web-based practice through interactive software with the math content appropriate to their placement level. May be taken twice. Graded as Pass/Fail. Offered: Summer, Fall and Spring. Two lab hours.

MATH 109  INTERMEDIATE ALGEBRA (4)
A study of linear systems of equations, quadratic functions and quadratic equations. Topics include literal equations, analysis and manipulation of graphs, various methods of solving quadratic equations, systems of linear and nonlinear equations, and a review of linear functions and equations. Prerequisite: MATH 102 or appropriate placement score. Offered: Summer, Fall and Spring. Four lecture hours.

MATH 111  MATH FOR ELEMENTARY SCHOOL TEACHERS I (3)
A study for students going into elementary education to understand the logic, patterns and strategies of the mathematics they will be teaching involving mathematics reasoning, sets, whole numbers, number theory, integers and rational numbers. Prerequisite: MATH 109. Offered: Occasionally. Three lecture hours.

MATH 112  MATH FOR ELEMENTARY SCHOOL TEACHERS II (3)
A study for students going into elementary education
to understand the logic, patterns and strategies of the mathematics they will be teaching involving decimals, percents, real numbers, geometry, congruency, similarity, measurements, algebra, statistics and probability. Prerequisite: MATH 109. Offered: Occasionally. Three lecture hours.

**MATH 119 APPLICATIONS OF MATHEMATICS FOR NON-SCIENCE MAJORS**

The course, designed for non-science majors, covers many applications of mathematical concepts. The applications include consumer finance, probability and statistics, as well as possible topics in managerial decision making processes, coding, social-decision making or symmetry in growth. Emphasis is placed upon the application of mathematical theory and the development of problem-solving abilities with appropriate use of technology. Prerequisite: MATH 102. Offered: Summer, Fall and Spring. NMGECC: Area II — Mathematics. Three lecture hours.

**MATH 121 COLLEGE ALGEBRA**

A study of equations and logarithmic functions and equations, composition of functions, inverse functions, and piecewise functions. The analysis and manipulation of related graphs will be covered, along with systems of equations — up to three unknowns. Prerequisite: MATH 109. Offered: Summer, Fall and Spring. NMCCNS: MATH 1114. NMGECC: Area II — Mathematics. Four lecture hours.

**MATH 135 INTRODUCTION TO PROBABILITY AND STATISTICS**

An introductory course in statistical methodology. Exploratory, robust, nonparametric and classical methods (descriptive statistics, hypothesis testing, confidence intervals, paired differences, correlation, linear regression and one-way ANOVA) and the applications of probability are studied. The course includes laboratory time in which students use calculators and/or computers to work on individual or group projects. Prerequisite: MATH 109 or MATH 119. Offered: Summer, Fall and Spring. NMCCNs: MATH 2113. NMGECC: Area II — Mathematics. Two lecture hours, two lab hours.

**MATH 150 PRECALCULUS AND TRIGONOMETRY**

A study of nonlinear functions, trigonometry and matrices. Topics include polynomial, rational, and absolute value functions, the six trigonometric functions and their inverses, the basic trigonometric identities, the solving of triangles, the solving of trigonometric equations, the use of vectors, the arithmetic of matrices, and their use in solving systems of linear equations. Prerequisite: MATH 121. Corequisite: MATH 150L. Offered: Summer, Fall and Spring. NMGECC: Area II. Three lecture hours, two lab hours.

**MATH 150L PRECALCULUS AND TRIGONOMETRY LABORATORY**

A companion to MATH 150 that covers additional topics useful for students who plan to study mathematics, mathematical sciences, computer science, or engineering at a four-year college or university. Readings and problems are supplemented with discussions and video lectures. Topics include sequences and series, complex numbers, trigonometric identities in greater depth than in MATH 150, and applications of trigonometry to physics and engineering. Prerequisite: MATH 121 or appropriate placement score. Corequisite: MATH 150. Offered: Summer, Fall and Spring. One lecture hour.

**MATH 162 CALCULUS I**

A study of the concepts of functions, limits, derivatives, summations and integration. The relationships of these concepts with maxima, minima, area, volumes and moments are also studied, along with the applications of calculus. The course includes laboratory time in which students use calculator and computer tools to work on individual and group projects. Prerequisites: MATH 162. Offered: Fall and Spring. NMCCNS: MATH 1624. NMGECC: Area II — Mathematics. Three lecture hours, two lab hours.

**MATH 163 CALCULUS II**

A continuation of MATH 162. Derivatives and integrals of transcendental functions, methods of integration, indeterminate forms and improper integrals, numerical methods, sequence and series, and conics are covered. The course includes laboratory time where, working with calculator and/or computer tools, students work on individual and group projects. Prerequisite: MATH 162. Offered: Fall and Spring. NMCCNs: MATH 1624. NMGECC: Area II — Mathematics. Three lecture hours, two lab hours.

**MATH 180 ELEMENTS OF CALCULUS I**

A brief review of functions and graphs, along with an introduction to limits, derivatives, summations and integration. The focus is on the applications of these topics to the managerial, social and life sciences. This course

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is designed for business, social science and life science majors. Prerequisite: MATH 121 or MATH 150L. Offered: Fall and Spring. Four lecture hours.

**MATH 261 MATHEMATICAL FOUNDATIONS (3)**
FOR COMPUTER SCIENCES
An introduction to the formal mathematical concepts of computer science. Topics include elementary logic, set theory, relations, deduction, induction, algorithm processes, graph theory and models of computation. Prerequisites: and MATH 150L or higher. Offered: Spring. Two lecture hours, two lab hours.

* **MATH 264 CALCULUS III (4)**
A continuation of MATH 162 and MATH 163. This course covers the remaining topics in calculus, including multivariate calculus, linear algebra (vectors in misplace), vector analysis and elementary differential equations. The course includes laboratory time where, working with calculator and/or computer tools, students work on individual and group projects. Prerequisite: MATH 163. Offered: Occasionally. NMCCNS: MATH 2614. NMGECC: Area II — Mathematics. Three lecture hours, two lab hours.

**MATH 267 APPLIED ORDINARY DIFFERENTIAL EQUATIONS (3)**
An introduction to the algorithmic theory of ordinary differential equations. The course covers ordinary differential equations with applications, numeric methods, series, Laplace transforms and an introduction to partial differential equations. It includes laboratory time in which students use calculator and/or computer tools to work on individual and group projects. Prerequisite: MATH 264. Offered: Occasionally. NMCCNS: MATH 2813. Two lecture hours, two lab hours.

**MEDIA ARTS**

**MART 111 INTRODUCTION TO SOCIAL MEDIA BASICS (2)**
Introduces the basics of Facebook, Twitter, Instagram, LinkedIn, and Pinterest. Topics include audience, purpose, demographics, image creation in Canva and Pic Monkey, obtaining and using stock images, review of successful social media campaigns and evaluation tools available, and management tools such as Hootsuite, Sproutsocial, Buffer, and Facebook scheduling. Grades as Pass/Fail. Offered: Occasionally. Two lecture hours.

**MART 115 SOCIAL MEDIA BASICS (2)**
Develops students' skills using the social media platforms of Facebook, Twitter, Instagram, LinkedIn, and Pinterest and introduces blogging. Topics include successful social media campaigning, optimum scheduling, third-party scheduling, advertising, boost posting, Google analytics, and social media integration with websites. Students create and utilize a WordPress site. Grades as Pass/Fail. Prerequisite: MART 111. Offered: Occasionally. Two lecture hours.

**MART 118 COMMUNICATION DESIGN (3)**
This course introduces graphic design principles and communication methods based on industry/client needs and trends, combining traditional and digital techniques. Students learn the elements of effective design, create original projects and hands-on exercises, view historical and current design trends, and participate in a team project. Offered: Fall and Spring. Three lecture hours.

**MART 119 DIGITAL SKILLS (3)**
This course serves as an introduction for media arts students and other students interested in acquiring basic digital design presentation skills including navigation and file management, hands-on practice with Adobe Photoshop Adobe Illustrator, and an overview of major media arts applications. Offered: Summer, Fall and Spring. Two lecture hours, two lab hours.

**MART 121 ADOBE ILLUSTRATOR (3)**
This course focuses on using Adobe Illustrator, a Postscript-compatible, vector-based drawing program, to design documents for print and web. Students learn to use the program for illustration, layout and multi-media projects including web, print, and animation. This course also includes design and aesthetic concepts. Offered: Fall and Spring. Three lecture hours.

**MART 123 ADOBE INDESIGN (3)**
This course develops students’ skills in desktop publishing using Adobe InDesign. Topics covered are graphic and typographic design, fonts, and related printing considerations. Emphasis is on design and production of documents for print. May be taken twice for degree or certificate credit. Offered: Fall and Spring. Three lecture hours.

**MART 127 DESIGN PRINCIPLES (3)**
Explore the relationships among the forms and principles of the natural world, the processes they perform, and how

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to intentionally embed universally understood information that communicates deeply and effectively in a global world. This class will include examples of process from nature and their correlates in humanly expressed design—why and how they work. Students will create design projects based on these concepts. Offered: Spring. Three lecture hours.

**MART 130 WEB DESIGN I** (3)
Students learn web interface design principles as well as practical skills for layout and formatting of web pages and simple web sites. In addition to design, students learn to use basic HTML and Dreamweaver to create simple web pages that include styles and interactivity. This course is a prerequisite for second-level web classes. Offered: Summer, Fall and Spring. Three lecture hours.

**MART 143 AFTER EFFECTS** (3)
Explore motion graphics and visual effects with Adobe After Effects. Learn the basics of integrating animated images and title sequences with live action. Offered: Fall. Three lecture hours.

**MART 144 GAME DESIGN ANALYSIS** (3)
An overview of games past to present and analysis of specific video game genres. Students learn the historical and cultural significance of video games through lecture and research. Students analyze and write about a different genre or video game each week. Topics include game history, game analysis, game mechanics, game design, and game theory. Offered: Fall. Three lecture hours.

**MART 146 GAME DESIGN FUNDAMENTALS** (3)
An introduction to the elements of game design and creation. Video games will be dissected and analyzed. Students create traditional (non-video) games to gain hands-on knowledge of the fundamentals of game design. Topics include game design, game play, game balance and game theory. Offered: occasionally. Three lecture hours.

**MART 148 3-D GRAPHICS AND ANIMATION** (3)
An introductory course in computer modeling, rendering and animation using various software packages. The course covers the basics of object creation, material assignments, and animation. Students plan and produce a simple 3-D animation. May be taken twice for degree or certificate credit. Offered: Occasionally. Three lecture hours.

**MART 159 INTRODUCTION TO PROTOOLS** (2)
This hands-on course provides a basic introduction to recording and editing using DigiDesign’s Pro Tools software. Students have access to their own Pro Tools equipped Mac or Windows workstation as well as to the recording studio. Students record and edit their own final project. Graded as Pass/Fail. Offered: summer.

**MART 160 AUDIO PRODUCTION I** (3)
Students learn to use analog and digital audio hardware and software, including the Pro Tools’ multi-track, computer-based recording and editing system, as well as study the fundamentals of acoustical science, microphones and recording techniques. Offered: Fall and Spring. Three lecture hours.

**MART 161 INTRODUCTION TO REASON AND LIVE** (3)
Students work with Propellerhead Reason and Ableton Live, two of the most useful and fun music software packages to produce beats, loops and songs. Both pieces of software will be studied in depth as well as how to integrate them into a live performance situation. Offered: occasionally. Three lecture hours.

**MART 165 AUDIO FIELD RECORDING** (2)
Learn to use digital and analog audio recording equipment to produce field recordings from diverse settings. The class is designed as a workshop, incorporating field trips, individualized support, group critiquing and problem solving. May be taken twice for degree or certificate credit. Offered: Summer. Two lecture hours.

**MART 170 WRITING FOR MASS MEDIA AND THE WEB**
This course is focused on writing skills and applications for all forms of mass media including journalism (news) and persuasive writing (advertising copy). Topics include basic principles of writing, analysis of factual information, the concept of news and careers in writing for mass media. Prerequisite: ENGL 109. Offered: Spring. Two lecture hours, two lab hours.

**MART 178 3D GRAPHICS AND ANIMATION II** (3)
A continuation of 3D graphics and animation studies, geared towards developing and producing advanced animation projects by expanding and refining skills acquired in MART 148. Topics include advanced techniques and tools for 3D modeling, texturing, and rigging. Prerequisite: MART 148. Offered: Spring. Three lecture hours.

**MART 180 PHOTOSHOP I** (3)
This is an introductory-level course in Adobe Photoshop, the industry standard image manipulation and digital painting application. Topics include the Photoshop interface, Bridge, basic image editing and compositing.
resizing and resolution, layers, type, and filters. Offered: Summer, Fall and Spring. Three lecture hours.

**MART 186  SCANNING TECHNIQUES**  (1)
This course develops students’ skills with scanning devices and software and correcting scanned content. Topics include scanning film, transparencies, flat work and 3-Dimensional objects, resolution and file formats, and a checklist for purchasing a scanner. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

**MART 187  ELECTRONIC COLOR THEORY AND PRACTICE**  (1)
Students learn about electronic color modes, spaces, device calibration and color management. They learn to match output to input depending on production method, including web, print and video. Topics include additive and subtractive color primaries, defining color space, device gamuts, choosing a color model, calibration and profiles, color management workflow, third-party calibration software and hardware, and color modes (bitmapped, grayscale, RGB, CMYK and Lab). Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

**MART 188  ADOBE LIGHTROOM**  (2)
This class presents a thorough overview of Adobe Lightroom, an application encompassing digital workflow, file management, basic adjustments, and presentation tools. Students will have a hands-on opportunity to work with Lightroom to create an efficient and comprehensive digital workflow. Offered: Summer, Fall and Spring. Two lecture hours.

**MART 189  COPYRIGHT AND MEDIA**  (1)
This workshop format class is designed to provide students, graphic designers and other content creators with essential information on copyright and fair use concepts as they relate to finding and using internet and other media. Graded as Pass/Fail. Offered: Occasionally. One lecture hour.

**MART 200  COPYRIGHT, MEDIA AND SOCIETY**  (3)
Exploration of national and global socio-economics as they apply to copyright, trademark, creative commons, and ethical considerations in the current world of internet media. Topics include the principles of communications, ethics, law, and the internet. Case studies are discussed to review current judicial decisions and the trends that are affecting the entertainment and news industries in the United States. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

**MART 201  APPLYING SOCIAL MEDIA TECHNIQUES I**  (2)
Students manage personal and business social media platforms and design campaigns that consider demographics, analytics, and efficiency. Students prepare for industry-recognized exams that test their skills for the job market. Prerequisite: MART 112. Offered: Occasionally. Two lecture hours.

**MART 202  APPLYING SOCIAL MEDIA TECHNIQUES II**  (2)
A capstone course in social media techniques. Students create professional business social media platforms and design campaigns that consider demographics, analytics, and efficiency. Students build a professional portfolio to prepare for the job market. Prerequisite: MART 201. Offered: Occasionally. Two lecture hours.

**MART 223  TYPOGRAPHY**  (3)
This course introduces students to the history of typography and its emotive, symbolic and communicative aspects. Students learn how to use type in a creative and aesthetic way and develop an understanding of page composition that incorporates concept and design. May be taken twice for degree or certificate credit. Offered: Occasionally. Three lecture hours.

**MART 225  INDESIGN II**  (3)
This class builds on the basic skills acquired in level one InDesign I. Topics include creating long documents, auto generating a table of contents, auto generating an index, object and nested styles, creating and formatting tables, and creating interactive PDFs from your InDesign documents. Prerequisite: MART 123. Offered: Spring. Three lecture hours.

**MART 228  DESIGN IN THE REAL WORLD**  (2)
Real world process of planning, developing and designing a client project from cold call to design presentation. Topics include project planning, managing client and content needs, time and scope management. Review of graphic and layout fundamentals, wire-framing, and composition are also covered. Final project include graphic proposals for a web site or print project. Knowledge of Photoshop or equivalent graphic program is recommended. Offered: Fall and Spring. Two lecture hours.

**MART 229  INTRODUCTION TO WORDPRESS**  (2)
Instruction in creating blog websites using Wordpress, the industry standard content management system (CMS). Topics include Wordpress themes, navigating the
dashboard, creating blog posts, adding pages, and creating menus. Offered: Fall and Spring. Two lecture hours.

MART 230  WEB DESIGN II - CSS RESPONSIVE WEB DESIGN  (3)
A class building on students’ knowledge of HTML by learning to author in web design codes using best practices in CSS3 and HTML5. Topics include elements and attributes, integrating responsive design layout grids, font sizing, and image sizing. Additional integration of CSS3 and JQuery items will be explored, including sliders and animation options. Course may be taken twice for degree or certificate credit. Prerequisite: MART 130 or permission. Offered: Fall and Spring. Three lecture hours.

MART 246  GAME DESIGN CONCEPTS  (3)
Instruction in prototyping and designing individual concepts for video games. Topics include how to craft, demonstrate, and refine multiple projects, including characters and environments. With instructor’s approval, design medium(s) are students’ choice. Feedback and instruction are provided through lecture, student presentations, peer interaction, and one-on-one interaction with the instructor. Course may be taken twice for degree or certificate credit. Prerequisite: MART 146. Offered: Spring. Three lecture hours.

MART 260  AUDIO PRODUCTION II  (3)
Students will use skills developed in MART 160 Audio Production I to produce audio projects, utilizing a variety of analog and digital audio hardware and software, including the Pro Tools multi-track, computer-based recording and editing system, as well as exploring more advanced audio techniques and concepts. Course maybe taken twice for degree or certificate credit. Prerequisite: MART 160. Offered: Spring. Three lecture hours.

MART 280  PHOTOSHOP II  (3)
This is an intermediate-level course in Adobe Photoshop, building on skills and concepts learned in Photoshop I. Topics include layer and channel masks, advanced layers, color management, and presentation tools. Prerequisite: MART 180 or permission. Offered: Fall and Spring. Three lecture hours.

MART 284  ADVANCED DIGITAL PROJECTS  (3)
Students work on advanced individual projects using the skills and concepts they learned in intermediate-level MART classes including Photoshop, web, Animation, Graphics, and Video. Feedback and instruction is provided by student presentations and interaction, and one-to-one contact with the instructor. Course maybe taken twice for degree or certificate credit. Prerequisites: MART 280 or permission. Offered: Fall and Spring. Three lecture hours.

MART 298  INTERNSHIP  (1-9)
This course provides students with an opportunity to enlarge and complete their learning experience by taking an unpaid position in a real working environment. Students must have completed a significant portion of core requirements to be eligible for this course. May be taken twice for degree or certificate credit. Variable credit. Permission required. Offered: Summer, Fall and Spring. One-nine lecture hours.

MEDICAL ASSISTANT

MAST 115  MEDICAL ASSISTANT  (2)
ADMINISTRATIVE PROCEDURES
This course introduces students to typical clerical, office and business skills in the office. Students learn telephone skills, liaison skills, appointment scheduling, filing, organizing patient records, reception duties, effective communication with patients and staff and how to keep an inventory of supplies. An introduction to bookkeeping and utilizing and maintaining computer software is also included in this course. Permission required. Corequisites: MAST 120 and MAST 125. Offered: Fall. Two lecture hours.

MAST 120  MEDICAL ASSISTANT  (3)
CLINICAL PROCEDURES I
Clinical procedures routinely performed in medical outpatient settings. Topics include taking vital signs and patient history, infection control, patient care and education. Basic anatomy and physiology of body systems, diseases, and provider-ordered treatments are addressed. Corequisites: MAST 115 and MAST 125. Offered: Fall. Two lecture hours, two lab hours.

MAST 125  MEDICAL ASSISTANT  (2)
LABORATORY PROCEDURES I
An introduction to diagnostic procedures routinely performed in the medical office laboratory setting. This course will cover CLIA (Clinical Laboratory Improvement Amendments) waived hematology, chemistry, immunology and microbiology testing. Federal laboratory guidelines, quality control and laboratory safety are also presented. Permission required. Corequisites: MAST 120 and MAST 115. Offered: Fall. One lecture hour, two lab hours.

MAST 210  MEDICAL OFFICE  (3)
INSURANCE AND FINANCE
The focus of this course is medical office bookkeeping procedures and processing of insurance claims. Areas
covered include banking and billing procedures, accounts receivable, collections, applying managed care and third party guidelines, medical coding, completing insurance claim forms, utilizing and maintaining billing software. Permission required. Prerequisite: MAST 115. Corequisites: MAST 220 and MAST 225. Offered: Spring. Three lecture hours.

MAST 220 MEDICAL ASSISTANT CLINICAL PROCEDURES II
Builds on Medical Assistant Clinical Procedures I and covers additional procedures performed in the outpatient medical setting, as well as medical emergencies, first aid, and medication administration techniques. Additionally, instruction about pharmacology, and preparing and administering medications is presented. Basic anatomy and physiology, diseases and treatments of various major body systems are taught. Prerequisite: MAST 120. Corequisite: MAST 210 and MAST 225. Offered: Spring. Two lecture hours, two lab hours.

MAST 225 MEDICAL ASSISTANT LABORATORY PROCEDURES II
Instructions and demonstrations of electrocardiography and respiratory testing. Topics also include anatomy and physiology, and diseases and treatments of major body systems as a continuation of Medical Assistant Clinical Procedures I. Prerequisite: MAST 120. Corequisites: MAST 210 and MAST 220. Offered: Spring. One lecture hour, two lab hours.

MAST 290 MEDICAL ASSISTANT CAPSTONE
Capstone course for medical assistants. Students share experiences occurring during their internship shifts and discuss cases and performance of medical assistant duties. Cognitive, psychomotor, and affective information is reviewed in preparation for the national certification exam. Permission required. Prerequisites: MAST 210, MAST 220 and MAST 225. Corequisite: MAST 298. Offered: Summer. One lecture hour.

MAST 298 MEDICAL ASSISTANT INTERNSHIP
A learning opportunity in a supervised, unpaid internship of 160 contact hours in an ambulatory health care setting performing administrative and clinical procedures consistent with the duties of a medical assistant. Travel may be required. Prerequisites: MAST 210, MAST 220 and MAST 225. Corequisite: MAST 290. Offered: Summer. Three lecture hours.

MUSIC
MUSC 111L CHORUS
A vocal ensemble for male and female students, faculty and staff. The chorus rehearses and performs choral music of various historical periods. This course is designed primarily for beginning to intermediate singers. Curriculum includes basic music reading and healthy vocal techniques. May be taken twice for degree or certificate credit. Offered: Fall and Spring. Two lab hours.

* MUSC 115 MUSIC THEORY I
This course covers elementary music-reading skills and progresses through major and minor scales, intervals and triads. Students acquire a firm understanding of the theory of the Western major and minor system, both visually and orally. Offered: Occasionally. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* MUSC 116 MUSIC THEORY II
This course is a continuation of Music Theory I and includes a study of major/minor keys and modes, triads, four-part choral writing and sight-singing. Prerequisite: MUSC 115. Offered: Occasionally. NMGECC: Area V — Humanities. Three lecture hours.

MUSC 118L GUITAR I
Applied music class offering instruction on the fundamentals of music theory with an emphasis on classical guitar theory and technique. No prior guitar experience is required. May be taken twice for degree or certificate credit. Offered: Occasionally. Four lab hours.

MUSC 119L GUITAR II: ENSEMBLE
An intermediate-level guitar course. Students continue to develop instrumental skills introduced in MUSC 118L. In addition, the course focuses on the fundamentals of how to play in an ensemble. The historical and cultural context of musical repertoire is discussed. Classwork consists largely of group work as well as rehearsal of individual skills. May be taken twice for degree or certificate credit. Prerequisite: MUSC 118L or permission. Offered: Occasionally. Four lab hours.

MUSC 121L GROUP PIANO I
Beginning group piano lessons designed primarily for students with little or no previous piano experience. Students are introduced to scales, chords, memorization

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and harmonization of simple melodies and rhythms. May be taken twice for degree or certificate credit. Offered: Occasionally. Four lab hours.

**MUSC 122L GROUP PIANO II** (2)
Continuation of MUSC 121L. Late elementary repertoire, sight-reading, moving out of the five-finger position, minor scale and chord patterns. May be taken twice for degree or certificate credit. Prerequisite: MUSC 121L. Offered: Occasionally. Four lab hours.

**MUSC 126L MARIACHI ENSEMBLE** (1)
A beginning mariachi ensemble for instrumentalists who have already attained basic technical skill on the violin, trumpet, guitar, vihuela or guitarron. The ability to read music is required. Offered: Occasionally. Two lab hours.

**MUSC 130 JAZZ HISTORY** (3)
Introductory course on the evolution and music styles in Jazz. Musical styles to be examined include ragtime, boogie-woogie, blues, Swing Era, bebop, and fusion. Scott Joplin, Louis Armstrong, Count Basie, Duke Ellington, Charlie Parker, Dizzy Gillespie, Miles Davis and John Coltrane are some of the key figures who will be introduced. Offered: Occasionally. Three lecture hours.

**MUSC 135 HISTORY OF ROCK AND ROLL** (3)
An exploration of the origins and development of Rock and Roll from the mid-1950s to the mid-1970s. Students will listen to and discuss various styles of music as well as examining cultural, economic, technological and social factors relating to the evolution of Rock and Roll music. Offered: Occasionally. Three lecture hours.

* **MUSC 140 MUSIC APPRECIATION** (3)
A course designed to develop active listening skills leading to further understanding and enjoyment of Western and non-Western classical and popular music. No previous musical background is required. Offered: Fall and Spring. NMCCNS: MUSC 1113. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

**MUSC 141 CLASS VOICE I** (1)
An applied music course in beginning voice that presents the fundamentals of healthy voice production and singing techniques. Basic music reading skills are introduced. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. One lecture hour.

**MUSC 211L CHAMBER SINGERS** (1)
A choral group that prepares classical music of various periods for musical performances. This course is designed primarily for intermediate to advanced singers, and an audition is required. May be taken twice for degree or certificate credit. Prerequisite: MUSC 111L. Offered: Fall and Spring. Two lab hours.

**MUSC 221L CLASS VOICE II** (1)
An applied music course in intermediate voice that presents vocal techniques beyond the beginning singer's level. Major topics include breath management, resonance, laryngeal design and function, diction, range, extension and maintaining healthy vocalism. May be taken twice for degree or certificate credit. Prerequisite: MUSC 141L. Offered: Fall and Spring. Two lab hours.

**MUSC 231L CLASS VOICE III** (1)
An applied music course in advanced voice that presents vocal techniques beyond the intermediate singer's level. Major topics include a basic knowledge of German singing diction, the International Phonetic Language and the necessary practical application and performance of German and English vocal literature for the advanced voice student. May be taken twice for degree or certificate credit. Prerequisite: MUSC 121L. Offered: Occasionally. Two lab hours.

**MUSC 241L CLASS VOICE IV** (1)
An applied music course in advanced voice that presents Bel Canto vocal techniques at an advanced singer's level. Major topics include a basic knowledge of French singing dictation, a review of the International Phonetic Alphabet, and the necessary practical application and performance of French, German, Italian, and English vocal literature for the advanced voice student. Maybe be taken twice for degree or certificate credit. Prerequisite: MUSC 231L. Offered: Occasionally. Two lab hours.

**MUSC 243L CONTEMPORARY VOICE** (1)
Applied music course in contemporary voice that presents voice techniques for singers at all levels of vocal development. Major topics include posture, breathing, breath management, diction, Mode 1, Mode 2 and mixed mode singing. The practical application and performance of genres of contemporary repertoire for voice students in a variety of styles are covered. Offered: Occasionally.

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NURSING

NURS 120 INTRODUCTION TO NURSING CONCEPTS
An introduction to the concepts of nursing practice and conceptual learning. Students define personal values, beliefs, and attitudes about health and wellness. This course provides opportunities for students to describe the importance of identifying patient safety issues, the roles and values of the nurse and members of the health care team, and specific standards/regulations that apply to nursing practice. Permission required. Corequisite: NURS 125. Offered: Summer, Fall and Spring. NMNEC: NEC 9113. Three lecture hours.

NURS 125 PRINCIPLES OF NURSING PRACTICE
An introduction to the application of concepts through clinical skills in seminar, laboratory, and/or the clinical setting. The course focuses on the principles of communication, assessment, safety, and specific nursing interventions including accurate calculation, measurement, and administration of medications. Students apply the concepts learned in Level I corequisite to the care of the patient and implement the principles of safety during the performance of nursing skills in patient-based scenarios. Graded as Pass/Fail. Permission required. Corequisites: NURS 120 and NURS 125. Offered: Summer, Fall and Spring. NMNEC: NEC 9124. One lecture hour, nine lab hours.

NURS 140 HEALTH AND ILLNESS CONCEPTS I
Focuses on health and illness concepts across the lifespan. The scope, risk factors, physiologic processes, attributes, and clinical management of the concepts of homeostasis and regulation, sexuality and reproduction, protection and movement, and emotional processes are included in the course content. Exemplars, evidence-based practices, collaborative care, health care standards, nursing informatics/technologies, and care resources associated with the concepts of the course are discussed. Normal physiology and healthy adaptations of the patient are integrated into the concept and exemplar content. Permission required. Prerequisites: NURS 120 and NURS 125. Corequisites: NURS 140 and NURS 145 and NURS 160. Offered: Fall and Spring. NMNEC: NEC 9214. One lecture hour, nine lab hours.

NURS 145 HEALTH CARE PARTICIPANT
An introduction to the attributes of the participant as an individual, a family, or a community. The role of nursing as related to the health of vulnerable populations and elimination of health disparities is included in course content. Protective and predictive factors influencing the health of families, groups, communities, and populations are discussed. Evidence-based practices guiding health-related teaching, counseling, screening, and outreach; disease and outbreak investigation; and referral and follow-up are explored as well as information and communication technologies. Permission required. Prerequisites: NURS 120 and NURS 125. Corequisites: NURS 140 and NURS 155 and NURS 160. Offered: Fall and Spring. NMNEC: NEC 9223. Three lecture hours.

NURS 155 NURSING PHARMACOLOGY
An introduction to pharmacological nursing practice across the lifespan utilizing a conceptual approach. The student identifies the nurse's professional role related to pharmacotherapeutics in diverse populations. Safety issues and minimization of risk potential associated with pharmacotherapeutics, complementary and alternative medicines are discussed. Evidence-based pharmacological and pathophysiological concepts are integrated to guide medication therapeutics. Common drug classes and the pharmacotherapeutics, pharmacodynamics and pharmacokinetics associated with each class are included in this course. Permission required. Prerequisites: NURS 120 and NURS 125L. Corequisites: NURS 140 and NURS 145 and NURS 160L. Offered: Fall and Spring. Three lecture hours.

NURS 160 ASSESSMENT AND HEALTH PROMOTION
An introduction to assessment and health promotion for the health care participant as an individual, a family or a community. This course utilizes seminar, laboratory and/or clinical settings. The student learns to assess physical health, health and illness beliefs, values, attitudes, developmental level, functional ability, culture, and spirituality of the participant. Community health needs are identified through collaborative community assessment and evidence-based practice. Graded as Pass/Fail. Permission required. Prerequisites: NURS 120 and NURS 125. Corequisites: NURS 140 and NURS 145 and NURS 155. Offered: Fall and Spring. NMNEC: NEC 9244. One lecture hour, nine lab hours.

NURS 191 NURSING REVIEW
A review course designed to give students extra support in order to gain proficiency and meet required benchmarks in nursing-related subject areas. Topics include test-taking strategies, study skills, and other content as needed. Offered: Occasionally. One lecture hour.

NURS 200 HEALTH AND ILLNESS CONCEPTS II
Continuation of health and illness concepts across the lifespan with the focus on chronic conditions. Concepts covered include oxygenation and hemostasis, homeostasis and regulation, protection and movement, and cognitive...
and behavioral processes. Students learn to apply selected health and illness concepts to the nursing care of recipients across the lifespan. Permission required. Prerequisites: NURS 140 and NURS 145 and NURS 155 and NURS 160. Corequisites: NURS 210 and NURS 225. Offered: Fall and Spring. NMNEC: NEC 9334. Three lecture hours.

NURS 205 PROFESSIONAL ISSUES IN PRACTICAL NURSING (2)

An overview of professional issues related to the role of the practical nurse (PN) or licensed practical nurse (LPN). Students learn about the LPN role according to the New Mexico Nurse Practice Act. Scope of practice and legal accountability are reviewed. Other topics include ethical and legal responsibilities of the LPN role, delegation of duties, and the role of the LPN as part of a health care team. On successful completion of this course, students are eligible to take the National Council Licensure Examination-Practical Nurse (NCLEX-PN). Permission required. Prerequisite: NURS 225. Offered: Occasionally. Two lecture hours.

NURS 210 PROFESSIONAL NURSING CONCEPTS I (3)

An introduction to foundational concepts for professional development including selected professional attributes and care competencies. Ethical values, virtues, principles, and policies that guide the moral delivery of health care are examined. The relationship between the nurse’s interpretation of the health care recipient’s needs, concerns and health problems, and the nurse’s decisions are explored. Permission required. Prerequisites: NURS 140 and NURS 145 and NURS 155 and NURS 160. Corequisites: NURS 200 and NURS 225. Offered: Fall and Spring. NMNEC: NEC 9323. Three lecture hours.

NURS 225 CARE OF PATIENTS WITH CHRONIC CONDITIONS (4)

Focus of this course is the provision of safe, evidence-based nursing care across the lifespan for patients with chronic conditions in a variety of settings. The student demonstrates ethical, safe, evidence-based nursing care for patients with chronic conditions. The student also demonstrates understanding of appropriate health care policy, finance, and regulatory environments affecting patients with chronic conditions. The student also demonstrates affective use of the nursing process and nursing informatics/technologies in the nursing care to patients with chronic conditions. Permission required. Prerequisites: NURS 140 and NURS 145 and NURS 155 and NURS 160. Corequisites: NURS 200 and NURS 210. Offered: Fall and Spring. NMNEC: NEC 9313. Three lecture hours.

NURS 230 HEALTH AND ILLNESS CONCEPTS III (4)

Health and illness concepts, with a focus on acute conditions across the lifespan. Exemplars, evidence-based practices, collaborative care, health care standards, nursing informatics/technologies, and care resources associated with the concepts/exemplars of the course are discussed. Students will apply selected health and illness concepts to the nursing care of patients across the lifespan. Permission required. Prerequisites: NURS 200 and NURS 210 and NURS 225. Corequisites: NURS 235 and NURS 260. Offered: Summer, Fall and Spring. NMNEC: NEC 9414. Four lecture hours.

NURS 235 CLINICAL INTENSIVE I (4)

Application of curricular concepts are applied in the care management of patients with acute conditions across the lifespan. This course utilizes a combination of seminar, lab, and clinical. Students integrate nursing practice concepts into professional nursing practice and diverse patient values into plans of care for patients with acute illness. Graded as Pass/Fail. Permission required. Prerequisites: NURS 200 and NURS 210 and NURS 225. Corequisites: NURS 230 and NURS 260. Offered: Summer, Fall and Spring. NMNEC: NEC 9424. One lecture hour, nine lab hours.

NURS 250 EMERGENCY MEDICINE IN NURSING (3)

An elective for the nursing student who wants to learn more about the scope of knowledge and skills that is required of emergency nurses. Students will be active participants in class discussions and simulation lab. Graded as Pass/Fail. Permission required. Prerequisites: NURS 225 and NURS 230. Offered: Fall and Spring. Two lecture hours, three lab hours.

NURS 260 A.D.N. CAPSTONE (3)

Course prepares students for entry-level nursing practice as an associate degree graduate. The focus of this course is management of individuals across the lifespan with chronic, acute, and select complex conditions. This course utilizes a combination of seminar, lab, and clinical experiences. Graded as Pass/Fail. Permission required. Prerequisites: NURS 200 and NURS 210 and NURS 225. Corequisites: NURS 230 and NURS 235. Offered: Summer, Fall and Spring. NMNEC: NEC 9436. One lecture hour, six lab hours.
NUTRITION

NUTR 121  DIETARY GUIDELINES  (1)
A presentation and explanation in detail of the “Dietary Guidelines for Americans” developed by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services. Prerequisite: READ 101L. Offered: Fall and Spring. One lecture hour.

NUTR 200  NUTRITION  (3)
Presents basic principles of human nutrition, including functions, requirements and food sources of nutrients and their roles in maintaining optimal health throughout the life cycle. Nutrition tools and guides to plan a healthy and sustainable diet are examined. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. Three lecture hours.

NUTR 205  NUTRITION IN THE LIFE CYCLE  (3)
A presentation and explanation of the specific nutritional needs and recommendations for all phases of the human life cycle—pregnancy, infancy, childhood, adolescence, adulthood and the elderly. Prerequisite: ENGL 109. Offered: Fall and Spring. Three lecture hours.

NUTR 206  COMMUNITY NUTRITION  (3)
An exploration of food and nutrition issues and programs related to individuals, families and groups living in a defined area. Prerequisite: ENGL 109. Offered: Spring. Three lecture hours.

NUTR 209  NUTRITION IN CHRONIC DISEASE  (3)
A review of the relationship between nutrition and obesity, diabetes, hypertension, heart disease and cancer. Dietary strategies for prevention and management of these chronic diseases are also examined. Prerequisite: ENGL 109. Offered: Fall. Three lecture hours.

NUTR 215  CULINARY NUTRITION  (3)
A combination of the science of nutrition and current dietary recommendations with the culinary arts. Strategies and techniques used to prepare healthful and appetizing food are explored and demonstrated. Information needed to meet the specialized dietary and health needs of individuals and groups is provided. Menu development, modification and analysis are reviewed. Prerequisite: ENGL 109. Offered: Fall and Spring. Four lecture hours.

NUTR 221  DIABETES MANAGEMENT  (3)
This course reviews the prevention and management of various types of diabetes. Included is information on blood glucose control, insulin and medications, nutrition and exercise recommendations, and the prevention of complications. May be taken twice for degree or certificate credit. Prerequisite: ENGL 109. Offered: Fall and Spring. Three lecture hours.

OFFICE TECHNOLOGIES

OFTC 110  COMPUTERS FOR NOVICES  (1)
This hands-on course is designed for future computer users who currently has little or no computer hardware or software skills. Students learn basic hardware operations, core keyboard and mouse skills, essential terminology and rudimentary software application concepts necessary for successful participation in other computer courses. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

OFTC 111  BUSINESS SOFTWARE ESSENTIALS I  (4)
A computer applications course in which students acquire proficiency-level skills in the Windows operating system and word-processing, spreadsheet, database and presentation software with MS Office. Offered: Summer, Fall and Spring. NMCCNS: BCIS 1113. Four lecture hours.

OFTC 114  INTRODUCTION TO WINDOWS  (1)
A hands-on introduction to Microsoft Windows operating system. This course focuses on navigating the Windows environment, using Windows-based programs and mastering file and folder management. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

OFTC 115  KEYBOARDING ESSENTIALS I  (1)
Instruction in keyboarding using the touch method. Recommended for students with little or no previous instruction in typing or those who need to improve keyboarding accuracy or speed. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

OFTC 116  WORD ESSENTIALS I  (1)
An introduction to the basic techniques of document production. Students learn how to create, edit, format, save and print a variety of professional documents. Previous experience with computer operation and file management highly recommended. Graded as Pass/Fail. Offered: Summer, Fall and Spring. One lecture hour.

OFTC 117  EXCEL ESSENTIALS I  (1)
This course focuses on the various personal and business uses for electronic spreadsheets. Emphasis is placed on creating, editing, manipulating and printing Excel workbooks and graphs. Previous experience with computer operation and file management highly recommended. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.
OFTC 118  ACCESS ESSENTIALS I  (1)  
An introduction to Access, the database-management software package for Windows. Students learn how to create and apply database related objects such as tables, forms, reports and queries to the creation of a business related project. Previous experience with computer operation and file management highly recommended. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

OFTC 119  OUTLOOK ESSENTIALS I  (1)  
This hands-on course teaches students how to use the mail, calendar, scheduling, contacts and task components of Outlook. Previous experience with computer operation and file management highly recommended. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

OFTC 126  POWERPOINT ESSENTIALS I  (1)  
An introduction to the basic techniques of electronic presentation production. Students learn how to create slides, customize slide layouts, integrate clipart, sound and animation schemes, design support materials for presentation delivery, effectively run and present a slide show and create custom shows from a basic presentation. Previous experience with computer operation and file management highly recommended. Graded as Pass/Fail. Offered: Fall and Spring. One lecture hour.

OFTC 130  WORD ESSENTIALS II  (1)  
A hands-on course designed to take Word Essentials I students to an intermediate level of skill and application. Topics include columns, forms, templates, graphics, complex tables, mail merge, document collaboration, and integration tools. Prerequisite: OFTC 111 or OFTC 116. Offered: Summer, Fall and Spring. One lecture hour.

OFTC 132  EXCEL ESSENTIALS II  (1)  
A hands-on course designed to take Excel Essentials I students to an intermediate level of skill and application. Topics include What-If analysis, pivot tables, advanced formulas and functions, complex charting, multiple worksheets, workbook auditing and troubleshooting and integration tools. Prerequisite: OFTC 111 or OFTC 117. Offered: Summer, Fall and Spring. One lecture hour.

PARALEGAL STUDIES

LEGL 111  INTRODUCTION TO AMERICAN LAW FOR PARALEGALS  (3)  
An introduction to American law and the U.S. legal system for paralegals. The history and structure of American jurisprudence is introduced and examined in the context of the U.S. Constitution. Legal ethics for paralegals are introduced. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 112  INTRODUCTION TO THE PARALEgal PROFESSION  (3)  
Basics of the paralegal profession and the application of paralegal skills in the law office. Students learn case management, set up client files, how to track billing, maintenance of a court calendar, preparation for trial and law office management. Legal ethics for paralegals are reinforced. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 114  LEGAL SECRETARIAL SKILLS  (3)  
Prepares students to become entry level legal secretaries and understand pathways to success in fast-paced law office environments. Essential skills are developed including preparing legal correspondence, creating legal files, maintaining litigation calendars, handling discovery, tracking billing, scheduling depositions and settlement conferences, processing legal mail, and providing multifaceted law office support. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 115  TORTS, PRACTICE AND PROCEDURE  (3)  
The theory and practical applications of the system governing civil liability for wrongs. Students study the elements of the different causes of tort action. The class will take an active role in planning and developing a lawsuit by applying methods of investigation, discovery and learning to draft a complaint. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 121  LEGAL RESEARCH AND WRITING I  (3)  
An introduction to basic legal research and writing, including memoranda and case analyses. Students learn the basics of Westlaw database. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 201  REAL ESTATE LAW  (3)  
An introduction to the law of real estate. Topics include rights of ownership, contractual obligations of real estate agents, titles, financing and closings. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 205  ENTERTAINMENT, MEDIA AND THE LAW  (3)  
An examination of the practical aspects of entertainment law and legal issues related to television, films, recordings, live performances, book publishing, musicians and various other aspects of the entertainment industry. Students will
gain a working understanding of the role of attorneys and agents, personal and intellectual property rights, and the legal and business relationships between entertainers and the commercial industry, as well as developing relevant skills in drafting key documents and negotiation skills. Offered: Occasionally. Three lecture hours.

LEGL 207 ENVIRONMENTAL LAW (3)
A study of the legal mechanisms that regulate the environment, including property, easement and access, and federal statutes such as the Clean Air Act and the Endangered Species Act. Issues such as the remediation of hazardous waste sites and the revitalization of takings jurisprudence under the Fifth Amendment will be examined. Students develop perspectives from both industry and environmental points of view. Offered: Occasionally. Three lecture hours.

LEGL 210 LEGAL ETHICS AND PROFESSIONAL RESPONSIBILITY (3)
An in-depth view and application of the rules for professional responsibility and ethical issues as they may arise in the legal profession. Students focus on ethical issues, governing laws, attorney-client relationships, and client representation. The course emphasizes legal responsibility topics pertaining to the client, competence, confidentiality, conflicts of interest, obligations to clients, adversaries and tribunals, legal liability, maintaining the integrity of the profession, respect of client confidences, candor toward the tribunal, truthfulness in statements to others, advertising, and professional independence. The New Mexico Bar Association rules and the American Bar Association Model Rules provide the substantive basis for the analysis of ethical situations. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 211 CONTRACT LAW (3)
An examination of fundamental legal principles in contract law formation. The course covers why and how promises are enforced as contracts, valid contract formation, the basic applications of contract law as well as relevant portions of the Uniform Commercial Code. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 215 JUVENILE LAW (3)
Legal rights and remedies of children and adolescents. The course examines juvenile court jurisdiction and procedures, the law of child abuse and neglect, juvenile claims to autonomy, and the competing rights and responsibilities of parents, children and the state. Offered: Occasionally. Three lecture hours.

LEGL 221 WILLS, PROBATE AND ESTATES (3)
Course covers drafting of wills and trusts, administration of estates, formal and informal probate proceedings, and estate tax returns. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 222 IMMIGRATION LAW (3)
An exploration of the statutory and regulatory scheme concerning the immigration and naturalization of aliens in the United States. Students will study border control issues, historical origins of U.S. immigration law and current proposals for major reforms of these laws. The unique constitutional status of aliens, important issues of separation of powers and federalism, and international and domestic law governing the treatment of refugees will be covered in depth. Offered: Occasionally. Three lecture hours.

LEGL 225 FAMILY LAW (3)
Course covers the law of domestic relations, including marriage, divorce, custody and adoption. Students learn the process of filing for divorce, parenting plans, child custody, paternity and traditional and alternative approaches to dispute resolution. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 230 BUSINESS ORGANIZATIONS (3)
Exploration of various types of business entities, such as corporations, partnerships, joint ventures and sole proprietorships, and the laws relating to them. Students will learn to draft and file for legal formation of several types of business entities. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 231 EVIDENCE LAW (3)
Principles of basic evidentiary rules for court proceedings. Problems and examples are used to demonstrate major principles of hearsay, relevancy, competency, admissibility and importance of authentication of evidence for testimony, documentary and tangible evidence. Prerequisite: LEGL 111. Offered: Occasionally. Three lecture hours.

LEGL 240 CONSTITUTIONAL LAW (3)
The focus will be on the structural framework established by the Constitution, including principles of federalism and the role of the Supreme Court in policing the constitutional order. Students will study the doctrine of judicial review, the reach of federal legislative power, limits on the reach of state power, the workings of the Supreme Court, and separation of powers and limits on the exercise of federal judicial power. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.
LEGL 241 LEGAL RESEARCH (4)
WRITING II/WESTLAW
An advanced course in review and analysis of case law and statutory law, preparation of complex memoranda, structure and content of court memoranda and briefs and advanced use of Westlaw. Prerequisite: LEGL 121. Offered: Fall. Four lecture hours.

LEGL 245 ALTERNATIVE DISPUTE RESOLUTIONS (3)
Alternative dispute resolution explores ADR methods such as mediation, arbitration and their practical applications. Includes the study of state and federal laws, procedures, and forms related to mandatory and optional ADR. Prerequisite: ENGL 109. Offered: Occasionally. Three lecture hours.

LEGL 250 CIVIL LITIGATION (3)
A course focusing on the civil litigation process, from the initial client interview through trial or settlement, including an overview of the appeals process. Emphasis is on the preparation of pleadings, particularly those used in the discovery process. Prerequisite: LEGL 121. Corequisite: LEGL 241. Offered: Spring. Three lecture hours.

LEGL 260 TRIBAL LAW AND GOVERNMENT (3)
Exploration of the unique position that tribal law and government has within the United States. The course provides an overview of the structure of tribal governments, the various systems of tribal law and the theoretical approaches that have been used to define and develop tribal legal systems. Offered: Occasionally. Three lecture hours.

LEGL 298 INTERNSHIP (1-3)
Students with no legal work experience or who desire experience in a legal field may participate in an internship with a prospective employer once they are close to completing their course work. Offered: Occasionally. Three lecture hours.

PHILOSOPHY

* PHIL 111 INTRODUCTION TO PHILOSOPHY (3)
An introduction to the major philosophical concepts, with an overview of metaphysics, epistemology, ethics, religion, aesthetics, politics and language. Basic philosophical problems of reality, knowledge, necessity, values and freedom are analyzed from both a modern and a historical perspective.

* PHIL 155 LOGIC AND CRITICAL THINKING (3)
An introduction to the methods and techniques of modern logic, including deductive and inductive reasoning, logical fallacies and argument analysis. Understanding, analyzing, and using argument forms are emphasized. Students learn the fundamentals of critical thinking and practice applying those skills in academic and personal situations. Prerequisite: ENGL 109. Offered: Fall. NMCCNS: PHIL 121. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

* PHIL 220 ETHICAL THEORY (3)
A study of moral concepts in Western cultural traditions that examines historical roots and contemporary ethical issues. The course introduces logical analysis, historical and contemporary ethical philosophers, and modern ethical problems. It provides a framework for exploring each student's personal ethical values. Such issues as abortion, gun control, economic justice and the death penalty are discussed. Prerequisite: ENGL 109. Offered: Occasionally. NMCCNS: PHIL 211. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

* PHIL 246 BIOMEDICAL ETHICS (3)
Biomedical Ethics is a course designed for both the health care professional and the general public. We examine ethical theory against the reality of current issues in the medical profession and in the field of bio-research. Topics such as euthanasia, genetic experimentation, informed consent and human and animal experimentation are studied from widely different ethical perspectives. Students are encouraged to formulate their own positions concerning these topics. Prerequisite: ENGL 109. Offered: Spring. NMCCNS: BCIS 111. Three lecture hours.

* PHIL 258 ENVIRONMENTAL ETHICS AND SUSTAINABILITY (3)
An investigation of the ethical dilemmas concerning our environment, business, and especially the issue of sustainability. Classical and contemporary ethical theories are presented as preparation for the examination and discussion of environmental concerns such as population, pollution, land use, the preservation of ecosystems, the moral status of animals, water, plants and future generations, global justice and ocean resources, environmental law and policy, the urban and suburban environments, and sustainable development in business, real estate and other forms of

* Approved by the NM Higher Education Department for transfer and application to general education requirements in any public two- or four-year educational institution in New Mexico. Students must work closely with their transfer institution and their SFCC adviser to ensure the best transition to four-year school
economic productivity. Prerequisite: ENGL 109. Offered: Fall and Spring. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

* PHIL 265  COMPARATIVE WORLD RELIGIONS  (3)
A comparative exploration of major world religions, including Islam, Taoism, Hinduism, Buddhism, Confucianism, Judaism, Christianity, and Native American and Zen traditions. Emphasis is placed on the historical and philosophical contexts of these religions and on their common and diverse values, theories of reality, knowledge, and beauty. Prerequisite: ENGL 109. Offered: Fall. NMCCNS: RELI 1113. NMGECC: Area V — Humanities and Fine Arts. Three lecture hours.

PHLEBOTOMY

PHLB 113  INTRODUCTION TO PHLEBOTOMY  (3)
An examination of concepts of phlebotomy and venipuncture procedures along with basic anatomy and physiology, medical terminology, medical legal and ethical issues, patient care, best practices and quality assurance. Permission required. Prerequisite: HLCR 113. Corequisite: PHLB 115L. Offered: Fall and Spring. Three lecture hours.

PHLB 115L  CLINICAL PHLEBOTOMY I  (3)
A lab course in which students practice phlebotomy procedures. Major topics include collection and handling of blood and non-blood specimens, patient communication skills, and ethical considerations. Permission required. Corequisite: PHLB 113. Offered: Summer, Fall and Spring. Six lab hours.

PHLB 117  SPECIAL PRACTICES IN PHLEBOTOMY  (3)
Includes specialized blood and non-blood collections, effective writing of resumes and interviewing, basic phrases and words used with Spanish-speaking patients, student discussion of clinical experiences obtained during PHLB 198, and review of material to prepare the student for the national certification exam. Other topics include expanded considerations of medical terminology and non-cardiac anatomy and physiology. Prerequisites: PHLB 113 and PHLB 115L. Corequisite: PHLB 198. Offered: Fall and Spring. Three lecture hours.

PHLB 198  CLINICAL PHLEBOTOMY INTERNSHIP  (2)
A course providing clinical experience in phlebotomy. Students work in a health-care setting, collect blood and non-blood specimens, and provide patient care.

PHOTOGRAPHY

PHOT 111  DIGITAL PHOTOGRAPHY I  (3)
This is an introductory course in Digital Photography. It covers SLR camera functions and use, image capture and color management, archival printing and presentation of work. Classes are used for lectures, presentations, discussions, regular critiques and hands-on digital darkroom time. Assignments are designed to familiarize students with basic technical skills, genres and personalities associated with photography. Prerequisite: MART 180L. Offered: Summer, Fall and Spring. One lecture hour, four lab hours.

PHOT 120  BLACK AND WHITE FILM PHOTOGRAPHY I  (3)
An introductory course in film-based black-and-white photography. It covers SLR camera functions and use, exposure techniques and film processing, traditional darkroom printing and presentation of work. Assignments are designed to familiarize students with basic technical concepts, genres and personalities associated with photography. Offered: Summer, Fall and Spring. One lecture hour, four lab hours.

PHOT 130  ALTERNATIVE PHOTOGRAPHIC PROCESSES I  (3)
An introductory course in Alternative Photographic Processes, also known as Non-silver Photography, or historic processes. Areas covered include the production of digital negatives and processes such as cyanotype, Van Dyke prints, and platinum/palladium printing. Assignments are designed to familiarize students with basic technical skills, genres and personalities associated with photography. Prerequisite: PHOT 111 or PHOT 120. Offered: Fall. One lecture hour, four lab hours.

PHOT 140  PHOTOGRAPHY AND STUDIO LIGHTING I  (3)
An introductory course in the purposeful and creative use of light and shadow in photography. Both natural and artificial light sources are used to illuminate arranged subjects, primarily still lifes, small environments and portraits, lighted in a variety of ways to render desired effects and outcomes. Prerequisite: PHOT 111 or PHOT 120. Offered: Fall. One lecture hour, four lab hours.

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PHOT 150  CAMERA USE AND THE ART OF SEEING  (3)
Focuses on the use of the digital SLR camera and the principles of composition and the art of seeing. Students are required to shoot digital files for their assignments. Students’ work is critiqued on the basis of the online presentations or PowerPoint presentations; no printing is part of this course. Designed for the beginning photographer, this course prepares students for subsequent photo courses and reviews the principles of camera use and composition. Not a darkroom/lab course. Offered: Fall and Spring. Three lecture hours.

PHOT 195  PHOTOGRAPHING ARTWORK  (3)
This course provides practical skills to artists who need to generate examples of their creative output for documentary and commercial purposes. Students learn to photographically capture images for web, portfolio, gallery and professional presentations. Students learn to stage, light, and photograph artwork such as paintings, drawings, ceramics, jewelry, furniture and photographs to create professional presentations for galleries, museums, collectors, and college applications. Digital cameras are utilized in this course. Students will learn color management and various methods of outputting print and digital files for portfolio, web and marketing activities. Offered: Fall and Spring. One lecture hour, four lab hours.

PHOT 200  UNDERWATER PHOTOGRAPHY  (3)
Traditional genres of photography such as Still Life, Portraiture, and Fashion Photography will be re-evaluated and re-discovered in the context of the aquatic environment. A shallow warm water pool will be used during the scheduled class times. No diving skills or diving equipment are required. Enough time for practical instruction and underwater open lab will be allotted to shoot all the images necessary to fulfill the class objectives. Students should be comfortable in water for prolonged periods. Prerequisite: PHOT 111 or PHOT 120. Offered: Fall. One lecture hour, four lab hours.

PHOT 210  DIGITAL PHOTOGRAPHY II  (3)
Techniques and concepts learned in Digital Photography I are expanded upon in this project-oriented course. Predictable image capture, enhanced color management, archival printing techniques and presentation of work to professional portfolio standard. Assignments are designed to deepen understanding of photography in contemporary and historical contexts. Prerequisite: PHOT 111. Offered: Fall and Spring. One lecture hour, four lab hours.

PHOT 220  BLACK AND WHITE FILM PHOTOGRAPHY II  (3)
Expand upon techniques and concepts learned in Photography I in this project-oriented course. Predictable image exposure, the Zone System, enhanced film developing techniques, traditional fiber-based printing techniques and presentation of work to professional portfolio standard. Assignments are designed to deepen understanding of photography in contemporary and historical contexts. Prerequisite: PHOT 120. Offered: Fall and Spring. One lecture hour, four lab hours.

PHOT 230  ALTERNATIVE PHOTOGRAPHIC PROCESSES II  (3)
An expansion of the techniques and concepts learned in Alternative Photographic Processes I. In this project-oriented course, some previously covered processes like cyanotype or Van Dyke may be explored further and/or advanced processes such as historical carbon printing methods may be offered depending on the availability of specialized facilities and/or the faculty member’s area of expertise. Classes are used for lectures, presentations, discussions, regular critiques and hands-on non-silver darkroom time. Assignments are designed to deepen understanding of photography in contemporary and historical contexts. Prerequisite: PHOT 130. Offered: Spring. One lecture hour, four lab hours.

PHOT 240  PHOTOGRAPHY AND STUDIO LIGHTING II  (3)
Techniques and concepts from Photography and Studio Lighting I are expanded upon in this project-oriented course. Major projects are assigned. Both natural and artificial light sources are used to illuminate arranged subjects, primarily still lifes, small environments and portraits, lighted in a variety of ways to render desired effects and outcomes. Prerequisite: PHOT 140. Offered: Spring. One lecture hour, four lab hours.

PHOT 245  PHOTOGRAPHIC PORTRAITURE  (3)
This course focuses on what it means to portray someone by examining the creative, manipulative and communicative opportunities and pitfalls that inform one of the most popular photographic rituals. Photographic issues such as subtext, narrative, metaphor, and self-portraiture will be explored in detail. Prerequisite: PHOT 111 or PHOT 120. Offered: Occasionally. One lecture hour, four lab hours.

PHOT 248  FASHION PHOTOGRAPHY  (3)
Students will work with fashion models in studio and exterior environments to learn the art of professional fashion photography. Innovative approaches to using light, wind,
make up and close-ups are but a few examples of technical manipulations that will be covered. The subject will be further explored by studying and analyzing historic and contemporary trends in fashion photography and how they reflect broader social realities. From Richard Avedon to heroin chic and Irving Penn to Calvin Klein ads, a fascinating world awaits with a richness that extends far beyond the assumed parameters of this subject. Prerequisite: PHOT 11I or PHOT 120. Offered: Occasionally. One lecture hour, four lab hours.

PHOT 250 LANDSCAPE PHOTOGRAPHY (3)
An exploration of the broadest definitions of what the photographic landscape is, or can be. From a traditional definition as an aesthetic pictorial perspective, to environmental, ecological, social, referential, political, and its uses as a pro-active tool. Both, natural and urban landscapes can be explored. Prerequisite: PHOT 11I or PHOT 120. Offered: Occasionally. One lecture hour, four lab hours.

PHOT 255 DOCUMENTARY PHOTOGRAPHY (3)
Students photograph a subject or narrative event with the end product being a layout and proposal for a published photo-essay. A variety of photographic skills including lighting are covered, as well as the ethical, legal and social considerations raised by this type of photography. Prerequisite: PHOT 11I or PHOT 120. Offered: Occasionally. One lecture hour, four lab hours.

PHOT 260 PHOTOGRAPHIC SURREALISM (3)
An exploration of the rich and fascinating form of expression in the context of the photographic image. The ease with which images, photographic and otherwise, can be combined offers the serious explorer great opportunities to depict notions of reality and perception within this forum of self-expression. This vehicle is similarly adept at revealing the absurdities and contradictions that surround us every day. Students are challenged to produce well-considered, technically competent and visually engaging work. The students’ work can be purely digital in nature, or hybrid, incorporating any other photographic processes and techniques he/she considers to be beneficial to aid the outcome of the end product. Students may work in black and white, color or a combination of both. Prerequisite: PHOT 11I or PHOT 120. Offered: Occasionally. One lecture hour, four lab hours.

PHOT 265 EXTREME PHOTOGRAPHY (3)
A production course that encourages risk-taking strategies and radical approaches in the making of photographs. Work expressed in forms such as mixed media, installation, large scale prints, new approaches to collage, political, narrative, autobiographical, diaristic, constructed, directorial, sequential, use of text and others may be explored. Prerequisite: PHOT 11I or PHOT 120. Offered: Occasionally. One lecture hour, four lab hours.

PHOT 280 DIGITAL IMAGING FOR FINE ARTS (3)
Focuses on creating imagery that is expressive, experimental and collaborative in an effort to explore the photographic medium as it intersects artistically with the traditions of drawing, painting and printmaking. Assignments are designed to deepen understanding of photography in contemporary and historical contexts. Prerequisite: PHOT 11I or PHOT 120. Offered: Occasionally. One lecture hour, four lab hours.

PHYSICS

* PHYS 111 INTRODUCTION TO PHYSICS (3)
A general introduction to concepts in physics, such as Newton’s laws of motion, gravity, energy, thermodynamics, waves, electricity, magnetism, optics, relativity and quantum theory. Prerequisites: ENGL 109 and MATH 109. Corequisite: PHYS 111L. Offered: Fall and Spring. NMGECC: Area III — Sciences. Three lecture hours.

* PHYS 111L INTRODUCTION TO PHYSICS LAB (1)
Laboratory experience for PHYS 111. The lab emphasizes hands-on investigations that support the concepts discussed in PHYS 111. Corequisite: PHYS 111. Offered: Fall and Spring. NMGECC: Area III — Sciences. Three lab hours.

* PHYS 121 GENERAL PHYSICS I (3)
The first half of a comprehensive first-year course in the fundamentals of physics. This course examines Newtonian mechanics, work and energy, motion, fluid statics and dynamics, heat, waves and sound. Prerequisites: ENGL 109 and MATH 150. Corequisite: PHYS 121L. Offered: Fall. NMCCNS: PHYS 1113. NMGECC: Area III — Sciences. Three lecture hours.

* PHYS 121L GENERAL PHYSICS I LAB (1)
Lab experience for PHYS 121. Experiments are conducted that investigate topics such as gravity, force, projectiles, momentum, torque, buoyancy and thermodynamics. Corequisite: PHYS 121. Offered: Fall. NMCCNS: PHYS 1111. NMGECC: Area III — Sciences. Three lab hours.

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* PHYS 122  GENERAL PHYSICS II  (3)
The second half of a comprehensive first-year course in the
fundamentals of physics. This course examines electrostatics, circuits, magnetism, electromagnetic
induction, electromagnetic waves, optics and nuclear
physics. Prerequisite: PHYS 121. Corequisite: PHYS 122L.
Offered: Spring. NMCCNS: PHYS 1123. NMGECC: Area
III — Sciences. Three lecture hours.

* PHYS 122L  GENERAL PHYSICS II LAB  (1)
Lab experience for PHYS 122. Experiments are conducted
that investigate topics such as electrostatics, circuits, capacitance, electromagnetic induction and optics.
Corequisite: PHYS 122. Offered: Spring. NMCCNS: PHYS
1121. NMGECC: Area III — Sciences. Three lab hours.

* PHYS 161  CALCULUS PHYSICS I  (3)
This is the first of three calculus-based physics courses
for engineers and physical science majors. The course
examines motion, vectors, forces, work, energy, rotational
motion and fluid mechanics. Prerequisites: ENGL 109
and MATH 162. Corequisite: PHYS 161L. Offered: Fall.
NMCCNS: PHYS 1213. NMGECC: Area III — Sciences.
Three lecture hours.

* PHYS 161L  CALCULUS PHYSICS I LAB  (1)
Lab experience for PHYS 161. Experiments are conducted
that investigate topics such as measurement, vectors, kinematics and graphical analysis of motion, friction,
projectiles, energy, ballistics, collisions, satellites, rotational motion and fluids. Corequisite: PHYS 161.
Offered: Fall. NMCCNS: PHYS 1211. NMGECC: Area
III — Sciences. Three lab hours.

* PHYS 162  CALCULUS PHYSICS II  (3)
This is the second of three calculus-based physics courses
for engineers and physical science majors. The course
examines temperature, heat transfer, laws of
thermodynamics, electric fields, electric potential, DC
and AC circuits, magnetic fields, induction and Maxwell's
equations. Prerequisite: PHYS 161. Corequisite: PHYS
162L. Offered: Spring. NMCCNS: PHYS 1223. NMGECC:
Area III — Sciences. Three lecture hours.

* PHYS 162L  CALCULUS PHYSICS II LAB  (1)
Lab experience for PHYS 162. Experiments are conducted
that investigate topics such as thermal expansion, heat
transfer, electrostatics, electric fields, Gauss' Law,
capacitance, DC and AC circuits and electromagnetic

PLUMBING

PLMB 111  BASIC PLUMBING, SAFETY AND PIPE FITTING  (2)
An introduction to basic plumbing, safety and pipe fitting.
This course will introduce students to today's complex and sophisticated plumbing systems and the career opportunities available. Major topics include safety, tools, materials, equipment and procedures. Offered: Fall. One lecture hour, two lab hours.

PLMB 121  GAS PIPING AND COMBUSTION VENTING  (3)
An introduction to the installation of piping and venting for natural gas and liquid petroleum systems. Topics include piping design, fuel combustion piping systems and domestic hot water systems. Offered: Fall. Two lecture hours, two lab hours.

PLMB 131  SERVICE PLUMBING, REPAIR, MAINTENANCE AND REMODEL  (2)
An introduction to the practical skills needed to service, repair, maintain and install plumbing fixtures and faucets. Students will also learn troubleshooting and project management skills. Offered: Fall. One lecture hour, two lab hours.

PLMB 141  PUMPS AND MOTORS  (2)
An introduction to various pump and motor operations, starting with proper hydraulic sizing and electrical demand requirements. Topics include electrical power and hydraulic components of pumping water. This course presents the fundamentals commonly related to the study of the mechanical properties of water, including liquid pressure, liquid flow, pumping dynamics, and hydrostatics or fluid mechanics. Offered: Fall. One lecture hour, two lab hours.

PLMB 211  WATER SUPPLY SYSTEMS AND BACKFLOW PREVENTION  (3)
Covers the design and application of water delivery systems used for domestic and commercial potable drinking water. The course will concentrate on water pipe sizing as well as types of materials and fittings. Cross connection prevention will be covered as well as the hands-on use of backflow prevention test gauges. Offered: Fall. Two lecture hours, two lab hours.

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PLMB 221 DRAIN/WASTE/VENT AND GRAY WATER (3)
Covers the layout and design of drain and vent systems in residential and commercial buildings including those using gray water systems. Topics include safety requirements, tools and materials, proper installation, maintenance, and principles of gravity and air pressure. Offered: Fall. Two lecture hours, two lab hours.

PLMB 231 BOILERS AND HYDRONIC SYSTEMS (2)
An introduction to boilers and hydronic systems. Students will study fundamental hydronic heating concepts, heat load design, estimating, heating sources, the properties of water as it relates to hydronics, system components, heating control panels and distribution piping systems. Offered: Fall. One lecture hour, two lab hours.

POLITICAL SCIENCE

* POLI 200 AMERICAN GOVERNMENT AND POLITICS (3)
A survey that considers the institutions and processes of American government — what they look like, how they work and what purposes they serve. The course also reflects on where each citizen fits into this picture, and explores individual rights, responsibilities and opportunities for participation. The course compares and contrasts the ideals and the reality of the American political system by emphasizing contemporary issues. Prerequisite: ENGL 109. Offered: Fall and Spring. NMCCNS: POLS 1123. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

* POLI 211 NEW MEXICO GOVERNMENT (3)
An exploration of New Mexico government including the historical roots of our political system, our relationship with the federal government, and an inside view of the working of politics in the state capital and in our communities. Prerequisite: ENGL 109. Offered: Fall and Spring. NMCCNS: POLS 1213. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

PORTUGUESE

PORT 111 BEGINNING PORTUGUESE I (4)
Designed for students with no previous exposure to Portuguese, this course develops basic listening, speaking and grammatical skills. The course will help students begin to understand, speak, read and write Portuguese. It is a beginning course to teach students to communicate in Portuguese as well as to gain a deeper knowledge of Brazilian culture. The majority of the classroom time will be used for oral and listening activities and completing the exercises in the textbook. Offered: Occasionally. Four lecture hours.

PORT 112 BEGINNING PORTUGUESE II (4)
A continuation of Portuguese I, this course is designed for students with at least one semester of Beginning Portuguese or equivalent. Students develop a broader foundation in their skills gained in the first semester and gain a deeper knowledge of Brazilian culture. The majority of the classroom time will be used for communicative activities, interactive group exercises and written exercises in the textbook. Prerequisite: PORT 111 or permission required. Offered: Occasionally. Four lecture hours.

PORT 121L PORTUGUESE LANGUAGE LAB (1)
A self-paced language lab designed to accelerate, reinforce and support all levels of Portuguese. The course provides an opportunity to practice and strengthen listening, speaking, reading and writing skills through the use of software, audio and video tapes, and other technologies. Graded as Pass/Fail. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

PRINTMAKING AND BOOKARTS

PRBK 167L INTRODUCTION TO PAPERMAKING (3)
This course emphasizes traditional European styles of making paper by hand. Students construct a mold and deckle and other basic tools of papermaking. Cotton, abaca and other exotic indigenous fibers are investigated. Pulp-coloring methods, embedding, embossing and three-dimensional sculptural uses of paper are introduced. Offered: Occasionally. Six lab hours.

PRBK 168L LETTERPRESS (3)
An introduction to letterpress printmaking including the basics of typesetting and printing on a cylinder press and platen press with metal type, wood type, relief, and contemporary printmaking methods. Students work on independent and collaborative projects and learn press lockup, ink mixing, multiple-color registration, editions, and the basics of press mechanics using good studio

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practice. May be taken twice for degree or certificate credit. Prerequisite: PRBK 174. Offered: Occasionally. Six lab hours.

PRBK 174L INTRODUCTION TO PRINTMAKING (3)
The study and exploration of a variety of printmaking processes and principles. Image-making, using relief, intaglio and planographic methods, are covered. May be taken twice for degree or certificate credit. Prerequisite: DRPT 118L. Offered: Fall and Spring. Six lab hours.

PRBK 175L MONOTYPE PRINTMAKING (3)
Additive and subtractive methods of monotype printmaking. Monotype is an old method that has received new attention in today's society. Students explore its relationship to other contemporary forms of art and develop a personal direction in their work. May be taken twice for degree or certificate credit. Prerequisite: DRPT 118L or PRBK 174L. Offered: Fall and Spring. Six lab hours.

PRBK 182L INTAGLIO I (3)
Fundamental techniques for using the unique qualities of intaglio processes to create single prints and editions that express aesthetic concerns. Students will work primarily in black and white. This course will focus on technical and aesthetic considerations of development of intaglio plates, intaglio printing and an introduction to the history of intaglio as a fine art discipline. May be taken twice for degree or certificate credit. Prerequisite: PRBK 174L. Offered: Occasionally. Six lab hours.

PRBK 191L RELIEF PRINTMAKING (3)
In this course, students will learn about the origins and development of relief printmaking, including linocut and woodcut. Students will produce a portfolio of original prints and make a presentation on the historical and contemporary approaches to this art. May be taken twice for degree or certificate credit. Prerequisite: PRBK 174L. Offered: Spring. Six lab hours.

PRBK 211L ALTERNATIVE PRINTMAKING (3)
This course covers alternative printmaking methods of emulsion transfer including chemical and litho. Polaroid transfers and Solar Plate etching are used in combination with the process of monotype. This creates a great opportunity to develop unique mixed media pieces. May be taken twice for degree or certificate credit. Offered: Occasionally. Six lab hours.

PRBK 265L ADVANCED BOOKS ARTS (3)
Continues the investigation of book arts through a variety of structures and enclosures using differing binding styles. The origins of the book and its global history are discussed. The work of contemporary book artists and examples are also discussed. Offered: Spring. Six lab hours.

PRBK 267L ADVANCED PAPERMAKING (3)
Continues the investigation of two- and three-dimensional papermaking. Beating fiber, paper chemistry, sheet formation, pulp painting, and sculptural papermaking are covered. Papermaking history and contemporary applications are discussed. Offered: Spring. Six lab hours.

PSYCHOLOGY

*PSYC 111 PSYCHOLOGY I (3)
This course introduces the concepts, theories, significant research findings, methodology and terminology in the evolving field of psychology. Students will explore how human beings live, think, feel, and act in order to gain a better understanding of themselves, others, and the world around them. Major topics include research methods, learning, intelligence, memory, human development, motivation, emotion, personality, and psychological disorders and their treatment. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. NMCCNS: PSYC 1113. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

PSYC 125 COMMUNICATION AND COUNSELING SKILLS (3)
An introduction to basic communication skills and strategies for the helping professions, such as social work and mental-health counseling. The history, theory, and areas of practice in the helping professions will be explored through lecture and experiential activities. Special emphasis will be placed on the influence of personal and professional values of one's development as a service provider in a multicultural society. Prerequisite: ENGL 109. Offered: Fall and Spring. Three lecture hours.

PSYC 200 STATISTICAL PRINCIPLES FOR THE SOCIAL SCIENCES (3)
Presentation of the basic principles of the description and interpretation of data. The course provides an introduction to statistical principles appropriate to the social sciences, as well as a basis for further work in data analysis. Topics include descriptive statistics, regression, correlation, hypothesis testing, research design and an introduction to probability theory. Prerequisites: MATH 109 or MATH 119 and PSYC 111. Offered: Fall and Spring. Two lecture hours, two lab hours.

PSYC 210 CULTURAL PSYCHOLOGY (3)
This course explores the field of cultural psychology: the scientific study of the ways in which cultural forces shape
human thought, emotion, and behavior. As a sub-discipline of psychology, cultural psychology emphasizes the influence of culture on human behavior and examines topics in psychology from a multicultural, multiethnic perspective. While the course will cover a broad range of topics, emphasis will be placed on core issues in cultural psychology. Prerequisite: PSYC 111. Offered: Occasionally. Three lecture hours.

**PSYC 220 PSYCHOLOGY OF GENDER (3)**
This course explores gender as a psychological construct that influences our behavior in multiple contexts and will focus on a variety of psychological theories and research on gender. Topics include the learning of gender roles, ways of knowing, mental health, sexuality, family issues and workplace issues. Prerequisite: PSYC 111. Offered: Occasionally. Three lecture hours.

**PSYC 225 POSITIVE PSYCHOLOGY (3)**
This course will examine the contemporary movement known as Positive Psychology. Positive psychology is the scientific study of optimal human functioning; its emphasis is not on surviving and adapting but on actually thriving as a person within one's community. It includes identifying human strengths, fostering positive emotions and resilience, engendering wellness, optimism and hope, and pursuing positive relationships and a creative and meaningful lifestyle. Positive psychology represents a major shift from the disease model in psychology to the best aspirations and potential in human behavior. Prerequisite PSYC 111. Offered: Spring. Three lecture hours.

**PSYC 230 PSYCHOLOGY OF PERSONAL GROWTH AND INTERPERSONAL RELATIONSHIPS (3)**
Students will apply psychological insights and principles to better understand themselves and their relationships with others and the world in order to live more effectively. Such topics as self-identity, role of emotions in behavior, love, relationships, health and stress, sexuality, death, meaning and values, forgiveness, and non-violent communication will be explored. This course is experiential in nature with an emphasis on dialogue and group activities. Prerequisite: PSYC 111. Offered: Spring. Three lecture hours.

**PSYC 231 PSYCHOLOGY OF PERSONALITY (3)**
A survey and examination of theory, research and applications of both classical and contemporary approaches to the study of human personality. The course will explore the manner in which personality is organized and expressed, and how it influences the way the individual relates to the social world. Students will also examine the contributions of genetic and environmental influences that collectively determine personality. Prerequisite: PSYC 111. Offered: Fall. Three lecture hours.

**PSYC 240 ABNORMAL PSYCHOLOGY (3)**
A survey of psychological disorders and their symptoms along with an examination of the theoretical bases for categorizing mental illness and treatment modalities. Students also examine alternative approaches to understanding mental dysfunction. Prerequisite: PSYC 111. Offered: Summer, Fall and Spring. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

**PSYC 250 BRAIN AND BEHAVIOR (3)**
An introduction to the contemporary and interdisciplinary fields of neuroscience and behavioral genetics. Focus will be on the dynamic and reciprocal interaction between the brain and behavior. Students explore the nature and structure of the brain and its role in thinking, feeling and behaving. Prerequisite: PSYC 111. Offered: Fall. NMGECC: Area IV. Three lecture hours.

**PSYC 260 PSYCHOLOGY OF LEARNING AND MEMORY (3)**
An exploration of the field of learning and memory, focusing on the neurobiological and psychological processes involved in animal and human learning and memory. Both historical and contemporary models are discussed, as are concrete applications of learning and memory theories. Students will learn how to explain and to improve their own learning and memory. Prerequisite: PSYC 111. Offered: Spring. Three lecture hours.

**PSYC 265 COGNITIVE PSYCHOLOGY (3)**
A survey of the scientific study of the thinking mind. Cognitive psychology includes the study of pattern recognition, attention, memory, representation of knowledge, language, problem-solving, creativity, and decision-making. Practical and personal applications will be discussed. Prerequisite: PSYC 111. Offered: Fall. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

**PSYC 270 STUDY ABROAD: IMAGES AND INSIGHTS (3)**
A study abroad class in which students visit ancient sites in Greece. The influence of the classical Greek archetypes and their mythic patterns on human experience and behavior will be studied. The powerful forces of the archetypes

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personified by Greek gods, goddesses and heroes will be explored. The Archaic, Classical and Hellenistic images of the gods, goddesses, heroes and mythological stories as they are represented on architecture and in sculpture and painting will be examined from an art historical perspective. Art from the Byzantine period including Christian archetypal imagery in the form of icon painting will be introduced in both a historical and contemporary context. Students will be responsible for additional costs for this course, which will include airfare, travel costs while abroad, hotel, food and miscellaneous expenditures. Prerequisite: PSYC 111 or AHST 201 and Permission Required. Offered: Occasionally. Three lecture hours.

**PSYC 271  SOCIAL PSYCHOLOGY  (3)**
An exploration of how an individual’s actions, emotions, attitudes and thought processes are influenced by society and by other people. Topics include aggression, prejudice, group communication dynamics, interpersonal relations and other determinants of behavior. Prerequisite: PSYC 111. Offered: Fall and Spring. Three lecture hours.

**PSYC 280  HUMAN SEXUALITY  (3)**
An exploration of the personal, social, physiological and cultural aspects of human sexuality. Major topics include gender identity development, love and intimacy, interpersonal communication, sexual deviance, sex therapy, and sexuality across the lifespan. Prerequisite: PSYC 111. Offered: Fall and Spring. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

**PSYC 290  DEVELOPMENTAL PSYCHOLOGY  (3)**
An overview of the processes of development across the human life span. This course examines the stages and process of the development of physical, social, emotional and intellectual aspects of human personality from conception to old age. Emphasis is placed on pertinent research and practical applications. Prerequisite: PSYC 111. Offered: Summer, Fall and Fall. NMGECC: Area IV. Three lecture hours.

**PSYC 295  DIRECTED STUDIES IN PSYCHOLOGY  (3)**
An advanced capstone course in psychology that provides students with an opportunity to focus on areas of personal interest and specialization within the discipline of psychology. Under the supervision of psychology faculty, students will develop academic research papers or projects in selected areas of psychology. This course is intended for students who are majoring in psychology and will offer opportunities for students to integrate and synthesize material from the core requirements in psychology and prepare them to transfer to a four-year institution. Students will take the capstone course during their final semester. Completion of nine hours of psychology at the 200 level. Permission required. Offered: Fall and Spring. Three lecture hours.

**READING**

**READ 100L  READING FLUENCY AND VOCABULARY DEVELOPMENT  (2)**
This course helps students read faster and understand more of what they read. Using diverse texts, students will practice comprehension and study strategies such as previewing, note-taking, summarizing, distinguishing main ideas from supporting details, and distinguishing between fact and opinion. Students will develop greater reading fluency through speed reading drills. Focused exercises on dictionary use, context clues, and word parts will increase students’ working vocabularies. Eligible for “PR” grade. This course is a prerequisite for READ 101L and ENGL 108. Prerequisite: Course Placement Evaluation reading score. Offered: Summer, Fall and Spring. Four lab hours.

**READ 101L  CRITICAL READING ACROSS THE DISCIPLINES  (2)**
Students will work with college-level readings to strengthen reading comprehension and critical thinking skills. Basics include notetaking skills, vocabulary development, main ideas and supporting details, outlining and mapping, and writing summaries. Students learn to interpret and evaluate readings by examining tone, symbolism, and figurative language in texts; by analyzing logic, emotion, and other aspects of argumentation; and by identifying logical fallacies. The course includes basic research skills using library, internet, and community resources. This course is a prerequisite for English 109. Prerequisite: READ 100L or appropriate placement score. Offered: Summer, Fall and Spring. Four lab hours.

**READ 211  INTRODUCTION TO READING AND LITERACY DEVELOPMENT  (3)**
This course is designed to prepare early childhood professionals for promoting children’s emergent literacy and reading development. Through a developmental approach, the course addresses ways in which early childhood professionals can foster young children’s phonemic awareness, literacy problem solving skills, fluency, vocabulary, comprehension and language development. This course provides the foundation for early childhood professionals to become knowledgeable about

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literacy development in young children. An integrated language arts perspective and an interdisciplinary approach as it addresses developing writing, reading and oral language in the home and school contexts will be addressed. Major instructional approaches and strategies to support children’s emergent literacy and reading skills will be presented. Prerequisite: ECED 111 or ENGL 109. Offered: Spring. Three lecture hours.

RESPIRATORY CARE

RESP 112 RESPIRATORY CARE ANATOMY AND PHYSIOLOGY (4)
A study of human cardiopulmonary, neuro and renal anatomy and physiology with a clinical emphasis. Laboratory component covers patient assessment in the health care setting, including patient history, physical exam, laboratory data, ECG, basic chest imaging, pulmonary function testing, documentation in patient records and cultural awareness and competence. Includes coverage of physics and mathematics as they apply to the physiology of the cardio-pulmonary system. Permission required. Offered: Fall. Three lecture hours, two lab hours.

RESP 120 THERAPEUTIC MODALITIES (5)
Covers respiratory care therapeutic modalities in all patient populations, including medical gas administration, oxygen therapy, humidity and aerosol therapy, bronchial hygiene, airway management, lung expansion therapy and the applicable physics and mathematics. This course introduces students to respiratory care professional organizations and to professional and ethical issues in health care, sustainable living through study of the “invisible structures” behind environmental sustainability, and the environmental impact of the medical industry. Permission required. Offered: Fall. Three lecture hours, four lab hours.

RESP 122 CARDIOPULMONARY PATHOPHYSIOLOGY I (1)
Introduces the student to assessment and management of selected respiratory disorders. Topics include anatomic changes, pathophysiology, etiology, differential diagnosis, clinical manifestations, and management. Permission required. Offered: Fall. One lecture hour.

RESP 125 CARDIOPULMONARY PHARMACOLOGY (1)
Introduction to cardiopulmonary pharmacology as used in respiratory care. Topics include review of central and peripheral nervous systems, pharmacology terminology, dosage calculations, bronchodilating agents, mucous-controlling agents, corticosteroids and aerosol administration. Permission required. Offered: Fall. One lecture hour.

RESP 130L RESPIRATORY CARE CLINICAL I (3)
Introduction to respiratory care in the patient care setting. Clinical experiences include patient assessment, interview and physical exam, chart review, documentation, basic respiratory equipment and procedures, airway management, patient transport and applicable therapist driven protocols. Permission required. Offered: Fall. Nine lab hours.

RESP 160 VENTILATOR MANAGEMENT (5)
Introduces mechanical ventilation background, theory and physiologic effects. This course prepares the student to initiate and manage advanced airways and mechanical ventilation in the patient care setting and includes discussion of disorder-specific ventilation strategies and technical operation of specific ventilators. Permission required. Offered: Spring. Three lecture hours, four lab hours.

RESP 162 CARDIOPULMONARY DIAGNOSTICS (4)
Builds on the basic assessment and interpretation skills acquired in RESP 112 and includes pulmonary function testing, acid-base balance, arterial blood gases (ABGs), ECGs, chest radiography (CXR), cardiac diagnostics and an introduction to intravenous (IV) therapy. Permission required. Offered: Spring. Three lecture hours, two lab hours.

RESP 164 CARDIOPULMONARY PATHOPHYSIOLOGY II (2)
Builds on material presented in RESP 122 and introduces students to the range of cardiopulmonary disorders. Topics include review of disease-specific patient assessment, cardiopulmonary vascular diseases, diseases of the lung parenchyma, neurologic and neuromuscular diseases, disorders of the pleura and chest wall, neoplastic disease and near drowning, smoke inhalation and thermal injuries. Permission required. Offered: Spring. Two lecture hours.

RESP 166 CARDIOPULMONARY PHARMACOLOGY II (1)
Continuation of RESP 125 Cardiopulmonary Pharmacology with an emphasis on advanced cardiac life support (ACLS) and critical care agents. Topics include advanced cardiac life support agents, cardiovascular agents, critical care agents and a review of dosage calculations. Permission Required. Offered: Spring. One lecture hour.
RESP 170L  RESPIRATORY CARE CLINICAL II  (4)
Builds on experience and skills acquired in Respiratory Care Clinical I. Experiences include cardiopulmonary diagnostics: arterial blood gases (ABGs), ECGs, intravenous therapy (IVs), and radiography (X-ray). The course also introduces initiation and management of non-invasive and invasive mechanical ventilation. Permission required. Offered: Spring. Twelve lab hours.

RESP 214  RESPIRATORY CARE SEMINAR —  (2)  ALTERNATE SITES
Prepares students for clinical experiences in respiratory care as it is practiced in non-hospital settings. The course includes research, sleep medicine, pulmonary rehabilitation, hyperbaric medicine, respiratory home care, transplantation and disaster management. Permission required. Offered: Summer. One lecture hour, two lab hours.  

RESP 220  RESPIRATORY CARE SEMINAR —  (4)  CRITICAL CARE
Reviews management of mechanical ventilation and integrates critical care practice, including critical care assessment, monitoring, ventilator management, disease management and shift management. Permission required. Offered: Summer. Three lecture hours, two lab hours.  

RESP 230L  RESPIRATORY CARE CLINICAL III  (2)
Builds on experience and skills acquired in Respiratory Care Clinicals I and II. Students are introduced to emergency and critical care procedures and expand their experience with mechanical ventilation. Permission required. Offered: Summer. Six lab hours.  

RESP 240  PROFESSIONAL DEVELOPMENT  (2)
Prepares students for national respiratory care credentialing exams and the job placement process. Topics include interviewing, resume-building, and board exam strategies. Permission required. Offered: Fall. Two lecture hours.  

RESP 260  NEONATAL PEDIATRIC RESPIRATORY CARE  (3)
Expands on the introduction to neonatal and pediatric respiratory care received in previous courses. This course prepares students to practice respiratory care in the neonatal and pediatric critical care units. Permission required. Offered: Fall. Two lecture hours, two lab hours.  

RESP 270L  RESPIRATORY CARE CLINICAL IV  (7)
Prepares the student for practice in the entry-level health care environment. This clinical experience focuses on adult, pediatric and neonatal critical respiratory care in the acute care setting. Advanced cardiopulmonary assessment, plan of care, and shift management in all settings are included. Permission required. Offered: Fall. Twenty-one pay hours.  

RESP 298  RESPIRATORY THERAPY INTERNSHIP  (.5-2)
An elective for the respiratory care student who wants more clinical experience. The student will work with a mentor in a hospital, clinic, home care, rehabilitation or diagnostic center setting, gaining applied experience in the specialty of their choice. Permission required. Offered: Occasionally. Half - two lecture hours.  

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS  

STEM 111  INTRODUCTION TO SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS  (3)
An introductory course for science, mathematics and engineering technology students that emphasizes degree planning and academic-success skills. During the semester, the student works on critical thinking, problem solving, teamwork, career planning and acquiring the tools to assess personal strength, abilities, desires and professional goals. Offered: Summer, Fall and Spring. Three lecture hours.  

SCULPTURE  

SCUL 115L  BASIC FABRICATION AND SAFETY  (2)
An introduction to the basics of machinery, methods and materials used in the production of sculpture. The proper use of the sculpture facilities and the safety procedures associated with them will also be taught. The course provides the foundation upon which the student’s subsequent education in the creation of sculpture will be based. Safety is the main focus of the class. This class is not an open studio course. Offered: Fall and Spring. Four lab hours.  

SCUL 117L  SANTEROS: CRAFT AND TRADITION  (3)
New Mexican santeros are part of a 400-year-old artistic and religious tradition. In this course, students learn the history, symbolism, and wood-carving and painting techniques associated with diverse styles of ancient and contemporary santero artisans. Students learn to carve bultos and to paint retablos. May be taken twice for degree or certificate credit. Offered: Fall and Spring. Six lab hours.  

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SCUL 118L  SANTEROS II  (3)
Builds on acquired skills, experience and knowledge of the history, symbolism, wood-carving and painting techniques of the New Mexican folk art of creating santos. Students will concentrate on carving techniques for rendering aesthetically pleasing heads, hands and feet, and the process of applying natural pigments to created works. May be taken twice for degree or certificate credit. Permission required. Offered: Occasionally. Six lab hours.

SCUL 131  SITE AND ENVIRONMENTAL ART  (3)
This course introduces students to the history of earthworks created throughout the world by numerous cultures. It includes the role of environmental art in contemporary art and its applications to environmental issues. Studio projects include the construction of site-specific sculpture. May be taken twice for degree or certificate credit. Offered: Occasionally. One lecture hour, four lab hours.

SCUL 134  FORGING FOR THE SCULPTOR  (3)
An introduction to the use of traditional forging tools and techniques in the creation of decorative and expressive ironwork. May be taken twice for degree or certificate credit. Offered: Occasionally. One lecture hour, four lab hours.

SCUL 213L  INTRODUCTION TO NEW MEXICO TINWORK  (3)
Students learn traditional tinworking, part of the traditional Hispanic folk art of Northern New Mexico, using fundamental tools, processes and materials. Students fabricate such items as frames, candleholders, and objects of utilitarian and artistic purposes. Regional issues and techniques are explored. May be taken twice for degree or certificate credit. Offered: Occasionally. Six lab hours.

SCUL 213L  SCULPTURE I  (3)
This course is designed to help the student to perceive, conceptualize, create and execute works of art in three-Dimensional forms of sculpture. It includes an exploration of figuration, abstraction and nonobjective forms. May be taken twice for a degree or certificate credit. Prerequisite: SCUL 115L. Offered: Summer, Fall and Spring. Six lab hours.

SCUL 260L  CONTEMPORARY BRONZE SCULPTURE  (3)
An introduction to direct casting methods for the realization of a personal and expressive art. Students work with cast bronze, which has been used for thousands of years as an expressive medium. In addition to a lab fee, students must purchase wax, ceramic shell and bronze. May be taken twice for degree or certificate credit. Prerequisite: SCUL 213L. Offered: Occasionally. Six lab hours.

SCUL 261L  STONE SCULPTURE  (3)
An overview of stone sculpture that investigates techniques of carving in limestone, alabaster and marble by hand and with pneumatic tools, both directly and from models. May be taken twice for degree or certificate credit. Prerequisite: SCUL 213L. Offered: Occasionally. Six lab hours.

SCUL 262  METAL SCULPTURE I  (3)
The course introduces cutting and welding techniques in metal, primarily black iron. It is also designed to help students become more proficient in the use of black iron for 3-dimensional expression. May be taken twice for degree or certificate credit. Prerequisite: SCUL 213L. Offered: Fall and Spring. One lecture hour, four lab hours.

SCUL 263L  SCULPTURE II  (3)
An in-depth investigation of materials and concepts applicable to spatial relations and sculptural considerations. The course provides an opportunity for students to expand the knowledge of concepts they began to develop in Sculpture I, but with an emphasis on an independent exploration of specific materials and issues pertinent to their own artistic curiosities and interests. Students develop individual proposals that incorporate various sculptural materials and types of presentation. May be taken twice for degree or certificate credit. Prerequisite: SCUL 213L. Offered: Fall and Spring. Six lab hours.

SCUL 264L  MIXED-MEDIA SCULPTURE ASSEMBLAGE  (3)
This course covers a variety of tools and techniques used in mixed-media sculpture, with an emphasis on wood construction. Assemblage as an aspect of the additive approach to sculpture is examined. Students focus on aesthetic, structural and conceptual principles involved in this approach. In addition to wood, materials may include metal, fibers, plastics, found objects, etc. Prerequisite: SCUL 115L. Offered: Occasionally. Six lab hours.

SCUL 265L  GLASS SCULPTURE  (3)
An introduction to the basic kiln casting in the lost wax technique and other kiln working of glass including the processes of slumping and fusing. Students will be introduced to creating molds for use with glass and the entire lost wax process. Prerequisite: SCUL 213L. Offered: Occasionally. Six lab hours.

SCUL 267L  METAL SCULPTURE II  (3)
An in-depth study of the metal processes introduced in Metal Sculpture I with greater emphasis on individual artistic expression. TIG welding is introduced in this class. May be taken twice for degree or certificate credit. Prerequisite: SCUL 262L. Offered: Occasionally. Six lab hours.
SCUL 268L MOLD MAKING FOR SCULPTORS (3)
A course in basic mold making for sculpture. This course covers pattern preparation, mold construction, and casting in wax and plaster. Class projects are designed to help students become proficient in several mold making processes. This class may be of special interest to students who wish to do bronze and glass sculpture. Offered: Occasionally. One lecture hour, four lab hours.

SCUL 270L WOOD SCULPTURE (3)
An introduction to tools and techniques used in wood sculpture to develop sculptural forms and encourage personal exploration. Students investigate a diverse range of techniques, such as wood construction, wood lamination, fabrication, wood carving, wood finishing, glues, and tool sharpening and maintenance. Sculptural traditions, both historical and contemporary, are discussed. Prerequisite: SCUL 213L. Offered: Occasionally.

SCUL 294L SCULPTURE: ADVANCED PROJECTS (3)
Structured around a common theme or mode of inquiry relevant to the conceptual concerns and techniques particular to the making of sculpture. An in-depth forum is provided to analyze aesthetic and conceptual concerns. Emphasis is placed on the realization of each student's unique vision and completion of projects. Creativity and the development of a personal style of self-expression are encouraged. Prerequisites: SCUL 115L and SCUL 213L and SCUL 263L or permission. Offered: Occasionally. Three lecture hours.

SERVICE LEARNING

SERV 190 SERVICE LEARNING (1)
As an add-on to an anchor course, students have the opportunity to earn college credit through a structured service-learning experience. This course combines community service and classroom instruction with a focus on critical, reflective thinking as well as personal and civic responsibility. Students will engage with community partners in a way that is mutually beneficial, enhancing the learning experience of the students and addressing identified needs in the community. Students complete a project in a non-profit, school or government agency. To enroll in a particular section of this course, students must be enrolled in the anchor course that corresponds to that section. Permission required. Offered: Fall and Spring. One lecture hour.

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SOCIOLOGY

* SOCI 111 INTRODUCTION TO SOCIOLOGY (3)
An introduction to the study of society in the context of social relationships. It includes the study of the components of culture, the socialization process, key elements of other cultures, social structure and class, groups and organization, deviance and crime, social inequality, social institutions, strengths and weaknesses of bureaucracies, and marginalized populations with an emphasis on race, class and gender. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. NMCCNS: SOCI 1113. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

* SOCI 209 AGING AND THE FAMILY (3)
A study of the sociological aspects of aging. Students will analyze family relationships, health and health care issues, economics, retirement, widowhood, bereavement and care of the frail and poor elderly in an aging American society. Historical, biological, psychological, social, cultural and political perspectives of aging will also be explored. Prerequisite: ENGL 109. Offered: Spring. Three lecture hours.

* SOCI 216 RACE, CLASS AND GENDER (3)
An examination of the social bases of inequality and theories that explain the creation of systems and ideologies of subordination. Readings and topics explore the consequences of discrimination against others based on such factors as race, gender, sexual orientation, ethnicity or appearance. Prerequisite: ENGL 109. Offered: Fall and Spring. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

* SOCI 220 SOCIAL PROBLEMS (3)
An examination of the causes and nature of contemporary social problems, including health and health care, substance abuse, domestic violence and date rape, social class distinctions, poverty, racism, prejudice, and discrimination, gender and sexuality, aging, population and migration, war and terrorism. In addition, strategies for social change are evaluated. Prerequisite: ENGL 109. Offered: Fall. NMCCNS: SOCI 2113. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

* SOCI 225 MARRIAGE, FAMILY AND INTIMATE RELATIONSHIPS (3)
A sociological approach to the study of the history, the current status and the future of friendship, courtship, marriage, parenthood, divorce, remarriage and sex roles.
The social and psychological components of intimate relationships, marriage and the family are considered. Prerequisite: ENGL 109. Offered: Occasionally. NMCCNS: SOCI 2213. NMGECC: Area IV — Social and Behavioral Sciences. Three lecture hours.

**SOLAR ENERGY**

**SOLR 111  INTRODUCTION TO SOLAR ENERGY (1)**
An introduction to all aspects of the use of solar energy including passive solar design, solar energy systems and biological uses of solar energy. This course offers a broad survey of the uses and design implications of various types of solar energy as a foundation for studies in the Solar Certificate and the Associates in Applied Science in Sustainable Technologies. Offered: Occasionally. One lecture hour.

**SOLR 121  DESIGN AND INSTALLATION OF PHOTOVOLTAIC SYSTEMS I (3)**
An introduction to the fundamentals of solar electric generation by the use of photovoltaic panels. Students acquire skills and an understanding of the basic technologies of photovoltaic cells and panels, system design considerations, wiring requirements and component selection. Some hands-on work will be included to provide the student with installation skills. Offered: Occasionally. Three lecture hours.

**SOLR 131  DESIGN AND INSTALLATION OF SOLAR HOT WATER SYSTEMS (3)**
In this course, students will be introduced to the different types of solar hot water systems, design principles, the evolution of solar hot water system designs, and introductory installation techniques. Equipment such as control components, heat exchangers, solar collectors, and storage tanks will be reviewed. Participants will also be exposed to more complex solar heating applications, including hydronic heating. Participants will have the opportunity to design and install a solar hot water or heating system. Offered: Occasionally. Three lecture hours.

**SOLR 131I  SOLAR THERMAL INSTALLATION LAB (1)**
This course is designed to give students real hands-on experience in installing a solar hot water system. It is offered in conjunction with ENVR 225, concentrated into the second half of the semester once students have gained a basic understanding of solar thermal systems design. It will meet once a week for four hours after the midterm for ENVR 225. Corequisites: SOLR 131. Offered: Occasionally. Two lab hours.

**SOLR 221  DESIGN AND INSTALLATION OF PHOTOVOLTAIC SYSTEMS II (3)**
An advanced course in solar energy generation that builds on ENVR 221. Students develop advanced skills in system design, component and wiring selection and installation. Emphasis is on medium and large systems and integration of those systems into existing electrical grids. Prerequisite: SOLR 121. Offered: Occasionally. Three lecture hours.

**SOLR 221D  PHOTOVOLTAICS DESIGN LAB (1)**
Focuses on the design of photovoltaics. This is an appropriate lab course for individuals interested in solar sales. Hands-on learning includes the use of photovoltaic software and implementation of strategies for the design and sales of photovoltaic installations. Course may be taken concurrently with the prerequisite. Prerequisite: SOLR 121. Corequisite: SOLR 121. Offered: Occasionally. Two lab hours.

**SOLR 221I  PHOTOVOLTAICS INSTALLATION LAB (1)**
Focuses on the installation of photovoltaics (PV). This is an appropriate lab course for individuals interested in solar installation. Hands-on activities include PV systems installation and PV site planning. Course may be taken concurrently with prerequisite. Prerequisite: SOLR 221. Offered: Occasionally. Two lab hours.

**SOLR 231  ADVANCED SOLAR THERMAL DESIGN (3)**
An advanced course in solar heating design for those students interested in concentrating in the solar thermal field. This course expands on the material presented in the SOLR 131 class. Topics include advanced solar hydronic controls, heating load modeling performance of different hydronic fluids and night sky cooling. Prerequisite: SOLR 131. Offered: Occasionally. Three lecture hours.

**SOLR 298  SOLAR INTERNSHIP (1-4)**
A course to provide students with an opportunity to enlarge and complete their learning experience by spending time in a real working environment in the solar industry. Students must have completed a significant portion of core requirements to be eligible for this course. Graded as Pass/Fail. Permission required. Offered: Summer, Fall and Spring. One-four lecture hours.
SPANISH

SPAN 101  INTRODUCTION TO SPANISH  (2)
A beginning course in Spanish that introduces students to the sound system, pronunciation and basic vocabulary necessary for communication. Recommended for students who have had no previous exposure to Spanish or to the study of another foreign language. This course is not for college transfer credit. Offered: Summer, Fall and Spring. Two lecture hours.

*SPAN 111  BEGINNING SPANISH I  (4)
A beginning course in Spanish for the student with little or no previous exposure to written or spoken Spanish. The course teaches Spanish as a foreign language. It emphasizes conversational skills and requires reading, writing and oral practice. The course also includes a lab component designed to accelerate and support the lecture material. A corresponding Heritage Spanish course, SPAN 113, is offered for students whose native culture includes exposure to the language. Offered: Summer, Fall and Spring. NMCCNS: SPAN 1113/SPAN 1111. NMGEC: Area V — Humanities and Fine Arts. Four lecture hours.

*SPAN 111L  SPANISH I LAB CONVERSATION LAB  (1)
A language lab designed to accelerate, reinforce and support SPAN 111. The lab incorporates audio and video tapes, computer programs, conversion drills and open-dialogue and conversation skills. May be taken twice for degree or certificate credit. Graded as Pass/Fail. Prerequisite: SPAN 111 or SPAN 111L. Offered: Fall and Spring. NMCCNS: SPAN 1111. NMGEC: Area V — Humanities and Fine Arts. Two lab hours.

*SPAN 112  BEGINNING SPANISH II  (4)
A continuation of Spanish I involving further study of the structure of the language as well as extensive practice in listening, speaking, reading and writing. The course includes a laboratory component designed to accelerate and support lecture material. A corresponding Heritage Spanish course, SPAN 114, is offered for students whose native culture includes exposure to the language. Prerequisite: SPAN 111. Offered: Summer, Fall and Spring. NMCCNS: SPAN 1121/SPAN 1123. NMGEC: Area V — Humanities and Fine Arts. Four lecture hours.

*SPAN 112L  SPANISH II CONVERSATION LAB  (1)
A language lab designed to accelerate, reinforce and support SPAN 112. The lab incorporates audio and video tapes, computer programs, conversion drills and open-dialogue and conversation skills. May be taken twice for degree or certificate credit. Graded as Pass/Fail. Prerequisite: SPAN 111 or SPAN 111L. Offered: Fall and Spring. NMGEC: Area V — Humanities and Fine Arts. Two lab hours.

*SPAN 113  BEGINNING HERITAGE SPANISH I  (4)
A beginning course for students who grew up hearing and perhaps speaking some Spanish. Emphasis is placed on the four skills (listening, speaking, reading, and writing) in addition to basic vocabulary. The focus is on Spanish through the study of the history and culture of New Mexico and the Southwest. Offered: Fall and Spring. NMGEC: Area V — Humanities and Fine Arts. Four lecture hours.

*SPAN 114  BEGINNING HERITAGE SPANISH II  (4)
A continuation of Beginning Heritage Spanish I. This course involves further study of the structure of the language as well as more oral and written practice. Students work toward idiomatic expression and fluency through the study of the history and culture of New Mexico and the Southwest. Prerequisite: SPAN 111 or SPAN 113. Offered: Spring. NMGEC: Area V — Humanities and Fine Arts. Four lecture hours.

SPAN 120  SURVIVAL SPANISH FOR THE EDUCATION PROFESSIONAL  (3)
An introductory course in Spanish that exposes the education professional to the sound system/pronunciation, basic vocabulary, idiomatic expressions and cultural issues of the language. A major goal of the course is the development of effective conversational skills for the educational setting — although basic grammar, reading and writing are also addressed. Offered: Occasionally. Three lecture hours.

SPAN 121L  SPANISH LAB  (1)
A self-paced language lab designed to accelerate, reinforce and support all levels of Spanish. The course provides an opportunity to practice and strengthen listening, speaking, reading and writing skills through the use of software, audio and video tapes, and other technologies. Graded as Pass/Fail. May be taken twice for degree or certificate credit. Offered: Summer, Fall and Spring. Two lab hours.

SPAN 130  INTENSIVE SPANISH  (2)
An intensive two-week course designed to prepare the beginning or intermediate-level student for travel and study

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in a Spanish-speaking country. The course addresses basic survival Spanish and cultural literacy for a successful trip. May be taken twice for degree or certificate credit. Graded as Pass/Fail. Prerequisite: SPAN 111. Offered: Occasionally. Two lecture hours.

* SPAN 150 CONVERSATIONAL SPANISH I (3)
This third-semester Spanish course emphasizes oral communication, idiomatic usage and the development of vocabulary, with a review of basic syntax. Prerequisite: SPAN 112 or SPAN 114. Offered: Fall and Spring. NMCCNS: SPAN 2143. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

SPAN 153 SPANISH FOR HUMAN SERVICES (3)
An introductory Spanish course for professionals in the human services. The course focuses on pertinent vocabulary for situations commonly encountered by professionals in areas such as social work, counseling, case management, Social Security, Medicare, health services, food stamps, child support, vocational rehabilitation, senior citizen issues and other areas. Basic Spanish pronunciation and grammar are introduced in the context of practical social-services situations. Prerequisite: SPAN 111 or SPAN 113. Offered: Occasionally. Three lecture hours.

SPAN 191 SPANISH ABROAD I (4)
This is a level I intensive Spanish course. Students will study for a two-week period at a foreign language institute. The course includes approximately 40 hours of study in Spanish grammar, sentence structure and vocabulary development with additional hours of conversational tutoring. Excursions to selected historical and anthropological sites will be arranged through the Institute. May be taken twice for degree or certificate credit. Graded as Pass/Fail. Prerequisite: SPAN 112 or permission. Offered: Summer. Four lecture hours.

* SPAN 211 INTERMEDIATE SPANISH I (3)
A grammar review that concentrates on expanding skills in conversation, vocabulary, reading and writing. Selected readings on history, literature and current events are used. Prerequisite: SPAN 112 or SPAN 114. Offered: Fall and Spring. NMCCNS: SPAN 2133. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

* SPAN 212 INTERMEDIATE SPANISH II (3)
A continuation of Intermediate Spanish I. This course completes the grammatical overview of Spanish idioms and forms in preparation for more-intensive cultural studies. Prerequisite: SPAN 211 or SPAN 213. Offered: Fall and Spring. NMCCNS: SPAN 2143. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

* SPAN 280 INTRODUCTION TO HISPANIC LITERATURE (3)
An introduction to the novels, poetry, short fiction and drama of Spain and Hispanic America. Emphasis is on interpretation with appropriate references to literary history. Lectures, discussion and compositions are in Spanish. Prerequisite: SPAN 211 or SPAN 213. Offered: Occasionally. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

* SPAN 284 CHICANO LITERATURE AND EXPRESSION (3)
Conducted in Spanish, this course presents the Chicano experience through literature, journalism, chronicles, film and drama. May be taken twice for degree or certificate credit. Prerequisite: SPAN 211 or SPAN 213. Offered: Occasionally. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

* SPAN 285 LATIN AMERICAN FEMINIST EXPRESSION (3)
Through literature, art, film and journalism, students explore the role of women in Latin American culture, including emerging issues and women's own perspectives. The course surveys the works of historic and contemporary artists, writers and filmmakers of Hispanic America. May be taken twice for degree or certificate credit. Prerequisite: SPAN 211 or SPAN 213. Offered: Occasionally. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

* SPAN 286 SOUTHWEST CULTURE THROUGH FILM (3)
This course explores the Hispanic culture of the Southwest as depicted in documentary and popular entertainment films. A discussion of each film is held after viewing. Prerequisite: SPAN 211 or SPAN 213. Offered: Occasionally. NMGEC: Area V — Humanities and Fine Arts. Three lecture hours.

* SPAN 288 CONTEMPORARY LATINO FILM (3)
This course explores the Latino/Hispanic culture of Spain, Latin America and the United States as depicted in documentary and popular entertainment films. A discussion of each film is held prior to and after viewing. May be taken

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twice for degree or certificate credit. Prerequisite: SPAN 212 or SPAN 214 or permission. Offered: Occasionally. Three lecture hours.

SPAN 290  SPANISH GRAMMAR AND COMPOSITION  (4)
This course is designed to help students with advanced knowledge of Spanish understand and practice the formal structures of the Spanish language. In this course, students will read, study, analyze, and produce different literary styles that will help them expand their knowledge of the Hispanic culture and native Spanish speakers. May be taken twice for a degree or certificate credit. Prerequisite: SPAN 212 or SPAN 214. Offered: Occasionally. Four lecture hours.

SPAN 291  SPANISH ABROAD II  (4)
This is an advanced-level, intensive Spanish course for the native or non-native speaker who has limited proficiency in the language, but who is prepared to move beyond beginning-level work. Students will study for a two week period at a foreign language institute. The course includes approximately 40 hours of study in Spanish grammar, sentence structure, reading, writing and conversational practice. Excursions to selected historical and anthropological sites are arranged through the institute. May be taken twice for degree or certificate credit. Graded as Pass/Fail. Prerequisite: SPAN 112 or permission. Offered: Summer. Three lecture hours, two lab hours.

SPEECH

* SPCH 111  PUBLIC SPEAKING  (3)
The theory and practice of public speaking. Students study principles of communication theory and rhetoric and explore their application in the analysis, preparation and presentation of speeches. Prerequisite: ENGL 109. Offered: Summer, Fall and Spring. NMCCNS: COMM 1113. NMGECC: Area I — Communications. Three lecture hours.

* SPCH 220  INTERPERSONAL COMMUNICATION  (3)
The goal of this course is to increase the student's understanding of the communication processes that underlie the formation, maintenance and dissolution of interpersonal relationships. The class examines the application of interpersonal communication in the four basic categories of life: family, friends, romance and work-based relationships. Prerequisite: ENGL 109. Offered: Fall and Spring. NMCCNS: COMM 1213. NMGECC: Area I — Communications. Three lecture hours.

* SPCH 225  SMALL-GROUP COMMUNICATION  (3)
A speech communications course dealing with aspects of communication in small groups. Attention is given to leadership, group roles and norms, group decision making and problem solving, conflict resolution, the dynamics of listening, verbal and nonverbal means of communication, and group public presentation formats. Prerequisite: ENGL 109. Offered: Fall and Spring. NMGECC: Area I — Communications. Three lecture hours.

WATER TECHNOLOGY

WATR 111  INTRODUCTION TO WATER TREATMENT AND DISTRIBUTION SYSTEMS  (2)
An introduction to water distribution systems. Major topics include the Safe Drinking Water Act (SDWA), water sampling certification, disinfection, distribution systems, pumps and motors, groundwater characteristics, wells, basic surface water, safety and other topics from the New Mexico Water Systems Operator Certification Study Guide. Offered: Occasionally. Two lab hours.

WATR 112  APPLIED MATH FOR WATER OPERATORS  (4)
Designed to provide students with a basic understanding of the math needed to work formulas used in the operation of water treatment plants. Topics include formulations and calculations, unit conversion and parameters as they relate to water treatment systems. Offered: Occasionally. Four lecture hours.

WATR 160  APPLIED CHEMISTRY FOR WATER TREATMENT OPERATORS  (4)
Designed to provide students with the basic fundamentals of water chemistry and how these fundamentals impact the daily decisions pertaining to plant/process operations. The student will become proficient with the chemistry and analytical tools necessary to ensure the most efficient and effective plant operations. Students will also obtain a hands-on understanding of laboratory equipment, safety and hygiene, use of digital titrator to determine alkalinity and iron concentrations, pH testing, chlorine testing, how to operate and calibrate turbidimeters, coagulation theory and jar testing. Offered: Occasionally. Three lecture hours, two lab hours.

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WATR 166 MICROBIOLOGY FOR WATER TREATMENT OPERATORS (4)
Provides basic understanding of microbiology as it applies to water treatment operations. Topics include micrological contaminants, contaminant pathways, toxic effect as well as sampling, testing and treatment options. Offered: Occasionally. Three lecture hours, two lab hours.

WATR 215 PERMITS, REGULATIONS AND WATER RESOURCE MANAGEMENT (3)
Designed to provide students with an overview of the permits and regulatory environment encountered in establishing a water treatment operation/system. Students will also learn about the Safe Drinking Water Act (SDWA), water rights, water resource management, raw water sourcing, federal environmental law as well as local and regional issues. Prerequisite: WATR 111. Offered: Occasionally. Two lecture hours, four lab hours.

WATR 216 WATERSHED MANAGEMENT (3)
An in-depth class on the diverse aspects of water shed management. The course reviews the various ways individuals and organizations strive to balance the human use of water shed resources with natural resource protections and maximization. It explores the technology, policy making and best practices used to achieve optimum water shed management. Visits to local water sheds are included. Offered: Spring. Three lecture hours.

WATR 260 ADVANCED WATER TREATMENT TECHNOLOGIES (4)
Designed to provide students with an understanding of various advanced water treatment technologies. Technologies covered include raw water diversion, pre-sedimentation, coagulation, flocculation, sedimentation, membrane filtration, ozonators, granulated activated charcoal, finish water storage and solids processing. Prerequisite: WATR 160. Offered: Occasionally. Four lecture hours.

WATR 290 WATER OPERATOR CERTIFICATION REVIEW (3)
Review of the subjects needed to pass the operator certification exam for Levels 1-4. Major topics include Safe Drinking Water Act (SDWA), water sampling, disinfection, distribution systems, pumps and motors, groundwater characteristics, surface water characteristics, source water characteristics, wells, safety, surface water treatment operations, maintenance, and water math. Corequisite: WATR 260. Offered: Spring. Three lecture hours.

WATR 298 WATER TREATMENT INTERNSHIP (3)
This course provides students with an opportunity to enlarge and complete their learning experience by spending time in a real working environment. Students must have completed a significant portion of core requirements to be eligible for this course. Graded as Pass/Fail. Offered: Occasionally. Three lecture hours.

WELDING

WELD 111 SHIELDED METAL ARC WELDING (4) (SMAW) I
An introduction to shielded metal arc welding. This course also includes shop safety and personal protective equipment. Standards set by the American Welding Society are utilized in both classroom study and laboratory work. Offered: Occasionally. Two lecture hours, four lab hours.

WELD 112 SHIELDED METAL ARC WELDING (4) (SMAW) II
This course follows WELD 111 and introduces students to entry-level skills and knowledge of welding various joint designs in various welding positions. Students will learn to identify welding symbols and comply with welding procedures. Prerequisite: WELD 111. Offered: Occasionally. Two lecture hours, four lab hours.

WELD 115 OXYACET WELDING, CUTTING AND ALLIED PROCESSES (3)
An introduction to oxy acetylene welding and cutting processes for welders. This course covers the application of cutting processes, the use of protective equipment, the theory of oxy-fuel, air carbon and plasma cutting. Offered: Occasionally. One lecture hour, four lab hours.

WELD 121 GAS TUNGSTEN ARC WELDING (4) (GTAW) I
An introduction to gas tungsten arc welding. Students will cover personal protective equipment, the theory of gas tungsten arc welding (GTAW) and the selection and storage of filler materials and gases. Offered: Occasionally. Two lecture hours, four lab hours.
WELD 122 GAS TUNGSTEN ARC WELDING II
Advanced skills and knowledge of welding with the gas tungsten arc welding process. Topics also include identification and testing of metals and professional ethics. Prerequisite: WELD 121. Offered: Occasionally. Two lecture hours, four lab hours.

WELD 131 GAS METAL AND FLUX CORED ARC WELDING I
An introduction to gas metal arc welding (GMAW) and flux cored arc welding (FCAW) processes. The class will cover personnel protective equipment, materials, theory and selection and handling of shielding gases. Offered: Occasionally. Two lecture hours, four lab hours.

WELD 132 GAS METAL AND FLUX CORED ARC WELDING II
An in-depth study of advanced skills and knowledge of gas metal arc welding (GMAW) and flux cored arc welding (FCAW) processes. Students will learn to identify and correct problems and will study structural shapes, measures and weights. Prerequisite: WELD 131. Offered: Occasionally. Two lecture hours, four lab hours.

WELD 141 INTRODUCTION TO METALLURGY
Basic science of metals for welders. Topics will include welding ferrous and non-ferrous metals along with annealing and tempering processes. Environmental impact and dangers of welding certain types of metals will be covered. Offered: Occasionally. Two lecture hours.

WELD 211 SHIELDED METAL ARC WELDING III
An in-depth study and application of advanced shielded metal arc welding. Students will be able to classify steel and its physical properties. Students will be able to apply hardness tests and work with procedure specifications and mill reports. Prerequisite: WELD 112 with a grade of B or higher or permission. Offered: Occasionally. Two lecture hours, four lab hours.

WELD 221 GAS TUNGSTEN ARC AND GAS METAL ARC WELDING III
An advance study and application gas tungsten and gas metal arc welding process. Students will apply pipe and plate weld procedures according to American Society of Mechanical Engineer, American Welding Society, and American Petroleum Institute codes. Prerequisites: WELD 122 with a grade of B or higher or permission. Offered: Occasionally. One lecture hour, four lab hours.

WELD 261 PIPE FABRICATION
Layout and welding of pipes. In this course students complete a project in which they will be given a blueprint from which they will layout, cut and weld a pipe project. Project will be tested for weld quality and leaks. Prerequisites: WELD 111 and WELD 115 with a grade of B or higher or permission. Offered: Occasionally. One lecture hour, four lab hours.
PRESIDENT’S EXECUTIVE MANAGEMENT TEAM

Cecilia Y.M. Cervantes, Interim President
   Ph.D., University of Colorado
   M.Ed., University of Texas, El Paso
   B.A., University of Texas, El Paso

Deborah Boldt, Executive Director, SFCC Foundation
   M.A., Antioch University
   B.A., Antioch University
   A.A., Miami Dade Community College

Camilla Bustamante, Dean
   Ph.D., University of New Mexico
   M.P.H., University of New Mexico
   M.S., University of New Mexico
   B.S., Northern Arizona University

Rebecca Estrada, Executive Director
   M.A., University of Colorado at Boulder
   B.A., New Mexico State University

Cheryl Fields, Associate Vice President
   Ed.D., Nova Southeastern University
   M.A., Eastern New Mexico University
   B.A., Eastern New Mexico University

Bernadette Jacobs, Dean
   Ph.D., Pacifica Graduate Institute
   M.A., Loyola Marymount University
   B.A., California State University

Jenny Landen, Dean
   M.S.N., University of North Carolina
   B.S.N., University of Alaska

Jeremy Lovato, Chief Information Officer
   B.B.A., Western Governors University

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   M.B.A., College of Santa Fe
   B.A., University of New Mexico

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   B.S.M.E., New Mexico State University

Yasushi Morimoto, Assistant Vice President for Planning and Institutional Effectiveness
   M.A., University of New Mexico
   B.A., Earlham College

Margaret Peters, Vice President for Academic and Student Affairs
   M.A., Claremont Graduate University
   B.A., Texas A&M University

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   M.B.A., University of New Mexico
   B.B.A., University of New Mexico
FULL-TIME FACULTY

School of Arts, Design, and Media Arts
John Boyce, Assistant Professor
  M.F.A., Vermont College of Fine Arts
  B.F.A., California Institute of Art

Ezra Estes, Assistant Professor
  B.A., Eastern New Mexico University

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  M.F.A., Rhode Island School of Design
  B.A., Wesleyan University

James Marshall, Associate Professor
  M.F.A., University of Michigan School of Art

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  M.B.A., College of Santa Fe
  B.B.A., University of New Mexico

Milton Riess, Assistant Professor
  B.A., The Evergreen State College

Laura Rosenfeld, Associate Professor
  M.F.A., San Jose State University
  B.F.A., California College of Arts and Crafts

Peter Taussig, Assistant Professor
  M.A., University of Alberta
  B.A., Concordia University

Diane Tintor, Associate Professor
  M.A., New Mexico State University
  M.A., New Mexico State University
  B.A., State University of New York

William Wilson, Assistant Professor
  M.F.A., University of New Mexico
  B.A., Oberlin College

School of Business, Professional Studies and Education
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  Ph.D., New Mexico State University
  M.A., College of Santa Fe
  B.S., New Mexico State University

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  M.Ed., University of Arizona
  B.S., State University of New York at Oneonta

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  Ph.D., New Mexico State University
  M.A., University of the Americas, Puebla, Mexico
  B.A., Rutger College, Rutgers University

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  M.B.A., St. Bonaventure University
  B.A., Colgate University

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  Ph.D., University of New Mexico
  M.A., Sacred Heart University
  B.A., University of Puerto Rico

School of Fitness Education
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  Ph.D., University of New Mexico
  M.S., Louisiana Tech University
  B.S., Louisiana Tech University

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  B.A., Colorado State University

Enita Pendleton, Assistant Professor
  B.A., University of North Carolina

School of Liberal Arts
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  M.Ed., Columbia University
  M.A., Columbia University
  B.A., Haverford College

Carlos Balladares, Assistant Professor
  M.S.W, New Mexico Highlands University
  B.S.W, New Mexico Highlands University

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  Ph.D., University of New Mexico
  M.A., Loyola Marymount University
  B.A., Loyola Marymount University

Bethany Carson Kilpatric, Assistant Professor
  M.A., St. John's College
  B.A., Haverford College

Liz Cervio, Assistant Professor
  M.S., St. Thomas University
  B.S., University of Minnesota

Carole Chavez Hunt, Assistant Professor
  M.A., University of New Mexico
  B.A., University of New Mexico

Julia Deisler, Associate Professor
  Ph.D., Brown University
  M.A., University of Kansas
  B.A., University of Kansas

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  M.A., St. John's College
  B.A., Georgetown College
Bruno Gagnon, Associate Professor  
Ph.D., University of New Mexico  
M.A., Loyola Marymount University  
B.A., Loyola Marymount University  

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B.A., Lewis and Clark College  

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Ed.M., Harvard University  
M.A., St. John’s College  
B.A., University of New Mexico  
B.A., University of California — Davis  

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Ph.D., Arizona State University  
M.A., University of New Mexico  
B.A., University of New Mexico  

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M.A., University of New Mexico  
B.A., College of Santa Fe  

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B.A., University of New Mexico  

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M.F.A., Vermont College of Fine Arts  
B.A., Wellesley College  

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M.A., University of Northern Colorado  
B.A., Gallaudet University  

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Ph.D., Florida State University  
M.A., Rutgers University  
B.A., Montclair State College  

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M.S.N., University of Phoenix  
B.S.N., Massachusetts College of Pharmacy and Allied Health Sciences  

Gerald Friedman, Assistant Professor  
Ph.D., University of Illinois  
M.S., University of Illinois  
A.B., Princeton University  

Leonard Gannes, Assistant Professor  
Ph.D., Princeton University  
M.S., Princeton University  
B.S., University of California, Davis  

Lucas Gonzales, Assistant Professor  
M.S.N., University of New Mexico  
B.S.N., University of New Mexico  

Janelle Gutierrez, Assistant Professor  
M.S.N., National American University  
B.S.N., National America University  
R.N., Technical Vocational Institute  

Neil Hunter, Assistant Professor  
M.S., Queens University  
B.S., McGill University  

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M.S.N., University of New Mexico  
B.S.N., Pacific Lutheran  
A.D.N., Olympic College  

Miguel Maestas, Assistant Professor  

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A.A.S., Santa Fe Community College  
C.D.A., Dental Assisting National Board  

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M.S., Texas Tech University  
B.S., Texas Tech University  

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B.S.N., University of New Mexico  

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B.S., University of Michigan  

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B.S., New Mexico Highlands University  
A.S., Santa Fe Community College
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   M.E.A., Goddard College
   M.Ed., University of Massachusetts
   B.S., University of Massachusetts

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   M.S., University of Arizona
   B.S., University of Mosul

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   B.S.N., University of New Mexico

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   B.S., Central Michigan University

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   M.A., University of California, Los Angeles
   B.S., California Institute of Technology

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Patrick Mares, Assistant Professor

Shawn Miller, Assistant Professor

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   B.A., University of New Mexico

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   B.S., in Biology, Virginia Tech
   B.S., in Fishery Science, Virginia Tech

Jerry Trujillo, Assistant Professor
   M.B.A., University of Phoenix
   B.A., Wayland Baptist University

Xubi Wilson, Assistant Professor
   B.A., State University of New York at Binghamton

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Michael Lehrer, Computer Lab Coordinator
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Lynne Matthes, ACE Coordinator
Rose Prada, Administrative Assistant
Susan Rathjen, Basic Literacy Coordinator
Dafyd Rawlings, ESL Coordinator
Amanda Rivera de Garcia, ESL Literacy Coordinator
Gayle Torrez, Database Analyst

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Michael Arellano, Bookstore Buyer
Delpha Maunder, Clerk
Felisha Ortiz, Clerk
Mariah Sedillo, Duplicating Technician

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Rebecca Stone, Cashier
Melanie Cebada, Cashier

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AND CONTRACT TRAINING
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Evelyn Gonzales, Administrative Assistant
Amanda Hatherly, Director, Center of Excellence in Green Building and Energy Efficiency, NM Energy Smart Academy
Janet Kerley, Environmental, Health and Safety Instructor
David Markwardt, Professional Development Specialist
Maria Montoya, Administrative Assistant

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Kate Latimer, LPCC, Counselor
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Rafael Alvares-Rey
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Candida, Guevara-Fuentes
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Gilbert Leyba
Ermalinda Miramontes
Humberto Nevarez
Elvia Ochoa
Lesvia Perez
Imelda Quezada
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Dorothy Ray
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Oscar Tovar
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Yolanda Villegas, Custodial

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Niki McKay, Dual Credit Specialist
Jennifer Gurule, Administrative Assistant

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Patrick Mares, Chef-Manager

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Michael Dunn, Line Cook
Dalia Esparza, Cashier
Carol Garcia, Barista
Miguel Nunez, Dishwasher
Dina Ramirez-Loya, Cashier
Arturo Ruiz, Dishwasher
Wildron Sican, Line Cook
Ignacio Soto, Kitchen Supervisor
David Stone, Line Cook

GENERAL SERVICES
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Steve Silva, General Services Clerk

GROUNDS
Malvina Canon, Grounds Maintenance Manager
Francisco Cedeno, Groundskeeper
Gilbert Sanchez, Groundskeeper
Rafael Trevizo, Groundskeeper
Juan Vazquez, Groundskeeper

HIGHER EDUCATION CENTER
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Marjorie Mascarenas, Administrative Assistant

KIDS CAMPUS
Michelle Rosen, Director
Madeline Abeyta, Teacher Assistant
Leona Aguilar, Teacher II
Stephanie Alderete Teacher II
Amelia Barbara Byrne Gonzales, Program Coordinator
Kaleigh Brewer, Teacher II
Lillian Durr, Teacher II
Karlee LaVe, Teacher Assistant
Veronica Loya, Teacher Assistant
Abrianna Montoya, Teacher Assistant
Amanda Montoya, Teacher II
Andrea Ortiz, Teacher Assistant
Eva Ortiz, Teacher Assistant
Ashly Sandoval, Administrative Assistant
Olga Reese, Teacher Assistant
Nicholas Reilly, Teacher Assistant II
Elizabeth Ruiz, Teacher I
Amani, Rogers-Muller, Teacher Assistant
Maren Woods, Teacher Assistant
LIBRARY
Peg Johnson, Library Director
Sarah Hood, Reference and Instruction Librarian
Harriet Meiklejohn, Technical Services Librarian
Brian Romero, Library Assistant
Laura Smith, Collections and Instruction Librarian

MAINTENANCE
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Robert Gott, HVAC Technician
Ronnie Griego, Lead Mechanic
Paul Arellano, Locksmith
Paul Lopez, Painter
Alfonso Padilla, Maintenance Technician
Jerald Sandoval, Electrician
Shane Suina, Maintenance Technician
Orlando Trujillo, HVAC Technician
Mark Valadez, HVAC Technician
Derrick Valerio, Electrician
Joe Zamora, Plumber

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Jennifer Bleyle, Executive Assistant
Emily Drabanski, Staff Writer
Hayley Horowitz, Digital Marketing and Recruitment Specialist
Ben Lauer, Assistant Coordinator for Facilities and Special Events
Antonia Lujan, Main Telephone Operator
Sarah Martinez, Marketing Production Associate
Laura J. Mulry, Assistant Executive Director
Fran Nawrocki, Facilities Coordinator/Events Planner
Dorothy Perez y Piriz, Publications Specialist

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Martin Gutierrez, Database Specialist
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Emily Stern, Diversity and Integrated Learning Coordinator
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Noe Villarreal, Safety Officer

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Cori Bergen, Sr. Director of Network and Systems Administrator
Robert Bond, Applications Administrator
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Mariano Chavez, Systems Technicians
Chris Falance, Helpdesk Specialist
Rod Hasson, Service Desk Specialist
Tricia Kattell, TAACCCT Programmer/DBA
David Keppel, Network Administrator
Erica Keppel, Systems Administrator
John Ketchens, Systems Analyst/Banner Programmer
Mason Kovac, Director, Technology Support
Alex Martinez, Administrative Assistant
Marshall Martinez, Audio Visual Support Technician
Ken McPherson, Web Developer
Jeffrey Montoya, Database Administrator
Ted Polkinghorn, Sr. Director
Richard Rubenstein, Systems Technician
Stevie Smaltz, Senior IT Support Technician
Fine Spirit Routt, Technology Support Specialist
JoAnn Storch, Help Desk Specialist
Charles Thompson, Network Technician
Norbert Utz, Director of Enterprise Application
Mark Wood, Information Systems Analyst

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Rosemarie Garcia, Executive Assistant
Donna Wells, Executive Assistant to the Governing Board

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Jill Carlson, Director of Assessment and Accreditation
Julie Gallegos, Planning and Quality Officer
Barbara Griego, Director of Institutional Research
David Sandoval, Data Analyst
Anthony Ulibarri, Institutional Research Technician
Teruo Yokoyama, Institutional Research Analyst

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Nicole Berezin, Instructional Designer
John Gorman, Instructional Designer

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Doreen Jaramillo, Clerk
Monica Lucero, Technician
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Patrick McCoy, Recycling Clerk
Andrea Mueller, Project Manager and Assistant Campus Planner

PROCUREMENT TECHNICAL ASSISTANCE
Christopher Avery, Temporary Procurement Adviser
Leonard Bean, Procurement Adviser
Tracey Edwards, Administrative Assistant II
Arthur Humphries, Procurement Adviser
Jonnie Loadwick, Procurement Adviser
Elythia McAnarney, Procurement Adviser
Karen Medina, Procurement Adviser
Priscilla Wilson, Procurement Adviser

REGISTRAR
Kathleen Sena, Registrar
Bernadette Gonzales, Assistant Registrar

SAFETY AND SECURITY
Chris Gettler, Supervisor
Camey Barney, Lead Security Officer
Linda Ortiz, Security Officer

SANTA FE SMALL BUSINESS DEVELOPMENT CENTER
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Deborah Collins, Business Adviser
Julianne Gutierrez-Ortiz, Senior Administrative Assistant

SCHOOL OF ARTS, DESIGN, AND MEDIA ARTS
Bernadette Jacobs, Dean
Shalimar Krebbs, Associate Dean
Donna Brownell, Media Arts Technician
Francine Fischer, Woodworking Technician
Elizabeth Hunt, Design Technician
Alison Johnson, Media Arts Technician
Heather Kraman, Administrative Assistant II

SCHOOL OF BUSINESS, PROFESSIONAL STUDIES AND EDUCATION
Camilla Bustamante, Dean
Brooke Gondara, Associate Dean
Geraldine Harris, Administrative Assistant II
Shirley Vialpando, Administrative Assistant I
Dawn Wink, Teacher Education Director

SCHOOL OF FITNESS EDUCATION
Jenny Landen, Dean
Colleen Lynch, Associate Dean
James Bolleter, Aquatics Supervisor
Savannah Bolleter, Reception Desk Clerk
Eric Davis, Lifeguard
Adrienne George, Lifeguard
Cecilia Gutierrez, Reception Desk Clerk
Kristin Gebhart, Lifeguard
Jody Paul Herrera, Lifeguard
Ute Jannsen-Kerr, Director
Miquela Martinez, Fitness Specialist
Bernie Montano, Facility Supervisor
Rose Ortiz, Lifeguard
Alan Prokuski, Lifeguard
Kyra Taylor, Lifeguard
Lynda Trujillo, Administrative Assistant II
James Turner, Wellness Technician
Kenny Valdez, Reception Desk Clerk
Joe Vigil, Reception Desk Clerk

SCHOOL OF LIBERAL ARTS
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Shalimar Krebbs, Associate Dean
Elizabeth Anthony, Administrative Assistant I

SCHOOL OF SCIENCES, HEALTH, ENGINEERING AND MATH
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Colleen Lynch, Associate Dean
Tami Crespin, Senior Administrative Assistant
Sahaj Khalsa, Director of ESMI
Aamna Nayyar, Director of Dental Health
Rebecca Jeffs, Director of Respiratory
Yuri Findlay, Director of Phlebotomy

SCHOOL OF TRADES, ADVANCED TECHNOLOGIES AND SUSTAINABILITY
Camilla Bustamante, Ph.D., Dean
Brooke Gondara, Associate Dean
Katherine Fox Ehler, Hospitality Program Coordinator
Ondine Fraunglass, Biofuels Lab Assistant
Patrick Mares, East Wing Eatery, Chef-Manager
Seiglende Montoya, Administrative Assistant I

SFCTV STATION
Doreen Gallegos, TV Operations Manager
George Marvin, Community TV Programmer
SFCC FOUNDATION
Deborah Boldt, Director of Development
Linda Cassel, Advancement Associate and Art on Campus
Kelly Smith, Advancement Services Manager Database and Fund Development Manager

STUDENT ACCESSIBILITY SERVICES
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Susan Johnson, Case Specialist
Nan Keegan, Case Manager
Lisa Morley, Administrative Assistant

STUDENT DEVELOPMENT
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Maria Eleas, Student Involvement Coordinator
Kathy Romero, Administrative Assistant

STUDENT FINANCIAL AID
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Kelly Durbin, Interim Director
Susan Weaver, Student Employee Program Manager
Meghan McGarrity, Financial Aid Specialist

STUDENT RECRUITMENT
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Daniela Gurule, Counselor

SUN PATH-DOL/TAACCCT
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Kerry Bank, I-Best Faculty
Cheryl Peachey, Site Coordinator
Trisha Kattell, TAACCCT Programmer
Carla Slentz, Program Manager
Margaretmary Woodd, Administrative Assistant

TESTING CENTER
Ellen Roth, Lead Program Specialist
Sandra Brintnall, Program Specialist
Fred Tixier, Testing Technician
Eileen Valdez, Program Specialist

TRiO
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Robert Cillo, Adviser
Kathryn Ugoretz, Learning Specialist
Carmen Valdez, Administrative Assistant II

TUTORING CENTER
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VETERANS RESOURCE CENTER
Greg Scargall, Specialist

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Cheryl Fields, Ph.D., Associate Vice President
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Cahalan Fiddes, Academic Adviser
Marvin Gabaldon, Data Technician
Danielle Gonzales, Manager
Jennifer Gurule, Administrative Assistant I
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Gerard Martinez, Academic Adviser
Emily Powell, Academic Adviser
Melba Ramos, Academic Adviser
Lisa Sharp, Administrative Assistant I
Elisabeth Solis, Enrollment Specialist
Danny Suazo, Academic Adviser

For a current directory, go to www.sfcc.edu.
Academic Year: A school year consisting of summer, fall and spring semesters.

Accreditation: The formal process by which colleges and universities are authorized to award college credit and degrees. SFCC has been accredited by the Higher Learning Commission (HLC) of the North Central Association (NCA) of Colleges and Schools since 1983.

ACCUPLACER: Reading, Sentence Skills (English) and Math evaluations used to determine appropriate course placement for students.

Adult Education: Free courses that prepare students to take the high school equivalency preparation (GED and HiSet) or improve the skills of English as a Second Language learners.

Adviser: A SFCC staff or faculty member who assists students with setting and meeting academic goals.

Articulation: Courses or programs completed at one institution may be used to fulfill requirements at another institution.

Associate Degree (A.A., A.S., A.A.A., A.A.S.): A degree consisting of a minimum of 61 credit hours that is designed for transfer to a bachelor's degree program or to lead the individual directly to employment in a specific career.

Audit: A grade option that reflects a student's enrollment in a course but does not carry course credit or count for enrollment verification; cannot be used to meet pre- or corequisite requirements, and does not reflect competency in a course.

Blended course: A blended course combines face-to-face classroom instruction and online internet-based learning. Typically, 50 percent of the time is in the classroom and 50 percent of the time students work independently on computers.

Certificate: Awarded upon completion of a prescribed series of courses and usually completed in 1-2 years. A certificate indicates skill competency in many technical and career areas.

Challenge Exams: An examination and credit used to demonstrate proficiency in a particular course.

Concentration: An area of emphasis or specialty within a program of study (major).

Corequisite: A course that is required to be taken in combination with another course. Often a lab is the corequisite for a lecture, for example. A student who withdraws from one of a pair of corequisite courses must withdraw from the other as well.

Course Fee (Program Fee): A charge for materials, equipment and supplies for a course, listed in the schedule of classes and the SFCC Catalog.
Course ID: A designation consisting of a 4-letter department abbreviation followed by a 3-digit number. For example ENGL 111, Composition and Rhetoric is English 111.

Course Load: The number of credit hours a student is enrolled in each term.

Credit for Prior Learning: A process by which students may demonstrate proficiency in a particular course, whether or not that proficiency has been gained in an academic setting.

Credit Hour: A unit of measurement for courses. At SFCC, each hour of credit in a lecture class requires a minimum of 750 minutes of instruction per session; each hour of credit in a laboratory-class requires at least 1,500 minutes.

CRN: A six-digit course reference number, assigned to each course in the schedule of classes and used in registration.

Developmental Courses: Courses numbered below 111 that are designed to prepare students for college-level work.

Distance Learning: Course sections offered via the internet. These sections cover the same material and carry the same credit as their in-class counterparts. Separate fees are charged. For details, see the schedule of classes.

Dropping Courses: Removing a student's name from a course roster if the student no longer wishes to attend. Deadlines for dropping courses and receiving a refund are printed in the schedule of classes. No record of the course appears on the student transcript.

Dual Credit: A high school-aged student enrollment program in which eligible high school students can enroll at SFCC and earn both high school and college credit.

Elective: A program credit requirement that allows the student to choose from a variety of approved courses or discipline areas.

Freshman: A student who has completed fewer than 30 credits at SFCC.

Full-time status: A schedule of 12 or more credit hours per term.

GED: General Educational Development diploma; may be considered equivalent to high school diploma.

General Education Courses: Courses that may be used to satisfy the five general education categories: communications, laboratory sciences, math, Social and Behavioral Sciences, and humanities. These categories form the common basis of all associate degrees.

Grade: letter grade of (A, B, C, D or F) that is used in calculating the grade point average and recommended for courses in a degree plan.

Grade Point Average (GPA): An educational standard computed by multiplying the number of credit hours of a course by the points assigned to the course grade, then dividing by the total number of hours. Point values are: A=4, B=3, C=2, D=1, F=0.

Graduation: Official confirmation of the completion of a certificate or degree program. Graduation is dependent on the approved completion of all program and institutional graduation requirements and is approved by the Office of the Registrar.

In-State and In-District Resident: Applies to students who have established New Mexico residency for tuition purposes for 12 consecutive months and reside within the college's taxing district.

In-State but Out-of-District Resident: Applies to students who have established New Mexico residency for tuition purposes and reside outside the college's taxing district.

Learning Communities: Learning communities offer students integrated curricula that emphasize connections among students, faculty and disciplines.

Linked Courses: Students enroll in two or more classes tied together as corequisites. Two types of linked classes include accelerated or interdisciplinary classes.

Major: A specific program of study consisting of a specific group of courses designed to provide intensive education or training in a specialized area and leading to a certificate and/or associate degree.

MySFCC.edu: is the college's web portal, an online information resource for students, faculty and staff. By logging in to my.sfcc.edu you can catch up on the latest SFCC news, register for classes, make a payment on your account, get course information and more. Every person enrolled in an SFCC class is given a my.sfcc.edu account.

Non-Degree Student: A student who has not yet chosen a major or who does not wish to earn a certificate or degree.

NR: Shown on your transcript and indicates that a faculty has Not Reported the grade for the term.
Part-time: A schedule of fewer than 12 credit hours per term.

Permission to enroll: The special approval for a student to enter a restricted course and/or to waive a course pre- or corequisite by an academic adviser or dean.

PIN: A student's personal identification number used to access SFCC's secure online registration system and STARS.

Plagiarism: Presenting someone else's work (whether it consists of words, research, images or other work) as your own without proper acknowledgment of the true author. Plagiarism is a serious violation of academic rules and carries consequences ranging from failure to expulsion from a course.

Prerequisite: A specific requirement that must be successfully completed before a student may enroll in a course.

Program: See major.

R: Denotes Thursday in the schedule of classes and online registration system.

Registration: The process of signing up for courses.

Registration Fee: A processing fee assessed to each student for the semester.

Repeating courses: A course may be repeated up to three times, with each enrollment appearing on the transcript.

S: Denotes Saturday in the schedule of classes and online registration system.

Schedule: A printed list of classes to be offered in the upcoming semester that includes CRN, day/time and location, and information about admission, payments and registration.

Scholarships: A form of financial assistance that covers the cost of tuition and/or books and does not have to be repaid. Scholarships may be awarded on the bases of merit and/or need.

Snow Day: Under extreme weather conditions, SFCC may close or operate under an abbreviated schedule, with classes beginning at 10 a.m. Information is announced on a weather watchline, 505-428-1716 and at www.sfcc.edu.

Substitution: An approved exchange of courses and credit(s) because the competencies and/or learning objectives of the substituting course are comparable, but not equivalent, to those of the required course. Substitution in the requirements of a degree plan must be approved by the department chair or dean.

Topics Course: Topic courses complement SFCC's regular course offerings in a subject area or program. They may be of specific, short-term interest and are generally not applied to degree programs.

Transcript: An official educational record of a student's enrollment at a college, showing courses attempted, completed, final grades and GPA.

Transfer credits: Credits for courses taken at another institution and counted toward a SFCC certificate or degree.

Tuition: A charge of courses based on course type, credit hours, and the student's in-state, in-district classification.

U: Denotes Sunday in the schedule of classes.

Waiver: An approved exemption from a course because the competencies and/or learning objectives of the course already have been attained due to prior training, educational or work experience.

Web-blended course: Include a predetermined number of face-to-face meetings in addition to required online coursework.

Withdrawal: Dropping at any point in the semester a course or all courses. Withdrawals are represented by a “W” on the student transcript and do not qualify for a tuition refund.
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