

2007–2009 Catalog

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(505) 224-5301

CNM Workforce Training Center

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cnm.edu

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GLOSSARY,
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About this Catalog

The **CNM Catalog** is a student's official guide to programs, courses and policies of Central New Mexico Community College (CNM).

The **CNM Catalog** is a summary of information of interest to students; it is not a complete statement of programs and policies. Other important information is published in the **Schedule of Classes**; the **Financial Aid and Scholarship Guidebook**; and handbooks published by academic divisions and other offices.

Students are responsible for complying with the provisions of these documents. Not all programs and classes listed in the **CNM Catalog** are offered at all campuses or every term. If fewer than 12 students enroll in a course, the course may be cancelled. Not all courses will be offered every term.

Information in the **CNM Catalog** is subject to change. This **CNM Catalog** is available in alternative formats from the Special Services office at Main Campus. It is also published on the CNM home page, cnm.edu.

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About the Cover

A special thanks to those involved with this publication is on page 408.

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About CNM

Thank you for your interest in Central New Mexico Community College (CNM)—and welcome! Now in its fourth decade, CNM is a regionally accredited community college offering courses in a variety of occupational, college transfer and adult/developmental education subjects.

For 2007–09, credit programs at CNM include:

- certificates in 53 business, health, technologies and trades occupations as well as short-term career and technical courses;
- associate degrees in 45 occupational fields and arts and sciences;
- college transfer courses in pre-management, engineering, other occupational subjects and 28 arts and sciences disciplines transferable for freshman and sophomore credit at four-year institutions; and
- remedial, preparatory and developmental classes for students preparing to meet admission requirements at CNM or other institutions.

CNM also offers non-credit programs including:

- adult education basic skills (including English as a second language and GED exam prep);
- customized training and assistance to business through the CNM Workforce Training Center, (505) 224-5200; and
- workshops and support for learners over 50 through the Emeritus Academy, (505) 224-5506.

CNM also offers enrollment opportunities for high-school-aged students (see page 12). An increasing number of credit courses are offered in innovative distance-learning formats designed to overcome barriers of time or space (see page 45).

CNM is accredited to grant certificates and associate of applied science, associate of arts and associate of science degrees by The Higher Learning Commission, a commission of the North Central Association; 30 North LaSalle Street, Suite 2400, Chicago, Illinois 60602-2504; telephone (800) 621-7440; www.hlcommission.org.

History

Authorized by the New Mexico Legislature in 1963, CNM was approved by district voters in 1964 to provide adults with skills necessary for success in the world of work. Job training programs in business, health, technologies and trades areas emphasize up-to-date, hands-on skills needed by local employers. Internships, co-op programs and apprenticeships are also available.

CNM was accredited by the North Central Association of Colleges and Schools in 1978. Degree-granting power was approved for CNM by Legislature in 1986, beginning the transition to a community college. By the late 1980's, liberal arts had become CNM's fastest growing component and an increasingly important part of occupational instruction and the University of New Mexico was offering all its remedial courses through CNM.

Until 1979, CNM was part of the Albuquerque Public Schools (APS), with the APS Board

of Education doubling as the CNM Governing Board. The first election for an independent CNM board was held in September 1979. Board members are elected by voters in seven geographical districts within the College district, which includes all of Bernalillo County and part of Sandoval County.

CNM Today

With an enrollment of about 26,000, CNM (formerly Albuquerque Technical Vocational Institute or TVI) is the second largest postsecondary institution in New Mexico. The Main Campus occupies 60 acres near downtown Albuquerque and the 42-acre Joseph M. Montoya Campus is in the Northeast Heights. Classes also are offered at our South Valley Campus, CNM Westside and the CNM Workforce Training Center as well as the University of New Mexico and various other off-campus sites.

CNM's classrooms, libraries and laboratories are modern and comfortable. Each student has access to state-of-the-art equipment, especially computers. CNM programs, facilities and services are accessible to the disabled.

Advisory committees with representatives from local businesses help ensure that CNM students acquire the skills needed for success on the job and CNM helps graduates find jobs. CNM's graduate placement for 2004–05 was 96 percent. (See chart on page 6.) The College also cooperates with other two- and four-year schools on course and program articulation and student transfer.



**Central New Mexico
Community College**

C N M — F I N D Y O U R C O U R S E

PEOPLE

Diversity
Integrity
Respect
Teamwork

STUDENTS

Achievement
Communication
Learning
Opportunity

COMMUNITY

Accountability
Economic Development
Leadership
Service

VISION

Creating Pathways for Student's Futures

MISSION

Dynamic Education for the Community

Funding for CNM programs and most construction and equipment comes from a property tax levy in the College's service district and annual appropriations by the New Mexico Legislature. Tuition and fees are moderate and financial aid is available to those who qualify. Private contributions through the CNM Foundation are increasing every year.

CNM's academic year is divided into three terms: fall (generally begins in August), spring (generally begins in January) and summer (generally begins in May). Short sessions and nontraditional schedules, including weekend classes, are available for many programs and courses.

Assessment

CNM, in compliance with The Higher Learning Commission, regularly conducts assessment of its instruction. Assessment of student academic achievement is an effort in each of the academic divisions, which evaluate their success in fulfilling both course and program objectives. Toward this end, students may be requested to participate in forums, portfolios, testing or surveys that help the divisions measure student success and satisfaction.

General Education

CNM provides basic, career, technical and general education for a population that includes a broad spectrum of ages, cultural backgrounds and intellectual abilities. It is committed to general education and related courses as an integral part of certificate and associate degree programs. The general education courses include mathematics, communication skills, social and natural sciences, humanities, foreign languages, fine arts and InformationTechnology 1010.

In career and technical certificate programs, related education courses cover competencies in communication, math and human relations to better prepare students for the world of work.

In associate degree programs, students are required to complete a minimum of 15 semester credit hours of general education in addition to courses in their major discipline. The general education courses in the transfer liberal arts degree reflect the common requirements of the state's six universities and approximate the universities' core curriculum in the freshman and sophomore sequence.

Student Learning Outcomes

Core Competencies

CNM has identified five core competencies that all CNM associate degree graduates will demonstrate upon completion of a program of study at CNM. These competencies represent the most deeply held values of the College. They help ensure that our graduates will be informed and committed citizens, valued employees and fully prepared transfer students.

Life Skills: Student's personal behavior will demonstrate the ability to make reasoned judgments, to be responsible for commitments and to understand the viewpoints of others. This includes professionalism, work ethic and citizenship.

Technology: Students will understand the limits, problems and possibilities associated with the use of technology and will have the tools necessary to evaluate and learn new technologies as they become available. This includes the ability to use computer-based technology to communicate, solve problems and acquire information.

Interpersonal Skills/Teamwork: Students will work and interact with others at a personal, professional and global level, demonstrating respect for individual and cultural differences while practicing civility, honesty and personal responsibility.

Critical Thinking: Students will demonstrate the ability to engage in the process of defining tasks and evaluating problems through the examination of information, application of computation skills and reflection on ideas for the purpose of reaching decisions.

Communication: Students will read, write, listen and use verbal skills to organize and communicate ideas and information in personal and group settings.

Exit Competencies

All programs of study at CNM have identified exit competencies that graduates will demonstrate upon completion of their programs of study. These competencies are consistent with employer expectations in the workplace. Exit competencies for each program are located at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>

Together, the exit competencies and core competencies will ensure that CNM graduates demonstrate the necessary knowledge, skills and behaviors to be contributors to the workforce and society. These competencies represent an assurance to students and employers that programs are providing quality teaching and learning experiences at CNM.

Graduate Employment

Data for 2005-06

In addition to tracking the graduate employment data shown in the charts on these pages, the Job Connection Center (www.cnm.edu/depts/jcc) provides a variety of employment services and support to CNM students and graduates, including:

- Online job listings and leads
- Résumé and interview assistance
- Job search workshops
- Job market and job search materials
- On-campus recruitment activities
- Access to computers, the Internet and fax machine in support of job search activities
- Help with interview attire and grooming
- Job success consultation

Services are free and graduates have lifetime access.

The Job Connection Center provides a variety of services to employers, including job advertising, student/graduate referrals, on-campus recruiting opportunities and instructional/faculty contacts. Services are free. Employers should contact the Job Connection Center by calling (505) 224-3060.

The Job Connection Center also provides institutional and community services, including class presentations and collecting and publishing CNM graduate job placement statistics.

About the Graduate Employment Data

For more information and/or explanation about the graduate employment data on these pages, contact the Job Connection Center.

For local and state employment and wage trends, go to www.dol.state.nm.us/eds/index.html. For national employment and wage trends go to <http://acinet.org>

Programs not listed have no graduates for this reporting cycle.

CONTACT INFORMATION

Main Campus: (505) 224-3060, www.cnm.edu/depts/jcc

	Total Graduates	Continuing Education	Percent Employed in Training-Related Job ¹	Hourly Wage/Range ²
Applied Technologies				
Air Conditioning, Heating & Refrigeration, Certificate	34	9	92%	\$14.00 - 20.00
Architectural/Engineering Drafting Technology, Certificate	13	9	100%	11.50
Architectural/Engineering Drafting Technology, Degree	8	1	100%	11.50 - 15.00
Automotive Technology, Certificate	31	6	92%	7.75 - 14.99
Carpentry, Certificate	9	6	N/A	N/A
Construction Management Technology, Degree	11	3	100%	11.00 - 45.00
Construction Technology, Degree	14	3	100%	10.02 - 15.00
Diesel Equipment Technology, Certificate	13	2	100%	8.00 - 15.00
Electrical Trades, Certificate	47	16	100%	9.50 - 23.00
Electronics Engineering Technology, Degree (program no longer offered)	6	1	100%	15.00 - 30.00
Electronics Technology, Certificate	36	15	100%	10.00 - 30.00
Electronics Technology, Degree	18	1	100%	12.00 - 32.00
Engineering Design Technology, Degree	2	0	100%	12.00
Film Crew Technician, Certificate	6	0	100%	Not Reported
Geographic Information Technology, Certificate	10	0	100%	14.50 - 24.04
Geographic Information Technology, Degree	11	0	100%	14.00 - 20.19
Landscaping, Certificate	5	0	100%	8.00
Machine Tool Technology, Certificate	20	6	89%	10.50 - 17.97
Manufacturing Technology, Certificate	3	0	0%	N/A
Manufacturing Technology, Degree	4	0	75%	17.00 - 21.00
Mechanical Technology, Degree	9	0	100%	14.88 - 20.50
Metals Technology, Degree	26	5	100%	12.00 - 26.44
Photonics Technology, Certificate	7	4	100%	15.50
Photonics Technology, Degree	6	0	100%	12.00 - 15.00
Plumbing, Certificate	39	13	100%	11.00 - 22.00
Residential Wiring, Certificate	53	24	95%	9.50 - 23.00
Transportation Technology, Degree	9	1	100%	9.34 - 21.63
Truck Driving, Certificate	47	1	100%	9.00 - 31.25
Welding, Certificate	34	7	95%	11.00 - 19.00
TOTAL APPLIED TECHNOLOGIES	531	133	97%	N/A
Business & Information Technology				
Accounting, Certificate	32	10	100%	8.50 - 22.11
Accounting, Degree	40	7	100%	8.50 - 19.23
Baking, Certificate	36	20	100%	7.50 - 20.00
Bookkeeping, Certificate	14	4	100%	10.50 - 16.67
Business Administration, Certificate	24	2	100%	11.97 - 18.67
Business Administration, Degree	60	8	94%	10.77 - 18.67

	Total Graduates	Continuing Education	Percent Employed in Training-Related Job ¹	Hourly Wage/Range ²
Business Graphics, Certificate	4	1	100%	\$15.00
Business Graphics, Degree	15	3	86%	10.00 - 16.47
Computer Information Systems, Certificate	12	4	100%	10.67
Computer Information Systems, Degree	29	11	83%	10.67 - 12.08
Computing Technology, Certificate	13	4	100%	10.00 - 21.63
Computing Technology, Degree	23	4	100%	21.63 - 37.00
Court Reporting, Certificate	4	1	100%	45.00
Culinary Arts, Degree	24	3	93%	6.75 - 14.00
E-Commerce, Certificate (program no longer offered)	2	0	100%	Not Reported
E-Commerce, Degree (program no longer offered)	2	0	100%	Not Reported
Financial Services, Certificate	9	1	80%	12.50 - 12.96
Financial Services, Degree	18	2	83%	12.50 - 12.96
Food Service Management, Certificate	19	11	100%	9.25 - 14.00
Health Information Technology, Degree	8	0	100%	10.30 - 12.67
Hospitality & Tourism, Certificate	3	1	100%	8.69 - 14.42
Hospitality & Tourism, Degree	8	1	100%	8.69 - 14.42
International Business, Certificate	0	0	N/A	N/A
International Business, Degree (changed to certificate program)	1	0	100%	13.00
Judicial Studies, Certificate	9	1	100%	9.35 - 16.00
Medical Coding, Certificate	14	5	88%	10.30 - 19.00
Medical Office Assistant, Certificate	17	6	67%	8.00 - 10.50
Networking Technology, Certificate (changed to a concentration)	9	5	100%	15.50 - 26.50
Networking Technology, Degree (changed to a concentration)	34	5	100%	11.00 - 25.00
Office Administration, Certificate (program changed to Office Technology)	25	1	100%	10.25 - 17.02
Office Administration, Degree (program changed to Office Technology)	36	1	100%	8.10 - 19.00
Office Assistant, Certificate	6	3	100%	12.50
Paralegal Studies, Degree	44	6	92%	10.00 - 30.00
Pre-Management, Degree	84	52	94%	13.00 - 19.23
Project Management Technology, Degree	4	1	100%	Not Reported
Professional Cooking, Certificate	28	14	89%	10.00 - 17.31
Technology Management & Training, Degree	1	0	100%	16.00
Web Technology, Certificate	5	0	100%	12.50
Web Technology, Degree	4	0	100%	Not Reported
TOTAL BUSINESS & INFORMATION TECHNOLOGY	720	198	96%	N/A

Communication, Humanities & Social Sciences

	Total Graduates	Continuing Education	Percent Employed in Training-Related Job ¹	Hourly Wage/Range ²
Child, Youth & Family Development, Certificate (program no longer offered)	4	1	100%	Not Reported
Child, Youth & Family Development, Degree	25	7	100%	\$11.04 - 12.00
Elementary Education, Degree	32	16	91%	9.50 - 14.00
Fine Arts, Degree	3	2	N/A	N/A
TOTAL COMMUNICATION, HUMANITIES & SOCIAL SCIENCES	64	26	96%	N/A

Health, Wellness & Public Safety

	Total Graduates	Continuing Education	Percent Employed in Training-Related Job ¹	Hourly Wage/Range ²
Biotechnology, Degree	11	0	71%	12.00
Clinical Laboratory Assistant, Certificate	9	2	100%	11.47 - 13.00
Cosmetology, Degree	19	1	100%	6.25 - 20.00
Criminal Justice, Degree	23	4	75%	7.75 - 10.24
Dental Assisting, Certificate	22	3	100%	10.00 - 16.00
Diagnostic Medical Sonography, Degree	15	1	91%	22.50 - 34.50
Environmental Safety & Health, Degree	10	1	100%	8.59 - 25.20
Fire Science, Degree	14	1	100%	29.00
Fitness Technician, Certificate	13	0	88%	8.00 - 45.00
Health Unit Coordinator, Certificate	33	3	100%	8.00 - 12.00
Medical Laboratory Technician, Degree	9	1	100%	12.00 - 16.82
Nursing, Degree	175	1	100%	19.26 - 35.00
Nursing Assistant, Certificate	61	23	92%	8.00 - 15.00
Pharmacy Technician, Certificate	32	1	94%	8.75 - 12.47
Phlebotomy, Certificate	49	19	100%	8.40 - 13.00
Practical Nursing, Certificate	0	0	N/A	N/A
Radiologic Technology, Degree	21	0	93%	18.50 - 25.59
Recreation & Leisure, Certificate (program no longer offered)	2	0	100%	Not Reported
Recreation & Leisure, Degree (program no longer offered)	4	1	100%	Not Reported
Respiratory Therapy, Degree	20	0	100%	15.20 - 24.00
Surgical Technology, Certificate	14	2	100%	13.00 - 15.50
Veterinary Technology, Degree	3	0	100%	12.50 - 13.50
TOTAL HEALTH, WELLNESS & PUBLIC SAFETY	559	64	97%	N/A

Mathematics, Science & Engineering

Pre-Engineering, Degree (program changed to Engineering)	8	5	N/A	N/A
TOTAL MATHEMATICS, SCIENCE & ENGINEERING	8	5	N/A	N/A
TOTALS	1882	426	97%	N/A

1. Excludes those not located, not seeking training-related job, continuing school, or serving in military

2. Not necessarily entry-level wages; only includes wages whereby the acquisition of a degree/certificate resulted in a training related position or promotion. Not all graduates report wages.

New programs not listed have no graduates for this reporting cycle.

2007 – 2009 Academic Calendar

Fall Term 2007

First day of instruction.....	August 27
Last day to register, change grading options and withdraw	See Schedule of Classes
Labor Day Holiday (no classes; offices closed).....	September 3
Midterm.....	October 16
Thanksgiving Holiday.....	November 22-25
Last day of the term (may vary; consult division)	December 13
Fall grades available on STARS and online.....	See Schedule of Classes

Spring Term 2008

First day of instruction.....	January 14
Last day to register, change grading options and withdraw	See Schedule of Classes
Martin Luther King, Jr. Day Holiday (no classes; offices closed).....	January 21
President's Day Holiday (no classes; offices open)	February 18
Midterm.....	March 6
Graduation Commencement Ceremony (tentative).....	April 25
Last day of the term (may vary; consult division)	May 1
Spring grades available on STARS and online.....	See Schedule of Classes

Summer Term 2008

First day of instruction.....	May 19
Last day to register, change grading options and withdraw	See Schedule of Classes
Memorial Day Holiday (no classes; offices closed).....	May 26
Midterm.....	June 27
Independence Day Holiday (no classes; offices closed).....	July 4-6
Last day of the term	August 10
Summer grades available on STARS and online.....	See Schedule of Classes

Fall Term 2008

First day of instruction.....	September 2
Last day to register, change grading options and withdraw	See Schedule of Classes
Midterm.....	October 21
Thanksgiving Holiday.....	November 27-30
Last day of the term (may vary; consult division)	December 18
Fall grades available on STARS and online	See Schedule of Classes

Spring Term 2009

First day of instruction.....	January 12
Last day to register, change grading options and withdraw	See Schedule of Classes
Martin Luther King, Jr. Day Holiday (no classes; offices closed).....	January 19
President's Day Holiday (no classes; offices open)	February 16
Midterm.....	March 5
Graduation Commencement Ceremony (tentative)	April 24
Last day of the term (may vary; consult division)	April 30
Spring grades available on STARS and online.....	See Schedule of Classes

Summer Term 2009

First day of instruction.....	May 18
Last day to register, change grading options and withdraw	See Schedule of Classes
Memorial Day Holiday (no classes; offices closed).....	May 25
Midterm.....	June 26
Independence Day Holiday (no classes; offices closed).....	July 3-5
Last day of the term	August 9
Summer grades available on STARS and online.....	See Schedule of Classes

Getting Started

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Find your course.

le#.net

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vector-based

nuclear medicine

Pharmacology

creativity

Admission

Admission is the process of applying and being accepted to Central New Mexico Community College (CNM). Registration is the process of selecting courses, receiving and paying for a class schedule and completing enrollment at CNM. The following requirements and procedures do not apply to students taking non-credit classes.

CNM has an open admission policy that provides individuals the opportunity to enroll in the College's certificate or degree programs as well as individual courses. Students are considered for admission to CNM without regard to gender, race, color, national origin, religion, age, disability, sexual orientation or marital status. However, individuals may be denied admission to CNM, enrollment in courses and/or programs and participation in certain CNM sponsored activities if it is determined that such access is likely to pose a serious threat to the safety of the applicant and/or members of the CNM community. Such determination would be made on a case by case basis by a review board under the guidance of the dean of students.

CNM's academic year is divided into three terms that usually begin in August, January and May. Students are urged to apply for admission at least two months before registration begins and may apply for any term up to one year in advance.

Most full-time students attend school year-round until they finish their programs. In most programs, it is possible to take a term off, if necessary. However, students who interrupt their programs may not be able to resume their studies at the time they want, because classes they need may not be offered every term. An interruption in enrollment may also mean a change in program and graduation requirements upon the student's return.

General Admission Requirements

Any person seeking admission to CNM must meet one of the following criteria:

- be at least 18 years of age; or
- have a high school diploma from a U.S. high school* or foreign high school; or
- have a General Educational Development (GED) diploma; or
- have completed the requirements of a home-based school program; or
- qualify for one of CNM's High School-Aged Student Enrollment programs (see page 12).

Note: CNM does not issue I-20's (student visas) for international students to attend. Individuals in the United States on approved visas or other statuses may be eligible to attend CNM. Eligibility is based on the visa or status type and expiration date. For more information, please contact the Admissions Office.

**The high school must be recognized by the state department of education in the institution's home state or by a regional accrediting agency approved by the New Mexico State Board of Education.*

Enrolling at CNM is as easy as A, B, C! Below is a quick reference guide to CNM's enrollment process for beginning students. Complete enrollment information and more can be found in the following sections of this catalog.

Be Admitted

- Apply online at cnm.edu or submit admissions form (All students are assigned a CNM e-mail account to access CNM PASSPORT, our College-wide communication system)
- Take the Accuplacer placement exams or provide official ACT or SAT scores
- Meet with an academic advisor
- Complete the online New Student Orientation

Register for Classes

- Receive information on registration
- Obtain a **Schedule of Classes**
- Plan your schedule
- Register for classes online or on STARS
- Pay tuition and fees

Before Attending Classes

- Obtain your student ID card
- Go to cnm.edu and click on CNM PASSPORT to begin using CNM's communication system.
- Purchase textbooks
- Make arrangements for parking

Enrollment Options

Enrollment Status

A student's enrollment status is determined by the student's primary goal for taking courses at CNM. Admission representatives and academic advisors are available to assist students with identifying and/or meeting their educational goals.

Non-Degree Status: Those who do not want to earn a degree or certificate or have not yet chosen a major (degree or certificate program). Non-degree students may request to change to certificate/degree status and apply credits earned in non-degree status by completing a Declare a Major form. Non-degree students are eligible to receive division-issued Skill Sets (see below).

Note: Non-degree status will not satisfy eligibility requirements for financial aid, veterans' educational benefits or other assistance.

Certificate/Degree Status: Those who have met the program entrance requirements listed on page 11 and have officially declared the major (program of study) from which they plan to earn a certificate or degree from CNM.

Certificates, Degrees and Skill Sets

CNM offers the following types of certificates and degree programs (see page 56 for a complete listing):

- **Certificate:** A certificate program prepares students to enter skilled or paraprofessional occupations or to upgrade workplace skills and knowledge.
- **Associate of Applied Science (AAS) Degree:** An AAS degree program prepares students to enter either skilled or paraprofessional occupations or to upgrade workplace skills and knowledge. An AAS program is not intended to transfer to bachelor's degree programs, although certain courses may be accepted at some institutions.
- **Associate of Arts (AA) Degree:** An AA degree program is designed for transfer into a bachelor's degree program in arts and sciences, social or behavioral sciences or a professional field with such disciplines as its base.
- **Associate of Science (AS) Degree:** An AS degree program is designed for transfer into a bachelor's degree program in a technical, medical or professional field with such disciplines as its base.
- **Skill Set:** A document issued by an academic division upon successful completion of a combination of approved courses that provide specific skills.

Program Entrance Requirements

Any person wanting to enter into a CNM certificate and/or degree program must meet one of the following criteria:

- have a high school diploma from a U.S. high school (*Note: The high school must be recognized by the state department of education in the student's home state or by a regional accrediting agency approved by the New Mexico State Board of Education*); or

- have a General Educational Development (GED) diploma; or
- have an associate, baccalaureate or higher degree from a regionally accredited post-secondary institution in the United States; or
- have, on file at CNM, Accuplacer, ACT (English, math and reading) or SAT (verbal and math) placement scores dated within the last 5 years.

Note: The above-listed criteria may be different from that used to establish financial aid eligibility. Some programs have additional requirements (see programs of study section, page 50).

The Admission Process

1. Submit Admission Form

Admission Forms are available online (cnm.edu) and in the Admissions Office at all CNM campuses.

New Students (beginning freshmen): Any student who has never attended a college or university, including CNM in a certificate/degree or non-degree status must complete an Admissions Form.

Returning Students: Any student who previously attended CNM in a certificate/degree or non-degree status and has not been enrolled for three or more terms must complete a new Admissions Form.

Transfer Students: Any student who has attended a college or university, but has not attended CNM in a certificate/degree or non-degree status must complete an Admissions Form.

Transfer students are not required to submit official transcripts for admission purposes. Students who want to transfer credits earned at other institutions or who need to provide proof of meeting a course prerequisite, must have official transcripts sent to the CNM Records Office (see page 12).

Note: Students wanting to apply for financial aid, should access financial aid information and forms from CNM's website (cnm.edu) or visit the Financial Aid Office as soon as possible in the admission process. All students are assigned a CNM e-mail account to access CNM PASSPORT, our College-wide communication system. For more information visit cnm.edu.

2. Take the Accuplacer placement exams or provide official ACT/SAT scores taken within the last five years

Prerequisites are requirements that must be met prior to registering for many courses. They may be met with approved scores on placement exams—Accuplacer, ACT, SAT, by transfer of credit from another institution, or by successful completion of a specific CNM course.

Accuplacer is a computer adaptive test used to assess skills in reading, English and mathematics. CNM uses this test to help students plan an appropriate schedule of coursework at CNM and meet course prerequisites. The test is not timed, but students should allow 1 1/2 to 2 hours to complete the set of exams. Accuplacer is available at any campus free of charge. Current photo ID is required to take the test. Practice exams are available at all Assessment Offices and online at cnm.edu. Students may be exempt from

Accuplacer testing if they:

- hold an associate degree or higher from an institution in the United States (these students may take courses for which ENG 1101 and RDG 0950 are prerequisites); or
- are non-degree students registering for less than six credit hours per term and not enrolling in ENG or MATH courses; or
- can provide proof of successful completion of previous college-level math and/or English courses.

Special exams for advanced placement into some Biology and Spanish classes are also available.

Biology Placement Exam

The Biology Placement Exam, is intended for students with significant prior experience in chemistry and biology. Passing the exam may allow a student to enroll in Biology 2110/2192 and/or Biology 2310/2392 without taking the Biology 1410/1492 and Chemistry 1410/1492 prerequisites. A grade of "B" or better in high school biology and chemistry within the last three years or significant background experience in these two areas is the suggested minimum preparation. Course placement based on the Biology Placement Exam must be approved by the Division of Math Science and Engineering.

Spanish Placement Exam

The Spanish Placement Exam, is used to determine course placement depending on the skill level of the student.

3. Meet with an academic advisor

Students should meet with an academic advisor (see page 26) to discuss program selection and/or course placement.

4. Complete a New Student Orientation

Orientation is mandatory for all first time college students. Its purpose is to help new students make the transition to CNM. Students may attend an in-person orientation which is held before the beginning of each term or they may view CNM's online orientation at cnm.edu. For more information on orientation call (505) 224-3182.

To Register for classes see *The Registration Process*, page 16.

High School-Aged Student Enrollment Programs and Articulated Credit

High School-Aged Student Enrollment Programs

CNM's three High School-Aged Student Enrollment Programs each provide qualified high school-aged students who reside in CNM's service area the opportunity to enroll in college classes at CNM. Credits earned may be applied toward a CNM certificate and/or degree and most are transferable to other colleges. Classes are taught by CNM faculty on CNM campuses, through distance learning or at an off-site location. Students enrolled in any of these programs are subject to all CNM policies and regulations. Information on the requirements and enrollment process for these programs is available at any Admissions Office, online at cnm.edu or from School Relations Office at (505) 224-4238 or hsprograms@cnm.edu.

Dual Credit provides high school sophomores, juniors and seniors who attend a public high school (with whom CNM has a Dual Credit agreement) and qualify for New Mexico in-state tuition status, the opportunity to take college courses for which they will simultaneously earn both college credit and high school elective credit. Students should see their high school counselor for Dual Credit information.

- Dual Credit students are often able to complete a college certificate or degree more quickly because they start college while in high school.
- Dual Credit students may only enroll in courses numbered 1000 and above.
- Dual Credit students may enroll in a maximum of 12 credits per term.
- Dual Credit students have their registration and tuition fees waived. (The student pays for any additional course fees and textbooks.)
- Dual Credit admission and registration can be processed online and at any CNM campus.

College and Career Bound provides high school sophomores, juniors and seniors who attend a private school or a public high school, or are currently home-schooled students and at least 16 years of age, the opportunity to earn college credit.

- College and Career Bound students are often able to complete a college certificate or degree more quickly and with less expense because they start college while in high school or home school.
- College and Career Bound students must pay all tuition and fees.
- College and Career Bound students may only enroll in courses numbered 0900 and above.
- College and Career Bound students may enroll in a maximum of 12 credits per term.
- College and Career Bound admission and registration can be processed online and at any CNM campus.

Drop-In provides those 16 or 17 years of age, who are no longer actively enrolled in high school and are released from compulsory education, the opportunity to continue their education at CNM.

- While Drop-In students must pay all tuition and fees, a special Drop-In scholarship is available to help Drop-In students with their educational costs.

- Drop-In is a great opportunity for students to continue their education, earn a certificate or degree and/or enter a career path.
- Drop-In admission can be processed at any CNM campus.

Articulated "Banked" Credit

High school students may deposit credit in the CNM "Credit Bank" when earning a B or better in high school courses that have been articulated with CNM courses. These classes are taught by high school faculty at the high school and have the same exit competencies as the CNM course. These "banked" credits can fulfill prerequisite requirements for classes in the student's program of study. Once a student has successfully completed a course at CNM, through Dual Credit or as an incoming freshman, he/she can petition to have the "banked" credit added to his CNM transcript at no cost.

The articulated credit courses are approved through a written agreement with area school districts. CNM currently has articulation agreements for specific classes with Albuquerque Public Schools (APS), Bernalillo, Los Lunas, Rio Rancho, Belen, Cuba and Santa Fe. Students should contact their high school counselor or curriculum assistant principal for more information. Additional information is available at cnm.edu, hsprograms@cnm.edu or by calling the School Relations Office at (505) 224-3327.

Transfer and Other Credit

Transfer Credit

Credits earned at other postsecondary institutions may be transferred and applied toward program requirements in accordance with the following guidelines:

- An official transcript from each institution attended must be sent directly to the CNM Records Office for evaluation.
- Credit for arts and sciences courses earned at regionally accredited postsecondary institutions will be evaluated automatically upon receipt of the official transcript (for admitted and currently enrolled students only). Courses with D or better grades earned at public New Mexico institutions will be considered for transfer credit; courses from institutions outside New Mexico and private institutions in New Mexico must have C or better grades to be considered for transfer credit.
- To receive transfer credit for career and technical courses, the student must request that the CNM's Records Office refer the transcript(s) to the appropriate academic division for review. An interview and/or demonstration of competence may be required before the decision regarding credit is made. Demonstration of competence is required for all transfer credit more than 10 years old.
- Remedial and upper-division courses are not generally transferable.

Non-Traditional Credit

Students may be allowed to establish credit for courses based on life and work experience and/or prior training. Because opportunities to establish such credit vary by division, students interested in this option should contact their academic division office.

Examination Credit

CNM Challenge Exams: These exams are available to applicants and currently enrolled students who wish to establish CNM credit for prior education, training and/or experience. Other postsecondary institutions may not accept challenge exam credit. The fee for most exams is \$15. The following restrictions apply:

- A student may attempt a challenge exam only once per course.
- A student may not take a challenge exam if, within the last 10 years, he or she completed the course at any school with a final grade, including AU but excluding W grades.
- A grade of CR will be recorded upon the student's completion of CNM credit coursework in the same or subsequent term.
- Courses successfully challenged may count toward program requirements, but not CNM's graduation residency requirement.

Contact the appropriate academic division office for information on Challenge Exams.

Advanced Placement (AP)/College Level Examination Program (CLEP): Students may earn up to 30 credits through Advanced Placement (AP) and College Level Examination Program (CLEP) tests. Earned AP and CLEP credit will be treated as transfer credit. For more information, contact an academic advisor or the CNM Records Office.

Advanced Placement (AP) Exams			
AP Exam	Minimum Score	CNM Course	Credit Hours
Art History	3	ARTH 1101	3
	5	ARTH 2201, 2202	6
Studio Art			
Drawing	3	ARTS 1106	3
2-D Design	3	ARTS 1121	3
3-D Design	3	ARTS 1122	3
Environmental Science	3	BIO 1110/1192	4
Biology	3	BIO 1410/1492	4
Chemistry	3	CHEM 1510/1592, 1610/1692	8
Computer Science A	3	CSCI 1151	4
Computer Science AB	3	CSCI 1151, 2251	8
Macroeconomics	3	ECON 2200	3
Microeconomics	3	ECON 2201	3
English Language & Composition	3	ENG 1101, 1102	6
French Language	3	FREN 1101, 1102, 2201, 2202	16
French Literature	3	FREN 1101, 1102, 2201, 2202	16
German Language	3	LANGUAGE ELECTIVE	6
Human Geography	3	GEOG 1102	3
European History	3	HIST 1102	3
American History	3	HIST 1161, 1162	6
Latin: Vergil	3	LANGUAGE ELECTIVE	6
Latin: Literature	3	LANGUAGE ELECTIVE	6
Music Theory	3	MUS 1103	4
Calculus AB	3	MATH 1710	4
Calculus BC	3	MATH 1710, 1715	8
Statistics	3	MATH 1330	3
Physics B	3	PHYS 1510/1592	10
		PHYS 1610/1692	
Physics C			
Mechanics	3	PHYS 1710/1792	5
Electricity & Magnetism	3	PHYS 1810/1892	5
American Government	3	PSCI 2200	3
Comparative Government	3	PSCI 2220	3
Psychology	3	PSY 1105	3
Spanish Language	3	SPAN 1101, 1102,	14
		2201, 2202	
Spanish Literature	3	SPAN 2280	3

AP scores must be forwarded to the CNM Records Office. AP scores will only be accepted if they are: (1) Sent directly from the AP Testing Center, or (2) included on high school or college transcripts as part of the student's permanent record.

College Level Examination Program (CLEP)				
CLEP Exam	Minimum Score for exams taken:		CNM Course	Credit Hours
	through June 2001	after June 2001		
arts and sciences subject exams				
Biology	46	50	BIO 1010	3
Chemistry	47	50	CHEM 1510/1592, 1610/1692	8
Macroeconomics	44	50	ECON 2200	3
Microeconomics	41	50	ECON 2201	3
Analyzing/Interpret Lit	47	50	ENG 1150, 2250	6
English Literature	46	50	ENG 2284, 2285	6
American Literature	46	50	ENG 2287, 2288	6
French Level 1	42	50	FREN 1101, 1102	8
French Level 2	45	62	FREN 1101, 1102, 2201, 2202	16
Information Systems and Computer Applications	n/a	50	IT 1010	3
German Level 1	n/a	50	LANGUAGE ELECTIVE	6 or
German Level 2	n/a	63	LANGUAGE ELECTIVE	12
US History I	47	50	HIST 1161	3
US History II	46	50	HIST 1162	3
Western Civilization I	46	50	HIST 1101	3
Western Civilization II	47	50	HIST 1102	3
Humanities	n/a	50	HUM 1111, 1121	6
Algebra-College	46	50	MATH 1315	3
Algebra-Trigonometry	45	50	MATH 1415	4
College Mathematics	n/a	50	MATH 1320	3
Trigonometry	50	50	MATH 1410	3
Precalculus	n/a	50	MATH 1415	4
Calculus w/ Elementary Functions (objective and problem portions)	41	50	MATH 1710	4
American Government	47	50	PSCI 2200	3
Educational Psychology, Introduction to	n/a	50	PSY ELECTIVE	3
Introductory Psychology	47	50	PSY 1105	3
Human Growth and Development	n/a	50	PSY 2220	3
Introductory Sociology	47	50	SOC 1101	3
College Spanish Level 1	45	50	SPAN 1101, 1102	8
College Spanish Level 2	50	66	SPAN 1101, 1102, 2201, 2202	14
Business Exams				
Principles of Accounting	45	50	ACCT 1110, 1210	9
Principles of Management	46	50	BA 1133	3
Principles of Marketing	50	50	BA 2222	3
Introductory Business Law	51	50	BA 2240	3

CLEP scores must be forwarded to the CNM Records Office. CLEP Scores will only be accepted if they are: (1) sent directly from the CLEP Testing Center, or (2) sent directly from the CNM Assessment Center.

Course Substitutions and Waivers

Course Substitutions: A course for which a student has already received credit may substitute for a required course in the student's program, if the substituting course meets the competencies of the required course. Course substitutions must be approved by the academic division in which the student's program is offered. If the substituting course has fewer credit hours, the student may be required to make up the credit difference with appropriate coursework identified by the division. (See Graduation, page 32)

Course Waivers: A course waiver is an exemption from a required course because the competencies of the course have already been attained due to prior training, education and/or work experience. Demonstration of competencies will be required. A course waiver must first be approved by the academic division in which the student's program is offered then secondly, by the division in which the waived course is offered. Credit waivers do not require the student to make up the deficient credit(s) however; there are limits to the number of credits that can be waived in a program. (See Graduation, page 32)

Transfer Among New Mexico Higher Education Institutions

To facilitate the transfer of students and course credits among New Mexico's colleges and universities, the state's public institutions of higher education are required to accept in-transfer courses taken within approved modules of lower-division course work and apply them toward degree requirements. New Mexico's colleges and universities have developed transfer guides, consistent with requirements of state law (21-1B, NMSA 1978), to assist students who plan to transfer. Guides for most four-year New Mexico colleges and universities are available from the Academic Advisement and Career Development department.

Because not all CNM courses are designed to transfer to other colleges and universities, students planning to transfer from CNM to a two- or four-year college or university in New Mexico should meet with an academic advisor. Advisors can assist students in choosing which CNM classes will best meet their educational plans.

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 assure that all pre-transfer coursework will meet the requirements of the desired degree.

Transferable Lower-Division General Education Common Core

Students who have not yet selected either an academic focus or the institution where they wish to graduate are advised to take courses during their freshman year outlined in the Lower Division General Education Common Core. For students enrolled at any public institution in New Mexico, the following courses are guaranteed to transfer to any other New Mexico public college or university and apply toward associate and baccalaureate degree program requirements. Students should consult with an academic advisor about which specific courses fit these categories. Students preparing for careers in engineering, health sciences or other profession-related fields are advised that some of this course work may not transfer toward general education requirements but in most cases will apply toward elective requirements.

Lower-Division General Education Common Core

Area I: Communications (select 9 credit hours)

- (a) College-Level English Composition3-4 hours
- (b) College-Level Writing (a second course building on the above)3 hours
- (c) Oral Communication3 hours

Area II: Mathematics (select 3 credit hours)

- (a) College Algebra3 hours
- (b) Calculus3 hours
- (c) Other College-Level Mathematics3 hours

Area III: Laboratory Science (select 8 credit hours)

- (a) General Biology, with laboratory4-8 hours
- (b) General Chemistry, with laboratory4-8 hours
- (c) General Physics, with laboratory4-8 hours
- (d) Geology/Earth Science, with laboratory4-8 hours
- (e) Astronomy, with laboratory4-8 hours

Area IV: Social/Behavioral Sciences (select 6-9 credit hours)

- (a) Economics (macro- or micro-)3 hours
- (b) Introductory Political Science3 hours
- (c) Introductory Psychology3 hours
- (d) Introductory Sociology3 hours
- (e) Introductory Anthropology3 hours

Area V: Humanities and Fine Arts (select 6-9 credit hours)

- (a) Introductory History Survey3 hours
- (b) Introductory Philosophy3 hours
- (c) Introductory Course in History, Theory,
or Aesthetics of the Arts or Literature3 hours

Total to be selected 35 semester hours

Lower-Division Transfer Modules

Students who have selected a field of study but have not yet selected the college or university where they wish to earn a bachelor's degree are advised to take courses during their freshman and sophomore years outlined in one of the Lower-Division Transfer Modules. For students enrolled at any public institution in New Mexico, these courses are guaranteed to transfer to any New Mexico university and apply toward bachelor's degree program requirements. Students should consult an academic advisor about which specific classes fit these categories. Lower-division transfer modules presently exist for: business, engineering, biological sciences, social &

behavioral sciences, teacher education, early childhood education and physical sciences. Copies of these Transfer Modules may be obtained from the State of New Mexico Higher Education Department's website (www.hed.state.nm.us).

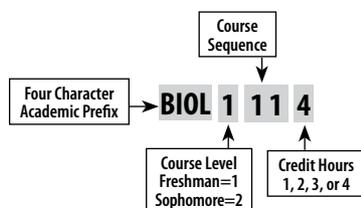
Transferable Courses Fulfilling the General Education Common Core

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 articulation of general education courses among New Mexico's colleges and universities. In accordance with policies established by the New Mexico Higher Education Department, designated general education courses successfully completed at any regionally accredited public institution of higher education in New Mexico are guaranteed to transfer to other New Mexico public institutions.

A Core Matrix of approved courses guaranteed to transfer and meet general education requirements at any New Mexico college or university can be found on the New Mexico Higher Education Department website at www.hed.state.nm.us. Courses are listed by institution.

The course prefix and number that appear in parenthesis next to many of the institutions internal course prefixes and numbers is the New Mexico Common Course Number. It serves as a single reference point for courses taught throughout the state that share substantially equivalent content. Courses bearing this designation are part of a statewide equivalency table that cross-references the institutional course and number with the universal "common course number" creating an easy one-to-one match.

Students may find the New Mexico Common Course Number listed in crosswalks, degree outlines, transfer guides and in course descriptions in college catalogs and websites. 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 as if it were taken on that campus. The New Mexico Common Course Number 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 as demonstrated below:



Students who have decided on a major and/or an institution at which to complete their studies should obtain a transfer guide or catalog and consult with an academic advisor at that particular institution to determine the most appropriate course selections. Students enrolling for the first year of study at a New Mexico 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 year of study.

Transfer Credit Appeal

All New Mexico public post secondary institutions are required to establish policies and practices for receiving and resolving appeals and complaints from students or from others regarding the transfer of course work from other public institutions in the state. CNM's appeal process is as follows:

- For arts and sciences course evaluations, complete a Re-Evaluation of Transfer Credit form, available at the Records Office, Admissions Offices or online at cnm.edu.
- For career and technical course evaluations, file a written appeal with the appropriate academic dean's office providing the prefix/number of the course(s) in question, term and year the course was taken, the name of the course and the course description from sending institution's catalog.
- If the request is denied, the student may continue the appeal process to the executive vice president for Academic Affairs and must do so no later than 30 days following the notification of denial.
- The executive vice president's office, in concert with the appropriate division 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 in Santa Fe by contacting:

Deputy Secretary for Academic Affairs Higher Education Department
New Mexico School for the Deaf Campus
1068 Cerrillos Road, Santa Fe, New Mexico 87505-1650

If a student's articulation appeal 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 of each course the student was required to repeat at the receiving institution.

Registration



Registration is the process of formally selecting and paying for classes. To register for classes, students must have attended CNM credit classes within the past year or be admitted for the term in which they plan to attend. Registration and payment of fees must be made in accordance with the instructions and deadlines published in the **Schedule of Classes**. Individuals may not participate or “sit in” on classes for which they are not registered.

The Registration Process

1. Receive information on registration.

Registration information is sent to continuing students and those admitted prior to the start of registration; all other students are given registration information at the time of admission. Registration dates are posted online at cnm.edu/onlinereg and published in the **Schedule of Classes**. Registration begins approximately two months before the start of a term.

2. Obtain a Schedule of Classes.

The **Schedule of Classes** lists courses, registration instructions and dates. It is published approximately two weeks before the start of registration for each term. The **Schedule of Classes** is available online at cnm.edu/onlinereg, in the registration offices at all campuses and CNM libraries.

3. Plan your schedule.

Academic advisement is strongly recommended for all students before registering for classes. Advisors at all campuses can provide assistance with course selection and placement.

Schedule plans should have alternate sections and insure that all course pre- and corequisites are met. Use the **Schedule of Classes** to obtain the CRN (Course Reference Number) for each class selected and for registration processes. New class sections added since the schedule was printed are available through STARS (CNM’s automated telephone registration system) at (505) 224-4893 and online (cnm.edu).

4. Register for classes.

Students register for classes through STARS at (505) 224-4893, CNM’s online registration system (cnm.edu) or in person.

5. Pay tuition and fees.

In order to complete registration, all charges must be paid. Charges are based on the student’s residency classification for tuition purposes, the type of courses and number of credit hours taken (see page 20). Payment information and deadlines are printed in the **Schedule of Classes**.

*Note: After registering and paying for classes, students need to purchase textbooks, obtain a CNM student ID and possibly make arrangements for parking on campus. All vehicles parked at CNM campuses must be registered with CNM’s Security Office. Paid parking is available at Main Campus. (See the **Schedule of Classes** for more information on these items.)*

Prerequisites and Corequisites

Pre- and corequisites are listed in course descriptions and are subject to change with each new Catalog. It is the student’s responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the Catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.

Prerequisite: A prerequisite is a requirement that must be successfully completed before a student may enroll in a course. Prerequisites are based on the essential skills or competencies to be successful in the next level course. All prerequisite courses must be completed with a “C” or better grade. A student who receives a W, AU, I, NC, PR, D or F as a final grade may not enroll in any class for which the former is a prerequisite. A **“Recommended”** prerequisite is one that is strongly suggested for successful completion of the course, but is not required.

Most entry-level courses have prerequisites for math, English or reading. Students who have completed course prerequisites may be required to provide proof through transcripts or test scores. Accuplacer, ACT and SAT scores may not be more than five years old.

Corequisite: A corequisite is a course that is either recommended or required to be taken in combination with another course. If a course with a required corequisite is taken for audit, the corequisite also must be taken for audit. When a course that has a required corequisite is dropped, the corequisite must also be dropped.

How to Meet a Course Prerequisite

There are four ways to meet a course prerequisite:

1. Take the Accuplacer placement exam at CNM (see Assessment Centers on page 26).
2. Submit official ACT or SAT scores (no more than five years old) to any Admissions Office.
3. Enroll in the required prerequisite course and pass it with a grade of CR or C or higher.
4. Complete the required prerequisite course at another institution with a grade of C or higher (proof of completion may be required).

Speak with an academic advisor for further assistance with prerequisite and course placement.

Registration Guidelines

Adding, Changing and Declaring Majors: Students may add, change and/or declare a major (program) at any time during the term in which they are enrolled. (See Program Entrance Requirements on page 11.) To graduate from a CNM program, students must have declared their major at the time of admission by submitting a Declare a Major form (available online at cnm.edu), through CNM’s online registration system or prior to completing an application for graduation. (See Graduation: General Requirements, page 32.)

Adding Courses: Classes may be added according to the time frame and dates printed in the **Schedule of Classes**.

Cancellation of Enrollment Before Term Begins: Students not able to attend CNM when planned but who have registered for classes must drop all classes through STARS or the online registration system before the beginning of the term. All fees are refunded if registration is canceled before classes begin.

Prerequisite Requirement Guide

Required Prerequisite*	Ways to Meet Prerequisites
ENG 0550	<ul style="list-style-type: none"> • ENG 0550 or above with CR or C or better • Accuplacer sentence skills score of 53-68 or Accuplacer reading score of 59-68 • ACT English score of 12-13 or SAT verbal/critical reading score of 260-280 or ACT reading score of 14-15
ENG 0750	<ul style="list-style-type: none"> • ENG 0750 or above with CR or C or better • Accuplacer sentence skills score of 69-84 • ACT English score of 14-15 or SAT verbal/critical reading score of 290-320
ENG 0950	<ul style="list-style-type: none"> • ENG 0950 or above with CR or C or better • Accuplacer sentence skills score of 85-109 • ACT English score of 16-22 or SAT verbal/critical reading score of 330-450
MATH 0550	<ul style="list-style-type: none"> • MATH 0550 or above with CR or C or better • Accuplacer arithmetic score of 31-56 • ACT math score of 13-14 or SAT quantitative/math score of 290-310
MATH 0750	<ul style="list-style-type: none"> • MATH 0750 or above with CR or C or better • Accuplacer arithmetic score of 57-120 • ACT math score of 15-16 or SAT quantitative/math score of 320-340
MATH 0930	<ul style="list-style-type: none"> • MATH 0930 or above with CR or C or better • Accuplacer elementary algebra score of 72-80 • ACT math score of 17-20 or SAT quantitative/math score of 350-410
MATH 0940	<ul style="list-style-type: none"> • MATH 0940 or above with CR or C or better • Accuplacer elementary algebra score of 81-120 • ACT math score of 21-22 or SAT quantitative/math score of 420-450
MATH 0950	<ul style="list-style-type: none"> • MATH 0940, 0950 or above with CR or C or better • Accuplacer elementary algebra score of 81-120 • ACT math score of 21-22 or SAT quantitative/math score of 420-450
RDG 0750	<ul style="list-style-type: none"> • RDG 0750, 0950 or arts and sciences course with CR or C or better • Accuplacer reading score of 69-79 • ACT reading score of 16-17 or SAT verbal/critical reading score of 300-320
RDG 0950	<ul style="list-style-type: none"> • RDG 0950 or arts and sciences course with CR or C or better • Accuplacer reading score of 80-120 • ACT reading score of 18-36 or SAT verbal/critical reading score of 330-800

*Other prerequisites are listed in course descriptions in this catalog.

Registration

Course Load: The normal course load each term is 12 to 18 credit hours, with 12 hours constituting a full load. Students wishing to take more than 18 credit hours must meet the following conditions:

- Have a cumulative CNM grade point average of 2.5 and
- Have no grade lower than C in the previous term and
- Secure permission from Academic Advisement and Career Development

No student may take more than 22 credit hours per term.

Course Overfills: If a class is full, the instructor may approve a class overfill. Course Overfill Cards are available from instructors and at any Registration office. Course overfill approval does not waive a pre- or corequisite or extend registration deadlines. Refer to the **Schedule of Classes** for information on this process.

Course Repetition Limit: A student may enroll in the same CNM course a maximum of three times. Should the student attempt to register a fourth time for the same course, his/her registration will be blocked and the student will be referred to the Academic Advisement and Career Development department for evaluation of the issue. Topics, problems, internship, cooperative education and physical fitness activity courses are exempt from the course repetition limit (see Repeat Course Processing, page 35).

Dropping Courses or Withdrawing: Classes may be dropped according to the time frame and dates printed in the **Schedule of Classes**.

Fifteen-week and full-term classes dropped on or before the 15th day of that part of term/session (including Saturdays) and all other classes dropped on or before the first 1/3 of that part of term/session (including Saturdays) do not appear on the student's CNM transcript. After that time a withdrawal grade (W) will appear on the student's record for classes dropped. Specific dates are printed in the **Schedule of Classes**.

A student should not assume he/she will be dropped from classes for nonattendance. A student who has not officially dropped a class will receive a final grade in the class. A student physically unable to drop a current class by the published deadline (Example: hospitalization) may submit a written appeal, along with required supporting documentation, to the Registration Center requesting an exception to the drop deadline policy. Appeal forms are available in Registration offices.

Grade Options: Students must select a grade option (grade mode) when registering for class (see page 35). Deadlines and information regarding changing grading options are printed in the **Schedule of Classes**.

Permission to Enroll: Students may enroll in some courses only by permission of the instructor or program director. Forms are available in the division offices. Permission to enroll does not constitute a waiver of a course, grant credit for another course, allow a course to be overfilled or extend registration deadlines.

Step-ups/step-backs: Students may, with division approval, step-up or step-back into most developmental courses (courses numbered 0999 and below) through the second week of the term and into some lower-level career and technical courses (in the same discipline) through the fifth week of the term. Students may, however, step-up or step-back into a self-paced, developmental math course through the tenth week of a full term and the eighth week of the 12-week session or

term. Students who are having difficulty in a class and are considering this option should contact the instructor or their achievement coach.

Residency Classification for Tuition Purposes

A student is classified as a resident or non-resident for tuition purposes based on information supplied at the time of admission or re-admission. All residency requirements must be met before the first day of the term.

The New Mexico Higher Education department establishes residence requirements for tuition purposes. These requirements apply to U.S. citizens, those with Permanent Resident immigration status or those who have applied for Permanent Resident status. Residency requirements and information are available in Admissions offices and from the New Mexico Higher Education department's Web page at www.hed.state.nm.us.

Minimally, four basic requirements must be met (additional requirements may apply):

1. **The 12-Month Consecutive Residence Requirement:** A student must physically reside in New Mexico for the 12 consecutive months immediately preceding the term for which the petition is submitted.
Note: Students whose parents or guardians reside out of state cannot begin to complete the 12-month requirement until their 19th birthday.
2. **The Financial Independence Requirement:** Students cannot be approved for residency if they are financially dependent on their parents or legal guardians who are non-residents of New Mexico. At the time the student applies for residency (if under 23 years of age), a copy of his or her parents' or guardians' 1040 or 1040A U.S. income tax form for the previous year may be required.
3. **The Written Declaration of Intent Requirement:** The student must sign a written declaration of intent to relinquish residency in any other state and establish it in New Mexico.
4. **The Overt Act Requirement:** Residency regulations require the completion of overt acts that support the student's declaration of intent to reside in New Mexico. Information on the number and type of required overt acts is available in the Admissions and Records Offices.

Note: 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

- An individual married to a legal resident of New Mexico and providing 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 entering the active 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 while in the service done anything (such as voting in another state) 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 him or her as a nonresident of New Mexico.
- Any person who is at least 65 years of age, their spouse and dependents, who move to New Mexico for retirement purposes, or who provide appropriate evidence of retirement, shall not be required to complete the 12-month durational requirement but must satisfy all other requirements.
- American Indian nations, tribes and pueblos. 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 post-secondary educational institution shall be eligible to pay the in-state tuition rate. 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, 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.
- Navajo Nation. 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.
- Armed Forces. 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 sixty (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.

- National Guard. An active member of the National Guard and the member's spouse and children shall be deemed in-state residents for purposes of determining tuition and fees.
- New Mexico High School/GED Graduates. All persons, regardless of immigration status, who have attended a secondary educational institution in New Mexico for at least one year and who have either graduated from a New Mexico high school or received a general educational development certificate (GED) in New Mexico will be assessed in-state tuition rates.

Petitions for New Mexico Residency for Tuition Purposes

A nonresident student who believes he/she has satisfied the residency requirements may obtain a "Petition for Resident Tuition Classification" and the checklist of required supporting documentation online at cnm.edu, from the Main Campus Records Office or Admissions office at all other campuses. 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 for which the petition is being filed. A petition received after that date will not be considered. The completed petition and required supporting documentation must be submitted to the Main Campus Records Office or the Admissions office at all other campuses. A student may be requested to supply additional information or to explain apparent inconsistencies before a final decision is reached. The student is notified of the decision and, if denied, may amend his/her petition with additional information and/or appeal to CNM's Residency Appeals Committee. The appeals committee shall be the student's last recourse prior to the courts. If the student satisfies the residency requirements for a future term, he/she may re-petition for residency for that term.

Tuition and Fees

Tuition is charged according to a student's residency status (tuition classification) and the number and type of credit hours enrolled. Schedule changes in which a student drops and adds the same class in a different part of term/session may result in additional charges. Special tuition rates do not exist for non-resident part-time students or non-resident students enrolling in the summer term.

Some courses may require additional fees. Refer to course descriptions for additional fee information.

Courses taken through distance learning require an additional per credit hour fee. (See below.)

Senior Citizen Discount: Senior citizens qualify for a reduced tuition rate of \$5 per credit hour, up to six credit hours per term. The tuition discount applies only to arts and sciences courses. To qualify, the student must be age 62 or older prior to the beginning of the term and must be classified as a New Mexico resident for tuition purposes.

To receive the senior citizen discount, eligible students must go to the Records Office at Main Campus or the Admission Office at all other campuses and complete a Senior Citizens Tuition Discount form. The discount form must be approved by the tenth day of the term.

Note: The discount does not apply to Adult Education classes, workshops and other non-credit courses, or to occupational or developmental courses.

Payment Methods

Payment methods and deadlines are printed in the **Schedule of Classes**. Arrangements can be made for CNM to bill authorized agencies that have agreed to pay a student's educational expenses. Additional information is available from the Cashier's Office at the Main and Montoya Campuses.

Fees

Some courses have required fees (see course descriptions). Audit students pay the same fees as students enrolled for credit. Other fees include:

Administrative Service Fee: Students do not pay this \$10 fee; rather, it is charged to third-party agencies that sponsor students.

Distance Learning Fee: One to four credit hours: \$30 per hour. Five or more hours: \$120 per course.

Diploma Replacement Fee: \$20

Educational Service Fee: This fee, of up to \$75, is charged on third-party agency contracts

TUITION RATES PENDING CNM GOVERNING BOARD APPROVAL ; SEE SCHEDULE OF CLASSES FOR ANY TUITION CHANGES

Tuition Rates for 2007–08 <i>(subject to change without notice)</i>	New Mexico Residents In CNM-District	New Mexico Residents Outside CNM-District	Non-New Mexico Residents
arts and sciences courses (<i>courses numbered 1000 and above with the following subject codes: ANTH, ARTH, ARTS, ASTR, BIO, CHEM, COMM, CST, ECON, ENG, FREN, GEOG, GNHN, HIST, HUM, JOUR, MATH, MUS, NUTR, PHIL, PHYS, PSCI, PSY, RLG, SOC, SPAN, THEA</i>) and AFAS, GNED, MSL and NAVS courses	Full Time (12 to 18 credit hours): \$496.80 Part Time (1 to 11 credit hours) and more than 18 credit hours: \$41.40 per credit hour	Full Time (12 to 18 credit hours): \$616.80 Part Time (1 to 11 credit hours) and more than 18 credit hours: \$51.40 per credit hour	Full Time (12 to 18 credit hours): \$2,648.40 Part Time (1 to 11 credit hours) and more than 18 credit hours: \$220.70 per credit hour
All other CNM courses not listed above	None	Full Time (12 to 18 credit hours): \$120.00 Part Time (1 to 11 credit hours) and more than 18 credit hours: \$10 per credit hour	Full Time (12 to 18 credit hours): \$2,648.40 Part Time (1 to 11 credit hours) and more than 18 credit hours: \$220.70 per credit hour
Registration Fee: There is a \$40 registration-processing fee required each term (\$2 supports the Student Association of CNM).			

Please see page 23 for information on estimated CNM student expenses.

requiring additional services; students do not pay it.

GED Exam Fee: First time \$25; retest \$15

Graduation Processing Fee: A \$20 graduation-processing fee will be charged to all non-current students applying for graduation.

CNM Challenge Exam Fee: \$15 (may vary)

Registration Fee: There is a \$40 registration-processing fee required each term (of that, \$2 is collected on behalf of the Student Association of CNM.).

Transcript Fee: Students may request up to three official CNM transcripts, free of charge, per calendar year. Additional copies will be issued for a fee of \$3 per copy, payable in advance. A fee of \$10, payable in advance, will be charged for CNM transcripts faxed within the continental United States.

Refunds: Tuition, course fees and the registration fee are refundable only if CNM cancels a class or if the student withdraws by the refund deadline printed in the **Schedule of Classes** or if, after payment of nonresident tuition/fees, the student's status is changed to resident. The Health Wellness & Public Safety program fee is refundable if the student does not receive the uniform/equipment. Refund requests may be made at the Cashier's Office.

The mission of Financial Aid and Scholarship Services (FASS) is to provide prompt, accurate and courteous financial aid assistance. Although the primary responsibility for educational costs rests with the student and his or her family, CNM, the federal government and the state of New Mexico all contribute to assist students pursuing a higher education. Students applying for financial aid should complete a Free Application for Federal Student Aid (FAFSA) available online at www.fafsa.ed.gov. Computers are available at all campuses and help is available at Main and Montoya campuses. To optimize your opportunities for financial aid at CNM, file by May 1st every year.

Please visit the CNM website cnm.edu for the most recent financial aid information. Graduating high school students, as well as first time and returning CNM students can file for financial aid before applying for admissions.

The following is a summary of available financial aid policies and programs.

General Eligibility Requirements

To receive financial aid a student must:

- Be a U.S. citizen or an eligible non-citizen
- Have earned a GED, high school diploma or a passing score on all three components of the Accuplacer exam—in a single sitting. If all three scores are not achieved in one sitting, the student must retest.
- Not have been overpaid on a grant or be defaulted on a loan
- Maintain satisfactory academic progress defined by federal regulations.
- Enroll in eligible courses defined by the institution. *A list of ineligible courses is available at <http://www.cnm.edu/depts/fass/requirements/>*
- Enroll in an eligible program of study
- Not exceed federal aggregate loan limits as defined by the Department of Education

For a complete list of eligibility requirements, click on the Funding tab at www.studentaid.ed.gov.

Awards

All financial aid awards are based on information provided by the student, availability of funds and general eligibility requirements. Any award may be revised based on changes in enrollment, cost of attendance, family contribution or failure to meet satisfactory academic progress. Withdrawals or changes in enrollment may affect an award or any future awards.

Grants

- The Federal Pell Grant provides funds to undergraduate students without bachelor's degrees. Pell awards range between \$133 and \$4,310 per academic year, depending on enrollment status, cost of attendance and family contribution.
- Students who receive Federal Supplemental Educational Opportunity Grants (SEOG) must demonstrate exceptional financial need and the lowest expected family contribution.

- State Student Incentive Grant (SSIG) recipients must demonstrate financial need, be New Mexico residents and be enrolled at least half time.
- An Academic Competitiveness Grant (ACG) will provide up to \$750 for the first year of undergraduate study and up to \$1,300 for the second year of undergraduate study to full-time students who are U.S citizens, eligible for a Federal Pell Grant and who had successfully completed a rigorous high school program after Jan 1, 2005. Second year students must also have maintained a cumulative GPA of at least 3.0.
- The New Mexico College Affordability Grant (NMCAG) is designed to encourage New Mexico students with financial need who do not qualify for other state grants or scholarships to attend and complete educational programs at a public New Mexico college or university.
- Students cannot receive an SSIG, SEOG or NMCAG simultaneously.
- The FAFSA is the only application needed to apply for these grants.

Loans

Federal Subsidized and Unsubsidized Stafford Loans, Nursing Student Loans for Service and Federal PLUS loans all require separate applications. Before applying for a loan, a student must first complete the Free Application for Federal Student Aid (FAFSA). Students receiving a loan must be enrolled for six (6) credit hours. Congress also establishes loan limits that may be prorated depending on a student's classification. All first-time borrowers must attend an entrance interview before loans are processed. Students who meet Subsidized Stafford Loan eligibility requirements may borrow up to \$3,500 per year as first year students and \$4,500 per year as second-year students. Second year or sophomore students are those who have completed 30 credits of regular coursework. Independent students who meet unsubsidized loan eligibility requirements may borrow up to \$4,000 in additional funds.

Student Employment

CNM offers student employment (sometimes referred to as workstudy) to students who want to work on campus while they are attending CNM. Students are paid every two weeks and can work a maximum of 20 hours a week at an hourly rate. Student employment earnings are taxable.

Eligibility

To qualify for student employment and maintain eligibility, students must:

- Have a complete financial aid file
- Maintain Satisfactory Academic Progress
- Have Unmet Need as determined by the FAFSA and CNM
- Maintain continuous half-time enrollment (6 credit hours)
- File a new FAFSA for the upcoming Fall term early enough that their financial aid file is complete by June 30. If not, students will be ineligible to continue working after June 30th until their financial aid file has been completed.

Hiring Process

Before students can apply for a student employment position, they must be awarded student employment funds which can be found on their award letter under the headings Federal Work Study, State Work Study, or CNM Student Employment. If you have not been awarded one of these funds, you must follow the Online Award Request Instructions. Students needing assistance may receive help at our Student Resource Center.

All available student employment positions are listed by campus on our website, <http://www.cnm.edu/depts/fass/>. Once you find a job you are interested in, print out the Student Employment Job Posting and Referral Form and contact the supervisor listed to request an interview. The supervisor will verify your student employment award and set up an interview. Fill out and print the Student Employment Application and take it with you to the interview. Keep in mind that there are a large number of applicants for these jobs. It may take a few interviews before you are hired.

Once hired, you will need to take the supervisor signed referral form, a picture ID and Social Security card to the FASS office at Main or Montoya Campus. We will have you complete a W-4 (IRS withholding form) and I-9 (Citizenship Verification form). FASS will notify your supervisor if and when you may begin working and your supervisor will then arrange a start date with you.

Veteran's Affairs Education Benefits

CNM is fully certified by the state of New Mexico for VA Education Benefits (G.I. Bill).

Students must declare a certificate or degree program and can only be paid for classes that are required (including prerequisites) for that program. Undecided, non-degree and skill sets and non-required electives, optional or previously passed courses are not eligible for VA education benefits.

Students are paid based on the number of credit hours taken and the length of the term. To ensure full payment, students may want to attend full-term classes. If a student takes courses with different beginning or ending dates, payment will be adjusted accordingly. Students drawing VA education benefits may also qualify for other forms of financial aid.

A one-time only deferment may be available for students to defer the cost of classes (it does not cover book costs).

For further information, visit or call the veterans assistance personnel in the Financial Aid and Scholarship Services Office on the main campus. Information about VA Education Benefits in general can be also be found at:

CNM Financial Aid and Scholarship Services Office . . (505) 224-3090

VA Education Toll-Free Number 1-888-GI-BILL-1

VA Website www.gibill.va.gov

All forms associated with VA Education Benefits can be obtained from the Veterans' Assistance section of the Financial Aid and Scholarship Services Office at Main campus. Some forms may be available at the Financial Aid and Scholarship Services Office at other campuses. Local forms are also available online at the CNM website and VA forms can be found at the VA website.

Scholarships

CNM offers a wide variety of state, institutional and federal scholarships. These include tuition scholarships, such as the Lottery, the Bridge to Success, CNM Legislative and CNM General.

The **Bridge to Success** and the **Lottery** scholarship are both offered to students who are graduates from a New Mexico high school or GED program. The **Bridge to Success** scholarship pays for tuition and registration fees for the first fall term if students enroll in 12 credit hours, declare an eligible major and complete the Free Application for Federal Student Aid (FAFSA) by August 1.

The **Lottery Scholarship** will automatically be awarded to students for the following spring term who have completed a minimum of 12 credit hours with a cumulative grade point average of 2.5 or better the previous fall. This scholarship pays tuition expenses for up to four terms at CNM as long as eligibility is maintained.

CNM Scholarships include the General, Daycare and Legislative, just to name a few. The CNM Scholarship application is available late January through June. CNM Scholarships are intended to help defray the cost of attendance and encourage New Mexico residents to complete a degree or certificate program at CNM. New and continuing awards are based on the limited availability of funds and are awarded to assist students in the most beneficial manner possible. In order to be eligible for most CNM Foundation Scholarships, students must: maintain satisfactory academic progress, have a cumulative grade point average of 2.0 or higher, have a course completion rate of 70% or higher, be within the maximum allowable hours of their declared major, have not received a Bachelor's Degree, complete a Free Application for Federal Student Aid (FAFSA), have unmet need as determined by FAFSA, enroll for a minimum of six credit hours, be a New Mexico resident, be a citizen of the United States or an eligible non-citizen and be admitted to CNM with a financial aid eligible major.

CNM Foundation Scholarships are also available. Foundation Scholarships have specific requirements and applications are available at various times of the year.

For more information, please visit the Financial Aid and Scholarship Services at cnm.edu.

Check Release

Financial aid checks are released each term after the 21st day of the full 15-week term. Checks for students who complete their files too late for the first check release are released on subsequent Fridays throughout the term. If a check is not picked up within seven (7) days of the release date it will be mailed to the student's current address on file at Admissions. Qualified students are notified of their disbursement dates in award letters mailed to their homes. Prior to check release, students may use the deferred award amount (shown on their class schedules) to charge the cost of their classes and to charge books and supplies at the CNM bookstore.

Main Campus students may pick up checks at the Cashier's Office in the Student Services Center; Montoya Campus students may pick up checks at the Cashier's Office in Tom Wiley Hall. Please refer to the **Schedule of Classes** for hours. A valid picture ID must be presented to pick up a check.

Students who apply for a student loan too late to receive it on the regularly scheduled release date will receive their checks about four weeks from the date they apply for the loan. Due to

federal regulations, Federal Stafford Loans that are processed for a single term may require two scheduled disbursements within that term.

Financial Aid Satisfactory Academic progress

Federal regulations require that financial aid recipients meet certain academic standards to be eligible for federal financial aid. To ensure financial aid recipients are making satisfactory academic progress, academic transcripts are reviewed at the end of each term to determine eligibility for the next term. All terms of attendance are reviewed, including periods in which the student did not receive financial aid.

Standards of Academic progress

Qualitative Progress: Students must maintain a cumulative grade point average of 2.0 (a “C” average). Grades of I, CR, PR, NC, W, AU and TR are not calculated in the GPA. In the case of a repeat course, only the higher grade is calculated into the grade point average.

Completion Rate: Students must complete a minimum of 70 percent (70%) of all course work attempted at CNM. Courses with grades of failure (F), incomplete (I), in progress (PR), audit (AU), no credit (NC) or withdrew (W) are not considered completed course work.

Maximum Time Frame: Students must complete their program within 150 percent (150%) of the credit hours required by their declared program. Students who exceed the maximum allowable hours will be suspended from receiving financial aid.

When satisfactory academic progress is reviewed, transfer credits are taken into account for students enrolled in majors that articulate to four-year postsecondary institutions. For a list of these programs, visit www.cnm.edu/depts/fass/requirements. Click on “Eligible and Ineligible Programs and Courses.”

Other Information

Dropping and Adding Classes: Students who add classes may be paid for additional hours. Financial aid recipients who drop a class before the class begins or before the census date for that class may have to repay a portion of the funds they received.

Developmental Courses: Students can receive federal student aid for up to 30 developmental credit hours only. Developmental courses are defined under the Division of Educational & Career Advancement under the Academic Divisions section of this catalog. This includes grants, loans and scholarships.

Aid May Be Reduced Due to Credit Clock Hour Major: Some majors at CNM do not fall under the regular definition of an eligible program and are subject to a special calculation. Depending on the award, the calculation may either reduce your aid or keep you from being paid at all. For a list of these majors, visit the financial aid website, www.cnm.edu/depts/fass/requirements, or the financial aid offices at Main or Montoya campuses.

Ineligible Courses and Majors: In order for a course to be eligible for financial aid, it must fulfill the requirements of an eligible major. Optional courses that are not required for any eligible major are not eligible for financial aid. A list of ineligible courses and programs can be viewed online at www.cnm.edu/depts/fass/requirements.

Financial Aid Deferment Authorization Form

A financial aid deferment prevents your classes from being dropped for non-payment. It also allows you to charge textbooks against your approved financial aid award. To be eligible for a financial aid deferment:

- You must have a complete financial aid file and have approved grants and/or loans.
- You must be making satisfactory academic progress (not be on financial aid suspension).
- Students wishing to charge textbooks against financial aid must first complete an online financial aid authorization. This form is also available from our customer service center.

Please confirm that you have a deferment in place to charge classes and/or books prior to payment deadlines. Your deferment can be viewed on your online schedule.

Repayment of Federal Funds

When a student withdraws from school before 60 percent (60%) of the term has passed, a federally prescribed formula will be applied to determine if the student, the school or both will be required to pay back to the U.S. Department of Education a portion of the aid disbursed to the student. Students who fail to officially withdraw may be considered to be withdrawn at midterm. Financial aid recipients who drop a class before the class begins or before the census date for that class may have to repay a portion of the funds they received.

Websites

To apply for federal financial aid: www.fafsa.ed.gov

Information on federal financial aid: www.studentaid.ed.gov

CNM Financial Aid and Scholarship Services website: www.cnm.edu/depts/fass

Search for external scholarships: www.fastweb.co

ESTIMATED AVERAGE CNM STUDENT EXPENSES* Resident tuition and fees are a weighted average of In-District and Out-of-District expenses.

	CNM Student Living Off-Campus			CNM Student Living At Home		
	1 term	2 terms	3 terms	1 term	2 terms	3 terms
Books & Supplies	\$ 386	\$ 772	\$ 1,158	\$ 386	\$ 772	\$ 1,158
Room & Board	4,106	8,212	12,318	729	1,458	2,187
Transportation	646	1,292	1,938	646	1,292	1,938
Personal Expenses	+ 693	+ 1,386	+ 2,079	+ 560	+ 1,120	+ 1,680
Estimated Cost-of-Living Expenses	\$ 5,831	\$ 11,662	\$ 17,493	\$ 2,321	\$ 4,642	\$ 6,963
+ NM Resident Tuition & Fees*	+ 336	+ 672	+ 1,008	+ 336	+ 672	+ 1,008
Total NM Resident Student Expenses	\$ 6,167	\$ 12,334	\$ 18,501	\$ 2,657	\$ 5,314	\$ 7,971
+ Out-of-State Tuition/Fees*	+ 2,688	+ 5,376	+ 8,064	+ 2,688	+ 5,376	+ 8,064
Total Out-of-State Student Expenses	\$ 8,519	\$ 17,038	\$ 25,557	\$ 5,009	\$ 10,018	\$ 15,027

Childcare Costs: For students needing childcare, add \$1,500 per term to totals above.

* Estimates are based on full-time enrollment and compiled according to federal guidelines. The estimated amounts above are accurate for the 2006-07 academic year. Amounts for 2007-08 and 2008-09 are subject to change.

Accessing CNM

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Find your course.

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vector-based

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Student Resources and Support

Academic Advisement and Career Development

Academic Advisement and Career Development provides a variety of services to support the academic goals and career plans of each CNM student. Advisors and Career and Educational Specialists are available Monday through Friday to help students prepare for an enjoyable and successful academic experience at CNM. Students can see us on a walk-in basis or call for an appointment at (505) 224-4321.

Advisors and Career and Educational Specialists provide assistance with the following:

- **Academic Planning:** Help in selecting courses to ensure students meet program requirements and register for courses they need.
- **Career Development:** Exploration of career interests and career field choices through advisement sessions that utilize online career information and resource material available in the Career Resource Center. Please see page 54 for additional information on career clusters.
- **College Policies and Procedures:** Get answers to questions about course requirements, transferability of classes and many other issues.
- **Student Services:** Get information about campus resources and student support services available to help students meet their academic and career goals.
- **Transfer:** Do you want to transfer to a four-year college or university? We can help with the details!

Students unable to visit an Academic Advisor or Career and Educational Specialist, please note other options for academic advisement:

- Visit us real time online at: www.cnm.edu/depts/aacd. See the CNM website for hours of availability.
- E-mail us at aacd@cnm.edu.
- Call us at (505) 224-4321.
- Office hours are: Monday through Thursday 8 a.m. to 6 p.m. and Friday 8 a.m. to 5 p.m.

Career Pathways

A career pathway is an education plan that directly guides a student toward a chosen occupation in a “career cluster.” Career clusters can be used to investigate a wide range of career choices. The career cluster approach makes it easier for students to understand the importance of education and helps students select elective courses to enhance their career. Each cluster contains a complete set of career pathways aligned with programs of study. See page 54 for more information on career pathways.

For more information contact Academic Advisement and Career Development by phone at (505) 224-4321, e-mail at aacd@cnm.edu or online at cnm.edu/depts/aacd.

Career Resource Centers

CNM Main and Montoya Campus Career Resource Centers, located next to Academic Advisement and Career Development at each campus, provide students with the opportunity to gather information about personal career interests and make available the most up to date career

information to assist students with employment plans now and in the future.

Visit the Career Resource Centers for assistance with the following:

- **The Discover® Program** is a computer-based career exploration tool that assesses personal abilities, interests and values to help determine which career fields may be a good employment match.
- **Resource Guides:** We have books, videos and online information pertaining to many different career fields.
- **College Catalogs:** We have information about colleges throughout New Mexico and nationwide.

CONTACT ACADEMIC ADVISEMENT AND CAREER DEVELOPMENT AT:

(505) 224-4321 for CNM Main and Montoya Campuses
(505) 224-5308 for CNM Westside Campus
(505) 224-5056 for CNM South Valley Campus

CAREER RESOURCE CENTERS:

(505) 224-4344 Main Campus, Room 203 Student Services Building, 900 University Blvd.
(505) 224-5651 Montoya Campus, Room 204 Tom Wiley Hall, 4700 Morris N.E.

Achievement Coaches

Achievement Coaches support and encourage student success by listening attentively and providing coaching to help students apply their strengths to reach their goals. You will find Achievement Coaches in academic divisions and support programs.

Achievement Coach services include:

- Academic and personal coaching
- Campus and community information
- Academic success workshops

Visit us at: <http://www.cnm.edu/achv> Get to know your Achievement Coach today by stopping by or calling for an appointment.

CONTACT INFORMATION

Applied Technologies: (505) 224-3365 or (505) 224-3734
Business & Information Technology: (505) 224-3870
Communication, Humanities & Social Sciences: (505) 224-3588
Educational & Career Advancement: (505) 224-3962 or (505) 224-3942
Health, Wellness & Public Safety: (505) 224-4111
Math, Science & Engineering: (505) 224-3561
TRIO: (505) 224-4377

Assessment Centers (Testing)

CNM's Assessment Centers offer a variety of tests, most of them free of charge. Study guides for most exams are available in the Assessment Centers. Testing accommodations for individuals with disabilities are available upon request; documentation and prior notice are required.

Among the examinations administered at CNM are Accuplacer math, reading and English tests; the Biology Placement Exam; the Nursing Basic Math Test and Nursing Mobility Profile; the Spanish placement exam and; typing tests.

The American College Test ACT for placement is not offered at CNM. Students wishing to take the tests must register for a national test date. Information and registration packets are available in the Assessment Centers. CNM accepts ACT scores from all students for placement in certain courses. CNM also honors SAT, AP and CLEP scores but administers only the CLEP exam to current students. For further information students may contact the Assessment Centers.

CONTACT INFORMATION

Call (505) 224-3244

GED Exam

Anyone at least 16 years old who is not a high school graduate may take the General Educational Development (GED) exam at CNM to earn a high school diploma. The exam contains sections on writing, reading, science, social studies and math. A \$25 fee is charged for the GED test. (A \$15 fee is charged for retesting.)

A 16 or 17-year-old may take the exam only if released from state compulsory school attendance and granted a GED Underage Permission Form. No currently enrolled high school student and no one 15 years old or younger may take the exam.

CONTACT INFORMATION

The Division of Educational and Career Advancement—(505) 224-4282 at Main Campus, (505) 224-5575 at Montoya Campus—offers free GED preparatory classes (see page 41).

Computer Labs

Computer labs are available for student use at all CNM locations. A complete listing of locations and phone numbers can be found in the **Schedule of Classes**. Be sure to call ahead because times may vary throughout the school year.

Job Connection Center

(See listing on page 6.)

Libraries

The CNM libraries at the Main and Montoya campuses provide a variety of resources designed to meet the information needs of CNM students, faculty, staff and community patrons. The libraries serve as the major information resource for CNM and provide the library services necessary to support the College's mission.

CONTACT INFORMATION

The Main Campus Library is located at 2000 Coal Avenue SE in Jeannette Stromberg Hall (JS Building), 4th floor.

Main Circulation Desk, (505) 224-3274

Main Reference Desk, (505) 224-3285

Main Media Desk, (505) 224-3302

The Montoya Campus Library is located at 4700 Morris NE in the J Building, Room 123.

Montoya Circulation/Media Desk, (505) 224-5721

Montoya Reference Desk, (505) 224-5730

Library Hours

When classes are in session, CNM Libraries are open:

Monday–Thursday: 7 a.m. to 9:30 p.m.

Friday: 7 a.m. to 5 p.m.

Saturday: 8 a.m. to 5 p.m.

Sunday: Closed

Term Break hours are Monday–Friday 7 a.m. to 5 p.m.

Contact the libraries for more information for holidays and special closings.

CNM Libraries on the Internet

Access online information through **cnm.edu**, including: the Main and Montoya campus libraries catalog with book, video and serials holdings; full-text articles from thousands of magazines, journals and newspapers using online academic research databases; an electronic reference service to ask a question via your e-mail; and online forms to make inter-library loan requests, provide the libraries with suggestions for the purchase of books and other materials, schedule library tours and request database passwords for off-campus access to databases.

Services Offered by the CNM Libraries

- Public access computers with Internet capabilities are available for searching library holdings or the World Wide Web.
- Staff are available during library hours to assist patrons in locating materials, Internet searching and answering reference questions.
- Library instruction workshops ranging from general orientation tours to specialized workshops for students, faculty or staff.
- Staff collaboration with instructors on classroom assignments or research topics.
- Personalized reference and research consultation by appointment.
- Intra-library loan services for books held at either library.

Student Resources and Support

- Inter-library loan services for patrons wishing to borrow materials from regional or national libraries, convenient online forms for books or articles.

Library Holdings

- Circulating book collection of approximately 30,000 titles at Main Library and 14,000 at Montoya Library.
- Reference collection of approximately 6,000 titles at Main Library and 3,000 at Montoya Library.
- Audiovisual collection selected to support the CNM curriculum of approximately 3,500 video titles at Main Library and 300 at Montoya Library.
- Serials collection of over 700 titles in print and microform version—includes current and back-issued magazines, peer-reviewed journals and newspapers.
- Vertical file collection of over 5,000 items including corporate annual reports, consumer information pamphlets, current social issues, travel and leisure brochures and much more.

Special Services

Special Services assists students with physical, mental, learning, visual, speech or hearing disabilities. Career counseling, program planning, classroom accommodations, adaptive equipment, coordination with community support agencies and specialized learning plans are available. Follow-up services (counseling and job-seeking help) are also provided.

CONTACT INFORMATION

Main Campus: (505) 224-3000
Montoya Campus: (505) 224-5946

Testing

(See Assessment Centers on page 26.)

TRIO Student Support Services

The TRIO Student Support Services program is funded by U.S. Department of Education. The goal of the program is to help students graduate from a CNM program and as appropriate transfer to a four-year university. You are eligible if you: are a U.S. citizen or permanent resident; have an academic need; are preparing for an Associate Degree and/or plan to transfer to a four year university; belong to one or more of the following categories: income eligible and/or first generation college student (parent(s) or guardian(s) do not have a four-year degree) and/or have a documented disability.

Services include academic and career guidance; math, science and English tutoring; college success workshops; university transfer assistance and cultural-educational activities and student leadership opportunities. The TRIO Student Support Services program has limited student enrollment. Applications are accepted the last two weeks of each term. Staff will contact applicants in the event of an opening.

CONTACT INFORMATION

Main Campus, Student Services Center, Suite 101, (505) 224-4375.

Tutoring Services

The **Assistance Centers for Education (ACE)** provides learning support at all CNM campuses by offering one-to-one and small-group learning assistance, reinforcing classroom concepts, fostering independent thinking and helping develop problem-solving skills. ACE is part of the Division of Educational & Career Advancement. Services are available free to students. ACE is certified by the College Reading and Learning Association and certified tutors are available to help students in a variety of subjects. Visit our website at <http://planet.cnm.edu/ace/>.

ACE components are listed on this and the following page.

The **Tutorial/Learning Centers (T/LC)** are open to all students and the general public. Individual tutoring in English, math, sciences and other areas is provided on a walk-in basis. Additional instructional resources include videos, reference materials and workbooks.

CONTACT INFORMATION

Main Campus T/LC, Jeannette Stromberg Hall, (505) 224-4306
Montoya Campus T/LC, J Building, (505) 224-5990
South Valley Campus, (505) 224-5067
CNM Westside, (505) 224-5311

The **Adult Education Learning Centers (AELC)** are open to all adult basic education students. Individual and small group tutoring is available on a walk-in and by appointment basis. Subjects covered are basic skills (BSK), job/life skills (JLS), English as a Second Language (ESL) and GED preparation. Additional instructional resources include videos, reference materials, workbooks and conversation groups.

CONTACT INFORMATION

Main Campus, Ken Chappy Hall, Room 6, (505) 224-4312

Montoya Campus, J Building, (505) 224-5995
 South Valley Campus, (505) 224-5067
 CNM Westside, (505) 224-5311

The **Writing and Reading Assistance Centers (WRAC)** are open to all students in developmental education courses. Individual and small group tutoring is available on a walk-in and by appointment basis. Topics covered are pre-writing techniques, outlining strategies, essay organization, summary writing, grammar, vocabulary building, reading comprehension, test preparation, study skills and other concepts covered in reading and writing courses. Additional instructional resources include videos, reference materials and computers with writing and reading software.

CONTACT INFORMATION

Main Campus WRAC, Ken Chappy Hall, Room 8, (505) 224-3954
 Montoya Campus, J Building, (505) 224-5990
 South Valley Campus, (505) 224-5067
 CNM Westside, (505) 224-5311

The **Math Learning Centers (MLC)** are open to all developmental math students. One-to-one and small-group tutoring is available on a walk-in basis. Additional instructional resources include handouts, videos, reference materials and computer software.

CONTACT INFORMATION

Main Campus, Ken Chappy Hall, Room 4, (505) 224-3989
 Montoya Campus, J Building, (505) 224-5990
 South Valley Campus, (505) 224-5067
 CNM Westside, (505) 224-5311

The **Open Computer Lab (OCL)** is open to students and members of the public. The lab has over 60 computers, including three Macintosh computers, with various software packages for educational and personal use on a first-come, first-served basis. Staff members are on duty to provide general assistance.

CONTACT INFORMATION

Main Campus, Jeannette Stromberg Hall, (505) 224-4314

The **Literacy Volunteers at CNM** offer free tutoring services that bring together adult learners and volunteer tutors. One-to-one tutoring is available by appointment. Subjects covered are literacy, English as a Second Language (ESL), GED preparation and citizenship.

CONTACT INFORMATION

Main Campus, (505) 224-4313

The **Supplemental Instruction Program (SIP)** provides peer-assisted study sessions for targeted, traditionally difficult courses. Student leaders are recommended by faculty, attend

intensive training and facilitate regularly scheduled study groups with the goal of improved student success leading to increased retention and completion.

CONTACT INFORMATION

Main Campus, Jeannette Stromberg Hall, (505) 224-4714

Free Online Tutoring is available to CNM students for selected courses to include math, English, science, economics and Spanish. Students can go online for drop-in live sessions (available 24-7 for Math), prescheduled appointments, or they may submit questions/papers with a 24-hour turnaround. In addition, other academic resources are available through the website.

CONTACT INFORMATION

Main Campus, Jeannette Stromberg Hall, (505) 224-4308

Campus Life

CNM recognizes that as a student, your need for a well-rounded educational experience extends beyond just the classroom. In an attempt to ensure that you have the resources you need to be successful as a student and that you have the opportunities to develop your full potential as a future leader and an active community member, the following information is provided.

Note: An overview of Student Codes and Policies is on page 38.

Bookstores

Bookstores sell required texts for CNM courses. In addition, they carry a full range of school supplies and CNM-spirit items (t-shirts, pens, ball caps). Bookstores are available at both Main and Montoya Campuses. The hours vary, please call for more information.

CONTACT INFORMATION

Main Campus Bookstore, Student Services Center: (505) 243-0457; Montoya Campus Bookstore, Tom Wiley Hall: (505) 332-7485; www.cnm.edu/bookstore

Child Care

CNM maintains affiliation with Tres Manos Child Development Center to provide daytime care for children of low-income students and neighborhood residents. Cost of services is on a sliding scale and preference is given to single parents. Be sure to sign up early, sometimes availability is limited.

CONTACT INFORMATION

Tres Manos Child Development Center, 823 Buena Vista SE (on the south side of Main Campus); (505) 848-1310.

E-mail/Web (CNM Passport)

All students, once admitted to CNM, have an account available on CNM Passport (<http://passport.cnm.edu>). Please read, understand and agree to the CNM Information Technology Use Policy (see page 388 or cnm.edu).

CNM Passport provides a student with an official CNM e-mail account as well as options for calendars, groups and personalized pages. Check it out!

CONTACT INFORMATION

Visit <http://passport.cnm.edu> for more information and to sign up or call (505) 224-HELP (4357).

Food Services

Food courts are available at both Main and Montoya Campuses. These areas provide a variety of eating options for students at a range of prices. Hours vary at both sites, so be sure to stop by and find out when there is access to quick food on campus.

Other campuses and instructional sites do offer vending machines for student use.

CONTACT INFORMATION

Main Campus Food Court: Lower level of Student Services Center; Montoya Campus Food Court: H Building; All campuses: Vending machines

Health Care

A Student Health Center is available on Main Campus. To obtain services, you must be a currently enrolled student and schedule an appointment by calling the number listed below. First aid and basic primary care services are offered. A co-pay (ranging from \$5 to \$35) is required for services.

Details about private provider student health insurance are available at the Student Activities Office in the Student Services Center at Main Campus (505) 224-3238 and in Tom Wiley Hall on the Montoya Campus.

CONTACT INFORMATION

Student Health Center (Main Campus): Upper level of Student Services Center; hours: 8 a.m. to 5 p.m.; (505) 224-3080.

Honor Society

Phi Theta Kappa is the official international honor society for junior and community colleges. CNM's chapter of Phi Theta Kappa is the Alpha Upsilon Chi chapter. Students who have a declared major in an associate's degree program, have completed 12 or more credit hours at CNM and have a cumulative GPA of 3.5 or higher are invited to join Phi Theta Kappa.

CONTACT INFORMATION

Dean of Students Office (Main Campus): Upper level of Student Services Center; hours: 8 a.m. to 5 p.m.; (505) 224-4342.

Housing

CNM is a non-residential college so there is no housing available on campus. However, there are numerous apartment complexes and rental homes in the vicinity of campus. Many local renters do maintain postings of their available rentals in the Main Campus Student Activities Office for your use. Most postings are for the area in and around the Main Campus.

CONTACT INFORMATION

Information regarding rental housing near Main Campus is available from Student Activities Office (Main Campus), room SSC109.

ID Cards

As a student, you are required to have a CNM ID. Many services on campus require the ID to access the service and having an ID is the quickest and easiest way to verify your eligibility for tax-free purchasing in the bookstore and student discounts in many Albuquerque-area businesses.

CONTACT INFORMATION

Main Campus, Student ID Office, SSC 109; Hours: 8 a.m. to 5 p.m.; (505) 224-3238.

Montoya Campus, Tom Wiley Hall, Room "C"; Call ahead for hours; (505) 224-5546.

Pew Foundation Leadership Program

CNM offers a unique opportunity for students to develop their leadership skills and become more marketable in applying for jobs after graduation. The Pew Foundation Leadership Pleanty Program is designed to provide extensive training in leadership and civic engagement opportunities to become a student leader in the Albuquerque community.

Students interested in becoming part of this program should call (505) 224-4359 for the upcoming academic year.

CONTACT INFORMATION

Call the Title V Office at (505) 224-4394 or the Department of Experiential Learning at (505) 224-4359.

Parking

Parking is currently free at most campus lots, although you must register your vehicle with security and display a parking sticker when parking on any CNM campus. Parking stickers are available free at the information counter in the Admissions Office at the Main and Montoya campuses and in the administrative offices at the South Valley Campus and CNM Westside. At Main Campus, students may purchase permits for permit-only and gated parking lots. Permits must be displayed from the rearview mirror. Gated lots are open and free after 4:30 p.m. Spaces are available on a first-come, first-serve basis.

Parking violations may result in disciplinary action against car owners. Cars parked in fire lanes and in spaces reserved for the handicapped are subject to towing.

CNM students may also purchase parking permits for parking lots near the Main Campus. More information is available in the **Schedule of Classes**.

CONTACT INFORMATION

Parking Services, (505) 224-4637; parkserv@cnm.edu

Security

For Campus Emergencies on any campus, call 224-3001.

These numbers directly connect any campus phone to the “Emergency Phone” in the Campus Security Dispatch and should be used only when an emergency arises such as fire, violent crimes or when medical response is required.

Code Blue Phones

Outdoor emergency “code blue” phones are located across CNM campuses. These telephones are housed in highly visible, lighted blue call boxes and provide one-button speed dialing for instant communication with campus security.

Motorist Assistance

CNM Security assists the CNM community when individuals are unable to start their vehicles, retrieve locked keys, etc. Some services are not available at all times, but CNM Security will assist people to obtain services from another source.

Motorists will be required to sign a service disclaimer before any service is rendered. Assistance may be requested by calling Security Dispatch at (505) 224-3002.

Security Escort Services

The Security Department provides a security escort service. The service is available 24 hours a day, but is limited to on-campus locations. Call (505) 224-3002 to request an escort.

Additional security information and crime statistics (in compliance with the Cleary Act) are listed in the Security Department’s Annual Report available from the Security Department.

CONTACT INFORMATION

Main Campus Security Department; 901 Buena Vista SE; Physical Plant Building; hours: 7:30 a.m. to 5:00 p.m.; (505) 224-3002.

Student Activities

CNM offers its students a number of activities which are meant to enrich life on campus and to provide for a complete and holistic approach to your educational experience. Students can become a member of the Executive Council of Students (CNM’s Student Government), join a club or organization- there are well over 30 available - or take part in activities and events that are provided throughout the year.

CONTACT INFORMATION

Main Campus: Student Activities Office , SSC 109; (505) 224-3238.

Transportation

Sun Tran, Albuquerque’s public transit system, has routes that serve CNM’s Main, Montoya and South Valley campuses. Schedules are available at the Student Services Center on Main Campus or from Sun Tran.

Bicycle racks are available at all of our campuses.

CONTACT INFORMATION

Sun Tran: (505) 843-9200; www.cabq.gov/transit

Voter Registration

CNM students may register to vote at any CNM campus.

CONTACT INFORMATION

Main and Montoya Campuses: Admissions Offices or Student Activities Office; Main Office at the South Valley Campus or CNM Westside.



Graduation

Achieve The Dream - Graduate! Graduation from CNM is an important step for a student in meeting their education and career goals. With a CNM certificate or degree, a CNM graduate will join a growing number of successful CNM alumni and increase their job and educational advancement opportunities.

Graduation is not automatic. To receive a certificate or degree from CNM, a student must complete CNM's Graduation Requirements, Graduation Application Process and pay any debts to CNM in full.

Any student with questions about graduation requirements or the graduation application process should meet with an academic advisor, achievement coach or program director.

Graduation Requirements for Certificates and Degrees

- Official declaration of the major (program) in which the student will be graduating (see page 17 on adding, changing and declaring majors).
- Selection of an eligible graduation catalog. The student may choose to complete their program requirements as defined in the catalog that was in effect when they earned their first credit(s) at CNM or a later catalog as long as the catalog is not more than five years old and the student maintained continuous enrollment by completing at least one course at CNM, with a grade of C or better, in that catalog and each successive catalog year.

Note: A student who does not maintain continuous enrollment loses the right to graduate under their original catalog. They may only choose from the catalog in effect at the time they resume course work at CNM or a later catalog in which they maintained continuous enrollment. Course pre- and corequisites must be met for each course at the time of registration, regardless of the catalog under which a student will graduate.

- Completion of all program requirements, including all courses and credit hours listed in the student's graduation catalog.*
 - ◆ All career and technical courses used to meet program requirements must have a grade of C or better and all arts and sciences courses, a minimum grade of D (see page 35).
 - ◆ Career and technical courses more than ten years old must have been officially validated by the academic division in which the course was offered.

Note: Courses numbered below 1000 cannot be used to meet program graduation requirements.

- Completion of CNM's residence requirement. At least one-quarter of the required program coursework and credit hours for a certificate and 12 credit hours of the required program coursework for a degree must be completed at CNM, after the program becomes available.

Note: Credit based on challenge exams and courses graded AU do not apply toward the graduation residence requirement.

- Achieve a cumulative GPA of 2.0 or better in the program (unless otherwise stated in the program description).

*Using Transfer Credit, Non-Traditional Credit, Examination Credit, Waivers and Substitutions to meet program requirements (see page 12): A student using transfer, non-traditional, exam credit and/or waivers or substitutions to meet program requirements must have all required documentation on file in the CNM Records Office at least two weeks prior to submitting their Graduation Application Packet. Failure to do so will delay processing.

Note: A student may be required to make up deficient credit resulting from course substitution or transfer. A course waiver does not require the student to make up the credits of the waived course. Because all CNM graduates in degree programs must complete a minimum of 60 credits and 90 percent of the credits required in their certificate program, there is a limit on the number of course waivers that can be granted. (Example: If a program requires 64 credits, a maximum of 4 credits may be waived. If a program requires 68 credits, a maximum of 8 credits may be waived.) All credits used for graduation must be displayed on the student's CNM transcript. (See page 12.)

Applying for Graduation

1. Submit a Graduation Application Packet (GAP) for each completed program. GAP's are available online at cnm.edu, the Academic Advisement and Career Development offices and the achievement coach office in which the program is offered. A GAP includes:

- A graduation application,
- A job connection and graduation surveys and
- A program checklist (checklists for catalogs prior to 2004 are not available online)

2. Completed packets along with the student's official Web transcript, available through CNM's online enrollment system, must be submitted to the Academic Advisement and Career Development office during the term in which the student finishes their program. Submitted packets will be processed in the order received.

Note: Non-current students have up to one year after their last term of enrollment at CNM to apply for graduation. A \$20 processing fee will be charged to all non-current students for each graduation application.

Graduation with Honors

A student earning a cumulative GPA of 4.0 will graduate with highest honors. A student with a cumulative GPA of 3.6 to 3.9 will graduate with honors. Degrees, certificates and official CNM transcripts note these awards.

Updating Certificates

A student who has received a certificate may update his/her skills and earn a subsequent certificate in that program when:

- The previously earned certificate is 10 years old or older and
- 100 percent of the certificate coursework was completed within the past 10 years; and
- The student has met all other graduation requirements as stated in the **CNM Catalog**

Updating Associate Degrees

A student who has received an associate degree from CNM may earn a subsequent associate degree in the same major (program) when:

- The student completes, at CNM, a minimum of 30 credit hours of new or additional required program course work (see note below) and
- The student has met all other graduation requirements as stated in the **CNM Catalog**.

Note: These credits must be earned in courses required by the program for graduation and may not have already been used to satisfy graduation requirements in the student's prior degree in that major (program) or by completing an additional concentration in the program. These new and/or additional credits cannot be earned by repeating courses that were used for graduation in the prior CNM degree in that major (program).

Graduation Ceremony

CNM conducts one "graduation commencement ceremony" each year, at the end of the spring term. Students graduate in the term in which all graduation requirements are completed even if there is no graduation ceremony scheduled that term. Information about the graduation commencement ceremony is available at cnm.edu.

Graduation Ceremony Dates (tentative)

Summer 2007, Fall 2007 and Spring 2008 graduates.....	April 25, 2008
Summer 2008, Fall 2008 and Spring 2009 graduates.....	April 24, 2009



- GETTING STARTED
- ACCESSING CNM
- EDUCATIONAL OPTIONS
- PROGRAMS OF STUDY
- COURSE DESCRIPTIONS
- CODES AND POLICIES
- GLOSSARY, INDEX, MAPS

Academic Policies *(The following policies do not apply to students taking non-credit classes)*

Definition of Terms

Academic Year: The academic year is divided into three terms: fall, spring and summer.

Attendance: Students enrolled for credit or audit are expected to attend all class sessions. Instructors will take attendance.

Absences do not relieve students of the responsibility for missed assignments and exams. Students must take the initiative in arranging with their instructors to make up missed work.

A student who misses the first class meeting and has not contacted the instructor, or who misses two consecutive class meetings in the first week may be dropped from the course. A student with excessive absences may be dropped from a course. (See the **Schedule of Classes** for additional information regarding attendance requirements.) If a student is dropped from a course for non-attendance he or she is also dropped from corequisite courses. A student should not assume he/she will be dropped automatically.

A student who is dropped by an instructor for non-attendance is notified by mail. The instructor's decision is final, but if the student disagrees with the action he or she must contact the instructor within two working days of receipt of the notification.

Additional information about attendance is contained in individual course syllabi.

Classification of Students: The following are standards for the academic classification of students:

- Freshman: A student who has completed fewer than 30 credits at CNM
- Sophomore: A student who has completed 30 or more credits at CNM
- Part-time: A student enrolled in fewer than 12 credit hours per term
- Full-time: A student enrolled in 12 or more credit hours per term

Course Numbering: Effective Fall 2007, courses numbered 0001-0999 are developmental or preparatory courses; 1001-1999 are freshman-level courses; 2001-2999 are sophomore-level. Prior to Fall 2007, courses numbered 1-100 were developmental or preparatory; 101-299 freshman and sophomore level.

Course Types:

arts and sciences courses: Courses numbered 1001 and above with the following subject codes: ANTH, ART, ARTS, ARTH ASTR, BIO, CHEM, COMM, CST, ECON, ENG, FREN, GEOG, GNHN, HIST, HUM, JOUR, MATH, MUS, NUTR, PHIL, PHYS, PSCI, PSY, RLG, SOC, SPAN, THEA

career and technical courses: Courses numbered 1001 and above not listed as arts and sciences courses

developmental courses: Courses numbered 0999 and below

Credit Hours: Credit in courses offered by CNM is awarded in terms of credit hours. Each hour of credit in a lecture class requires a minimum of 750 minutes of instruction per term; each hour of credit in a laboratory class requires a minimum of 1,875 minutes of instruction per term. For transfer purposes, one CNM credit hour generally equals one semester credit hour at other institutions.

Grading System

Final CNM grades are recorded on the student's CNM transcript and calculated in both a term grade point average (GPA) and a cumulative GPA. Final grades are available to students on STARS and online at cnm.edu.

The grades awarded in all courses represent the quality of work done. Their meaning in most courses is as follows:

- A:** **Excellent;** 4 points per credit hour.
- B:** **Above average;** 3 points per credit hour.
- C:** **Average;** 2 points per credit hour.
- D:** **Below average;** 1 point per credit hour.
- F:** **Failure;** 0 points per credit hour.
- CR:** **Credit;** grade is equivalent of at least a grade of C but is not computed in the grade point average.
- NC:** **No Credit;** grade is not computed in the grade point average.
- PR:** **In Progress;** course work not completed; grade is not computed in the grade point average.
- AU:** **Audit;** recorded for completion of enrollment in an audited course; no credit is earned.
- I:** **Incomplete;** grade is not computed in the grade point average (see Incomplete Grade Assignment and Removal on page 35).
- W*:** **Withdrew;** used for student, instructor and administrative withdrawals.
- TR/TRD:** Credit for transfer coursework and non-traditional credit; grade is not computed in the grade point average.

**Effective Fall 2003, 15-week and full-term classes dropped on or before the 15th day of that part of term/session (including Saturdays) and all other classes dropped on or before the first 1/3 of that part of term/session (including Saturdays) do not appear on the student's CNM transcript. A "W" will appear on the student's record for classes dropped after the dates listed above. Prior to Fall 2003, a "W" appeared on the student's record for full-term and 12-week courses dropped after the 15th day of the term/session (including Saturdays) and for all other short-session courses dropped on or after the first day of the session.*

Grade Point Average

To compute the grade point average (GPA), multiply the number of credit hours by the quality point value assigned to the letter grade for each class: A = 4 points, B = 3 points, C = 2 points, D = 1 point, F = 0 points. Then divide the total number of quality points earned by the total number of eligible credit hours attempted. See box below. (Grades of I, CR, PR, NC, W, AU and TR are not calculated in the GPA.) Effective Fall 1991, courses on the student's transcript which have an E in the repetition column are excluded from GPA calculation.

Grade Point Average (GPA) Calculation Example

Course	Credit(s) Attempted	x	Grade Received (quality point value)	=	Total Quality Points Earned
ENG 1101	3	x	B (3 quality points)	=	9
ACCT 1303	1	x	C (2 quality points)	=	2
HIT 1030	4	x	A (4 quality points)	=	16
TOTAL	8 credits				27 quality points earned

Now, divide total quality points earned by total credits attempted: $27 \div 8 = 3.37$
 Therefore: GPA = 3.37

Grade Mode (Grade Options)

CNM has the following grading options (grade modes). These options are not available for all classes. Refer to the course description for grade mode restrictions.

Traditional Grade: A, B, C, D, F. Traditional grades are used in calculating GPA. Students interested in transferring their CNM course work to another institution are encouraged to enroll in courses for a traditional grade.

Audit: Students auditing a course must meet course prerequisites, are expected to attend all class sessions, but are not required to complete assignments. Students changing from audit to any other grade mode are responsible for having met all course requirements to date, as stated in the course syllabus. Students may not enroll in courses numbered 0999 and below for audit.

Courses taken for audit will appear on the student’s transcript as AU with no credits recorded and no grades assigned. Courses taken for audit are not included in the student’s total course load for enrollment verification and cannot be used to meet a course pre- or corequisite.

Credit/No Credit: Students may elect to take arts and sciences courses for credit/no credit (CR/NC) but it is not an option for General Honors or most career and technical courses. All developmental courses are graded on a CR/NC basis.

CR (Credit): Students must meet all minimum requirements for the course. CR is the equivalent of a C or better grade. A grade of CR is not computed in the GPA but the student will receive credit for the course.

NC (No Credit): Students who do not satisfactorily complete minimum course requirements will receive NC. A grade of NC is not computed in the GPA and the student will not receive credit for the course.

Note: Some schools, scholarships and honorary societies do not accept this grading system and/or convert grades of CR to C and NC to F. Students planning to transfer to another institution should talk to an academic advisor at that institution about possible consequences of CR/NC grades.

Open-Entry, Open-Exit: Students may register for courses that have flexible entry and/or exit points with the open-entry, open-exit grading option. Depending on the course, the student may receive a traditional (A, B, C, D, F), credit/no credit (CR/NC) or an in progress (PR) grade.

Incomplete Grade Assignment and Removal

A grade of “I” (incomplete) is given when circumstances beyond the student’s control have prevented completion of the work for a course within the official dates of a term. In no case is an “I” to be used to avoid a failing grade or to allow extra time to complete work normally expected.

Removal of an “I” grade can only be accomplished by completing the work in a manner acceptable to the instructor no later than the 10th day of the following term.

An “I” not made up by the 10th day of the following term will automatically revert to an F or NC on the student’s record and cannot be changed by work completion.

Repeat Course Processing

When a student has completed a course two or more times, each course enrollment and all grades will appear on the student’s transcript. Only the higher grade will be used to calculate the GPA. This policy applies to courses with identical course abbreviations and numbers except for the following: topics, problems, internship and cooperative education courses and when course abbreviations and numbers change as a result of new programs and/or program revisions. It does not affect any courses taken prior to Fall 1991. (See Course Repetition Limit, page 18.)

Note: For repeat course processing CR grades are computed as a C; NC grades are computed as an F. Also, certain forms of financial aid will not provide assistance to students who repeat courses previously completed successfully. Compliance with such regulations is the student’s responsibility.

Grade Appeals

It is the student’s responsibility to communicate concerns he/she may have about any grade in a class to the instructor of the class. If the issue is not resolved, the student may formally appeal a final grade for the following reasons:

- Inconsistency between what is written in the syllabus and what is practiced;
- Grade miscalculation;
- Errors in the final exam if a change in the final exam grade would cause a change in the course grade; or
- Inconsistent classroom practices.

A student may not appeal disagreements with teaching methodologies, attendance policies or grade weighting methods.

Appeal Process: The student must begin the formal grade appeal process by obtaining a Grade Appeal Form and process guide from the academic division in which the course was taken and submitting it to the instructor by the end of the first week of the term following the course. If the instructor is not available the student should submit a Grade Appeal Form to an academic administrator in the division. If the request for a grade change is approved, the instructor or academic administrator will submit a grade correction to the Records Office.

Academic Policies

If the appeal is denied, the student may further appeal to the division or directly to the Instructional Grade Appeal Board.

Registration Related Grade Appeals: A student who fails a class because he/she was physically unable to drop or complete the class, (Example: hospitalization or military service) may appeal in writing to the assistant registrar. The appeal, along with required supporting documentation, must be submitted by the end of the following term. Registration Related Grade Appeal forms are available in the Records Office at the Main Campus, the Admissions Office at all other campuses and online at cnm.edu.

Academic Renewal

Students who return to CNM after an extended absence may petition to remove complete academic terms from future degree and GPA considerations. This policy allows CNM students who had previously experienced academic difficulty to make a fresh start. Approval of the petition is based on the conditions listed below. If approved, Academic Renewal will result in a new grade point average.

1. To be eligible for Academic Renewal the student must have been absent from CNM for at least three consecutive years – 9 terms – prior to petitioning for Academic Renewal and must have completed at least 15 credit hours since his or her return with at least a 2.0 GPA.
2. Courses taken prior to Fall 1988 term are not eligible for Academic Renewal. Academic Renewal will affect all courses with grades of D or F taken between Fall 1988 and the student's absence.
3. Academic Renewal may be granted only one time per student and cannot be reversed.
4. Any academic suspensions that occurred in the past shall remain on the student's permanent academic record.
5. All attempted coursework and grades will remain on the student's official transcript. All courses affected by Academic Renewal will be excluded from the GPA calculation and may not be used to meet program and/or residency requirements for future graduation. A statement will be placed on the student's transcript indicating that Academic Renewal status was granted.
6. Academic Renewal does not affect any previous academic, financial or administrative determination made by CNM. Other institutions/agencies may or may not choose to honor this policy in evaluating a student's transcript.
7. Academic Renewal does not override the enrollment requirements of certain programs that require a specific minimum grade point average based on all coursework. Re-entry into any academic program is not automatic.
8. Forms for Academic Renewal are available in the Records Office at Main Campus, the Admissions Office at all other campuses and online at cnm.edu.

Academic Standards

Honor Roll: The Dean's List is compiled each term, listing students who completed 12 or more credit hours with traditional grades during the term and who achieved a term GPA of 3.5 or higher.

Graduation with Honors: Students earning cumulative GPA's of 4.0 graduate with highest honors. Students with cumulative GPA's of 3.6 to 3.9 graduate with honors. Degrees, certificates and official CNM transcripts note this award.

Warning: A student whose cumulative GPA is between 1.75 and 1.99 in a given term will receive a warning. Notification of academic warning appears on the student's grade report at the end of each term.

Probation: A student whose cumulative GPA (based on at least 16 GPA credit hours attempted at CNM) falls below 1.75 in a given term will be placed on probation effective with the following term of enrollment. Students are continued on probation if they withdraw from CNM while on probation. Notification of academic probation appears on the student's grade report at the end of each term.

Note: Some Health, Wellness and Public Safety programs may have specific requirements that affect a student's eligibility to continue in the program. Students should refer to the program handbook.

Suspension: After two consecutive terms of probation a student will be suspended from CNM when both the term and cumulative GPA are below 1.75. The duration of the initial suspension is one term; for subsequent suspensions, one year. Notification of academic suspension appears on the student's grade report at the end of each term and in a notification letter sent to the student.

If a suspended student has pre-registered for the next term, his/her schedule will be deleted and a refund of all fees and tuition will be authorized. A suspended student may be eligible to enroll in courses numbered 0999 and below during the student's initial suspension period.

Suspension Appeals: A student who has been suspended may submit a written appeal (along with appropriate supporting documentation), explaining the unusual circumstances and justifying why he or she should be readmitted, to the Director of Enrollment Services, who will approve or deny the appeal. If the director denies the appeal, the appeal will be referred to the Student Academic Appeals Committee. The student may present the case to the committee in person. The decision of the Committee is final.

Student Academic Records

The Records Office maintains official academic records. These records include, but are not limited to: the admissions form, high school and/or college transcripts, grades and academic standing.

CNM's policy for maintaining confidentiality of student academic records is in accordance with the Family Educational Rights and Privacy Act of 1974 (FERPA, P.L. 93-380, 512). Copies of the Rights and Privacy Act are available for examination in the Records Office at the Main Campus and the Admissions Offices at the Montoya and South Valley campuses and CNM Westside.

Access to Student Academic Records

All currently enrolled and former students may have access to their academic records. Other individuals and agencies that may have access to students' records include:

- CNM officials who have a legitimate educational interest in the records
- Officials of another school in which a student seeks to enroll, intends to enroll or is enrolled
- Officials of the U.S. Department of Education, the Comptroller General and state and local educational authorities
- Organizations providing the student's financial aid or determining or assisting in determining financial aid decisions concerning eligibility, amount, condition and enforcement of terms of said aid
- Federal, state and local officials or authorities if required by a state or federal law
- Organizations conducting certain studies for or on behalf of the Institute
- Accrediting institutions
- Organizations or individuals conducting studies for or on behalf of CNM
- Individuals serving a judicial order or a lawfully issued subpoena, provided that a reasonable effort is made to notify the student prior to compliance
- Honor societies and other chartered student organizations for determining membership
- Any person with the written consent of the student or the parent or legal guardian of students under 18
- Appropriate parties in a health or safety emergency
- Authorized recruiters of the U.S. Armed Forces, as per the Solomon Amendment

Public Directory Information: CNM has defined public directory information as:

- | | |
|--------------------|--------------------------------|
| ■ Student's name | ■ Dates of attendance |
| ■ Major discipline | ■ Awards and honors |
| ■ Classification | ■ Degrees/certificates awarded |

This information is available to the public and can be released unless an annual written request to withhold the information is on file in the Records Office. Confidentiality request forms may be obtained in the Records Office and at cnm.edu.

Challenge of Contents: Students have the right to challenge the content of their academic record if they feel the information is misleading, inaccurate or in violation of privacy or other

rights. However, the fairness of a grade may not be challenged under this provision. Any dispute over the contents of the record will be handled through informal discussions between the student and the Records Office. If such informal meetings are not satisfactory, the student has the right to a formal hearing before an appeals committee. Students have the right to file with the U.S. Department of Education a complaint concerning alleged failures by CNM to comply with the requirements of FERPA.

Change of Address: Students are expected to keep CNM informed of their current mailing and permanent addresses. Changes must be reported in writing to the Records Office on the Main Campus or the Admissions offices at the Montoya and South Valley Campuses, CNM Westside or online at cnm.edu. Address Change forms are available at any of these offices, online at cnm.edu and through CNM's online registration system. Address changes submitted by e-mail or by telephone are not accepted.

Change of Name: Students must bring appropriate documentation (at least two types of identification showing the new name) to the Records Office on the Main Campus or the Admissions Offices at the Montoya and South Valley campuses and CNM Westside to change their name on their CNM records. Name change forms are available at any of these offices and online at cnm.edu. Examples of such documentation are: marriage certificate, birth certificate, driver's license, original social security card or court order for legal name change.

Release of Transcripts: Official CNM transcripts are available directly from the Records Office and through the Admissions Offices at the Montoya and South Valley campuses and CNM Westside (additional processing time may be required). Transcript request forms are available at any of these offices and online at cnm.edu. Transcripts may be requested in person, by fax or by phone. Phone requests may only be used for sending transcripts to another postsecondary institution. Students may request up to three official CNM transcripts, free of charge, per calendar year. Additional transcripts cost \$3 each and \$10 for transcripts faxed within the continental U.S. and must be paid for in advance. No transcript is issued until all institutional obligations are paid.

Transcripts from other institutions received by CNM are not copied for or returned to students.

Social Security Number: Under the federal 1997 Tax Relief Act, CNM is required to obtain the Social Security number of each student in order to report educational credits to the U.S. Internal Revenue Service (IRS) and to the student at the end of each tax year. Refusal to provide a valid Social Security number may result in a fine levied on the student by the IRS. The privacy of a student's Social Security number is protected under FERPA and covered under CNM's Access to Student Academic Records Policy (see above). A student who chooses not to use his/her SSN as their CNM student number must complete an Alternate ID Request Form, available at any Admissions office, the Records office and online at cnm.edu.

Student Right to Know and Campus Security Act: Student retention and completion data are available from CNM's Planning, Budget and Institutional Research Office. A graduate job placement table is on pages 6–7. Campus security policies and crime statistics are published in the Rules and Policies section of this catalog and online at cnm.edu.

Overview of Student Codes and Policies

As a student, you are an active and vital part of the CNM educational community; a community dedicated to protecting the freedom of individuals to inquire, study, evaluate, question and gain new levels of knowledge and understanding. As with other communities, CNM has put specific policies and expectations in place that define acceptable behavior necessary to both protect individual freedoms and ensure responsible citizenship. As a member of the CNM community, it is your responsibility to understand and adhere to the codes and policies that govern and prescribe acceptable student behavior. Essential components of these policies and codes are discussed briefly below. However, students should review and become familiar with the full content of each policy and code found in the “Student Policies and Codes” section of this catalog.

Student Code of Conduct

The Student Code of Conduct defines the behavioral expectations of CNM students. It also explains the student discipline process and the procedures that are followed when a student violates the established Code of Conduct. A complete copy of the Code of Conduct is included in the section of this catalog titled, “Student Codes and Policies.” All students are expected to adhere to the Student Code of Conduct and should therefore familiarize themselves with its contents.

In addition to the Student Code of Conduct, students should also know and understand the rules and regulations that apply to CNM classrooms and laboratories and the policy statements that govern specific aspects of the CNM learning and working environment. These policies and rules are inherently tied to the Code of Conduct, but are defined separately because in most cases, they apply to all members of the CNM community—not exclusively students. As with the Student Code of Conduct, the full text for these rules and policies is found in the section “Student Code of Conduct” beginning on page 382.

The most recent version of the Student Code of Conduct can be found on the Dean of Students website at <http://www.cnm.edu/deanofstudents/>.

Policies

Equal Opportunity Policy

Central New Mexico Community College affirms that it will not discriminate on the basis of gender, race, color, national origin, ethnicity, religion, age, disability, sexual orientation or marital status in any of its policies, practices or procedures in accordance with applicable federal, state and local laws, nor will it condone any acts of illegal discrimination by its employees. This provision includes, but is not limited to, employment, admissions, testing, financial aid and educational services. The College confirms that the above provision by its reference to applicable federal, state and local laws prohibits and condemns any retaliation of any kind against any employee or student engaging in the exercise of free speech or in activities protected by federal, state or local laws.

Any student who wants to file a complaint or who has questions about illegal discrimination, retaliation or harassment based on these laws should contact the Dean of Students’ Office (505) 224-4342.

Americans with Disabilities Act Policy

In accordance with the Americans with Disabilities Act (ADA), Section 504 of the Rehabilitation Act of 1973 and other applicable law, CNM takes appropriate action to ensure that its programs and services are readily accessible to qualified individuals with disabilities. No qualified individual with a disability shall, on the basis of the disability, be excluded from participation in, be denied the benefit of, or otherwise be subjected to discrimination related to any of the institution’s programs or activities.

If a student wishes to discuss a possible accommodation or has concerns about CNM’s compliance, he or she should contact the director of Special Services at (505) 224-3259.

Admission Policy

CNM has an open admission policy except in a case when available information indicates that a potential student is likely to pose a serious threat to the safety of the applicant and/or members of the CNM community. For a full policy statement regarding this exception, please refer to page 392 in this catalog.

Academic Integrity

Students are expected to conduct themselves at all times with the highest academic standards. Cheating, falsifying work or plagiarism will not be tolerated. Students committing these offenses are subject to penalty ranging from a “0” on the assignment or test, to an “F” for the course. Students with repeat offenses are subject to disciplinary action up to and including expulsion.

For a full explanation of the procedures that are followed if academic dishonesty is suspected, please refer to page 387 of this catalog.

Information Technology Use Policy

This policy establishes the guidelines by which CNM computer, network and telecommunication systems can be used and defines what is acceptable when designing home pages on CNM’s systems. The prevailing concept is that technology use on campus should be for instruction, learning, academic research and administrative purposes only. The complete policy can be found on page 388 and at cnm.edu.

Substance Abuse Policy

It is CNM’s belief that abuse of alcohol or drugs impairs functioning, disrupts the learning process and poses a potential threat to the safety and well being of the CNM community. This policy statement (page 390) supports CNM’s commitment to maintaining a drug- and alcohol-free campus.

Sexual Harassment Policy

Sexual harassment is defined and the College’s intolerance for this behavior is explained on page 391. Students at CNM are expected to be respectful of others regardless of gender.

Military Duty Policy

CNM is committed to supporting the needs of our students involved in U.S. Military Service. The full version of CNM’s policy that addresses the needs of students who are called to Active Duty or are transferred to a new duty station while enrolled, can be found on page 391.

Rules Governing Classrooms and Labs

Children on Campus

Children (or other non-students) are not allowed to accompany adults to class. All children who are under age 15 and are on CNM’s campus must be accompanied by an adult at all times.

Electronic Devices

When students are in class or a lab, all cellular telephones, pagers and beepers must be turned off or switched to silent or vibration mode.

Electronic entertainment devices are to be turned off and headphones removed.

Dress

Students are expected to dress appropriately on campus at all times.

Smoking

All interior spaces of the college are non-smoking areas in accordance with City of Albuquerque ordinance.

Remember, each of these rules and policies is explained more fully in the STUDENT POLICIES AND CODES section of this catalog.

Student Complaint Process

Occasionally, a student will encounter a problem on campus that he or she does not know how to resolve. When this happens, students should always try to work out the problem by first discussing it with those most involved with the issue. Dealing with concerns in the most direct and honest fashion should always be the first step toward resolution. It is quite astounding how many issues are settled or problems resolved, when a student makes an appointment with a faculty or staff member and calmly and honestly communicates their frustrations or concerns.

If however, an issue or problem still exists, there is a formal complaint process at CNM that students may initiate. All formal complaints must be put in writing using the official CNM Student Input Form. These forms are available in hardcopy in the department or academic divisions, in the Dean of Students Office, or online.

When initiating a formal complaint, the following steps should be followed:

1. Be sure you have first attempted to resolve the issue by speaking directly with the individual(s) or office(s) involved.
2. Complete and submit a CNM Student Input Form (these should be submitted online or to the department or academic division or Dean of Students).
3. When the complaint is received it will be forwarded to the appropriate individual to review and address the issue.
4. After your concern has been addressed, you will receive a letter from the appropriate department documenting the receipt and review of your complaint.

For more information on the student complaint process please check the CNM website where you will also find the Input Forms to be completed when you need to file a formal complaint.

SPECIAL NOTE: Sometimes CNM students find they are particularly pleased with how something has been handled for them, how they were assisted by a particular staff member, the positive experience they had in a specific class, or some other outstanding thing that happened to them at CNM. As a student you should know that the same Input Form that is used to lodge a concern can also be used to provide a written compliment or note of appreciation. In this case, the process for submitting the form is the same as for filing a formal complaint.

Academic Divisions

Applied Technologies

Main Campus, Ted Chavez Hall • (505) 224-3711

Montoya Campus, J Building • Room J-112 • (505) 224-5919

The Applied Technologies Division provides technology-enriched learning environments dedicated to individual learning and designed to produce successful career opportunities and positive change for individuals. The division is dedicated to supporting the workforce and economic development needs of the community and state. Guided by industry advisory groups, Applied Technologies offers outstanding faculty and state-of-the-art practice laboratories and courses that provide entry-level career opportunities, retooling/retraining for current workers and customized training packages for employers, including certificate programs, associate degrees with concentration options and skill sets that allow students to specialize in areas of individual interest.

A number of the programs are nationally accredited. (See page 56 for a complete listing.) Students who have questions on course prerequisites or course transferability (to or from CNM) are encouraged to consult with division directors, program directors or program chairs. Challenge examinations are available for some courses.

In addition to technology skills, students need employability skills in order to succeed in the modern workplace environment. Jobs in the 21st century require employees who have good interpersonal and teamwork skills, are observant and can communicate, listen, locate and use information and read/write effectively. ACT WorkKeys® is a nationally-recognized system that identifies essential employability skills for specific occupations. CNM uses WorkKeys® and other supporting systems to insure that students completing the division's programs have the required skill levels. Students must provide their own personal protective equipment (hardhat and safety glasses or goggles) and lab clothes, which are appropriate and comply with Applied Technologies and/or Occupational Safety and Health Act (OSHA) standards.

Most programs require basic hand tools. Tool lists with approximate costs and purchase deadlines are provided by instructors at the beginning of each term. Students are encouraged to participate in nationally recognized student organizations whose activities are an integral part of the curriculum. Students working toward a degree, certificate or skills set must earn a grade of C or better in all career and technical courses to meet division completion and/or graduation requirements.

Business & Information Technology

Main Campus, Smith Brasher Hall • Room SB-103 • (505) 224-3811

Montoya Campus, H Building • Room H-103 • (505) 224-5599

The Business & Information Technology (BIT) faculty, staff and programs provide opportunities for students to “Build Business Careers.” Preparing learners for the world of business and information technology is critical for success in the global economy. The Business & Information Technology Division offers (1) skill sets, certificates, associate of applied science degrees and an associate of arts degree; (2) professional development and workforce education through the Workforce Training Center; (3) the Cisco Academy, the Microsoft Academy, the Red Hat Academy and Oracle Academy; and (4) small business development and small business counseling through the Albuquerque Small Business Development Center and the South Valley Small Business Development Center.

The four departments that offer skill sets, certificates, associate of applied science degrees and associate of arts degrees in the Business & Information Technology Division include:

Department of Accounting and Legal Studies

Accounting (ACCT), Bookkeeping (ACCT), Court Reporting (CR), Financial Services (FIN), Integrated Studies, Judicial Studies (JUD), Paralegal Studies (PL), Pre-Management (ACCT, IT, BA and general education courses), Technology Management and Training (associate of applied science degree and general education courses)

Department of Business Management

Business Administration (BA), Entrepreneurship courses (ENTR), Health Information Technology (HIT), International Business courses (IB), Medical Coding (HIT), Project Management (PM), Real Estate/Appraisal courses

Department of Hospitality and Tourism

Baking (CULN), Culinary Arts (CULN), Food Service Management (CULN), Hospitality and Tourism (HT), Professional Cooking (CULN)

Department of Information Technology

Business Graphics (BGC), Computer Information Systems (CIS), Computer Science courses (CSCI), Information Technology (IT), Medical Office Assistant (OTEC), Office Assistant (OTEC), Office Technology (OTEC)

A minimum of 12 students is required for first term and elective courses. Certain courses are not offered every term. A student who registers for a Business & Information Technology program may be required to take English, reading and/or math placement tests. Advanced students may earn credit for on-the-job training through cooperative education and internship courses.

The New Mexico Two-year/Four-year Business Articulation Matrix and articulation agreements with several New Mexico postsecondary educational institutions offer course or program transfer opportunities for Business & Information Technology students. Programs with articulation agreements include pre-management, technology management and training, accounting, business administration and hospitality and tourism. Please see the associate dean in the area of study for current articulation information.

Communication, Humanities & Social Sciences

Main Campus, Max Salazar Hall • (505) 224-3588

The mission of the Communication, Humanities and Social Sciences (CHSS) Division is to offer an accessible broad-based academic curriculum in a student-focused environment. The CHSS curriculum provides students with a foundation for further educational studies, self-expression and critical thinking.

The CHSS Division provides arts, social sciences, humanities and education courses to support occupational degree and certificate programs, the Associate of Arts in Liberal Arts and the Associate of Arts in Fine Arts. CHSS also offers degrees in Elementary Education, Children, Youth & Family Development (CYFD) with concentrations in Early Childhood Multicultural Education and Family Studies and an Alternative Teacher License Program or post-baccalaureate for students interested in obtaining a New Mexico Level I teaching license. Most courses are transferable to other degree-granting institutions as freshmen and sophomore level electives or requirements.

General Honors Program

Offering intensive interdisciplinary study, the General Honors Program increases opportunities for liberal arts education. Taught in a small-group seminar format, Honors courses emphasize discussion, student participation and self-expression. Students interested in these courses must have completed nine hours of arts and sciences courses, have a 3.2 or higher cumulative GPA and have earned a B or better in English 101. For information and registration, interested students should see an advisor.

Reserve Officer Training Corps (ROTC)

Students may register at CNM for University of New Mexico ROTC courses in Air Force (AFAS), Army (MSL) or Navy (NAVS). Uniforms and textbooks are provided. Because these classes are offered at the main campus of UNM, students should contact the appropriate personnel at UNM (see page 44) before enrolling.

Disciplines within the CHSS Division include *Anthropology: Study of the characteristics and customs of humankind, Art: Study of the language, forms, techniques, methods and concepts of visual expression, Communication Studies: Study of the forms, practices and methods of interaction between individuals and groups, Education: Study of teaching, learning and child development, Cultural Studies: Study of ethnic, gender and other groups and their contributions to society, Economics: Study of the production, distribution and consumption of resources and their impacts, English: Study of literature and the clear and correct use of the written language, French: Study of the written and spoken language, General Honors: Study of various topics discussed in a seminar format, Geography: Study of the earth and its distribution of life forms, History: Study of past events in the evolution and life of human communities, Humanities: Study of human achievements in the visual arts, literature and music, Journalism: Study of the methods, skills and conventions of news gathering and writing, Music: Study of the art, theory and appreciation, Philosophy: Study of fundamental human questions in the search for life's meaning, Political Science: Study of the principals, structures, institutions, processes and behaviors of governments, Psychology: Study of human motivations, emotions, cognition and behavior, Religion: Study of the origins, practices and values of belief systems, Sociology: Study of the organization, development and interactions of people and society, Spanish: Study of the written and spoken language, Theatre: Study of the dramatic arts and their history.*

Educational & Career Advancement

Main Campus, Max Salazar Hall • (505) 224-3939

The mission of the Division of Educational and Career Advancement (ECA) is to help students progress in their academic and career pursuits through credit (Developmental Education), non-credit (Adult Basic Education), and a variety of support courses and programs. ECA faculty and staff help students develop the academic, work, and life skills necessary for success. The division strives to be a welcoming “front door” to the college for entering and returning students and a source of support for continuing students.

Developmental courses are taught in four departments: Introductory English and English as a Second Language, Introductory Mathematics and Sciences (including Biology, Chemistry, Information Technology, Introduction to Accounting, and Introduction to Health Occupations), Reading and Career Exploration (including College Success Experience courses), and Academic Support. They are designed to enhance the skills of students who need preparation for college-level studies. While credit from developmental education courses is not transferable to other degree-granting institutions, these courses typically help students meet admissions requirements and program prerequisites. Many of the courses are offered in different teaching and learning methodologies so students can choose the ones which best fit their learning styles. Developmental education courses are graded credit (CR) or no credit (NC) and not with traditional letter grades. Eligible students may receive financial aid for up to 30 credit hours of developmental education courses.

The Adult Basic Education (ABE) Program offers free instruction to adults who do not have their high school diploma or do not speak English as their first language. Courses are offered in English as a Second Language (ESL), basic literacy, and GED Preparation (GED). ESL courses provide English skills for non-native speakers to enhance their work, school and personal lives. Adult Basic Education students receive most of the same services as other CNM students but do not follow the procedures outlined in this Catalog for admission and registration and are not eligible for financial aid. Prior to registering for classes, students are required to complete a placement test, a stipulation for the program's state and federal funding. Students who have missed or dropped ABE classes and those entering after the registration period is completed are encouraged to go to the Adult Education Learning Centers (AELC) at Main and Montoya campuses to continue their studies.

The division also offers transfer-level courses in College Success Experience (CSE) and is adding transfer-level English as a Second Language (ESL) and Reading (RDG) courses.

Day and evening classes are available at all campuses. Other services for students at the college are offered, including tutoring through the Assistance Centers for Education (ACE), located on all campuses (see page 28). Student Transitional Programs provide Achievement Coaches and a number of activities to facilitate students' entrance into this division and others at the college. Additional information on testing, registration, and class locations is available at MS 570 at Main Campus (224-3939), Ken Chappy Hall Room 1 at Main Campus (224-4282), H102 at Montoya Campus (224-5575), Main Office at South Valley Campus (224-5061) and Registration at Westside (224-5301).

Health, Wellness & Public Safety

Main Campus, Jeannette Stromberg Hall • (505) 224-4111

The Health, Wellness & Public Safety Division provides entry-level training and skill upgrading in a variety of health care, wellness, public safety and community service fields. Certificates, associate degrees and skill sets are awarded upon completion of program requirements.

Classes are held at the Main, Montoya, South Valley, CNM Westside and Workforce Training Center campuses as well as at community sites. Students may have supervised clinical, practicum or internships at community agencies and organizations.

Enrollment: All Health, Wellness and Public Safety Division programs except Nursing Assistant and Nursing Home/Home Health Attendant require a high school diploma or equivalent and completion of the CNM placement test. Most programs also have prerequisites. Health, Wellness and Public Safety Division programs require that students be in good physical condition and free of health conditions that could endanger themselves or others. Because of the widespread use of latex products, individuals who have an allergy to latex may find it difficult to successfully complete a Health, Wellness and Public Safety Division program. Students may be required to have a physical exam and immunizations at their own expense. Credit by examination (challenge) is available for selected courses. See program narratives for specific information.

Criminal Background Checks: The State of New Mexico requires a criminal history screening on all allied health and nursing students (7.1.9 NMAC). Disqualifying convictions are: homicide, trafficking in controlled substances, kidnapping, false imprisonment, aggravated assault or aggravated battery, rape, criminal sexual penetration, criminal sexual contact, incest, indecent exposure or other related sexual offenses, crimes involving adult abuse, neglect or financial exploitation, crimes involving child abuse or neglect, crimes involving robbery, larceny, burglary, extortion, forgery, embezzlement, credit card fraud, receiving stolen property or an attempt, solicitation or conspiracy involving any of the felonies listed above. Students who have a history of these convictions should contact the New Mexico Division of Health Improvement (<http://dhi.health.state.nm.us/cchsp>). Students with a disqualifying conviction will be removed or will not be allowed to remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any of the Allied Health or Nursing programs.

Drug Screen: Students are required to undergo a routine drug screening prior to starting the program or prior to beginning their clinical experiences. Contact the Health, Wellness, & Public Safety Division at (505) 224-4111 or going to the division website at <http://www.cnm.edu/depts/hwps/index.php> for more information.

Grading Policy: All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C or as otherwise indicated by program. For Health, Wellness & Public Safety Division career and technical courses only offered for CR/NC, a grade of CR must be earned.

Graduation Policy:

- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalog will be accommodated. Contact the division at (505) 224-4111 for more information.

Math, Science & Engineering

Main Campus, Max Salazar Hall • (505) 224-3561

The vision of Math, Science & Engineering (MSE) is to provide students with a strong academic curriculum that supports certificate programs, associate degrees and transfer purposes. Additionally, MSE offers an Associate of Science degree in Engineering which is designed to give students the knowledge and tools needed to be successful in pursuing a bachelor's degree in Engineering. All courses are transferable to other degree-granting institutions as freshmen and sophomore electives or requirements. Course offerings include astronomy, biology, chemistry, engineering, math, natural science, nutrition and physics.

Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.

Educational Options

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Find your course.

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vector-based

nuclear medicine

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Educational Options

Career Pathways

A career pathway is an education plan that directly guides a student toward a chosen occupation in a career cluster. Career clusters can be used to investigate a wide range of career choices. The career cluster approach makes it easier for students to understand the importance of education and helps students select elective courses to enhance their career. Each cluster contains a complete set of career pathways aligned with programs of study. See page 54 for more information on career pathways.

For more information contact Academic Advisement and Career Development by phone at (505) 224-4321, e-mail at aacd@cnm.edu or online at cnm.edu/depts/aacd/index.php.

College Success Experience Courses

CNM now offers **College Success Experience (CSE)** courses exploring study skills, student success career exploration, learning strategies and research techniques (see CSE section in course descriptions on page 322). These courses are designed for the new college student.

CONTACT INFORMATION

Division of Educational & Career Advancement, jbradley@cnm.edu or (505) 224-3972.

Emeritus Academy

The **Emeritus Academy** at CNM offers the Albuquerque and surrounding area residents short courses and workshops for those who want to further their knowledge and understanding of the arts, sciences, literature, computer skills and other topics of general interest. The Academy offers various short-term, non credit workshops and classes. For more information contact the CNM Emeritus Academy

CONTACT INFORMATION

CNM Emeritus Academy, CNM Montoya Campus, 4700 Morris NE, Building H, Room 101 ; (505) 224-5506.

Experiential Learning

The **Department of Experiential Learning** administers the following programs: Service Learning, Civic Engagement Leadership Institute, Reading Kids Count, Cooperative Education, Internships, Community Service, U.S. Presidential Service Award and Volunteerism. The office collaborates with Student Services and the Academic Division in providing students with various forms of experiential (hands on) learning opportunities. Students are required to register for all programs. The department also offers civic engagement coursework.

CONTACT INFORMATION

Department of Experiential Learning, Main Campus, (505) 224-4359 or 224-3265, weekdays from 8 a.m. to 5 p.m.

Learning Communities

Learning Communities bring together groups of college students who take two or more courses linked together. This allows classmates and the instructor the opportunity to work together on issues and topics of importance. This structured approach to student learning has been proven

effective in helping students succeed at CNM.

See the **Schedule of Classes** or **check with an academic advisor** for specific offerings, which differ every term.

CONTACT INFORMATION

Communication, Humanities & Social Sciences Division, (505) 224-3588
Math, Science & Engineering Division, (505) 224-3561
Educational & Career Advancement and other divisions, (505) 224-3966
Business & Information Technology Division, (505) 224-3811

Reserve Officers Training Corps (ROTC) Courses

CNM offers ROTC courses in conjunction with UNM for the Air Force (AFAS), Army (MSL) and Navy (NAVS). Courses are listed under the AFAS, MSL and NAVS subject codes in the course descriptions section of this catalog (see below) and are offered at UNM. Before enrolling, interested students should contact the appropriate ROTC program at UNM.

CONTACT INFORMATION

Air Force ROTC (see page 293); Army ROTC (see page 358); Navy ROTC (see page 360).

Workforce Training

The CNM Workforce Training Center (WTC) offers short-term, noncredit courses, assessments, exam preparation, professional development and continuing education to upgrade skills and improve career potential. We also offer high quality, customized employee training to meet specific organizational needs. Our customized training is:

- **Convenient** – Offered any time and place
- **Affordable** – Quality training that won't drain your budget
- **Diverse** – Programs cover a wide range of business, professional, health, vocational and technical needs and interests
- **Applicable** – Training which can be readily implemented on the job
- **Relevant** – Training which meets your organization's specific needs
- **Real World** – Our instructors have industry and training expertise

CONTACT INFORMATION

CNM Workforce Training Center, 5600 Eagle Rock Avenue (near I-25 and Alameda); (505) 224-5200; cnm.edu/campus/wtc.

WorkKeys®

What do successful administrators, health care providers, information technology specialists, teachers, technicians and other high-paid, high-skilled professionals have in common? All share certain essential skills that have enabled them to be successful in school, at work and in life!

CNM uses two systems called WorkKeys® and KeyTrain™ to identify, measure and teach

nine of the most important essential skills. These include such key abilities as applied technology, listening, observation and teamwork.

You may go to the WorkKeys®/KeyTrain™ Center located in the Ted Chavez Building (TC 107) to take the WorkKeys® tests and/or to get help with KeyTrain™ (the Internet-based skills tutorial program) Call (505) 224-4235 for hours and to schedule testing or go to <http://www.cnm.edu/depts/workkeys>.

CNM's career analyst is available to assist you in learning how to master these skills.

CONTACT INFORMATION:

David Licht, Career Analyst; (505) 224-4435; dlicht@cnm.edu

Distance Learning

Distance Learning (DL) courses facilitate learning and are especially suited to reach busy people who wish to increase their knowledge and skills without giving up their jobs, losing income or interfering with family responsibilities. Courses maintain the same high quality educational standards as those of the traditional classroom with the additional flexibility and convenience of learning built around the student's schedule. The various forms of communication and instructional technologies utilized permit and encourage students to participate in discussions with faculty and classmates. CNM uses the following Distance Learning delivery methods:

Internet Courses

Course content is offered through the Internet. Presentations, learning activities, interactive quizzes and tests are online. Instructors use e-mail, homepages and course management tools. Students must have access through an Internet browser and an e-mail address.

DVD Courses

Course presentations are delivered via DVD.

Hybrid Courses

A "hybrid" course combines both face-to-face classroom instruction and online Internet-based learning. Typically, 50 percent of the course is spent in a face-to-face classroom setting and the remaining 50 percent of the course is spent in an online classroom environment. In addition, students should expect to put in an additional four to six hours weekly of study time. Hybrid courses require that students have access to a computer.

Who Is a Successful Distance Learning Student?

Successful distance learners are self motivated.

Students must devote at least the same amount of time, or possibly more time, to participate in a distance learning course as they would to a traditional course.

Successful distance learners manage their time well.

Students appreciate the flexibility that distance learning courses offer and the freedom to schedule coursework at their convenience.

Successful distance learners have access to a computer.

Students must be fairly competent with Microsoft Explorer or Netscape, e-mail and computers in order to concentrate on course content. Students frequently log onto the computer to read posted lecture notes, complete assignments, take online quizzes and participate in weekly online class discussions.

Successful distance learners ask questions.

Students need to ask questions whenever information is unclear. Students should contact their instructor by e-mail, phone or fax. It is essential that students inform the instructor about any problems that may prevent them from participating in their distance learning course.

Successful distance learners have what they need to succeed.

Students need to obtain all required course materials and be familiar with test dates, assignment due dates and all course requirements. This information is available with course instructions located at <http://www.cnm.edu/depts/dl>.



Distance Learning

Distance Learning (DL) Frequently Asked Questions

Where Can You Find Distance Learning Courses in the CNM Catalog?

DL courses are identified by a computer symbol (🖥️) after the course number in the Programs of Study / Suggested Course Sequence Charts. Students can quickly identify DL courses available under each program.

Where Can You Find Distance Learning Courses in the CNM Schedule of Classes?

The CNM **Schedule of Classes** lists the course offerings each term in the Distance Learning Information section.

When Do Distance Learning Courses Begin and End?

Distance Learning courses are offered for varying lengths (5-week, 12-week or 15-week) sessions.

Are Distance Learning Courses Credit Courses?

DL courses are regular, full credit courses offering the same content and grades as on-campus courses. Students participate in discussions, submit assignments and take exams. Exams and quizzes in distance learning courses may be taken online, through the mail, in the CNM Assessment Center on the Main Campus or at a location identified by the instructor.

How Will You Receive Your Final Grade?

Final grades for distance learning courses are available on STARS, (505) 224-4893 or through the online registration system at cnm.edu.

How Do You Register for a Distance Learning Course?

Admission and registration (see pages 10 and 16) are the same for distance learning courses as for on-campus courses, although payment deadlines vary. Tuition and fees for distance learning courses must be paid within 10 working days from the date of registration.

Do You Pay Extra to Take a Distance Learning Course?

DL students pay a delivery fee of \$30 per credit hour up to a maximum of \$120 per course. This is in addition to any other CNM required tuition and fees. Students who have been awarded financial aid may defer these fees at the time of registration. Students are encouraged to check with the Financial Aid Office to determine eligibility for distance learning fees.

Do Distance Learning Courses Use the Same Books?

Some distance learning courses use different textbooks from on-campus sections of the same course. Students are encouraged to carefully review the course syllabus for the correct title and edition of the text and name of the author before purchasing textbooks. Students can purchase textbooks from the CNM Bookstores by mail, phone, online or in person. Main Campus Bookstore, (505) 243-0457; Montoya Campus Bookstore, (505) 332-7485; www.cnm.edu/bookstore or www.efollett.com.

What Student Support Services are Available for Distance Learners?

The following student support services are available for you:

Academic Advising: For help with enrollment, course selection, prerequisites, transfer credits and more, call (505) 224-3181.

Financial Aid: For information about financial aid, call (505) 224-3090 or visit their website at: <http://www.cnm.edu/depts/fass>

Libraries: For information and assistance, call (505) 224-3285 or visit the website at: <http://planet.cnm.edu/library>

Online Tutoring: For information and assistance, visit: <http://www.smarthinking.com>

CONTACT INFORMATION

Distance Learning Office, (505) 224-3317

<http://www.cnm.edu/depts/dl>

Please check our website for updated information about courses, instructor updates, course flyers and other information.



Blackboard

Where do I access my course?

CNM's Distance Learning classes use Blackboard Learning Systems CE 6, a course management system. Blackboard works with your computer's Internet browser to create a "virtual classroom" where online tools such as a discussion board, chat room, e-mail, online quizzes and more are used.

Login to Blackboard Learning System CE 6 at <http://elearning.cnm.edu>

Need help with Blackboard CE 6? Contact the Embanet Helpdesk at (888) 560-4927. It is available 24/7/365!

CONTACT INFORMATION

Distance Learning Office, (505) 224-3317; Outside Albuquerque, call: 1-888-453-1304 • <http://www.cnm.edu/depts/dl>

How Do I Register for DL Courses?

Step 1. Get admitted to the college!

Students may apply for admission online or in person at any of the CNM campuses. For more information on the admissions process please visit the Admissions website located at <http://www.cnm.edu/depts/enrollment/admissions/> or call the CNM Enrollment Services office at (505) 224-3160.

Step 2: Take the online orientation.

All new students must take the online orientation before they can register for classes. The online orientation is available at [cnm.edu](http://www.cnm.edu).

Step 3. Get academic advising!

Academic Advisors are available at the Academic Advisement and Career Development offices at all CNM campuses. Students can also chat with an advisor online between 2 p.m. - 5 p.m., Monday through Friday. For more information contact the Academic and Career Development office at (505) 224-4321.

Step 4. Get registered for classes!

Once students have been admitted and received academic advisement the next step is to register for courses. Registration for DL courses is the same method used for traditional classroom courses. For information on the registration process, please see page 16.

Step 5. Get your payment in on time!

DL students pay a delivery fee of \$30 per credit hour up to a maximum of \$120 per course. This is in addition to any other CNM required tuition and fees. Students who have been awarded financial aid may defer these fees at the time of registration. Students are encouraged to check with the Financial Aid Office to determine eligibility for distance learning fees. For payment deadline information, please see the **Schedule of Classes**.

Step 6. Get your books and supplies!

Some distance learning courses use different textbooks than on-campus sections of the same course. Students are encouraged to carefully review the course syllabus for the correct title and edition of the text and name of the author before purchasing textbooks. Students can purchase textbooks from the bookstores by mail, phone, online or in person. For information about the CNM Bookstore, please see the **Schedule of Classes**.

I'm registered...now what do I do?

Step 1: Read the Course Instructions!

Go to the DL homepage located at <http://www.cnm.edu/depts/dl/>. To access your course instructions, click on the name of your course listed on the homepage. The course instructions contain important information provided by your instructor.

Step 2: E-mail your instructor!

Many instructors request that you e-mail them as soon as you register, while others may require you to attend an orientation on campus to obtain important information. Please e-mail your instructor to get further instructions and to let them know you have read the course instructions and are prepared to begin the course.

Step 3: Create Your CE 6 Account!

Go to the Blackboard CE 6 homepage located at <http://elearning.cnm.edu> and create an account (if you don't already have one). A tutorial is available on the Blackboard CE 6 homepage to assist you with this step.

Step 4: Add Your Course.

On the first day of class, follow the Blackboard CE 6 Tutorial (on homepage) for information on how to add a class to your account through self-registration (unless your instructor informs you otherwise.)

Step 5: Access Your Course

Your class cannot be added until 8 a.m. on the day the class begins. On the first day of class, login to Blackboard CE 6, open your class and you are on your way! Remember, successful DL students ask questions. If you are unsure of what to do, e-mail your instructor.

Online Student Support: EL COLÉGIO

Pending New Mexico State Department of Education Approval

El Colegio is a collaborative initiative between CNM and Santa Fe Community College to deliver courses and programs to low-income and Hispanic students in the rural communities of New Mexico. Beginning Fall 2007 CNM offers distance learning courses in surgical technician, pharmacy technician and health information technology. These courses combined with comprehensive online student support services will allow students to fulfill the program requirements from a distance.

Programs of Study

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Find your course.

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vector-based

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Programs of Study

This section presents the Programs of Study that CNM offers. CNM offers the following types of certificate and degree programs:

- **Certificate (or Occupational Certificate):** An occupational certificate program prepares students to enter either skilled or paraprofessional occupations or to upgrade workplace skills and knowledge.
- **Associate of Applied Science (AAS) Degree:** An AAS degree program prepares students to enter either skilled or paraprofessional occupations or to upgrade workplace skills and knowledge. An AAS program is not intended to transfer to bachelor's degree programs, although certain courses may be accepted at some institutions.
- **Associate of Arts (AA) Degree:** An AA degree program is designed for transfer into a bachelor's degree program in liberal arts, social or behavioral sciences or a professional field with such disciplines as its base.
- **Associate of Science (AS) Degree:** An AS degree program is designed for transfer into a bachelor's degree program in a technical, medical or professional field with such disciplines as its base.

CNM also offers a:

- **Skill Set:** A document issued by an academic division upon successful completion of a combination of approved courses that provide specific skills and competencies.

The chart that begins on this page lists all CNM Programs of Study:

- in alphabetical order,
- the degree, certificate, or skill set a student can earn in the program and
- the page number of where to find in-depth information about the program.

Page 55 lists programs by career cluster. Page 56 shows a listing of **all** degrees and certificates by academic division and accredited by outside agencies or organizations.

Note: Courses numbered below 1000 cannot be used to meet program graduation or skill set requirements.

Students are advised to inquire about special requirements or background checks prior to enrolling in a program of study. Students with a criminal background may have limited employment opportunities in certain career fields or at certain job locations. Many employers perform pre-employment background checks. Others may require a security clearance. A criminal background may also prevent a student from performing an internship for some employers. By accepting a student into a program, CNM in no way guarantees a student will be accepted into an internship or be qualified for employment.

Program of Study	Degree	Certificate	Skill Set	Page
Accounting	AAS	X		59
Aerospace Technology	AAS			65
Air Conditioning, Heating & Refrigeration (<i>under Mechanical Technology</i>)		X		68 / 210
Airframe Maintenance Technician (<i>under Aviation Technology</i>)		X		70
Alternative Teacher Licensure Program Skill Sets in Early Childhood Multicultural Education, Elementary Education, Secondary Education, Special Education			X	72
Apprenticeships in Commercial Carpentry / Electrical Trades / General Trades / Iron Worker / Plumbing / Sheet Metal				74
Animation (<i>Concentration under Computing Technology</i>)			X	121
Architectural / Engineering Drafting Technology	AAS	X		75
Art History (<i>Concentration under Fine Arts</i>)				168
Art Studio (<i>Concentration under Fine Arts</i>)				168
Automotive Service Fundamentals (<i>under Transportation Technology</i>)				275
Automotive Technology (<i>under Transportation Technology</i>)		X		78 / 275
Aviation Technology	AAS			80
Aviation Maintenance Technician (<i>under Aviation Technology</i>) (<i>pending FAA approval</i>)	AAS			80
Aviation Sheet Metal Assembler Technician (<i>under Aerospace Technology</i>)			X	65
Aviation Systems Installation Technician (<i>under Aerospace Technology</i>)			X	65
Baking (<i>see also Culinary Arts</i>)		X		82
Bilingual Education (<i>Concentration under Elementary Education</i>)				150
Biotechnology	AS			84
Bookkeeping		X		59
Business Administration Concentrations: E-Commerce, Entrepreneurship, International Business, Leadership Development, Management, Marketing or Real Estate	AAS	X		86
Business Applications Design (<i>under Computer Information Systems</i>)			X	105
Business Graphics	AAS	X		93

Listing of Programs of Study

Program of Study	Degree	Certificate	Skill Set	Page
Call Center Operations			X	96
Carpentry (under Construction Technology) (see also Apprenticeships)		X		97 / 127
Class B Commercial Driver's License			X	278
Certified Public Accountant (CPA) Preparation (under Accounting)			X	59
Child Development Associate (CDA) (under Child, Youth and Family Development)			X	99
Child, Youth and Family Development Concentrations: Early Childhood Multicultural Education, Family Studies	AA			99
Cisco Certified Network Associate (CCNA) (under Computer Information Systems)			X	105
Clinical Laboratory Assistant		X		103
Club Management (under Hospitality and Tourism)			X	187
Computer Animation (Concentration under Computing Technology)				122
Computer-Assisted Drafting (CAD) (under Architectural / Engineering Drafting)			X	75
Computer Information Systems Concentrations: Computer Programming, Database Technology, Digital Media, Network Administration, Software Systems and Applications, Systems Administration, Web Technology	AAS	X		105
Computer Programming (Concentration under Computer Information Systems)				105
Computing Technology Concentrations: Computer Animation and Computer Programming	AAS	X		121
Construction Estimator (under Construction Management Technology)			X	124
Construction Management Technology	AAS			124
Construction Scheduler (under Construction Management Technology)			X	124
Construction Technology Concentrations: Electrical or General Construction	AAS			127
Continuous Quality Improvement (under Business Administration)			X	86
Cosmetology	AAS			131
Court Reporting		X		133
Criminal Justice	AAS			135
Culinary Arts (certificates in Baking, Food Service Management and/or Professional Cooking)	AAS			137

Program of Study	Degree	Certificate	Skill Set	Page
Database Technology (Concentration under Computer Information Systems)				105
Dental Assistant		X		139
Diagnostic Medical Sonography	AS			142
Diesel Equipment Technology (under Transportation Technology)		X		144 / 275
Digital Media (Concentration under Computer Information Systems)				105
Digital Publishing (under Business Graphics)			X	93
Early Childhood Multicultural Education (Concentration under Children, Youth and Family Development)				99
E-Commerce (Concentration under Business Administration)				86
Electrical Trades (under Construction Technology) also see Apprenticeship		X		127 / 145 74
Electronics Technology Concentrations: General Electronics, Process Control	AAS	X		147
Elementary Education Concentrations: Bilingual Education, Elementary Education, Special Education	AA			150
Emergency Medical Services			X	154
Emergency Medical Technician Paramedic		X		156
Engineering	AS			158
Engineering Design Technology	AAS			160
Entrepreneurship (Concentration under Business Administration)			X	86
Environmental Safety and Health	AAS			162
Family Studies (Concentration under Child, Youth and Family Development)				99
Film Crew Technician		X		163
Financial Services	AAS	X		166
Fine Arts Concentrations: Art History, Art Studio	AA			168
Fire Science	AAS			171

Listings of Programs of Study

Program of Study	Degree	Certificate	Skill Set	Page
Fitness Technician		X		173
Food and Beverage (under Hospitality and Tourism)			X	187
Food and Beverage Management (Concentration under Hospitality and Tourism)				187
Food Service Management (see also Culinary Arts)		X		175 / 255
Framing (under Construction Technology)			X	127
General Business (under Business Administration)			X	86
General Construction (Concentration under Construction Technology)				127
General Electronics (Concentration under Electronics Technology)				147
General Studies Transfer	AA	X		177
Geographic Information Technology	AAS	X		179
Geomatics Technology		X		181
Graphics Design (under Computer Information Systems)			X	105
Health Information Technology	AAS			183
Health Unit Coordinator		X		185
Hospitality and Tourism Concentrations: Food and Beverage Management, Hospitality Operations and Services	AAS	X		187
Hospitality Operations and Services (Concentration under Hospitality and Tourism)				187
Human Resources (under Hospitality and Tourism)			X	187
Human Resources Assistant (under Business Administration)			X	86
Information Technology Careers				191
Integrated Studies	AAS			192
International Business (this program is being discontinued and is not accepting new students. See the International Business concentration under the Business Administration program).		X		86 / 194
International Business (Concentration under Business Administration)				86
International Business Fundamentals (under Business Administration)			X	86

Program of Study	Degree	Certificate	Skill Set	Page
IRS Enrolled Agent Preparation (under Accounting)			X	59
Judicial Studies		X		196
Judicial Studies Fundamentals (under Judicial Studies)			X	197
Landscaping		X		199
Leadership Development (Concentration under Business Administration)			X	86
Legal (Concentration under Office Technology)				234
Liberal Arts	AA			201
Licensed Practical Nurse Refresher			X	204
Machine Tool Technology (under Metals Technology)		X		206 / 219
Management (Concentration under Business Administration)				86
Manufacturing Technology (MEMS / SMT Technician)	AAS	X	X	208
Marketing (Concentration under Business Administration)			X	86
Marketing and Sales (under Hospitality and Tourism)			X	187
Mechanical Technology Concentrations: Air Conditioning, Heating and Refrigeration, Plumbing	AAS			210
Medical Coding		X		213
Medical Laboratory Technician	AS			215
Medical Office Assistant		X		217
MEMS / SMT Technician (under Manufacturing Technology)			X	208
Metals Technology	AAS			219
Microsoft Certified Systems Admin. (MCSA) (under Computer Information Systems)			X	105
Microsoft Certified Systems Engineer (MCSE) (under Computer Information Systems)			X	105
Microsoft Software Support (under Computer Information Systems)			X	105
Multimedia Development (under Computer Information Systems)			X	105
Network Administration (Concentration under Computer Information Systems)				105
Nursing	AS			224
Nursing Assistant		X		228

Listing of Programs of Study

Program of Study	Degree	Certificate	Skill Set	Page
Nursing Home / Home Health Attendant			X	230
Office Assistant		X		232
Office Technology Concentrations: Legal and Office Technology	AAS	X		234
Paralegal Studies	AAS	X		238
Payroll Clerk (under Accounting)			X	59
Perioperative Nursing			X	241
Pharmacy Technician		X		243
Phlebotomy		X		245
Photonics Technology	AAS	X		247
Plumbing (under Mechanical Technology) also see Apprenticeship		X		210 / 249 74
Powerplant Maintenance Technician (under Aviation Technology) (pending FAA approval)		X		80
Practical Nursing (under Nursing)		X		224
Pre-Management	AA			253
Pre-Professional Writing (under Liberal Arts)			X	201
Process Control (Concentration under Electronics Technology)				147
Professional Cooking (see also Culinary Arts)		X		137 / 255
Professional Pilot and Flight Instruction (under Aerospace Technology)		X		65 / 257
Project Management	AAS		X	259
Radiation Protection Technologist			X	162
Radiologic Technology	AS			261
Real Estate (Concentration under Business Administration)			X	86 / 263
Records Clerk (under Office Technology)			X	234
Red Hat Certified Technician (RHCT) (under Computer Information Systems)			X	105
Registered Nurse Refresher			X	265
Residential Drafting (under Architectural / Engineering Drafting)			X	75

Program of Study	Degree	Certificate	Skill Set	Page
Residential Superintendent (under Construction Management Technology)			X	124
Residential Wiring (under Construction Technology)		X		124 / 267
Respiratory Therapy	AS			269
Retail / Wholesale Management (under Business Administration)			X	86
Rooms Division (under Hospitality and Tourism)			X	187
Software Systems and Applications (Concentration under Computer Information Systems)				105
Spanish Fundamentals for International Business (under Business Administration)			X	86
Special Education (Concentration under Elementary Education)				150
Stenotranscription (under Court Reporting)			X	133
Surgical Technology		X		271
Systems Administration (Concentration under Computer Information Systems)				105
Tax Preparer for Individuals (under Accounting)			X	59
Technology Management and Training	AA			273
Transportation Technology Concentrations: Automotive Technology, Diesel Equipment Technology	AAS			78 / 275
Truck Driving		X		278
Veterinary Technology	AAS			280
Web Graphics Specialist (under Computer Information Systems)			X	105
Web Technology (This program is being discontinued and is not accepting new students. See the Web Technology concentration under the Computer Information Systems Program).	AAS	X		105
Web Technology (Concentration under Computer Information Systems)				105
Welding (under Metals Technology)		X		284
Word Processing (under Office Technology)			X	234

Find Your Career at CNM

Central New Mexico Community College believes students are most successful when they begin their education with a career goal in mind. CNM uses career clusters and pathways to help students identify, plan and achieve career goals.

WHAT ARE CAREER CLUSTERS?

- Career clusters are groups of careers in business and industry that share similar skill sets and related occupations.
- Career clusters organize careers so that educators and students can target the education and skills needed for specific jobs.

Nationally, there are 16 career clusters. New Mexico is focusing on seven clusters to fill the economic and industry needs for skilled employees. The seven career clusters are:

1. **Arts and Entertainment**
2. **Hospitality and Tourism**
3. **Energy and Environmental Technology**
4. **Engineering, Construction and Manufacturing**
5. **Business Services**
6. **Communication and Information**
7. **Health and Biosciences**

WHAT ARE CAREER PATHWAYS?

A career pathway is an education plan that directly guides a student toward a chosen occupation in a career cluster. Career clusters can be used to investigate a wide range of career choices. The career cluster approach makes it easier for students to understand the importance of education and helps students select elective courses to enhance their career. Each cluster contains a complete set of career pathways aligned with programs of study. For example:

A CAREER CLUSTER	A CAREER PATHWAY	RELATED CNM PROGRAMS OF STUDY
Health and Biosciences ▶	Diagnostic Services ▶	Clinical Laboratory Assistant, Medical Laboratory Technician, Diagnostic Medical Sonography, Phlebotomy, Radiologic Technology
	Therapeutic Services ▶	Respiratory Therapy, Nursing, Dental Assistant
	Biotechnology Services ▶	Biotechnology
Hospitality and Tourism ▶	Culinary Arts ▶	Culinary Arts; Baking, Professional Cooking
	Hotel and Resort Management ▶	Hospitality Operations and Hotel Management
	Recreation and Gaming ▶	Gaming Operations and Casino Management

If you are a high school student you may be able to take CNM courses through dual credit to earn college credit toward your career and educational choices at CNM.

If you are a current CNM student and have not made a career choice you can meet with a CNM advisor to help you investigate numerous career options.

If you are coming back to school, you will find many career pathways available to enhance your career or to pursue a new profession.

If your future plans include transferring to a four-year institution, we can get you on the right track to move you toward your career and education goals. Career clusters and pathways provide a relevant map to a career or additional education.

HOW CAN CNM HELP YOU MAKE A CAREER CHOICE?

CNM advisors can help you map out your personal career pathway to get your college degree in a timely manner. Students who are unsure of what profession to pursue will benefit from the career development process. The process helps students to:

- Develop an understanding of what kind of career is best tailored to their interests and aptitudes
- Eliminate career choices that do not match income needs and location and timeframe requirements
- Create an academic plan that takes family and financial needs into consideration so students can complete their programs and fulfill their education and career goals

There are two ways to work on career development:

- 1) Work with an advisor or career and educational specialist in one of the Academic Advisement and Career Development (AACD) offices. Schedule an appointment or walk in to see an advisor, or contact AACD by phone at (505) 224-4321, e-mail at aacd@cnm.edu or online at cnm.edu/depts/aacd/index.php.
- 2) Take College Success Experience (CSE) courses offered through the Educational and Career Advancement division and work with an instructor and other students.

CONTACT INFORMATION

For more information contact AACD by phone at (505) 224-4321, e-mail at aacd@cnm.edu or online at cnm.edu/depts/aacd/index.php.



Career Clusters

The following are CNM programs listed under their appropriate New Mexico career cluster. Several programs of study are relevant to more than one career cluster. These programs are indicated with an asterisk* (information for each program can be found using the table on pages 50-53):

Arts and Entertainment

Computer Animation*
Cosmetology
Culinary Arts*
General Studies*
Film Crew Technician*
Fine Arts*

Business Services

Accounting
Bookkeeping
Business Administration
Computer Information Systems*
Computer Technology
Court Reporting
Criminal Justice
General Studies*
Health Information Technology*
International Business
Judicial Studies
Medical Office Assistant
Network Technology*
Office Assistant
Office Technology
Office Technology-Legal
Paralegal
Pre-Management
Project Management
Technology Management and Training
Web Technology*

Communication and Information

Alternative Teacher Licensure
Business Administration
Business Graphics
Child, Youth and Family Development
Computer Animation*

Computer Information Systems
Elementary Education
Film Crew Technician*
General Studies*
International Business
Liberal Arts*
Network Technology*
Project Management *
Web Technology*

Energy and Environmental Technology

Aerospace Technology
Aviation Technology*
Electronics Technology*
Engineering Design
Environmental Safety and Health
Fire Science
Geographic Information Technology*
Mechanical Technology*
Metals Technology*
Photonics*

Engineering, Construction, Manufacturing

Landscaping
Aerospace Technology*
Air Conditioning, Heating, Refrigeration
Architectural Engineering Drafting
Automotive Technology
Aviation Technology*
Carpentry
Computer Information Systems-Programming*
Construction Management
Construction Technology
Diesel Technology
Electronics Technology*
Engineering Design
MEMS Fabrication
Mechanical Technology*

Metals Technology*
Micro Electro Mechanical Systems Design
Photonics*
Plumbing
Project Management*
Transportation Technology
Welding

Health and Biosciences

Biotechnology
Clinical Lab Assistant
Dental Assistant
Diagnostic Medical Sonography
Emergency Medical Technician Paramedic
Fitness Technician
Health Unit Coordinator
Medical Coding
Medical Lab Technician
Nursing Assistant
Nursing (RN)
Paramedic
Perioperative RN
Pharmacy Technician
Phlebotomy
Practical Nursing (LPN)
Radiologic Technology
Respiratory Therapy
Surgical Technology
Veterinary Technology

Hospitality and Tourism

Baking
Culinary Arts*
Fitness Technician
Food Service Management
Hospitality and Tourism
Professional Cooking

Listings of Programs of Study

CNM 2007-09 Programs of Study

APPLIED TECHNOLOGIES

Aerospace Technology, AAS degree
Air Conditioning, Heating & Refrigeration, certificate (under Mechanical Technology) *Accredited by the Partnership for Air Conditioning, Heating, Refrigeration Association (PAHRA)*
Airframe Maintenance Technician, certificate (under Aviation Technology) (*Pending FAA Approval*)
Architectural Engineering Drafting Technology, certificate and AAS degree
Automotive Technology, certificate (under Transportation Technology) *Accredited by the National Automotive Technicians Education Foundation (NATEF)*
Aviation Maintenance Technician, AAS degree (under Aviation Technology)
Carpentry, certificate (under Construction Technology)
Computing Technology – Animation, certificate and AAS degree
Construction Management Technology, AAS degree, *Accredited by the American Council for Construction Education (ACCE)*
Construction Technology, AAS degree
Diesel Equipment Technology, certificate (under Transportation Technology)
Electrical Trades, certificate (under Construction Technology)
Electronics Technology, certificate and AAS degree
Engineering Design Technology, AAS degree, *Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC / ABET)*
Film Crew Technician, certificate
Geographic Information Technology, certificate and AAS degree
Geomatics, certificate
Landscaping, certificate
Machine Tool Technology, certificate (under Metals Technology)
Manufacturing Technology, certificate and AAS degree
Mechanical Technology, AAS degree

Metals Technology, Certificates and AAS degree
Photonics Technology, certificate and AAS degree
Plumbing, certificate (under Mechanical Technology)
Professional Pilot and Flight Instruction, certificate (under Aerospace Technology)
Powerplant Maintenance Technician, certificate (under Aviation Technology) (*Pending FAA Approval*)
Residential Wiring, certificate (under Construction Technology)
Transportation Technology, AAS degree
Truck Driving, certificate, *Accredited by the Professional Truck Driver Institute of America (PTDIA)*
Welding, certificate (under Metals Technology)

BUSINESS & INFORMATION TECHNOLOGY

Accounting, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Baking, certificate (see also Culinary Arts)
Bookkeeping, certificate
Business Administration, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Business Graphics, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Computer Information Systems, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Court Reporting, certificate, *Accredited by the National Court Reporters Association (NCRA)*
Culinary Arts, AAS degree, *Accredited by the American Culinary Federation (ACF)*
Financial Services, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Food Service Management, certificate (*see also Culinary Arts*)
Health Information Technology, AAS degree, *Accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)*
Hospitality and Tourism, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Integrated Studies, AAS Degree
International Business, certificate (*This program is being discontinued and is not accepting new students. See the International Business concentration under the Business Administration program.*)
Judicial Studies, certificate
Medical Coding, certificate
Medical Office Assistant, certificate
Office Assistant, certificate
Office Technology, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Paralegal Studies, AAS degree, post degree certificate (pending approval), *Approved by the American Bar Association (ABA), Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Pre-Management, AA degree, *Accredited by the Association of Collegiate Business Schools and Programs (ACBSP)*
Professional Cooking, certificate (see also Culinary Arts)
Project Management, AAS degree
Technology Management and Training, AA degree
Web Technology, certificate and AAS degree (*This program is being discontinued and is not accepting new students. See the Web Technology Concentration under the Computer Information Systems program.*)

COMMUNICATION, HUMANITIES & SOCIAL SCIENCES

Alternative Teacher Licensure Program
Child, Youth and Family Development, AA degree
Elementary Education, AA degree
Fine Arts, AA Degree
General Studies Transfer, AA degree and certificate
Liberal Arts, AA degree

HEALTH, WELLNESS & PUBLIC SAFETY

Biotechnology, AS degree
Clinical Laboratory Assistant, certificate
Cosmetology, AAS degree
Criminal Justice, AAS degree
Dental Assistant, certificate, *Accredited by the American Dental Association (ADA)*
Diagnostic Medical Sonography, AS degree, *Accredited by the Commission on Accreditation of Allied Health Education Programs*
Emergency Medical Services, certificate
Environmental Safety and Health, AAS degree
Fire Science, AAS degree
Fitness Technician, certificate
Health Unit Coordinator, certificate
Medical Laboratory Technician, AS degree, *Accredited by the National Accrediting Agency for Clinical Laboratory Sciences*
Nursing, ASN degree, *Accredited by the National League for Nursing Accrediting Commission and approved by the New Mexico Board of Nursing*
Nursing Assistant, certificate
Pharmacy Technician, certificate
Phlebotomy, certificate
Practical Nursing, certificate, *Accredited by the National League for Nursing Accrediting Commission and approved by the New Mexico Board of Nursing*
Radiologic Technology, AS degree *Accredited by the American Registry of Radiological Technologist*
Respiratory Therapy, AS degree, *Accredited by the Commission on Accreditation of Allied Health Education Programs and the Committee on Accreditation for Respiratory Care*
Surgical Technology, certificate, *Accredited by the Commission on Accreditation of Allied Health Education Programs*
Veterinary Technology, AS degree *Accredited by the American Veterinary Medical Association*

MATH, SCIENCE & ENGINEERING
Engineering, AS degree

About the Program of Study Pages

Program Heading

Programs are listed in alphabetical order. (Note: Many areas of study are listed within larger programs—for example, CPA Preparation coursework is under Accounting. Please check the index beginning on page 396 for specific names and coursework.)

Student Information Space

This area is designated for students and advisors to mark the students name or any pertinent information.

Division Affiliation

Identifies the CNM division through which the program is offered.

Degrees, Certificates or Skill Sets Offered

A listing of what types of credentials a student can earn in each program area.

Program Information

Describes the program, career and employment opportunities, special requirements for the program and whom to contact for more information about the program or for advisement. (CNM recommends that all students see an advisor or counselor before choosing a major or enrolling in classes.)

Prerequisites

This column lists prerequisites required to enter courses for the program. (Prerequisites are courses required to be completed before taking other coursework.) Prerequisites are also listed at the beginning of each course description (course descriptions are listed alphabetically by subject code starting on page 288). Many prerequisites can be met with Accuplacer test scores. See page 11 for more information.

ACCOUNTING

Business & Information Technology Division

- Associate of Applied Science in Accounting (Concentrations in Accounting E-commerce, Accounting Technology, Financial Accounting, Financial Services, General Accounting, Managerial Accounting or Tax)
- Certificate in Accounting
- Skill Sets in Certified Public Accountant (CPA) Preparation, Internal Revenue Service Enrolled Agent Preparation, Payroll Clerk and Tax Preparer for Individuals

Program Description

The Accounting program provides graduates with a strong foundation in the theory and procedures of accounting for business transactions. Computer technology and software applications that facilitate production of accounting information are an integral part of the program.

Coursework covers financial, managerial and tax accounting practices and procedures. Students develop financial statements for a variety of users and study the fundamentals of business law and management. Students also study the verbal, written and teamwork skills needed for a business career.

Upon completion of the program, students may take the Certified Bookkeeper (CB) exam. Upon completion of a bachelor's degree (available from four-year institutions), including 30 credit hours in accounting, students may be eligible to sit for exams leading to certifications such as Certified Public Accountant (CPA)—requires at least 150 college credit hours including a bachelor's degree) or a Certified Management Accountant (CMA). Certifying agencies include: New Mexico State Board of Accountancy (CPA), Institute of Management Accountants (CMA) and The American Institute of Professional Bookkeepers (CB).

Note: The associate of applied science degree transfers at least 30 technical credits and applicable Arts & Sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

Career and Advancement Opportunities

Most businesses, governmental and non-profit organizations employ accountants and / or bookkeepers. According to the 2003–04 US Department of Labor Statistics Job Outlook Handbook, the job openings outlook, both full- and part-time, for persons with accounting education are "plentiful." Education in accounting often provides a competitive advantage to those seeking advancement into other aspects of business.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business Occupations Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.	Course	Accuplacer equiv.
ENG 0750 Practical Writing	69	RDG 0750 Reading Improvement	69
ENG 0930 Essay Writing	85	RDG 0950 Reading & Critical Thinking	80
MATH 0930 Algebraic Problem Solving I	72		

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/agip/ExitComp.php> For prerequisites and a recommended course sequence, turn the page...

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Exit Competencies

All CNM degrees and certificates list technical competencies. (See page 5 for details.)

About the Graduation Checklists

Each **Program of Study** is accompanied by one or more checklists that offer a **SUGGESTED** sequence of courses for a full-time student. The course sequence can result in the student earning a skill set, certificate and/or degree.

Degrees, Certificate or Skill Set Heading

Programs are listed in alphabetical order. (Note: Many areas of study are listed within larger programs—for example, CPA Preparation coursework is under Accounting. Please check the index beginning on page 396 for specific names and coursework.)

Degrees, Certificates or Skill Sets Offered

A listing of what types of credentials a student can earn in each program area.

Total Credit Requirements

The number of credits required to complete the degree, certificate or skill set.

Electives or Optional Courses

To fulfill the requirements for a program, students often have a choice of electives. This area of the checklist lists possible electives.

Optional courses are courses in a specific content field that may be of interest to a student taking coursework in that field.

Distance Learning Option

A number of CNM's courses are available through distance learning (see page 45 for details). Eligible courses are indicated with a computer icon.

Course Category Listing

Course marked with a star symbol (★) are grouped into categories. Information on the courses within these categories can be found on page 289.

ACCOUNTING Degree / Certificate

Business & Information Technology Division

Associate of Applied Science / Bookkeeping Certificate / Accounting Certificate
Skill Sets in Certified Public Accountant (CPA) Preparation, Internal Revenue Service Enrolled Agent Preparation, Payroll Clerk and Tax
 Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
 Please see Course Descriptions for prerequisite information

Course	Credit Hours
TERM 1	
ACCT 1109 Business Math	3
ACCT 1113 Accounting IA	3
BA 1133 Business Interpersonal Skills	3
IT 1010 Introduction to Computers	3
TERM 2	
ACCT 1112 Accounting IB	3
ACCT 1120 Payroll Accounting	3
BA 1101 Introduction to Business	3
BA 1133 Principles of Management	3
BA 1121 Business English	3
Or	
ENG 1101 College Writing (degree students must choose ENG 1101)	3
**MATH 1210 Methods of Problem Solving or higher (except MATH 2110 and 2096)	3 or 4
(MATH 1315 is recommended for transfer students)	
TERM 3	
ACCT 1140 Accounting Applications	3
ACCT 1210 Accounting II	3
ACCT 2410 Electronic Spreadsheets	3
ACCT 2898 Internship	4
Or	
ACCT 2895 Cooperative Education	4
Or	
ACCT 1411, 1412, 1413 Quickbooks Series (Beginning, Intermediate, Advanced)	3
Or	
ACCT 1410 Quickbooks Complete	3
Bookkeeping Certificate	36-37
★ See page 289 to find information on this course category.	
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Course	Credit Hours
Approved Arts and Sciences Elective	3
TERM 4	
ACCT 2101 Intermediate Accounting IA	3
ACCT 2340 Tax Accounting I	3
Or	
ACCT 1301 Volunteer Tax Preparation	2
And	
ACCT 1398 Volunteer Tax Internship	1
ACCT 2420 Computerized Accounting	3
**ENG 1101 College Writing (if not already taken)	3
BA 2240 Business Law	3
Accounting Certificate	48-52
**Not required for Accounting Certificate, required for degree program only.	
TERM 5	
Required for degree only	
ACCT 2102 Intermediate Accounting IB	3
Accounting Elective (with ACCT prefix)	3
★ Accounting Elective	3
Approved Arts and Sciences Elective	3
BA 2999 Capstone Course	1
TOTAL CREDIT HOURS	67-71
APPROVED ACCOUNTING ELECTIVES	
ACCT prefixed courses not used elsewhere	3-4
FIN 1100 Principles of Banking	3
FIN 1310 Fundamentals of Risk Management and Insurance	3
FIN 2210 Finance	3
CIS 1160 Introduction to Information Management	3
CIS 1480 Access Fundamentals	3
CIS 1181 Intermediate Access	3
CIS 1182 Advanced Access	3
☒ = Course available through Distance Learning (see page 45).	

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Recommended Course Sequence

The information in this area details the courses (by course subject code, course number and course name as well as the number of credit hours) needed to complete a degree, certificate or skill set. Often, students can earn a certificate within a degree.

- **Associate of Applied Science in Accounting**
- **Certificate in Accounting**
- **Certificate in Bookkeeping**
- **Skill Sets in Certified Public Accountant (CPA) Preparation, Internal Revenue Service Enrolled Agent Preparation, Payroll Clerk and Tax Preparer for Individuals**

Program Description

The Bookkeeping certificate provides basic accounting skills for entry-level employment. Students also receive an introduction to business operations and to the written and verbal communication skills needed for a business career. The courses in this program may integrate into other Business and Information Technology programs. Students can take additional courses and receive a certificate or associate of applied science degree in Accounting.

The Accounting program provides graduates with a strong foundation in the theory and procedures of accounting for business transactions. Computer technology and software applications that facilitate production of accounting information are an integral part of the program. Education in accounting often provides a competitive advantage to those seeking advancement in all aspects of business.

Coursework covers financial, managerial and tax accounting practices and procedures. Students develop financial statements for a variety of users and study the fundamentals of business law and management. Students also study the verbal, written and teamwork skills needed for a business career.

Upon completion of the Accounting program, students may take the Certified Bookkeeper (CB) exam. Upon completion of a bachelor's degree (available from four-year institutions), including 30 credit hours in accounting, students may be eligible to sit for exams leading to certifications such as Certified Public Accountant (CPA—requires at least 150 college credit hours including a bachelor's degree) or a Certified Management Accountant (CMA). Certifying agencies include:

New Mexico State Board of Accountancy (CPA), Institute of Management Accountants (CMA) and The American Institute of Professional Bookkeepers

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts & sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

Career and Advancement Opportunities

Most businesses, governmental and non-profit organizations employ accountants and/or bookkeepers. The U.S. Department of Labor Statistics Job Outlook Handbook predicts that both full- and part-time employment for persons with accounting education are expected to grow faster than average.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or associate dean for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0750 Practical Writing.....	69
ENG 0950 Essay Writing (for ENG 1101).....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra Score	72

Course	Accuplacer equiv.
RDG 0750 Reading Improvement	69
RDG 0950 Reading & Critical Thinking (for BA 1101 and ENG 1101).....	80

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ▶

Associate of Applied Science Degree in Accounting / Bookkeeping Certificate / Accounting Certificate

Skill Sets in Certified Public Accountant (CPA) Preparation, Internal Revenue Service Enrolled Agent Preparation, Payroll Clerk and Tax Preparer for Individuals

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ACCT 1109 Business Math	3
ACCT 1111 Accounting IA	3
BA 1131 Business Interpersonal Skills	3
IT 1010 Introduction to Computers	3
TERM 2	
ACCT 1112 Accounting IB	3
ACCT 1120 Payroll Accounting	3
BA 1101 Introduction to Business	3
Or	
BA 1133 Principles of Management	3
BA 1121 Business English	3
Or	
ENG 1101 College Writing (degree students must choose ENG 1101)	3
**MATH 1210 Methods of Problem Solving or higher (except MATH 2110 and 2096)	
(MATH 1315 is recommended for transfer students)	3 or 4
TERM 3	
ACCT 1140 Accounting Applications	3
ACCT 1210 Accounting II	3
ACCT 2410 Electronic Spreadsheets	3
ACCT 2098 Internship	4
Or	
ACCT 2095 Cooperative Education	4
Or	
ACCT 1411, 1412, 1413 Quickbooks Series (Beginning, Intermediate, Advanced)	3
Or	
ACCT 1410 Quickbooks Complete	3
Bookkeeping Certificate	39-40
★ APPROVED ARTS AND SCIENCES ELECTIVE	3

Course	Credit Hours
TERM 4	
ACCT 2101 Intermediate Accounting IA	3
ACCT 2340 Tax Accounting I	3
Or	
ACCT 1301 Volunteer Tax Preparation	2
And	
ACCT 1398 Volunteer Tax Internship	1
ACCT 2420 Computerized Accounting	3
**ENG 1101 College Writing (if not already taken)	3
BA 2240 Business Law	3

Accounting Certificate 54-57

****Not required for Bookkeeping or Accounting Certificate, required for degree program only.**

TERM 5

Required for degree only

ACCT 2102 Intermediate Accounting IB	3
Accounting Elective	3
Accounting Elective	3
Approved Arts and Sciences Elective	3
BA 2999 Capstone Course	1

TOTAL CREDIT HOURS 67-71

APPROVED ACCOUNTING ELECTIVES

ACCT courses not used elsewhere	3-4
FIN 1100 Principles of Banking	3
FIN 1310 Fundamentals of Risk Management and Insurance	3
FIN 2210 Finance	3
CIS 1160 Introduction to Information Management	3
CIS 1180 Access Fundamentals	3
CIS 1181 Intermediate Access	3
CIS 1182 Advanced Access	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Course	Credit Hours
 ECM 1105 Web Business.....	3
CSE 1120 Career Exploration or higher.....	1-3

APPROVED ARTS AND SCIENCES ELECTIVES

 ECON 2000 Macroeconomics.....	3
 ECON 2001 Microeconomics.....	3
 ENG 1102 Analytic and Argumentative Writing.....	3
 ENG 2219 Technical Writing.....	3
Or	
ENG 2220 Expository Writing.....	3
 Communications (COMM 2221 or 1130 recommended).....	3
 ★BIOLOGICAL / PHYSICAL SCIENCE.....	7 hrs. maximum
 ★HUMANITIES.....	3 hrs. maximum
 ★SOCIAL / BEHAVIORAL SCIENCE (in addition to ECON 2000 and 2001).....	3 hrs. maximum
 ★FOREIGN LANGUAGE.....	3 hrs. maximum
★FINE ARTS.....	3 hrs. maximum
MATH 1210 Methods of Problem Solving or higher  if not previously used (except MATH 2110 & 2096).....	3 or 4

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

SKILL SET REQUIRED COURSES:

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon completion of the coursework.

Certified Public Accountant (CPA) Preparation (Skill Set)

The CPA Preparation Skill Set provides credit hours in accounting plus 3 credit hours in Business Law which are needed as a portion of the qualifications to take the CPA exam. Other requirements, which are set by the State Board of Accountancy, include a bachelor's degree or higher from an accredited college or university with at least 150 semester hours, which may include the 30 hours of accounting/law. Satisfactory completion of the coursework does not guarantee passing that exam. Additional information about licensing requirements for the CPA can be obtained from the New Mexico State Board of Accountancy at (505) 841-9108. All of the courses included may also be applied toward an associate of applied science degree in Accounting or an Accounting or Bookkeeping certificate.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

CERTIFIED PUBLIC ACCOUNTANT (CPA) PREPARATION SKILL SET

Bachelor's degree is a prerequisite for this skill set.

Course	Credit Hours
TERM 1	
ACCT 1111 Accounting IA.....	3
And	
ACCT 1112 Accounting IB.....	3
Or	
ACCT 1110 Accounting I.....	6
BA 2240 Business Law.....	3
TERM 2	
ACCT 1210 Accounting II.....	3
ACCT 2101 Intermediate Accounting IA.....	3
ACCT 2340 Tax Accounting I.....	3
ACCT 2410 Electronic Spreadsheets.....	3

See page 289 to find information on course categories marked with a star (★).

Course

Credit Hours

TERM 3

ACCT 2102 Intermediate Accounting IB.....	3
ACCT 2103 Intermediate Accounting II.....	3
CPA Prep Elective.....	3
CPA Prep Elective.....	3

APPROVED CPA PREP ELECTIVES

ACCT 1096 and/or 2096 Topics.....	1-6
ACCT 2210 Cost Accounting.....	3
ACCT 2220 Managerial Accounting.....	3
ACCT 2341 Tax Accounting II.....	3
ACCT 2420 Computerized Accounting.....	3
ACCT 2510 Governmental Accounting.....	3
ACCT 2520 Auditing.....	3

Internal Revenue Service (IRS) Enrolled Agent Preparation (Skill Set)

The IRS Enrolled Agent Preparation Skill Set provides confirmation that the student has satisfactorily completed the designated courses. These courses cover the information included in the exam offered by IRS for individuals who wish to be certified to represent clients before the IRS. Satisfactory completion of the coursework does not guarantee passing that exam. All of the courses included may also be applied to an associate of applied science degree in Accounting or an Accounting or Bookkeeping certificate.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

INTERNAL REVENUE SERVICE (IRS) ENROLLED AGENT PREPARATION SKILL SET

Course	Credit Hours
TERM 1	
ACCT 1109 Business Math.....	3
ACCT 1111 Accounting IA.....	3
ACCT 1301 Volunteer Tax Preparation.....	2

 – Course available through Distance Learning (see page 45).

Course	Credit Hours
TERM 2	
ACCT 1112 Accounting IB	3
ACCT 1398 Volunteer Tax Internship	1
ACCT 2340 Tax Accounting I	3
TERM 3	
ACCT 2341 Tax Accounting II	3
ACCT 2350 Enrolled Agent Review I	3
TERM 4	
ACCT 2351 Enrolled Agent Review II	3

Payroll Clerk (Skill Set)

The Accounting Payroll Clerk Skill Set is a series of courses that provides entry-level skills in payroll accounting. All of the Accounting Payroll Clerk courses may also be applied toward an associate of applied science degree in Accounting or an Accounting or Bookkeeping certificate.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

PAYROLL CLERK SKILL SET

Course	Credit Hours
TERM 1	
ACCT 1109 Business Math	3
ACCT 1111 Accounting IA	3
BA 1131 Business Interpersonal Skills	3
IT 1010 Introduction to Computers	3
TERM 2	
ACCT 1112 Accounting IB	3
ACCT 1120 Payroll Accounting	3
TERM 3	
ACCT 1140 Accounting Applications	3

Tax Preparer for Individuals (Skill Set)

The Skill Set provides confirmation that the student has satisfactorily completed courses that provide skills needed to prepare individual income tax forms for IRS filing by taxpayers. All of the courses may also be applied toward an associate of applied science degree in Accounting or an Accounting or Bookkeeping certificate.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

TAX PREPARER FOR INDIVIDUALS SKILL SET

Course	Credit Hours
TERM 1	
ACCT 1109 Business Math	3
ACCT 1111 Accounting IA	3
BA 1131 Business Interpersonal Skills	3
IT 1010 Introduction to Computers	3
TERM 2	
ACCT 1112 Accounting IB	3
ACCT 1301 Volunteer Tax Preparation	2
ACCT 1398 Volunteer Tax Internship	1
ACCT 2340 Tax Accounting I	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Description

Courses are offered in English as a Second Language (ESL), Basic Academic Skills / GED Preparation (GEDW, R, M) and Job Life Skills (GEDI). No letter grades are given.

Career and Advancement Opportunities

Adult Basic Education (ABE) courses help students prepare for the GED exam, higher education, job advancement or personal fulfillment.

Special Requirements

The ABE program offers free instruction to adults who do not have their high school diploma and to adults who do not speak English as their first language. The ABE program uses assessments (CASAS for English as Second Language classes and TABE, for Basic Skills classes) to determine student level in reading, writing, math or English as a Second Language. The CASAS assessment takes approximately two hours to complete and the TABE takes approximately three hours to complete.

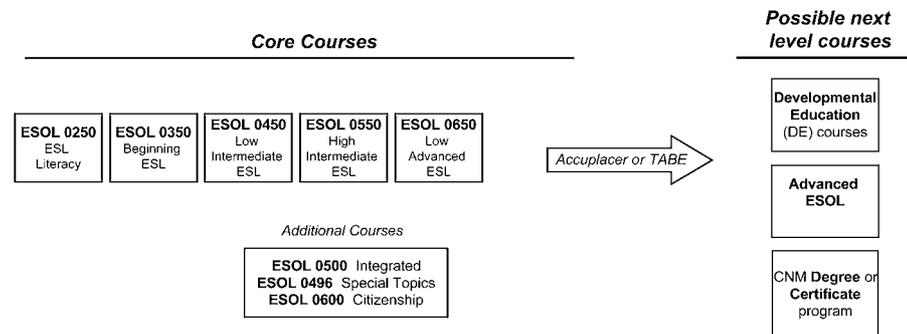
Adult Basic Education students receive most of the same services as other CNM students (for example, library access) but are not eligible for financial aid. Also, ABE students do not follow the procedures outlined in this catalog for admission and registration; they should contact the Division of Educational & Career Advancement at (505) 224-4282 for specific information.

CONTACT INFORMATION

For more information, contact the Division of Educational & Career Advancement, Ken Chappy Hall, Room 1, (505) 224-4282.

ENGLISH AS A SECOND LANGUAGE (ESL) COURSE OPTIONS

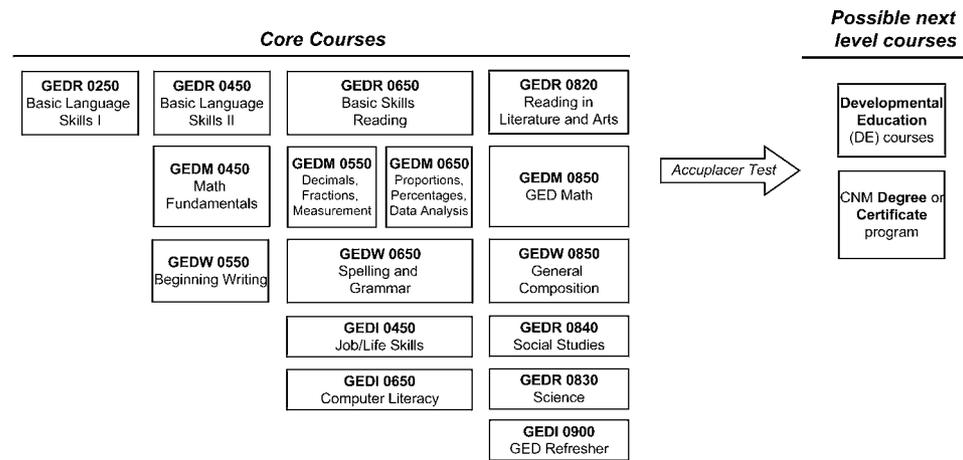
Course placement and order based on CASAS test results.



Intensive sections (MTWR) may be offered for leveled courses (see schedule of classes).

BASIC ACADEMIC SKILLS / GED PREPARATION COURSE OPTIONS

Course placement and order based on TABE test results.



- *Associate of Applied Science Degree in Aerospace Technology*
- *Certificate in Professional Pilot & Flight Instruction*
- *Skill Sets in Aviation Sheet Metal Assembler Technician and Aviation Systems Installation Technician*

Program Description

The certificate in Professional Pilot and Flight Instruction offers students advanced single engine ratings and entry-level access as flight instructors. The associate degree in Aerospace Technology (Professional Pilot and Flight Instruction) prepares students with multi-engine ratings. The Professional Pilot and Flight Instruction Training Program at CNM has a modern facility, state-of-the-art equipment (simulator) and training aircraft provided through a contractual agreement with Bode Aviation. Albuquerque Double Eagle Airport is the perfect place to learn to fly due to great weather, low air traffic and a large amount of air space for student pilots to practice maneuvers and landings. Double Eagle is a relatively new airport with new, expanded runways.

Career and Advancement Opportunities

With the increased numbers of moderately priced business aircraft entering the market and the increasing retirements of current commercial pilots, the air transport industry will have an increased demand for pilots. In addition, the programs are positioned to help provide a sustainable workforce for the emerging aviation manufacturing industry cluster in Albuquerque and New Mexico.

Special Requirements

Individuals who wish to become pilots must meet the medical requirements for a second-class FAA medical certificate. Note: please check course descriptions beginning on page 298 (subject code: AVIA) for course fees in this program.

CONTACT INFORMATION

Program information is available from the Applied Technologies Division Office at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Degree	
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score	72
RDG 0950 Reading & Critical Thinking	80

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ▶

Associate of Applied Science Degree in Aerospace Technology / Certificate in Professional Pilot & Flight Instruction

Skills Sets: Aviation Sheet Metal Assembler Technician; Aviation Systems Installation Technician

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSEWORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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NOTE: * The student will pay Professional Pilot Training lab fees directly to the flight training provider.

TERM

ENG 1101 College Writing	3
MATH 1210 or higher (except MATH 2110 or MATH 2096)	4
AVIA 1110 Introduction to Modern Commercial Air Operations	2
AVIA 1400 Private Pilot	3
AVIA 1492 Private Pilot Lab *	3

TERM 2

PHYS 1010 Introduction to Physics	3
AVIA 1500 Instrument Rating & Commercial Pilot I	3
AVIA 1592 Instrument Rating & Commercial Pilot I Lab *	3
AVIA 1140 Meteorology	3
AVIA 1145 Aircraft, Engines & Maintenance	3

TERM 3

AVIA 1150 Aviation Electricity	2
AVIA 1600 Commercial Pilot II	3
AVIA 1692 Commercial Pilot II Lab *	3
AVIA 2110 Aerodynamics for Pilots	3
AVIA 2115 Aerobatics, Spin & Upset Flight	1

TERM 4

AVIA 2100CFI & CFI II Ratings	3
AVIA 2192 CFI & CFI II Ratings Lab *	3
AVIA 2130 Modern Avionics	3
AVIA 2135 Introduction To Air Traffic Control	3
COMM 2221 Interpersonal Communication Studies	3

TERM 5

★HUMANITIES or SOCIAL/BEHAVIORAL SCIENCES Elective	3
AVIA Elective	3

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
AVIA 2200 Multi-Engine Commercial / Certified Flight Instructor	3
AVIA 2292 Multi-Engine Commercial / Certified Flight Instructor Lab *	3
AVIA 2255 Aviation Physiology	3
AVIA 2260 Crew Resource Management	3

TOTAL CREDIT HOURS73

AVIA ELECTIVES

AVIA 2250 Global Air Navigation	3
AVIA 2265 Management of Air Operations	3
AVIA 2270 Turbine Aircraft Systems	3
AVIA 2392 Advanced Flight Labs (Cessna 172) *	1
AVIA 2492 Advanced Flight Labs (BE-95)*	1
AVIA 2285 Advanced Flight Labs (Frasca SE FTD) *	1
AVIA 2290 Advance Flight Labs (Frasca ME FTD).*	1

ENG 1101 College Writing	3
MATH 1210 or higher (except MATH 2110 or MATH 2096)	4
AVIA 1110 Introduction to Modern Commercial Air Operations	2
AVIA 1400 Private Pilot	3
AVIA 1492 Private Pilot Lab *	3
PHYS 1010 Introduction to Physics	3
AVIA 1500 Instrument Rating & Commercial Pilot I	3
AVIA 1592 Instrument Rating & Commercial Pilot I Lab *	3
AVIA 1140 Meteorology	3
AVIA 1145 Aircraft, Engines & Maintenance	3
AVIA 1600 Commercial Pilot II	3
AVIA 1692 Commercial Pilot II Lab *	3
AVIA 2100CFI & CFI II RATINGS	3
AVIA 2192 CFI & CFI II RATINGS LAB *	3

Professional Pilot & Flight Instruction Certificate 42

 – Course available through Distance Learning (see page 45.)

Skill Set Required Courses:

AVIATION SHEET METAL ASSEMBLER TECHNICIAN SKILL SET

Course	Credit Hours
AVIA 1010 Introduction to Aircraft Structural Assembly.....	3
AVIA 1015 Aircraft Structural Assembly Manufacturing.....	3
AVIA 1092 Aircraft Structural Assembly Lab	3
TOTAL CREDIT HOURS.....	9

AVIATION SYSTEMS INSTALLATION TECHNICIAN SKILL SET

Course	Credit Hours
AVIA 1192 Electrical Systems Installation.....	3
AVIA 1292 Plumbing, Hydraulic & Pneumatic systems Installation.....	3
AVIA 1392 Flight Control Cable & Rigging Assembly.....	3
TOTAL CREDIT HOURS.....	9

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• **Certificate in Air Conditioning, Heating & Refrigeration**

Program Description

The Air Conditioning, Heating & Refrigeration (ACHR) Certificate program provides students the opportunity to gain knowledge and technical skills for entry into the Heating Air Conditioning Ventilation and Refrigeration (HVAC) installation, maintenance and service industry. The program prepares students in proper safety practices, installation of mechanical equipment, proper piping practices, electrical troubleshooting, service and maintenance of various types of refrigeration, heating, air conditioning and heat pump equipment and accessories. The program offers students an in-depth background in HVAC fundamentals through hands-on labs. Training is provided in service and maintenance on heating equipment (natural gas and electric), air conditioning and heat pumps, (packaged & split systems), boilers and boiler controls, chillers and building automation controls. Students gain an understanding of wiring diagrams to trouble shoot equipment, creating a sequence of operations from wiring diagrams, how to create wiring diagrams from equipment, system design including calculating building loads, duct design and code enforcement are included in the curriculum.

Career and Advancement Opportunities

Graduates earning their certificate in the ACHR program are qualified to take the New Mexico Journeyman's Refrigeration exam, High Pressure Boiler Operator's exam and Low Pressure Boiler Operators exam. An Associate Degree in Mechanical Technology with a concentration in ACHR is available to students earning a certificate in ACHR from CNM.

Special Requirements

Students are required to purchase textbooks, hand tools, personal protective equipment and pay for any certification exam fees.

Graduates will be required to earn their EPA Refrigeration Handling Certification and must complete the National Industry Competency Exams (ICE) in commercial refrigeration, residential AC & Heating and light commercial AC & Heating. Exam fees are approximately \$50 each.

CONTACT INFORMATION

Additional program information is available from the program chair at (505)224-3723, or from Academic Advisement and Career Development at (505)224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Certificate	
RDG 0750 Reading Improvement.....	69

Certificate in Air Conditioning, Heating & Refrigeration

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
____ ACHR 1105 Refrigeration Fundamentals	2
____ ACHR 1110 Basic Electricity.....	2
____ ACHR 1115 Refrigerant Management	2
____ ACHR 1120 Motors & Controls.....	2
____ ACHR 1125 Refrigeration Applications	2
____ ACHR 1130 Code & Safety Requirements I	1
____ ACHR 1135 Commercial Refrigeration	2
TERM 2	
____ ACHR 1205 Air Conditioning.....	2
____ ACHR 1210 Air Conditioning Control	2
____ ACHR 1215 System Design	3
____ ACHR 1225 Heating Systems	2
____ ACHR 1230 Heating Control Systems	2
____ ACHR 1220 Installation & Retrofit of Heat / Cooling System.....	2
TERM 3	
____ ACHR 1305 Pumps & Valves	2
____ ACHR 1310 Basic Hydronic Principles.....	2
____ ACHR 1315 Hot Water & Steam Generation Systems.....	2
____ ACHR 1320 Control I.....	2
____ ACHR 1325 Chilled Water Systems.....	2
____ ACHR 1335 Controls II	2
____ ACHR 1340 Code & Safety Requirements II	1
TOTAL CREDIT HOURS	39

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• *Certificate in Airframe Maintenance Technician (Pending FAA Approval)*

Program Description

The Airframe Maintenance Technician program prepares students for licensure as Federal Aviation Administration (FAA) certified airframe mechanics. Graduates will be qualified for employment in entry level position in the aircraft maintenance and manufacturing fields. The curriculum will meet FAA requirement for students in general and airframe subject areas. (The program is pending FAA approval).

Career and Advancement Opportunities

This program is positioned to help provide a sustainable workforce for the emerging aviation manufacturing industry cluster in Albuquerque and New Mexico. The aviation companies that have selected Albuquerque to establish manufacturing and assembly facilities will require Federal Aviation Administration (FAA) certified technicians as part of their assembly processes and after-sales servicing centers.

Special Requirements

Students wishing to enroll in the AVMT programs must complete an application before being considered for acceptance into the program.

CONTACT INFORMATION

Program information is available from the Applied Technologies Division Office at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

RECOMMENDED COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Certificate	
ENG 1101 College Writing	110
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score.....	81
RDG 0950 Reading & Critical Thinking	80

Certificate in Airframe Maintenance Technician, Part 147

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
AVMT 1240 Aircraft Forms & Regulations	5
AVMT 1260 Fundamentals of Math & Electricity	4
AVMT 1280 Fundamentals of Aviation Physics	4
PHYS 1010 Introduction to Physics	3
TERM 2	
AVMT 2220 Fundamentals of Aircraft Wood Structures, Covering & Finishing	3
AVMT 2225 Atmosphere Control, Fire Detection, Ice & Rain Sys.	3
AVMT 2230 Aircraft Sheet Metal, Part 65.....	5
 COMM 2221 Interpersonal Communication Studies	3
TERM 3	
AVMT 2235 Aircraft Landing Gear, etc.....	3
AVMT 2240 Aircraft Electrical Systems, Instruments, etc.	3
AVMT 2245 Airframe Assembly, Inspection & Welding.....	3
 COMM 2232 Business And Professional Communications Studies	3
TOTAL CREDIT HOURS	42

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Skill Sets in Early Childhood Multicultural Education Alternative Teacher Licensure, Elementary Education Alternative Teacher Licensure, Secondary Education Alternative Teacher Licensure, Special Education Alternative Teacher Licensure*

Program Description

CNM offers state-approved Alternative Teacher Licensure Programs in:

- Early Childhood Multicultural Education
- Elementary Education
- Secondary Education
- Special Education

Career and Advancement Opportunities

Upon successful completions of these certificate programs and required state exams, candidates are eligible to apply for a New Mexico Level I provision teaching license.

Special Requirements

Qualifications for Alternative Licensure

To qualify to pursue alternative licensure programs, an individual must have:

- A bachelor's degree including 30 semester hours of credit in a particular field that appertains to the licensure area sought; or
- A master's degree including 12 semester hours of graduate credit in a particular field that appertains to the licensure area sought; or

- A doctoral degree in a particular field that appertains to the licensure area sought.
- Initial Admission to CNM's Alternative Teacher Licensure Programs requires:**
- Completion of the CNM admission application
 - Completion of the CNM Alternative Teacher Licensure Program application packet
- Full acceptance (required to register for second semester of coursework) requires:**
- Passing scores on the Basic Skills portion of the New Mexico Teacher Assessment (NMTA). Note: to register for this exam visit www.nmta.nesinc.com
 - Successful completion of EDUC 2250: Foundations of Education
 - Complete student file on record with the CNM education department (to include official college transcripts and reference letters)

CONTACT INFORMATION

For further information, contact the division of Communication, Humanities and Social Sciences at (505) 224-3588, visit www.cnm.edu/depts/chss/programs/educ.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Applicants to this Skill Set must meet the provisions of New Mexico Public Education Department (NMPED). Must possess (1) a bachelor's degree that includes a minimum of 30 semester hours in a particular field, or (2) a master's degree that includes a minimum of 12 graduate semester hours in a particular field, or (3) a doctoral degree in a particular field that pertains and corresponds to the subject area and level of instruction, (4) all other prerequisites as specified in course sequence and (5) Undergo screening process and be approved for enrollment.

Skill Sets in Early Childhood Multicultural Education Alternative Teacher Licensure, Elementary Education Alternative Teacher Licensure, Secondary Education Alternative Teacher Licensure, Special Education Alternative Teacher Licensure

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Skill Set Required Courses:

EARLY CHILDHOOD MULTICULTURAL EDUCATION ALTERNATIVE LICENSURE

Course	Credit Hours
ECME 2250 Foundations of Early Childhood Education	3
ECME 2252 Teaching Young Children	3
ECME 2254 Developmentally Appropriate Early Childhood Multicultural Curriculum	3
ECME 2260 Observation & Assessment of Young Children	3
ECME 2262 Emergent Literacy: Theories & Principles	3
ECME 2264 Emergent Literacy: Methods & Materials	3
ECME 2390 Early Childhood Classroom Field Experience	3

Early Childhood Multicultural Education 21

ELEMENTARY EDUCATION ALTERNATIVE TEACHER LICENSURE

Course	Credit Hours
EDUC 2250 Foundations of Education	3
EDUC 2252 Teaching & Learning Theory	3
EDUC 2260 Fundamentals of Reading Instruction	3
EDUC 2262 Methods and Materials for Reading Instruction	3
EDUC 2284 Effective Teaching Methods & Strategies	3
EDUC 2285 Curriculum Development, Assessment and Evaluation	3
EDUC 2213 Supervised Field Experience	3

Elementary Education 21

SECONDARY EDUCATION ALTERNATIVE TEACHER LICENSURE

Course	Credit Hours
EDUC 2250 Foundations of Education	3
EDUC 2252 Teaching & Learning Theory	3
EDUC 2264 Reading and Writing Across the Curriculum in Secondary Education	3
EDUC 2284 Effective Teaching Methods and Strategies	3
EDUC 2285 Curriculum Development, Assessment and Evaluation	3
EDUC 2213 Supervised Field Experience	3

Secondary Education 18

SPECIAL EDUCATION ALTERNATIVE TEACHER LICENSURE

Course	Credit Hours
EDUC 2260 Fundamentals of Reading Instruction	3
 EDUC 2284 Effective Teaching Methods and Strategies	3
SPED 2250 Exceptionalities & Placement	3
SPED 2256 Evaluation / Individual Ed Plan & Documentation in Special Education	3
SPED 2272 Reading for Special Learners	3
EDUC 2285 Curriculum Development, Assessment and Evaluation	3
EDUC 2213 Supervised Field Experience	3

Special Education 21

TOTAL CREDIT HOURS 18 OR 21

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Note: Students enrolled in apprenticeships may not qualify for financial aid or Veterans Administration benefits. Apprenticeship courses are taken in numerical sequence (see Schedule of Classes). Department approval is required to register for advanced courses not taken in the appropriate sequence.

COMMERCIAL CARPENTRY APPRENTICESHIP

The Commercial Carpentry Apprenticeship (course subject code: CCAP), for persons currently employed in the industry, is offered in conjunction with the Rio Grande Chapter of Associated Builders and Contractors (ABC), Associated General Contractors (AGC) and the Carpenters Educational Program.

The program provides related classroom instruction. Students must purchase textbooks and instructional materials through the local ABC and AGC chapters.

ELECTRICAL TRADES APPRENTICESHIP

The Electrical Trades Apprenticeship (course subject code: ETAP), for persons currently employed full-time in the electrical industry, is offered in conjunction with the Independent Electrical Contractors (IEC) and ABC.

The program provides related classroom instruction. Students must purchase books and instructional materials through the IEC or ABC offices.

GENERAL TRADES APPRENTICESHIP

The General Trades Apprenticeship (course subject code: GTAP), for persons currently employed in the general trades industry, is offered in conjunction with the local industry.

The program provides related classroom instruction. Students must purchase textbooks and instructional materials through the sponsoring agency.

INDUSTRIAL PLANT MAINTENANCE APPRENTICESHIP

The Industrial Plant Maintenance Apprenticeship (course subject code: IMAP), for persons currently employed full time in the industrial plant maintenance industry, will be offered in conjunction with local industries.

The program provides related classroom instruction. Students must purchase books and instructional materials through the sponsoring industries.

IRON WORKER APPRENTICESHIP

The Iron Worker Apprenticeship (course subject code: IWAP), for persons currently employed in the industry, is offered in conjunction with Iron Workers Local 495.

The program provides related classroom instruction. Students must purchase textbooks and instructional materials through the Iron Workers Local 495.

PLUMBING APPRENTICESHIP

The Plumbing Apprenticeship (course subject code: PLAP), for persons currently employed full time in the mechanical trades (plumbing) industry, is offered in conjunction with ABC and Plumbing and Pipefitters Local 412 in New Mexico.

Students must purchase textbooks and instructional materials through the local ABC chapter or the Local 412 office.

SHEET METAL APPRENTICESHIP

The Sheet Metal Apprenticeship (course subject code: SMAP), for persons currently employed full time in the sheet metal industry, is offered in conjunction with the ABC. The program provides related classroom instruction. Students must purchase textbooks and instructional materials through the local ABC chapter.

CONTACT INFORMATION

For more information on apprenticeship programs, contact Apprenticeship Director in the Applied Technologies Division Office at (505) 224-3368.

- Associate of Applied Science Degree in Architectural / Engineering Drafting Technology
- Certificate in Architectural / Engineering Drafting Technology
- Skill Set in Computer-Assisted Drafting (CAD) or Residential Drafting

Program Description

The program integrates mathematics, technical writing and blueprint reading into the technical courses at all levels. Computer applications are emphasized throughout the program. The curriculum includes the principles of architectural and engineering graphics and the theory and practice of construction technology. To prepare students for work in the construction industry, the development and use of communication, teamwork and problem-solving skills are incorporated throughout the program.

The CAD Skill Sets is designed to prepare students to succeed as CAD technicians. Development of two- and three-dimensional CAD skills is the primary focus of the program. The Residential Drafting Skill Set is specific to the design, materials, methods and codes of residential construction and drafting. It focuses on the development of working drawings and construction documentation for housing applications.

Career and Advancement Opportunities

Graduates are prepared for entry-level jobs as architectural or engineering drafting technicians in residential and commercial construction and for estimating and sales positions with contractors, fabricators and suppliers. The Residential Drafting Skill Set prepares students

for entry-level positions as residential drafting technicians and is useful for those considering projects as owner / builders. The CAD Skill Set prepares students for entry-level positions as CAD drafter / technicians and offers career opportunities in the fields of architecture, engineering and construction. The Skill Set is also conducive to those seeking professional and technical upgrading in the design profession.

Special Requirements

Students must purchase their own drafting tools and construction hard hats.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score	72

Course	Credit Hours
IT 1010 Introduction to Computers	3

ARCHITECTURAL / ENGINEERING DRAFTING TECHNOLOGY Degree / Certificate *Applied Technologies Division*

Associate of Applied Science Degree in Architectural / Engineering Drafting Technology / Certificate in Architectural / Engineering Drafting Technology Skill Set in Computer-Assisted Drafting (CAD) or Residential Drafting

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
Certificate	
TERM 1	
ARDR 1010 CAD Analysis I.....	2
ARDR 1101 Building Materials and Methods I.....	3
ARDR 1105 Architectural Drafting I.....	4
ARDR 1110 Architectural Mathematics.....	3
CAD 1001 Basics of CAD.....	1
TERM 2	
ARDR 1201 Building Materials and Methods II.....	3
ARDR 1205 Architectural CAD Drafting II.....	7
ARDR 1220 CAD Analysis II.....	4
TERM 3	
ARDR 1305 Architectural CAD Drafting III.....	7
ARDR 1392 Advanced Computer-Assisted Drafting.....	2
ARDR 1492 Architectural Design.....	2
ARDR 2999 Architectural / Engineering Drafting Seminar.....	1
Architectural / Engineering Drafting Certificate	39
Degree	
TERM 1	
ARDR 1010 CAD Analysis I.....	2
ARDR 1105 Architectural Drafting I.....	4
ARDR 1110 Architectural Mathematics.....	3
ARDR 1101 Building Materials and Methods I.....	3
CAD 1001 Basics of CAD.....	1

Course	Credit Hours
COMM 2232 Business and Professional Communication Studies.....	3
Or	
ENG 1101 College Writing.....	3
TERM 2	
ARDR 1201 Building Materials and Methods II.....	3
ARDR 1205 Architectural CAD Drafting II.....	7
ARDR 1220 CAD Analysis II.....	4
TERM 3	
ARDR 1305 Architectural CAD Drafting III.....	7
ARDR 1392 Advanced Computer-Assisted Drafting.....	2
ARDR 1492 Architectural Design.....	2
ARTH 2260 Architectural History: Ancient through Modern.....	3
TERM 4	
ARDR 2101 Structural Systems Analysis.....	4
ARDR 2102 Structural Systems CAD Drafting.....	5
ARDR 2192 Site Analysis.....	2
MATH 1210 Methods of Problem Solving or higher.....	3-4
TERM 5	
ARDR 2202 Mechanical / Electrical Systems CAD Drafting.....	5
ARDR 2201 Mechanical / Electrical Systems Analysis.....	4
ARDR 2999 Architectural / Engineering Drafting Seminar.....	1
PHYS 1010 Introduction to Physics.....	3
PHIL 1156 Logic & Critical Thinking.....	3
Or	
PSY 1105 Introduction to Psychology.....	3
TOTAL CREDIT HOURS	75-76

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Skill Set Required Courses:

COMPUTER-ASSISTED DRAFTING SKILL SET

Course	Credit Hours
ARDR 1010 CAD Analysis I	2
ARDR 1230 Intermediate Computer-Assisted Drafting.....	3
ARDR 1330 Customizing Auto CAD.....	3
ARDR 1392 Advanced Computer-Assisted Drafting	2
CAD 1001 Basics of CAD	1

RESIDENTIAL DRAFTING SKILL SET

Course	Credit Hours
ARDR 1101 Building Materials and Methods I.....	3
ARDR 1105 Architectural Drafting I.....	4
ARDR 1110 Architectural Mathematics.....	3
ARDR 1010 CAD Analysis I	2
CAD 1001 Basics of CAD	1

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Certificate in Automotive Technology*
- *Skill Set in Automotive Service Fundamentals*

Program Description

Students study a variety of vehicle systems in classes combining theory and laboratory exercises that prepare graduates to work on a variety of automobiles and light trucks. The program provides extensive hands-on training opportunities to ensure competency at program completion. Courses within the Automotive Technology program are certified by the National Automotive Technicians Education Foundation. Each course provides the theoretical and practical knowledge required to prepare for ASE testing.

Entering students, upon successful completion of the four first-term courses, earn a Skill Set credential in Automotive Service Fundamentals recognizing their training to perform undercar service and repair. These students may earn credit for Ford Motor Company technical training in specific skill categories.

Career and Advancement Opportunities

Career opportunities exist in government, independent repair facilities and dealerships for all aspects of the industry including line technician, field service technician, service writer, service manager, warranty and parts and overhaul specialist. The national shortage of technicians in the automotive field suggests plentiful employment opportunities with excellent pay and benefits.

Special Requirements

Hand tools and textbooks are required in all transportation technology programs and one must not be allergic to fuels, oils and chemicals used in the industry. Additionally, most employers require a valid driving license and a good driving record.

CONTACT INFORMATION

Information about these programs is available from the program chair at (505) 224-3741 or the director (505) 224-3730, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

RECOMMENDED COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
 MATH 0750 Basic College Mathematics or Arithmetic score	57
RDG 0750 Reading Improvement.....	69

Certificate in Automotive Technology

Skill Set in Automotive Service Fundamentals

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSEWORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
____ AUTC 1110 Introduction to Automotive Systems	4
____ AUTC 1120 Brake Systems	4
____ AUTC 1130 Suspension and Alignment.....	4
____ AUTC 1140 Automotive Electrical.....	4
TERM 2	
____ AUTC 1210 Manual Transmission.....	4
____ AUTC 1220 Engine Repair	4
____ AUTC 1230 Automatic Transmissions	4
____ AUTC 1240 Automotive Electronics	4
TERM 3	
____ AUTC 2120 Engine Performance I.....	4
____ AUTC 2130 Engine Performance II.....	4
____ AUTC 2110 Air Conditioning and Heating	4
TOTAL CREDIT HOURS	44

AUTOMOTIVE SERVICE FUNDAMENTALS SKILL SET

Course	Credit Hours
____ AUTC 1110 Introduction to Automotive Systems	4
____ AUTC 1120 Brake Systems	4
____ AUTC 1130 Suspension and Alignment.....	4
____ AUTC 1140 Automotive Electrical.....	4

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Associate of Applied Science Degree in Aviation Maintenance Technology (Pending New Mexico Department of Higher Education and FAA Approvals)*
- *Certificate in Airframe Maintenance Technician*
- *Certificate in Powerplant Maintenance Technician*

Program Description

The maintenance technician degree and certificates prepare students for licensure as Federal Aviation Administration (FAA) certified airframe and power plant (A&P) mechanics. Graduates will be qualified for employment in entry level position in the aircraft maintenance and manufacturing fields. The curriculum will meet FAA requirement for student in general, airframe and power plant subject areas. (The programs are pending FAA approval).

Career and Advancement Opportunities

These programs are positioned to help provide a sustainable workforce for the emerging aviation manufacturing industry cluster in Albuquerque and New Mexico. The aviation companies that have selected Albuquerque to establish manufacturing and assembly facilities will require Federal Aviation Administration (FAA) certified maintenance technicians as part of their assembly processes and after-sales servicing centers.

Special Requirements

Students wishing to enroll in the AVMT programs must complete an application before being considered for acceptance into the program.

CONTACT INFORMATION

Program information is available from the Applied Technologies Division Office at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Degree	
ENG 1101 College Writing	110
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score.....	81
RDG 0950 Reading & Critical Thinking	80

Associate of Applied Science Degree in Aviation Maintenance Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
AVMT 1240 Aircraft Forms & Regulations	5
AVMT 1260 Fundamentals of Math & Electricity	4
AVMT 1280 Fundamentals of Aviation Physics	4
PHYS 1010 Introduction to Physics	3
TERM 2	
AVMT 2220 Fundamentals of Aircraft Wood Structures, Covering & Finishing	3
AVMT 2225 Atmosphere Control, Fire Detection, Ice & Rain Sys.	3
AVMT 2230 Aircraft Sheet Metal, Part 65.....	5
ENG 1101 College Writing	3
TERM 3	
AVMT 2235 Aircraft Landing Gear, etc.....	3
AVMT 2240 Aircraft Electrical Systems, Instruments, etc.	3
AVMT 2245 Airframe Assembly, Inspection & Welding.....	3
COMM 2221 Interpersonal Communication Studies.....	3
TERM 4	
AVMT 2260 Aircraft Turbine Engines	5
AVMT 2265 Engine Fuel Systems.....	6
COMM 2232 Business And Professional Communications Studies	3
★HUMANITIES OR BEHAVIORAL / SOCIAL SCIENCE ELECTIVE	3
TERM 5	
AVMT 2270 Engine Electrical Systems	6
AVMT 2275 Engine Instruments	5
AVMT 2280 Propeller Systems.....	4
TOTAL CREDIT HOURS	74

Course	Credit Hours
AVMT 1240 Aircraft Forms & Regulations	5
AVMT 1260 Fundamentals of Math & Electricity	4
AVMT 1280 Fundamentals of Aviation Physics	4
PHYS 1010 Introduction to Physics	3
AVMT 2220 Fundamentals of Aircraft Wood Structures, Covering & Finishing	3
AVMT 2225 Atmosphere Control, Fire Detection, Ice & Rain Sys.	3
AVMT 2230 Aircraft Sheet Metal, Part 65.....	5
COMM 2221 Interpersonal Communication Studies	3
AVMT 2235 Aircraft Landing Gear, etc.....	3
AVMT 2240 Aircraft Electrical Systems, Instruments, etc.	3
AVMT 2245 Airframe Assembly, Inspection & Welding.....	3
COMM 2232 Business And Professional Communications Studies	3

Airframe Maintenance Technician Certificate..... 42

AVMT 1240 Aircraft Forms & Regulations	5
AVMT 1260 Fundamentals of Math & Electricity	4
AVMT 1280 Fundamentals of Aviation Physics	4
PHYS 1010 Introduction to Physics	3
AVMT 2260 Aircraft Turbine Engines	5
AVMT 2265 Engine Fuel Systems.....	6
AVMT 2270 Engine Electrical systems	6
AVMT 2275 Engine Instruments	5
AVMT 2280 Propeller Systems.....	4
COMM 2221 Interpersonal Communication Studies	3
COMM 2232 Business And Professional Communications Studies	3

Powerplant Maintenance Technician Certificate 48

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• *Certificate in Baking*

Program Description

The Baking certificate is a two-term, 28 credit-hour program. Students are primarily in a hands-on lab setting beginning with the theory, skills and techniques of baking fundamentals. Topics include scaling, methods of mixing, processing of ingredients, ingredient functions and baking math. The retail production and merchandising of cookies, pies, pastries, quick breads, breads, sweet yeast and cakes are introduced. Students apply safety and sanitation principles and use their baking skills to formulate more difficult components to complete advanced pastries in the second half of the program. Techniques of classical and contemporary pastry arts are covered, including laminated dough, tarts, specialty cakes, genoise, sugar and chocolate decoration and international buttercreams. One of the final lab projects in the Baking certificate program is a wedding cake. The Baking certificate program is a required part of the Culinary Arts Associate of Applied Science degree that is accredited by the American Culinary Federation.

Career and Advancement Opportunities

Jobs are available in restaurants, resorts, schools, retirement homes, hospitals, cruise ships, catering companies, convention centers and bakeries.

Special Requirements

Students are required to purchase chef's uniforms, textbooks and tools. Students should be able to lift 30 pounds and must present a physician's certificate to CNM at the start of classes stating that the student is free from tuberculosis in a transmissible form. Students must be able to stand for the duration of laboratory classes.

CONTACT INFORMATION

Information about these programs is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Certificate	
RDG 0750 Reading Improvement.....	69
 MATH 0750 Basic College Mathematics or Arithmetic score of	57

Certificate in Baking

Information about this certificate and how it fits within the Culinary Arts Associate of Applied Science Degree is available on page 137.

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ CULN 1101 Introduction to Culinary Arts	1
_____ CULN 1102 Applied Culinary Math.....	1
_____  CULN 1103 Food Sanitation Principles	3
_____  IT 1010 Introduction to Computers.....	3
TERM 2	
_____ CULN 1130 Introduction to Baking Fundamentals.....	5
_____ CULN 1132 Applied Baking Principles.....	5
TERM 3	
_____ CULN 2230 Baking and Pastry Fundamentals	5
_____ CULN 2232 Advanced Baking and Pastry Techniques	5
TOTAL CREDIT HOURS	28

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• **Associate of Science Degree in Biotechnology**

Program Description

The biotechnology program prepares students for employment in the biotechnology industry and in facilities conducting research and development. The field of biotechnology represents a wide range of interrelated activities that includes DNA / protein analysis, biomanufacturing, bioprocessing, bioinformatics and proteomics. The applications of biotechnology include pharmaceuticals, agriculture, the diagnosis and treatment of disease, vaccines, forensics and bioremediation. Students will attain knowledge and laboratory skills in molecular biology, recombinant DNA, immunology, protein purification and tissue culture.

The program provides classroom and hands-on laboratory learning experiences. Students will also participate in a supervised internship at laboratory facilities during the final term of the program.

Career and Advancement Opportunities

Biotechnology is an emerging industry in New Mexico. National trends indicate that upon graduation with an associate degree or certificate from a community college, 51 percent of students accepted full-time employment in industry, while 19 percent accepted part-time employment. The national mean salary for entry-level positions is slightly above \$24,000, although the range is \$22,000 to \$32,000. Skilled biotechnology technicians work in a variety of scientific fields, including: research and development; service and quality assurance; forensics; food, water, soil and product testing laboratories; and manufacturing facilities. They are employed in biomedical research facilities, medical reference laboratories, diagnostic laboratories, colleges and universities, national research laboratories, drug manufacturing companies and private industry.

Special Requirements

Prior to beginning the Biotechnology Core courses students must have a high school diploma or equivalent, be admitted to CNM, declare Biotechnology as a major, establish a CNM grade point average of 2.0 or better and complete the arts & sciences prerequisites. If necessary, the

selection of students into the program will be determined by the number of completed arts & sciences courses required for the degree and date of declared major of biotechnology.

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

Graduation Policy

- All Health, Wellness & Public Safety career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit / no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and / or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the department at (505) 224-4111 for more information.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-5032 and from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
MATH 1310 Intermediate Algebra or College Level Math score of	60
ENG 1101 College Writing or Sentence Skill score of	110

Course	Credit Hours
Degree	
CHEM 1510 / 1592 General Chemistry I	4
CHEM 1610 / 1692 General Chemistry II	4

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ▶

Associate of Science Degree in Biotechnology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

PETITION IN SPRING FOR SUMMER

Selection is based on the date of declaration of BIOT as a major and the number of arts & science course completed with a grade of “C” or better. (G.P.A. 2.0 or higher)

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

REQUIRED PROGRAM COURSES

Course	Credit Hours
BIOT 1005 Math In the Biotechnology Laboratory	3
BIOT 1010 Biotechnology Seminar I	2
BIO 1510 / 1592 Molecular and Cell Biology	4
BIO 1610 / 1692 Genetics	4
 BIO 2110 / 2192 Microbiology	4
CHEM 2210 Organic Chemistry and Biochemistry	4
 IT 1010 Introduction to Computers	3
MATH 1330 Introduction to Probability and Statistics	3
 PHIL 2247 Biomedical Ethics	3

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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TERM 1 SUMMER

BIOT 1210 / 1270 Biotechnology Laboratory Techniques I	4
BIOT 1211 Biotechnology Seminar II	1

TERM 2 FALL

BIOT 1510 / 1570 Biotechnology Laboratory Techniques II	5
BIOT 1512 Biotechnology Seminar III	1

Course	Credit Hours
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TERM 3 SPRING

BIOT 2410 / 2470 Biotechnology Laboratory Techniques III	5
BIOT 2413 Biotechnology Seminar IV	1
BIOT 2475 Bioinformatics and Proteomics	3

TERM 4 SUMMER

BIOT 2098 Internship	8
BIOT 2810 Biotechnology Seminar	2

TOTAL CREDIT HOURS	60
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- **Associate of Applied Science Degree in Business Administration (Concentrations in: E-Commerce, Entrepreneurship, International Business, Leadership Development, Management, Marketing and Real Estate)**
- **Certificate in Business Administration**
- **Skill Sets in Continuous Quality Improvement, Entrepreneurship, General Business, Human Resources Assistant, International Business Fundamentals, Leadership Development, Marketing, Retail / Wholesale Management and Spanish Fundamentals for International Business**

Program Description

The Business Administration program provides opportunities for the business leaders of tomorrow to achieve a high-quality, high-value education that enables them to succeed in a competitive market. Emphasis is placed on hands-on experiences and conducting real-world research and community projects. The curriculum includes business concepts such as accounting, business law, management, marketing and sales. Skills related to the applications of these concepts are developed through the study of computer applications, communications, team building and decision making.

The concentrations provide students the opportunity to specialize in a particular business discipline of their choosing. The Business Administration certificate courses and several of the associate degree courses are offered online.

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts and sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

Career and Advancement Opportunities

Career opportunities are available in the public sector as well as the private sector in the following areas: advertising, marketing, entrepreneurship, human resources, sales, real estate, small business management and supervision.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0750 Practical Writing.....	69
ENG 0950 Essay Writing (for ENG 1101).....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0750 Reading Improvement.....	69
RDG 0950 Reading & Critical Thinking (for BA 1101 and ENG 1101).....	80

Associate of Applied Science Degree in Business Administration (Concentrations in: E-Commerce, Entrepreneurship, International Business, Leadership Development, Management, Marketing or Real Estate) / Certificate in Business Administration

Skill Sets in Continuous Quality Improvement, Entrepreneurship, General Business, Human Resources Assistant, International Business Fundamentals, Leadership Development, Marketing, Retail / Wholesale Management and Spanish Fundamentals for International Business

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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TERM 1

ACCT 1109 Business Math	3
ACCT 1111 Accounting IA	3
BA 1101 Introduction to Business	3
BA 1131 Business Interpersonal Skills	3
IT 1010 Introduction to Computers	3

TERM 2

ACCT 1112 Accounting IB	3
BA 1121 Business English	3
BA 1133 Principles of Management	3
CIS 1110 MS Applications and Integration	3
Or	
CIS 1170, 1171, 1172 Excel Series (Fundamentals, Intermediate, Advanced Excel)	3
Or	
CIS 1173 Excel Complete	3
Or	
CIS 1180, 1181, 1182 Access Series (Fundamentals, Intermediate, Advanced Access)	3
Or	
CIS 1183 Access Complete	3
ENG 1101 College Writing	3

TERM 3

ACCT 1210 Accounting II	3
BA 2222 Principles of Marketing	3
BA 2240 Business Law	3

Business Administration Certificate 39

★COMM Elective (COMM courses that transfer to UNM include COMM 1130 and 2221 – Recommended for transferring students (required for degree only))	3
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See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
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TERM 4

Choose one concentration for the degree.

(Since concentration courses may not be offered every term, students are encouraged to start taking concentration classes in term 3.)

E-Commerce Concentration (12-13 credit hours)

ECM 1010 Introduction to Internet Commerce	1
ECM 1105 Web Business	3
ECM 2220 Web Marketing	3
ECM 2240 Web Stores	3
CIS 2135 Microsoft Expression	3
Or	
CIS 2340 Dreamweaver	2

Entrepreneurship Concentration (12 credit hours)

ENTR 1101 Introduction to Entrepreneurship	3
ENTR 2103 Entrepreneurship	6
Or	
ENTR 2101 Entrepreneurship IA	3
And	
ENTR 2102 Entrepreneurship IB	3
ACCT 1410 Quickbooks Complete	3
Or	
BA 2228 Advertising	3
Or	
BA 2230 Customer Relations	3
Or	
ECM 1105 Web Business	3

Course	Credit Hours
International Business Concentration (13 credit hours)	
IB 1010 Introduction to International Business	3
IB 2101 International Marketing	3
Or	
IB 2102 International Management	3
IB 2210 Alternative Sources of Financing	1
And	
IB 2211 Financing an Import / Export Business	1
And	
IB 2215 Basics of Importing	1
And	
IB 2216 Basics of Exporting	1
And	
ENTR 2104 Entrepreneurship in a Global Setting	3
Or	
ECM 1105 Web Business	3
Leadership Development Concentration (12 credit hours from courses below)	
BA 1150 Introduction to Quality Management	1
BA 1151 Fundamentals of Continuous Quality Improvement	1
BA 1152 Quality Tools	1
BA 2153 Team Building for Quality	1
BA 2154 Re-engineering for Quality	1
BA 2155 Quality Leadership	1
BA 2234 Organizational Behavior	3
BA 2281 Business Ethics	3
BA 2282 Leadership and Group Dynamics	3
BA 2284 Strategic Management	3
Management Concentration (12 credit hours)	
BA 2234 Organizational Behavior	3
BA 2238 Human Resource Management	3
BA 2232 Supervision	3
Approved Elective (SEE LIST)	3

Course	Credit Hours
Marketing Concentration (12 credit hours)	
BA 2228 Advertising	3
BA 2223 Consumer Behavior	3
BA 2224 Introduction to Market Research	3
BA 2225 Niche Marketing	3
Or	
BA 2236 Retail Management	3
Or	
ECM 1105 Web Business	3
Or	
IB 2101 International Marketing	3
Real Estate Concentration (12 credit hours)	
BA 2270 Real Estate Law	3
BA 2271 Real Estate Principles and Practice	3
BA 2275 Broker Basics	3
Approved Elective (SEE LIST)	3
TERM 5	
BA 1122 Business Writing	3
Or	
ENG 1119 Technical Communications	3
BA 2226 Sales	3
BA 2999 Capstone Course	1
ECON 2000 Macroeconomics or higher	3
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 and 2096)	3-4
Or	
TOTAL CREDIT HOURS.....67-68	
BUSINESS ADMINISTRATION PROGRAM APPROVED ELECTIVES	
ACCT 1120 Payroll Accounting or higher	1-3
BA courses (except those required for certificate or degree)	1-3
CIS courses	1-3
CSE 1120 Career Exploration or higher	1-3
ECM courses	1-3
ENTR courses	3-6
IB courses	1-3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45).

Skill Set Required Courses:

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon completion of the coursework.

Continuous Quality Improvement (Skill Set)

The Continuous Quality Improvement (CQI) Skill Set is a series of courses that focus on quality concepts, data gathering, quality tools, team building, action plans and strategies to implement quality leadership throughout an organization. Process improvement and organizational cultural change are covered in each area. The courses may be applied to a certificate or associate of applied science degree in Business Administration.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

CONTINUOUS QUALITY IMPROVEMENT SKILL SET

Course	Credit Hours
 BA 1150 Introduction to Quality Management	1
 BA 1151 Fundamentals of Continuous Quality Improvement	1
 BA 1152 Quality Tools	1
 BA 2153 Team Building for Quality	1
 BA 2154 Re-engineering for Quality	1
 BA 2155 Quality Leadership	1

Entrepreneurship (Skill Set)

The Entrepreneurship Skill Set applies entrepreneurial principles to establishing, organizing and managing a business. Students complete a market research and feasibility assessment and develop a business plan, which includes an executive summary, vision and mission statement, company overview, product strategy, market analysis and plan and financial plan.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

ENTREPRENEURSHIP SKILL SET

Course	Credit Hours
TERM 1	
 IT 1010 Introduction to Computers	3
 ACCT 1111 Accounting IA	3
 ACCT 1411 Beginning QuickBooks	1
Or	
 ACCT 1410 QuickBooks Complete	3
TERM 2	
 ENTR 2103 Entrepreneurship	6
Or	
 ENTR 2101 Entrepreneurship IA	3
And	
 ENTR 2102 Entrepreneurship IB	3
 BA 2222 Principles of Marketing	3
 BA 2240 Business Law	3

General Business (Skill Set)

The General Business Skill Set is a series of courses for individuals who want to begin or expand their skills in business.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

GENERAL BUSINESS SKILL SET

Course	Credit Hours
 ACCT 1109 Business Math	3
 ACCT 1111 Accounting IA.....	3
 BA 1131 Business Interpersonal Skills	3
 BA 1101 Introduction to Business.....	3
Or	
 BA 1133 Principles of Management.....	3
 IT 1010 Introduction to Computers.....	3
 ACCT 1112 Accounting IB.....	3
Or	
 BA 1133 Principles of Management (If not used for required course in skill set)	3
Or	
 ECM 1105 Web Business.....	3
Or	
ENTR 1101 Introduction to Entrepreneurship.....	3
Or	
FIN 1100 Principles of Banking	3
Or	
 IB 1010 Introduction to International Business	3

Human Resources Assistant (Skill Set)

The Human Resources Assistant Skill Set is a series of courses for individuals who want to enhance their knowledge of the service functions of management such as recruiting, career development, equal employment opportunity, motivation, performance appraisal, selecting personnel, rights and responsibilities of employers and employees, complaint handling and ethics. All of the courses included may also be applied to a certificate or an associate of applied science degree in Business Administration.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

HUMAN RESOURCES ASSISTANT SKILL SET

Course	Credit Hours
TERM 1	
 BA 1133 Principles of Management.....	3
BA 2242 Employment Law for Business.....	3
TERM 2	
 BA 2234 Organizational Behavior	3
 BA 2238 Human Resource Management	3
 BA 2232 Supervision.....	3

International Business Fundamentals (Skill Set)

The International Business Fundamentals Skill Set is a series of courses for individuals who would like to develop an understanding of international business and globalization, the concepts of entrepreneurship, alternative sources of financing and the basics of importing and exporting. Basic computer skills are required. Students who do not have basic computer skills will need to take additional courses such as IT 1010 to develop those skills.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

INTERNATIONAL BUSINESS FUNDAMENTALS SKILL SET

Course	Credit Hours
TERM 1	
IB 1010 Introduction to International Business	3
TERM 2	
IB 2210 Alternative Sources of Financing	1
IB 2211 Financing an Import / Export Business	1
ENTR 2104 Entrepreneurship in a Global Setting	3
Or	
ENTR 1101 Introduction to Entrepreneurship	3
IB 2215 Basics of Importing	1
IB 2216 Basics of Exporting	1

Leadership Development (Skill Set)

The Leadership Development Skill Set focuses on essential competencies for present and future business leaders, including strategy development, business ethics, leadership knowledge, teamwork and organizational skills. All of the courses included may also be applied to a certificate or associate of applied science degree in Business Administration.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

LEADERSHIP DEVELOPMENT SKILL SET

Course	Credit Hours
TERM 1	
BA 2234 Organizational Behavior	3
BA 2281 Business Ethics	3

TERM 2

BA 2282 Leadership and Group Dynamics	3
BA 2284 Strategic Management	3

Marketing (Skill Set)

The Marketing Skill Set is a series of courses for individuals who want to update or expand their skills in planning, designing, creating and executing marketing activities for an organization. A certificate and an associate of applied science degree in Business Administration are available to students who wish to further enhance their business skills and knowledge.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

MARKETING SKILL SET

Course	Credit Hours
TERM 1	
BA 2222 Principles of Marketing	3
BA 2223 Consumer Behavior	3
BA 2224 Introduction to Market Research	3
TERM 2	
BA 2226 Sales	3
BA 2228 Advertising	3
BA 2225 Niche Marketing	3
Or	
BA 2236 Retail Management	3
Or	
ECM 1105 Web Business	3
Or	
IB 2101 International Marketing	3

See page 289 to find information on course categories marked with a star (★).

– Course available through Distance Learning (see page 45.)

Retail / Wholesale Management (Skill Set)

The Retail / Wholesale Management Skill Set is a series of courses for individuals currently in retail / wholesale positions who want to enhance their knowledge and skills and move into supervisory positions. All courses are offered online and may be applied to the Business Administration associate of applied science degree program.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

RETAIL / WHOLESALE MANAGEMENT SKILL SET

Course	Credit Hours
TERM 1	
 BA 1133 Principles of Management.....	3
 BA 2230 Customer Relations	3
TERM 2	
 BA 2226 Sales	3
 BA 2232 Supervision.....	3
 BA 2236 Retail Management	3

Spanish Fundamentals for International Business (Skill Set)

The Spanish Fundamentals for International Business Skill Set is a series of courses for the student or business owner who is interested in combining the study of international business with Spanish language fundamentals. Concepts on globalization of the economy, cultural dynamics, managing cross-cultural differences when conducting business with people of different cultures are combined with the introduction of listening, speaking and grammatical skills in Spanish.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

SPANISH FUNDAMENTALS FOR INTERNATIONAL BUSINESS SKILL SET

Course	Credit Hours
TERM 1	
 IB 1010 Introduction to International Business	3
 SPAN 1101 Beginning Spanish I.....	4
TERM 2	
 IB 2102 International Management	3
 SPAN 1102 Beginning Spanish II	4

- **Associate of Applied Science Degree in Business Graphics**
- **Certificate in Business Graphics**
- **Skill Set in Digital Publishing**

Program Description

The Business Graphics program combines creative design, language skills and print production training. Students produce designs for marketing, advertising, presentation, multimedia, Web and print.

The Digital Publishing Skill Set was designed as an entry point for job opportunities using creative design and print production.

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts and sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

Career and Advancement Opportunities

Job opportunities include employment in production print shops, marketing agencies, advertising agencies and retail outlets. Graduates may become designers, advertisement creators, marketing technicians, Web technicians, Web designers and advertising technicians.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0750 Practical Writing.....	69
ENG 0950 Essay Writing (for ENG 1101).....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0750 Reading Improvement.....	69
RDG 0950 Reading & Critical Thinking (for BA 1101 and ENG 1101).....	80

Associate of Applied Science Degree in Business Graphics / Certificate in Business Graphics

Skill Set in Digital Publishing

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
--------	--------------

TERM 1

ARTS 1121 Two-Dimensional Design.....	3
 BA 1121 Business English.....	3
 BA 1131 Business Interpersonal Skills.....	3
 IT 1010 Introduction to Computers.....	3

TERM 2

 BGC 2010 Introduction to Digital Publishing	3
 CIS 1330 PhotoShop.....	3
 CIS 2355 Adobe Illustrator.....	3
 ENG 1101 College Writing	3
 IT 1020 Integrating Business and Technology.....	3

TERM 3

 BGC 2015 Advanced Digital Publishing.....	3
 BGC 2020 Digital Drawing.....	3
CIS 2310 Desktop Publishing.....	3
 Approved Electives (SEE LIST).....	3
ARTS 1106 Drawing I (Required for Associate Degree only).....	3

TERM 4

 BGC 2030 Production PhotoShop.....	3
 BGC 2040 Digital Printing Production.....	3

Business Graphics Certificate..... 45

 BA 1101 Introduction to Business.....	3
Or	
 BA 1133 Principles of Management.....	3
ENG 2221 Creative Writing: Fiction.....	3
 Approved Electives (SEE LIST).....	3

TERM 5

 ★COMM Elective.....	3
MATH 1210 or higher  (except MATH 215).....	3 or 4
 BA 2999 Capstone Course.....	1

TOTAL CREDIT HOURS..... 64-65

APPROVED ELECTIVES

 ANIM 1005 Introduction to Lightwave	3
ANIM 1007 Introduction to Maya	3
ARTH 1101 Introduction to Art.....	3
ARTH 2201 History of Art I.....	3
ARTH 2202 History of Art II.....	3
 BA 1122 Business Writing	3
 BA 2226 Sales	3
 BA 2228 Advertising	3
 BA 2230 Customer Relations	3
 BA 2236 Retail Management	3
BGC 2095 Cooperative Education.....	4
BGC 1096 and/or 2096 Topics	1-3
BGC 2097 Independent Study.....	variable
BGC 2098 Internship.....	4
 CIS 1185 Adobe Acrobat	1
 CIS 1310 Introduction to Multimedia.....	3
 CIS 1710 Beginning XHTML	1
 CIS 1711 Intermediate XHTML	1
 CIS 1712 Advanced XHTML	1
CIS 1725 Extensible Markup Language	3
CIS 2320 Fireworks	1
CIS 2335 Director	3
 CIS 2340 Dreamweaver.....	2
 CIS 2350 Flash	3
 CIS 2360 Digital Video Editing.....	3
CIS 2370 Business Web Graphics.....	2
CIS 1096 and/or 2096 Topics	1-3
CSE 1120 Career Exploration or higher.....	1-3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Skill Set Required Courses:

DIGITAL PUBLISHING SKILL SET

Course	Credit Hours
 BGC 2010 Introduction to Digital Publishing 3	3
 BGC 2015 Advanced Digital Publishing..... 3	3
 BGC 2020 Digital Drawing 3	3
 BGC 2030 Production PhotoShop..... 3	3
 BGC 2040 Digital Printing Production 3	3

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Skill Set in Call Center Operations

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon completion of the coursework.

Description

The Business & Information Technology Division and the CNM Workforce Training Center collaborated to create the CNM Call Center College. This partnership allows students to receive credit for approved call center coursework attained through the Workforce Training Center. The Call Center Operations program provides opportunities for students to prepare for entry-level positions such as customer service representative (technical and non-technical), reservation agent, collection agent and telephone sales. The courses provide opportunities to develop keyboarding

skills, basic computer skills and customer relations skills. Students need to have basic computer skills.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from Business & Information Technology at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES

Course	Accuplacer equiv.
 ENG 0750 Practical Writing.....	69

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
OTEC 1101 Beginning Keyboarding.....	2
OTEC 1170 Business Telephone Techniques	1
OTEC 1171 Working with the Challenging Customer.....	1
 OTEC 1173 Time Management Skills	1
 BA 1131 Business Interpersonal Skills	3
 CIS 1130 Windows	1
 BA or CIS Electives	9
TOTAL CREDIT HOURS	18

APPROVED CALL CENTER OPERATIONS ELECTIVES

OTEC 1096 and/or 2096 Topics	1-3
 Any BA Course.....	1-3
 Any CIS Course.....	1-3

 – Course available through Distance Learning (see page 45.)

- **Certificate in Carpentry**
- **Skill Sets in Framing and Precision Woodworking**

Program Description

The Carpentry Certificate program provides students the opportunity to acquire knowledge and technical skills necessary to gain employment in the construction industry.

Students will read and interpret construction blueprints, experience techniques using concrete for foundations, framing of building walls, erecting roofing systems, installing drywall and taping. Students focus on bedding and wall finishes as well as exterior and interior door hanging, window installation and trim work. The building of a “cottage” from the ground up is a required part of the carpentry curriculum. The application of the International Residential Code is emphasized.

Career and Advancement Opportunities

In addition to the general carpentry courses, students may take additional coursework including construction management, computer aided drafting, commercial construction theory,

cost estimating, construction equipment, methods and general contractor preparation to earn an Associate Degree from Construction Technology.

100 percent of Carpentry graduates obtained employment in 2005-2006. According to the New Mexico Department of Labor “construction employment continues to enjoy strong growth, currently up 8.9 percent on the year, adding 5,000 jobs.”

CONTACT INFORMATION

Additional program information is available from the program chair at (505)224-3714, or from Academic Advisement and Career Development at (505)224-4321 (Main Campus) or (505) 224-5646.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
MATH 0550 Basic Mathematics or Arithmetic score of.....	31

Certificate in Carpentry

Skill Sets in Framing and Precision Woodworking

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ CARP 1005 Carpentry Blueprint Reading I.....	4
_____ CARP 1010 Introduction to Carpentry	1
And	
_____ CARP 1092 Construction Lab A.....	2
Or	
_____ CARP 1320 Carpentry Fundamentals	3
_____ CARP 1015 Structural Systems I.....	1
_____ CARP 1023 Structural Systems II.....	1
_____ CARP 1192 Construction Lab B.....	2
_____ CARP 1292 Construction Lab C.....	2
_____ ESH 2006 Occupational Safety for Construction I.....	1
TERM 2	
_____ CARP 2005 Carpentry Blueprint Reading 11.....	4
_____ CARP 2010 Exterior Finishes	1
_____ CARP 2015 Interior Finishes I.....	1
_____ CARP 2020 Interior Finishes II.....	1
_____ CARP 2092 Construction Lab A.....	2
_____ CARP 2192 Construction Lab B.....	2
_____ CARP 2292 Construction Lab C.....	2
TOTAL CREDIT HOURS	27

Skill Set Required Courses:

FRAMING SKILL SET

Course	Credit Hours
_____ CARP 1005 Carpentry Blueprint Reading I.....	4
_____ CARP 1010 Introduction to Carpentry	1
_____ CARP 1092 Construction Lab A.....	2
Or	
_____ CARP 1320 Carpentry Fundamentals	3
_____ CARP 1015 Structural Systems I.....	1
_____ CARP 1020 Structural Systems II.....	1
_____ CARP 1192 Construction Lab B.....	2
_____ CARP 1292 Construction Lab C.....	2
_____ ESH 2006 Occupational Safety for Construction I.....	1

PRECISION WOODWORKING SKILL SET

Course	Credit Hours
_____ CARP 1005 Carpentry Blueprint Reading I.....	4
_____ CARP 1305 Furniture Making	3
_____ CARP 1310 Advanced Furniture Making	3
_____ CARP 1315 Cabinetmaking	3
_____ ESH 2006 Occupational Safety for Construction I.....	1

- Associate of Arts Degree in Child, Youth and Family Development (Concentrations: Early Childhood Multicultural Education or Family Studies)
- Skill Sets in Child Development Associate (CDA)

Program Description

The Child, Youth and Family Development program facilitates the learning of theory and competencies required to work in specific child and family settings.

- Child Development Associate (CDA) provides the preparatory classroom and field experience work for students to successfully take the credential assessment administered by the Council for Early Childhood Professional Recognition.
- Early Childhood Multicultural Education is designed for people who want to work in this field and / or complete a bachelor's degree leading to teacher certification K-3.
- Family Studies focuses on learning about children's development from infancy to adolescence and the dynamics of family interactions.

Classroom instruction is available at the Main and Montoya campuses and periodically at the South Valley campus and CNM Westside. CDA field experience and associates degree practica are offered in practical settings appropriate to the concentration of study.

Career and Advancement Opportunities

Students from both concentrations of studies are employed almost immediately upon graduation. There is tremendous need for well-qualified early care and education workers in some of the following areas: child care, educational assistants, head start and early care teachers, family home child care, family development specialists and early care administration. Work is available with programs such as Head Start, Even Start, private and public child-care facilities and preschools serving the needs of children birth to age five. Private and public schools also employ students as educational assistants.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Skill Sets	
RDG 0750 Reading Improvement.....	69
ENG 0750 Practical Writing.....	69

Special Requirements

Students pursuing preparation work for CDA must be currently working in a child-care setting. Students may be required to undergo routine drug screening, a TB test and a criminal background check prior to beginning their field / practicum experience. All courses required for transfer must be taken for a traditional grade of A, B, C, etc. For courses offered only for credit / no credit, a grade of credit (CR) must be earned.

Graduation Policy

- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and / or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated.

CONTACT INFORMATION

For further information, please contact the Communication, Humanities & Social Sciences Division at (505) 224-3588 or Academic Advisement and Career Development at (505) 224-4321.

It is strongly recommended that students pursuing the family studies concentration should contact an academic advisor. Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Course	Accuplacer equiv.
Degree	
High school diploma or equivalent	
RDG 0950 Reading & Critical Thinking.....	80
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72

Associate of Arts Degree in Child, Youth and Family Development (Concentrations: Early Childhood Multicultural Education or Family Studies)

Skill Set in Child Development Associate (CDA)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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Early Childhood Multicultural Education Concentration

TERM 1

ECME 1104 Child, Growth and Development.....	3
ECME 1108 Health, Safety and Nutrition.....	2
ECME 1109 Curriculum Development and Implementation I.....	3
ECME 1190 Curriculum Development and Implementation Practicum I.....	2
ENG 1101 College Writing	3
MATH 1110 Mathematics for Elementary and Middle School Teachers I.....	3

TERM 2

COMM 1130 or COMM 2270 (COMM 270 Recommended).....	3
ECME 2201 Introduction to Reading and Literacy Development.....	3
ECME 2206 Family and Community Collaboration I.....	3
ECME 2212 Curriculum Development and Implementation II.....	3
ECME 2290 Curriculum Development and Implementation Practicum II.....	3
ENG 1102 Analytic and Argumentative Writing	3

TERM 3

ECME 2202 Professionalism.....	2
ECME 2204 Assessment of Children and Evaluation.....	3
ECME 2214 Guiding Young Children.....	3
EDUC 2265 Computers in School.....	3
BIOLOGICAL / PHYSICAL SCIENCE Elective (INCLUDING LAB, SEE LIST).....	4

TERM 4

HUMANITIES or SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
HUMANITIES or SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
HIST 1101 or 1102 or 1161 or 1162 or 2260 	3
FINE ARTS Elective (SEE LIST)	3
BIOLOGICAL / PHYSICAL SCIENCE Elective (INCLUDING LAB, SEE LIST)	4

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
--------	--------------

TOTAL CREDIT HOURS65

BIOLOGICAL / PHYSICAL SCIENCE ELECTIVES

ASTR 1110 / 1192 Introduction to Astronomy I / Astronomy Lab.....	4
BIO 1010 / 1092 OR 1410 / 1492.....	4
CHEM 1410 / 1492 Introduction to Chemistry / Introduction to Chemistry Lab.....	4
PHYS 1510 / 1592 OR 1610 / 1692 OR NS 1010OR 1015 OR 1020.....	4

SOCIAL BEHAVIORAL SCIENCE / HUMANITIES ELECTIVES

ANTH 1101 Introduction to Anthropology.....	3
ANTH 1130 Cultures of the World.....	3
ECON 2200 Macroeconomics.....	3
ECON 2201 Microeconomics.....	3
GEOG 1102 Human Geography.....	3
HUM 1111 Early World Civilization.....	3
PHIL 1110 Introduction to Philosophical Thought.....	3
PHIL 1156 Logic and Critical Thinking.....	3
PSCI 1110 The Political World.....	3
PSCI 2220 Comparative Government and Politics.....	3
PSY 1105 Introduction to Psychology	3
RLGN 1107 Living World Religions.....	3
SOC 1101 Introduction to Sociology.....	3
ENG 1150 Study of Literature	3
ENG 2206 Popular Literature: Detective Novel	3
ENG 2207 Popular Literature: Science Fiction	3
ENG 2208 Popular Literature: Espionage Fiction	3
ENG 2209 Popular Literature: Western	3
ENG 2096 Topics in Literature	3

FINE ARTS ELECTIVES

ARTH 1101 Introduction to Art.....	3
ARTH 2201 History of Art I.....	3
ARTH 2202 History of Art II.....	3

– Course available through Distance Learning (see page 45.)

CHILD, YOUTH & FAMILY DEVELOPMENT *(Family Studies Concentration) Communication, Humanities & Social Sciences Division*

Course	Credit Hours
MUS 1139 Early Music Appreciation	3
MUS 1140 Modern Music Appreciation.....	3
THEA 1120 Beginning Acting.....	3
THEA 1122 Beginning Acting II.....	3

Family Studies Concentration

TERM 1

CDV 1105 Infant Growth and Development Theory and Lab	4
ECME 1108 Health, Safety and Nutrition.....	2
CDV 1890 Family Studies Practicum I.....	2
CDV 2207 Management of Early Childhood Programs.....	3
ENG 1101 College Writing	3
MATH 1110 Mathematics for Elementary and Middle School Teachers I	3

TERM 2

COMM 1130 or higher.....	3
ENG 1102 Analytic and Argumentative Writing	3
CDV 2201 Middle Childhood Growth and Development	3
CDV 2218 OR 2219 (if not used as electives).....	3
CDV 1103 Preschool Growth and Development	3
CDV 2890 Family Studies Practicum II.....	2

TERM 3

BIOLOGICAL / PHYSICAL SCIENCE Elective (INCLUDING LAB)	4
CDV 2202 Adolescent Growth and Development	3
CDV 2212 Special Issues In Child Development.....	3
CDV Elective (SEE LIST)	3
CDV Elective (SEE LIST)	3
HUMANITIES or SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3

TERM 4

BIOLOGICAL / PHYSICAL SCIENCE Elective (INCLUDING LAB, SEE LIST).....	4
FINE ARTS Elective (SEE LIST)	3
HIST 1101 or 1102 or 1161 or 1162 or 2260.....	3
HUMANITIES or SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
CDV Elective (SEE LIST)	3

TOTAL CREDIT HOURS69

Course	Credit Hours
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CDV ELECTIVES

CSE 1120 OR HIGHER.....	1
CDV 1101 Parents and Young Children.....	3
CDV 1107 Art and Play	3
CDV 2218 Strengthening Family Structures (IF NOT USED AS REQUIRED COURSE).....	3
CDV 2219 Marriages and Families (IF NOT USED AS REQUIRED COURSE)	3
ECME 2201 Introduction to Reading and Literacy Development	3
ECME 2202 Professionalism	2
ECME 2204 Assessment of Children and Evaluation.....	3
ECME 2206 Family and Community Collaboration I	3
ECME 2214 Guiding Young Children	3
EDUC 2207 Educational Psychology.....	3
SPED 2201 Education of the Exceptional Person	3
CDV 2096 Topics.....	1-3
CDV 2097 Independent Study	1-3
CDV 2295 Cooperative Education	1-3

BIOLOGICAL / PHYSICAL SCIENCE ELECTIVES

ASTR 1010 / 1192 Introduction to Astronomy I / Astronomy Lab.....	4
BIO 1010 / 1092 OR 1410 / 1492 OR 1310 / 1392	4
CHEM 1410 / 1492 Introduction to Chemistry / Introduction to Chemistry Lab.....	4
PHYS 1510 / 1592 OR 1610 / 1692	4
ANY 2000-LEVEL BIO COURSE W / LAB.....	4
NS 1010 OR 1015 OR 1020.....	4

HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVES

ANTH 1101 Introduction to Anthropology.....	3
ANTH 1130 Cultures of the World	3
ECON 2200 Macroeconomics	3
ECON 2201 Microeconomics	3
GEOG 1102 Human Geography.....	3
PHIL 1156 Logic and Critical Thinking.....	3
PSCI 1110 The Political World	3
PSCI 2220 Comparative Government and Politics.....	3
PSY 1105 Introduction to Psychology	3
SOC 1101 Introduction to Sociology	3
ENG 1150 Study of Literature	3
ENG 2206 Popular Literature: Detective Novel	3
ENG 2207 Popular Literature: Science Fiction	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Course	Credit Hours
ENG 2208 Popular Literature: Espionage Fiction	3
ENG 2209 Popular Literature: Western	3
ENG 2096 Topics in Literature	3

FINE ARTS ELECTIVES

ARTH 1101 Introduction to Art	3
ARTH 2201 History of Art I	3
ARTH 2202 History of Art II	3
ARTH 2250 Modern Art	3
ARTH 2251 Art of the American Southwest	3
MUS 1139 Early Music Appreciation	3
MUS 1140 Modern Music Appreciation	3
THEA 1120 Beginning Acting	3
THEA 1122 Introduction to Theatre	3

Skill Set Required Courses:

CHILD DEVELOPMENT ASSOCIATE SKILL SET

Course	Credit Hours
CDV 1020 45-Hour Entry-level Course	3
CDV 1105 or CDV 1103	2
CDV 1120 Introduction to CDA Training	2
CDV 1190 Supervised Field Experience	3

• **Certificate in Clinical Laboratory Assistant (CLA)**

Program Description

Students study theory and learn the skills of laboratory testing in chemistry, hematology, immunology, microbiology and urinalysis. Instruction occurs in classrooms, laboratories and medical facilities. Upon completion of the program students may be eligible to take the national certification exam offered by the American Medical Technologists (AMT.)

Career and Advancement Opportunities

The CNM CLA program has a 92 percent placement rate for its graduates. CLA graduates seeking employment found jobs in area health care facilities and laboratories.

Special Requirements

Successful completion of the CNM Phlebotomy program, or national certification as a phlebotomist, or recent work experience and permission of the CNM CLA program director is required to enroll in CLA 1590.

There is a program fee for CLA 1010, which pays for a nametag, hospital parking permits, criminal background check, drug screening and health tests in the case of needle stick or exposure to other bodily fluids. Program fees are published in the **Schedule of Classes**.

Students are required to purchase disposable, fluid-resistant lab coats and must present evidence of current TB testing, immunizations (including hepatitis A & B, MMR, DTP and varicella) and BLS CPR, Health Insurance Portability Accountability Act (HIPAA), and Blood Borne Pathogens (BBP) certification prior to the clinical portion of the program.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit / no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and / or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Information concerning this program is available from the program director at (505) 224-5068 or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
High School Diploma or equivalent	
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0950 Reading and Critical Thinking	80

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

Course	Credit Hours
HLTH 1001 Clinical Preparation	1

RECOMMENDED PREREQUISITES SUGGESTED FOR PROGRAM SUCCESS

Course	Credit Hours
HLTH 0850 Introduction to Health Occupations	3
Any CSE Career Exploration Course	1-3

For a recommended course sequence, see next page... ▶

Clinical Laboratory Assistant (CLA) Certificate

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
___  CLA 1010 Introduction to Laboratory Technique.....	3
___ CLA 1075 Basic Hematology / Coagulation.....	2
TERM 2	
___ CLA 1570 Basic Chemistry / Microbiology.....	2
___ CLA 1590 Clinical Experience	3
___ Successful completion of the CNM Phlebotomy program or equivalent	
TOTAL CREDIT HOURS	10

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Computer Information Systems (Concentrations in Computer Programming, Database Technology, Digital Media, Network Administration, Software Systems and Applications, Systems Administration, Web Technology)**
- **Certificate in Computer Information Systems (Concentrations in Computer Programming, Database Technology, Digital Media, Network Administration, Software Systems and Applications, Systems Administration, Web Technology)**
- **Skill Sets in Business Applications Design, Cisco Certified Network Associate (CCNA), Graphics Design, Microsoft Certified Systems Administrator (MCSA), Microsoft Certified Systems Engineer (MCSE), Microsoft Software Support, Multimedia Development, Red Hat Certified Technician (RHCT) and Web Graphics Specialist**

Program Description

Computer software applications for the changing business environment require continual learning for a strategic advantage. Students have an opportunity to study computing theory, computer applications, database systems and problem solving in a business information technology environment. Classes include classroom and laboratory time.

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts and sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

Career and Advancement Opportunities

Jobs are available in businesses, schools, local, state and federal governments, law, medicine, entertainment, telecommunications, military and other areas. Types of jobs include office management, computer programming, computer center operations, network administration, database management, Web design, digital media and software applications.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COMPUTER INFORMATION SYSTEMS

(Computer Programming Concentration / Certificate in Computer Information Systems)

Business & Information Technology Division

Associate of Applied Science (Concentration in Computer Programming) / Certificate in Computer Information Systems

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
Certificate	
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
Degree	
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of	81

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1131 Business Interpersonal Skills	3
CIS 1207 Programming Logic and Design	3
CIS 1513 Database Design and Introduction to SQL	3
IT 1010 Introduction to Computers	3
MATH 1210 Methods of Problem Solving	4
TERM 2	
CIS 1275 C++ Programming I	3
CIS 1284 .NET I / Visual Basic	3
IT 1020 Integrating Business and Technology	3
ENG 1101 College Writing	3
MATH 1310 Intermediate Algebra (required for degree only)**	4
TERM 3	
CIS 2235 Java Programming I	3

Course	Credit Hours
CIS 2275 C++ Programming II	3
CIS 2520 Introduction to SQL (Structured Query Language)	3
ENG 1119 Technical Communications	3
Or	
ENG 2219 Technical Writing	3
MATH 1315 College Algebra (required for degree only)	3

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TERM 4

BIOLOGICAL/PHYSICAL SCIENCE WITH LAB (See Approved Science List)	4 or 5
COMM 2221 Interpersonal Communication Studies	3
CIS 2237 Java Programming II	3
Or	
CIS 2277 C++ Programming III	3
Or	
CIS 2284 .NET II / C# / Visual Basic	3
MATH 1410 Trigonometry	3
Or	
MATH 1320 A Survey of Mathematics	3
Or	
MATH 1415 Advanced Algebra	4

TERM 5

BA 2999 Capstone Course	1
★HUMANITIES or SOCIAL/BEHAVIORAL SCIENCES Elective	3
Approved Computer Programming Elective (SEE LIST)	3-4

TOTAL CREDIT HOURS 67-70

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

COMPUTER INFORMATION SYSTEMS

(Computer Programming Concentration / Certificate in Computer Information Systems)

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Course	Credit Hours
APPROVED BIOLOGICAL/PHYSICAL SCIENCE COURSES:	
_____ BIO 1110  / 1192 Environmental Science and Lab	3+1
Or	
_____  BIO 1010 / 1092 Biology for Non-Majors and Lab	3+1
Or	
_____  CHEM 1410 / 1492 Introduction to Chemistry and Lab	3+1
Or	
_____ CHEM 1510 / 1592 General Chemistry I	4
Or	
_____ PHYS 1510 / 1592 Physics I and Lab	4+1
APPROVED COMPUTER PROGRAMMING ELECTIVE COURSES	
_____ CIS 1096 and/or 2096 Topics	1-3
_____ CIS 2097 Independent Study	variable
_____ CIS 2521 Database Programming with PL / SQL	3
_____ CIS 2522 Oracle Internet Forms	3
_____ CIS 2237 Java Programming II	3
_____ CIS 2270 OpenGL Programming	3
_____ CIS 2277 C++ Programming III	3
_____ CIS 2279 Windows Programming in C++	3
_____ CIS 2280 .NET I / C#	3
_____ CIS 2284 .NET II / C# / Visual Basic	3
_____ CIS 2095 Cooperative Education	4
_____ CIS 2098 Internship	4
_____ CSE 1120 Career Exploration or higher	1-3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

COMPUTER INFORMATION SYSTEMS

(Database Technology Concentration / Certificate in Computer Information Systems)

Business & Information Technology Division

Associate of Applied Science (Concentration in Database Technology) / Certificate in Computer Information Systems

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
Certificate	
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
Degree	
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of	81

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1131 Business Interpersonal Skills	3
CIS 1207 Programming Logic and Design	3
CIS 1513 Database Design and Introduction to SQL	3
IT 1010 Introduction to Computers	3
MATH 1210 Methods of Problem Solving	4
TERM 2	
CIS 1680 Linux Essentials	3
CIS 2520 Introduction to SQL (Structured Query Language)	3
IT 1020 Integrating Business and Technology	3
ENG 1101 College Writing	3
MATH 1310 Intermediate Algebra (required for degree only)	4
TERM 3	
CIS 2521 Database Programming with PL / SQL	3

Course	Credit Hours
CIS 2522 Oracle Internet Forms	3
CIS 2146 MS SQL Server - Database Design	3
ENG 1119 Technical Communications	3
Or	
ENG 2219 Technical Writing	3
MATH 1315 College Algebra (required for degree only)	3

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TERM 4

BIOLOGICAL/PHYSICAL SCIENCE WITH LAB (See Approved Science List.)	4 or 5
COMM 2221 Interpersonal Communication Studies	3
CIS 2150 MS SQL Server – Implementation and Maintenance	3
MATH 1410 Trigonometry	3
Or	
MATH 1320 A Survey of Mathematics	3
Or	
MATH 1415 Advanced Algebra	4

TERM 5

BA 2999 Capstone Course	1
★HUMANITIES or SOCIAL/BEHAVIORAL SCIENCES Elective**	3
Approved Database Technology Elective (SEE LIST)	3-4

TOTAL CREDIT HOURS 67-70

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

COMPUTER INFORMATION SYSTEMS

(Database Technology Concentration / Certificate in Computer Information Systems)

Business & Information Technology Division

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INDEX, MAPS

Course	Credit Hours
APPROVED BIOLOGICAL/PHYSICAL SCIENCE COURSES	
___ BIO 1110  / 1192 Environmental Science and Lab	3+1
Or	
___  BIO 1010 / 1092 Biology for Non-Majors and Lab	3+1
Or	
___  CHEM 1410 / 1492 Introduction to Chemistry and Lab	3+1
Or	
___ CHEM 1510 / 1592 General Chemistry I	4
Or	
___ PHYS 1510 / 1592 Physics I and Lab	4+1
APPROVED DATABASE TECHNOLOGY ELECTIVE COURSES	
___ CIS 1096 and/or 2096 Topics	1-3
___ CIS 2097 Independent Study	variable
___ CIS 2095 Cooperative Education	4
___ CIS 2098 Internship	4
___ CIS 2235 Java Programming I	3
___ CIS 2280 .NET I / C#	3
___ CIS 2284 .NET II / C# / Visual Basic	3
___ CIS 2524 Oracle Reports	3
___ CSE 1120 Career Exploration or higher	1-3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

COMPUTER INFORMATION SYSTEMS

(Digital Media Concentration / Certificate in Computer Information Systems)

Business & Information Technology Division

Associate of Applied Science (Concentration in Digital Media) / Certificate in Computer Information Systems

Skill Sets in Business Application Design, Graphics Design, Multimedia Development, Web Graphics Specialist

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
Certificate	
ENG 0750 Practical Writing	69
RDG 0750 Reading Improvement	69
Degree	
RDG 0950 Reading & Critical Thinking	80
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
ENG 0950 Essay Writing	85

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1121 Business English	3
CIS 1130 Windows	1
CIS 1325 Visual Communication for Business Design	3
IT 1010 Introduction to Computers	3
IT 1020 Integrating Business and Technology	3
TERM 2	
BA 1131 Business Interpersonal Skills	3
CIS 1185 Adobe Acrobat	1
CIS 1310 Introduction to Multimedia	3
CIS 1330 PhotoShop	3
CIS 2310 Desktop Publishing	3

Course	Credit Hours
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TERM 3

CIS 1710 Beginning XHTML	1
CIS 2340 Dreamweaver	2
CIS 2350 Flash	3
CIS 2355 Adobe Illustrator	3
CIS 2360 Digital Video Editing	3

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TERM 4

CIS 1715 Overview of Web Technologies	3
CIS 2335 Director	3
ENG 1101 College Writing	3
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 and 2096)	3 or 4

TERM 5

BA 2999 Capstone Course	1
CIS 2380 PhotoShop Practicum	2
COMM 1110 Mass Media and Society	3
Or	
COMM 1130 Public Speaking	3
CIS 1720 Website Maintenance	1
ENG 1119 Technical Communications	3
Or	
ENG 2219 Technical Writing	3
★ HUMANITIES or SOCIAL/BEHAVIORAL SCIENCES Elective	3

TOTAL CREDIT HOURS 63-64

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Skill Set Required Courses:

Business Applications Design (Skill Set)

This Skill Set is designed as an entry point for job opportunities that include presentation graphics, brochure design and layout and photo enhancement skills. This Skill Set is for the person wanting to develop presentations, brochures and page layout for print, multimedia and online graphics. Students need to have strong basic computer skills. Students without strong basic computer skills (specifically Microsoft Windows and file management skills) may need to develop these skills.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

BUSINESS APPLICATION DESIGN SKILL SET

Course	Credit Hours
TERM 1	
 CIS 1130 Windows	1
 CIS 1145 Microsoft PowerPoint.....	2
 CIS 1185 Adobe Acrobat	1
 IT 1010 Introduction to Computers.....	3
TERM 2	
 CIS 1330 PhotoShop	3
 CIS 2310 Desktop Publishing.....	3
 CIS 2355 Adobe Illustrator	3

Graphics Design (Skill Set)

This Skill Set is for students with strong computer skills who want to create graphic layout by combining digital images and creating vector objects and who want a jump start with an entry point for creative job opportunities in the publishing field.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

GRAPHICS DESIGN SKILL SET

Course	Credit Hours
TERM 1	
 BA 1121 Business English.....	3
 CIS 1325 Visual Communication for Business Design.....	3
 CIS 1330 PhotoShop	3
 IT 1010 Introduction to Computers.....	3
TERM 2	
 CIS 1185 Adobe Acrobat	1
 CIS 2310 Desktop Publishing.....	3
 CIS 2355 Adobe Illustrator	3

Multimedia Development (Skill Set)

This Skill Set is designed as an entry point for job opportunities that include multimedia development. This Skill Set is for the person wanting to combine interactive multimedia skills with video, sound and the Web. Students must have strong basic computer skills. Students without strong basic computer skills (specifically Microsoft Windows and file management skills) will need to develop these skills before considering this skill set.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

MULTIMEDIA DEVELOPMENT SKILL SET

Course	Credit Hours
TERM 1	
 CIS 1310 Introduction to Multimedia.....	3
 CIS 1710 Beginning XHTML.....	1
TERM 2	
 CIS 2335 Director.....	3
 CIS 2350 Flash.....	3
 CIS 2355 Adobe Illustrator.....	3
TERM 3	
 CIS 2360 Digital Video Editing.....	3

Web Graphics Specialist (Skill Set)

This Skill Set is designed as an entry point for job opportunities that include multimedia development. This Skill Set is for the person wanting to combine coding, digital images and animations using application software to build a website. Students must have strong basic computer skills. Students without strong basic computer skills (specifically Microsoft Windows and file management skills) will need to develop these skills before considering this skill set.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

WEB GRAPHICS SPECIALIST SKILL SET

Course	Credit Hours
TERM 1	
 CIS 1130 Windows.....	1
 CIS 1330 PhotoShop.....	3
 CIS 1710 Beginning XHTML.....	1
 CIS 1711 Intermediate XHTML.....	1
 CIS 1712 Advanced XHTML.....	1
 IT 1010 Introduction to Computers.....	3
TERM 2	
 CIS 2320 Fireworks.....	1
 CIS 2340 Dreamweaver.....	2
 CIS 2350 Flash.....	3
 CIS 2355 Adobe Illustrator.....	3

COMPUTER INFORMATION SYSTEMS

(Network Administration Concentration / Certificate in Computer Information Systems)

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Associate of Applied Science (Concentration in Network Administration) / Certificate in Computer Information Systems

Skill Set in Cisco Certified Network Associate

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of (for degree)	81

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1131 Business Interpersonal Skills	3
CIS 1410 IT Essentials I: PC Hardware and Software	3
CIS 1420 Introduction to Computer Networking	3
IT 1010 Introduction to Computers	3
MATH 1310 Intermediate Algebra (required for degree only)	4
TERM 2	
BA 1121 Business English	3
CIS 1415 IT Essentials II: Network Operating Systems	3
CIS 1425 Network Topologies / Cisco Academy Semester 1	3
IT 1020 Integrating Business and Technology	3
MATH 1315 College Algebra (required for degree only)	3
TERM 3	
CIS 1207 Programming Logic and Design	3
CIS 2420 Basic Router Configuration / Cisco Academy Semester 2	3
ENG 1101 College Writing	3

Course	Credit Hours
MATH 1410 Trigonometry (required for degree only)	3
Or	
MATH 1320 A Survey of Mathematics (required for degree only)	3
Or	
MATH 1415 Advanced Algebra (required for degree only)	4

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TERM 4

CIS 2423 Local Area Network Management / Cisco Academy Semester 3	3
ENG 1119 Technical Communications	3
Or	
ENG 2219 Technical Writing	3
COMM 2221 Interpersonal Communication Studies	3
Approved Elective (SEE ELECTIVE LIST)	3

TERM 5

BA 2999 Capstone Course	1
CIS 2425 Wide Area Network Management / Cisco Academy Semester 4	3
CIS 2427 Troubleshooting Networks	3
★BIOLOGICAL/PHYSICAL SCIENCE Elective with LAB** (See recommended list.)	4
★HUMANITIES or SOCIAL / BEHAVIORAL SCIENCE Elective**	3

TOTAL CREDIT HOURS69-70

BIOLOGICAL/PHYSICAL SCIENCE ELECTIVE COURSES

BIO 1010 Biology for Non-Majors	3
BIO 1092 Biology for Non-Majors Laboratory	1
Or	
BIO 1110 Environmental Science	3
BIO 1192 Environmental Science Laboratory	1
Or	
CHEM 1410 Introduction to Chemistry	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

COMPUTER INFORMATION SYSTEMS

Business & Information Technology Division

(Network Administration Concentration / Certificate in Computer Information Systems / Cisco Certified Network Associate Skill Set)

Course	Credit Hours
 CHEM 1492 Introduction to Chemistry Laboratory.....	1
Or	
CHEM 1510 / 1592 General Chemistry I.....	4
Or	
PHYS 1510 Physics I.....	4
PHYS 1592 Physics I Laboratory.....	1

APPROVED ELECTIVE COURSES

 BA 1101 Introduction to Business.....	3
 BA 1152 Quality Tools.....	1
 BA 2230 Customer Relations	3
CIS 1096 and/or 2096 Topics	1-3
CIS 2097 Independent Study	variable
CIS 1275 C++ Programming I.....	3
CIS 1430 Fundamentals of Voice and Data Cabling	3
CIS 1440 Convergent Technologies I.....	3
 CIS 1513 Database Design and Introduction to SQL	3
CIS 1680 Linux Essentials	3
 CIS 1730 Web Programming with JavaScript.....	3
CIS 2095 Cooperative Education.....	4
CIS 2098 Internship	4
CIS 2430 Fundamentals of Wireless LANs	3
CIS 2620 Windows Server Management	3
CSE 1120 Career Exploration or higher.....	1-3

**** Must have a grade of C or better in these courses.**

Skill Set Required Courses:

Cisco Certified Network Associate (Skill Set)

This skill set is designed to prepare the student for CCNA certification and to achieve Cisco Routing and Switching certification at Associate Level. CCNA is for individuals who are interested in building a future in networking domain on Cisco products. Cisco certification validates an individual's achievement, so it increases the individual's professional credibility by ensuring high standards of technical expertise. Earning the CCNA indicates knowledge of networking from small to big enterprises.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Advisement and Counseling at (505) 224-4321.

CISCO CERTIFIED NETWORK ASSOCIATE SKILL SET

Course	Credit Hours
TERM 1	
CIS 2420 Basic Router Configuration / Cisco Academy Semester 2.....	3
TERM 2	
CIS 2423 Local Area Network Management / Cisco Academy Semester 3	3
CIS 2425 Wide Area Network Management / Cisco Academy Semester 4.....	3
TERM 3	
CIS 2427 Troubleshooting Networks	3

Associate of Applied Science (Concentration in Software Systems and Applications) / Certificate in Computer Information Systems

Skill Set in Microsoft Software Support

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
Certificate	
ENG 0750 Practical Writing	69
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0750 Reading Improvement	69
Degree	
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ACCT 1109 Business Math	3
BA 1121 Business English	3
BA 1131 Business Interpersonal Skills	3
CIS 1130 Windows	1
IT 1010 Introduction to Computers	3
IT 1020 Integrating Business and Technology	3
TERM 2	
CIS 1120 Microsoft Word	3
CIS 1140 PowerPoint Fundamentals	1

Course	Credit Hours
CIS 1150 MS Outlook	1
CIS 1160 Introduction to Information Management	3
CIS 1170 Excel Fundamentals (or CIS 1173 Excel Complete, DL Only)	1
CIS 1171 Intermediate Excel (or CIS 1173 Excel Complete, DL Only)	1
CIS 1172 Advanced Excel (or CIS 1173 Excel Complete, DL Only)	1
CIS 1185 Adobe Acrobat	1
CIS 2110 Project Management Software	1
ENG 1101 College Writing (for degree only)	3

TERM 3

CIS 2120 Hardware and Software Administration (for degree only)	3
CIS 1180 Access Fundamentals (or CIS 1183 Access Complete, DL Only)	1
CIS 1181 Intermediate Access (or CIS 1183 Access Complete, DL Only)	1
CIS 1182 Advanced Access (or CIS 1183 Access Complete, DL Only)	1
CIS 1310 Introduction to Multimedia	3
Or	
CIS 2340 Dreamweaver	2
Or	
CIS 2135 Microsoft Expression	3
CIS 2145 Excel Advanced Business Applications	3
COMM 1130 Public Speaking (for degree only)	3
Or	
COMM 2221 Interpersonal Communication Studies (for degree only)	3
Or	
ENG 1119 Technical Communications (for degree only)	3
Or	
ENG 2219 Technical Writing (for degree only)	3

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(Software Systems and Applications Concentration / Certificate in Computer Information Systems / Microsoft Software Support Skill Set)

Course	Credit Hours
TERM 4	
BA 2999 Capstone Course	1
CIS 2160 Office Integration	1
CIS 2121 Advanced Hardware and Software Administration	3
CIS 2140 Business Database Management	3
CIS 2147 Macro Programming	1
MATH 1210 or higher (except MATH 2110 and 2096)	3 or 4
PHIL 1156 Logic and Critical Thinking	3
Or	
PHIL 2245 Business Ethics	3
Approved Elective	2
TOTAL CREDIT HOURS	63-65

APPROVED ELECTIVES

CIS 1110 MS Applications and Integration	3
CIS 2097 Independent Study	variable
CIS 2130 Word Certification Prep	1
CIS 2131 MS Outlook Certification Prep	1
CIS 2132 PowerPoint Certification Prep	1
CIS 2133 Excel Certification Prep	1
CIS 2134 Access Certification Prep	1
CIS 1096 and/or 2096 Topics	1-3
CIS 2098 Internship	4
CIS 2095 Cooperative Education	4
CSE 1120 Career Exploration or higher	1-3

Skill Set Required Courses:

Microsoft Software Support (Skill Set)

This Skill Set is designed as an entry point for job opportunities using Microsoft desktop applications. This Skill Set is for the person wanting to combine the use of word processing, spreadsheet, database and presentation graphics skills in an office environment. Students must have basic keyboarding skills.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

MICROSOFT SOFTWARE SUPPORT SKILL SET

Course	Credit Hours
TERM 1	
CIS 1120 Microsoft Word	3
CIS 1130 Windows	1
CIS 1140 PowerPoint Fundamentals	1
CIS 1150 MS Outlook	1
CIS 2130 Word Certification Prep	1
CIS 2132 PowerPoint Certification Prep	1
IT 1010 Introduction to Computers	3
TERM 2	
CIS 1170 Excel Fundamentals	1
CIS 1171 Intermediate Excel	1
CIS 1172 Advanced Excel	1
CIS 1180 Access Fundamentals	1
CIS 1181 Intermediate Access	1
CIS 1182 Advanced Access	1
CIS 2110 Project Management Software	1
CIS 2131 MS Outlook Certification Prep	1
CIS 2133 Excel Certification Prep	1
CIS 2134 Access Certification Prep	1

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45).

COMPUTER INFORMATION SYSTEMS

(Systems Administration Concentration / Certificate in Computer Information Systems)

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Associate of Applied Science (Concentration in Systems Administration) / Certificate in Computer Information Systems

Skill Sets in Microsoft Certified Systems Engineer (MCSE), Microsoft Certified Systems Administrator (MCSA), Red Hat Certified Technician (RHCT)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES		Course	Credit Hours
Certificate			
		ENG 0950 Essay Writing.....	85
		MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of.....	81
		RDG 0950 Reading & Critical Thinking.....	80
Degree			
		MATH 1310 Intermediate Algebra or College Level Math score of.....	60
STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.			
		Course	Credit Hours
TERM 1			
		BA 1121 Business English.....	3
		BA 1131 Business Interpersonal Skills.....	3
		CIS 1420 Introduction to Computer Networking.....	3
		IT 1010 Introduction to Computers.....	3
		IT 1020 Integrating Business and Technology.....	3
TERM 2			
		CIS 1207 Programming Logic and Design.....	3
		CIS 1610 Windows Professional for Systems Administrators.....	3
		CIS 2620 Windows Server Management.....	3
		ENG 1101 College Writing.....	3
		MATH 1315 College Algebra (required for degree only).....	3
TERM 3			
		CIS 1680 Linux Essentials.....	3
		CIS 2120 Hardware and Software Administration.....	3
		CIS 2635 Windows Directory Services Management.....	3
		CIS 2650 Windows Network Environment.....	3
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TERM 4			
		CIS 2630 Windows Network Infrastructure Management.....	3
		CIS 2680 Linux Administration.....	3
		ENG 1119 Technical Communications.....	3
		Or	
		ENG 2219 Technical Writing.....	3
		COMM 2221 Interpersonal Communication Studies.....	3
		Approved Elective (SEE APPROVED ELECTIVES LIST).....	3
TERM 5			
		BA 2999 Capstone Course.....	1
		MATH 1410 Trigonometry.....	3
		Or	
		MATH 1320 A Survey of Mathematics.....	3
		Or	
		MATH 1415 Advanced Algebra.....	4
		BIOLOGICAL/PHYSICAL SCIENCE Elective with LAB (See recommended list.).....	4
		★HUMANITIES or SOCIAL / BEHAVIORAL SCIENCE Elective.....	3
TOTAL CREDIT HOURS			68-69
BIOLOGICAL/PHYSICAL SCIENCE ELECTIVES			
		BIO 1010 Biology for Non-Majors.....	3

See page 289 to find information on course categories marked with a star (★).

– Course available through Distance Learning (see page 45.)

Course	Credit Hours
 BIO 1092 Biology for Non-Majors Laboratory	1
Or	
 BIO 1110 Environmental Science	3
 BIO 1192 Environmental Science Laboratory	1
Or	
 CHEM 1410 Introduction to Chemistry.....	3
 CHEM 1492 Introduction to Chemistry Laboratory.....	1
Or	
 CHEM 1510 / 1592 General Chemistry I.....	4
Or	
 PHYS 1510 Physics I.....	3
 PHYS 1592 Physics I Laboratory.....	1

APPROVED ELECTIVES

 BA 1101 Introduction to Business.....	3
 BA 1152 Quality Tools.....	1
 BA 2230 Customer Relations	3
 CIS 1160 Introduction to Information Management	3
 CIS 1096 and/or 2096 Topics.....	1-3
 CIS 2097 Independent Study.....	variable
 CIS 1275 C++ Programming I.....	3
 CIS 1284 .NET I / Visual Basic.....	3
 CIS 1425 Network Topologies / Cisco Academy Semester 1	3
 CIS 1620 Windows OS User Support and Troubleshooting	3
 CIS 1625 Windows OS Desktop Applications Support and Troubleshooting	3
 CIS 1715 Overview of Web Technologies	3
 CIS 2095 Cooperative Education.....	4
 CIS 2098 Internship	4
 CIS 2121 Advanced Hardware and Software Management	3
 CIS 2149 MS Visio	3
 CIS 2150 MS SQL Server – Implementation and Maintenance	3
 CIS 2151 MS Exchange Server.....	3
 CIS 2610 Foundations of Network+	3
 CIS 2640 Designing Windows Directory Services / Network	3
 CIS 2645 Designing Windows Network Security	3
 CIS 2660 Principles of Information Security.....	3
 CIS 2670 Computer Security+	3
 CSE 1120 Career Exploration or higher.....	1-3

Skill Set Required Courses:

Microsoft Certified Systems Engineer (MCSE) (Skill Set)

This Skill Set is designed as an entry point for job opportunities that include network support using the Microsoft Windows platform and Active Directory. This Skill Set is for the person wanting to manage Windows users' accounts and groups, manage clients and servers, organize network structure, design a security solution for Windows and access between networks, analyze business requirements and design and implement the infrastructure for business solutions based on the Microsoft Windows operating system and Microsoft Servers software. The courses assist with the preparation for Microsoft Certified Professional (MCP) or MCSE certification and will not result in MCSE certification. Students must have strong computer skills. Students without these strong computer skills will need to develop these skills before considering this skill set.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

MICROSOFT CERTIFIED SYSTEMS ENGINEER (MCSE) SKILL SET

Course	Credit Hours
TERM 1	
 CIS 1610 Windows Professional for Systems Administrators	3
 CIS 2120 Hardware and Software Administration	3
 CIS 2620 Windows Server Management	3
TERM 2	
 CIS 2630 Windows Network Infrastructure Management	3
 CIS 2635 Windows Directory Services Management.....	3
 CIS 2640 Designing Windows Directory Services / Network	3
 CIS 2645 Designing Windows Network Security	3

Microsoft Certified Systems Administrator (MCSA) (Skill Set)

This Skill Set is designed as an entry point for job opportunities that include the skills to manage system environments running on the Windows operating system. This Skill Set is for the person wanting to manage Windows users' accounts, groups and clients and wanting to work to acquire a mid-level certification which can be a stepping stone to Microsoft Certified Systems Engineer (MCSE) certification. The courses assist with the preparation for MCSA certification and will not result in being MCSA certified. Students must have strong computer skills. Students without strong computer skills will need to develop these skills before considering this skill set.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

MICROSOFT CERTIFIED SYSTEMS ADMINISTRATOR (MCSA) SKILL SET

Course	Credit Hours
TERM 1	
 CIS 1420 Introduction to Computer Networking.....	3
CIS 1610 Windows Professional for Systems Administrators.....	3
CIS 2120 Hardware and Software Administration.....	3
CIS 2620 Windows Server Management.....	3
TERM 2	
CIS 2610 Foundations of Network+.....	3
Or	
CIS 2630 Windows Network Infrastructure Management.....	3
Or	
CIS 2635 Windows Directory Services Management.....	3
Or	
CIS 2150 MS SQL Server – Implementation and Maintenance.....	3
Or	
CIS 1096 and/or 2096 Topics.....	1-3

Red Hat Certified Technician (Skill Set)

The courses in this skill set provide the student an opportunity to prepare for the RHCT Certification; this is a mid-level certification for IT professionals who are able to:

- Install and configure Red Hat Linux;
- Understand limitations of hardware;
- Configure basic networking and file systems;
- Perform essential Red Hat Linux system administration;
- Configure basic host security;
- Perform basic diagnostics and troubleshooting.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Advisement and Counseling at (505) 224-4321.

RED HAT CERTIFIED TECHNICIAN (RHCT) SKILL SET

Course	Credit Hours
TERM 1	
CIS 1680 Linux Essentials.....	3
TERM 2	
CIS 2680 Linux Administration.....	3
TERM 3	
CIS 2685 Linux Advanced Administration.....	3

COMPUTER INFORMATION SYSTEMS

(Web Technology Concentration / Certificate in Computer Information Systems)

Business & Information Technology Division

Associate of Applied Science (Concentration in Web Technology) / Certificate in Computer Information Systems

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Acquiescer equiv.
Certificate	
ENG 0750 Essay Writing	69
RDG 0750 Reading Improvement	69
Degree	
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0950 Reading & Critical Thinking	80

RECOMMENDED PREREQUISITES SUGGESTED FOR PROGRAM SUCCESS

Course	Credit Hours
CIS 1207 Programming Logic and Design	3

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1131 Business Interpersonal Skills	3
CIS 1715 Overview of Web Technologies	3
IT 1010 Introduction to Computers	3
IT 1020 Integrating Business and Technology	3

Course	Credit Hours
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TERM 2

CIS 1330 PhotoShop	3
CIS 1513 Database Design and Introduction to SQL	3
CIS 1710 Beginning XHTML	1
CIS 1711 Intermediate XHTML	1
CIS 1712 Advanced XHTML	1

TERM 3

CIS 1730 Web Programming with JavaScript	3
CIS 1750 Web Programming with PHP	3
CIS 2340 Dreamweaver	2
CIS 2520 Introduction to SQL	3
CIS 2740 Cascading Style Sheets	3

Computer Information Systems Certificate 35

TERM 4

CIS 1725 Extensible Markup Language	3
CIS 2745 ASP.NET	3
CIS 2750 ColdFusion	3
ENG 1101 College Writing	3

TERM 5

CIS 2755 JavaServer Pages	3
ENG 1119 Technical Communications	3
★HUMANITIES Elective	3
★COMMUNICATION Elective	3
MATH 1210 Methods of Problem Solving	4
BA 2999 Capstone Course	1

TOTAL CREDIT HOURS64

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Computing Technology (Concentrations in Computer Animation or Computer Programming)**
- **Certificate in Computing Technology (Concentration in Computer Animation and Computer Programming [concentration is being discontinued and is not accepting new students])**

Program Description: Computer Programming

In this program students acquire the technical skills to solve information and management problems using computer hardware and software. Students have the choice of two concentrations: Computer Programming and Computer Animation. The Programming concentration provides students with skills in: object-oriented languages including Java, C++ and Visual Basic; networking operating systems; data structures; database concepts (Oracle and SQL); Web application programming; and personal computer operating systems.

THIS PROGRAM CONCENTRATION IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS. THE CONCENTRATION AND COURSES WILL BE INTEGRATED INTO THE COMPUTER INFORMATION SYSTEMS PROGRAM WITH A CONCENTRATION IN COMPUTER PROGRAMMING.

Career and Advancement Opportunities

Graduates are prepared for jobs as entry-level business applications programmers.

Special Requirements

None.

CONTACT INFORMATION

Information about the computer programming concentration is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Program Description: Computer Animation

In this program students acquire the technical skills to solve information and management problems using computer hardware and software. Computer Animation provides students with skills in: storyboard and screenwriting; video editing / post production; two- and three-dimensional design; digital drawing and printing production; NewTek Lightwave; Maya; image processing and computer game development; and demo reel production.

Career and Advancement Opportunities

Graduates are prepared for jobs as computer animation technicians.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the program director or associate dean in Applied Technologies at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COMPUTING TECHNOLOGY

Business & Information Technology and Applied Technologies Divisions

(Concentration in Computer Animation / Certificate in Computer Technology)

Associate of Applied Science (Concentration in Computer Animation) / Certificate in Computer Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Certificate

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80

Course	Credit Hours
IT 1010 Introduction to Computers	3

Degree

Course	Accuplacer equiv.
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of	81

Course	Credit Hours
IT 1010 Introduction to Computers	3

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.

Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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TERM 1

ANIM 1001 Survey of Computer Animation	3
ARTS 1106 Draw I	3
CIS 1130 Photoshop	3
ENG 1101 College Writing	3

TERM 2

ANIM 1003 Techniques for Animation Text	3
ANIM 1005 Introduction to Lightwave	3
ANIM 1007 Introduction to Maya	3
ARTS 1121 Two-Dimensional Design	3

TERM 3

ANIM 1009 Intermediate Lightwave	3
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See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
ANIM 1011 Intermediate Maya	3
ANIM 1013 Advanced Computer Animation	3
ARTS 1122 Three-Dimensional Design	3

Computing Technology Certificate 36

TERM 4

CIS 1207 Programming Logic and Design	3
MATH 1210 or higher (Except MATH 2110 and MATH 2096)	3-4
Approved Elective	6

TERM 5

ANIM 2999 Capstone	3
CIS 1275 C++ Language Programming I	3
Approved Elective	6

TOTAL CREDIT HOURS60

ADDITIONAL ELECTIVES

ACCT 1111 Accounting 1A	3
ANIM 2096 Topics	1-7
ANIM 2097 Independent Study	1-7
ANIM 2098 Internship	3
ANIM 2095 Cooperative Education	3
BGC 2020 Digital Drawing	3
BGC 2030 Production PhotoShop	3
BGC 2040 Digital Printing Production	3
COMM	3
ELEC 2020 Upgrading and Repairing PCs	3
ELEC 2025 Advanced Upgrading and Repairing PC's	3
CIS 2350 Macromedia Flash	3
FILM 2096 Special Topics	1-9
★PHYS elective	3
★THEA elective	3
★ARTH or ARTS	3

 – Course available through Distance Learning (see page 45.)

Associate of Applied Science (Concentration in Computer Programming) / Certificate in Computer Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

THIS PROGRAM CONCENTRATION IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS. THE CONCENTRATION AND COURSES WILL BE INTEGRATED INTO THE COMPUTER INFORMATION SYSTEMS PROGRAM WITH A CONCENTRATION IN COMPUTER PROGRAMMING.

COURSE PREREQUISITES

Course	Accuplacer equiv.
Certificate	
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Arithmetic score of	72
RDG 0950 Reading & Critical Thinking	80
Degree	
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of	81

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1131 Business Interpersonal Skills	3
CIS 1207 Programming Logic and Design	3
IT 1010 Introduction to Computers	3
IT 1020 Integrating Business and Technology	3
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 and 2096)	4
TERM 2	
CIS 1513 Database Design and Management	3
CIS 1275 C++ Programming I	3
CIS 1284 .NET I / Visual Basic	3
ENG 1101 College Writing	3
MATH 1310 Intermediate Algebra (required for degree only)	4
TERM 3	
CIS 2520 Introduction to SQL	3
CIS 2235 Java Programming I	3
CIS 2275 C++ Programming II (Object-Oriented Programming)	3

ENG 1119 Technical Communications	3
Or	
ENG 2219 Technical Writing	3
MATH 1315 College Algebra (required for degree only)	3

Computer Technology Certificate 40

TERM 4

★BIOLOGICAL/PHYSICAL SCIENCE WITH LAB	4
COMM 2221 Interpersonal Communication Studies	3
CIS 2237 Java Programming II (JCert Exam Prep)	3
Or	
CIS 2277 C++ Programming III (Advanced OOP)	3
Or	
CIS 2284 .NET II / C# / Visual Basic	3
MATH 1410 Trigonometry	3
Or	
MATH 1320 A Survey of Mathematics	3
Or	
MATH 1415 Advanced Algebra	4

TERM 5

BA 2999 Capstone Course	1
★HUMANITIES or SOCIAL/BEHAVIORAL SCIENCES Elective	3
Approved Electives (SEE LIST)	3

TOTAL CREDIT HOURS 67-68

APPROVED ELECTIVES

Any CIS course not already used	1-3
CIS 2120 Hardware and Software Administration	3
CIS 2095 Cooperative Education	4
CIS 1096 and/or 2096 Topics	1-3
CIS 2097 Independent Study	variable
CIS 2098 Internship	4
CSE 1120 Career Exploration or higher	1-3

 – Course available through Distance Learning (see page 45.)

See page 289 to find information on course categories marked with a star (★).

- *Associate of Applied Science Degree in Construction Management Technology*
- *Skill Sets in Construction Estimator, Construction Scheduler and Residential Superintendent*

Program Description

In this program students acquire the knowledge, essential skills and leadership abilities needed to contribute to the construction team. An emphasis is placed on developing the skills necessary to use state of the art industry standard technology and software. The program is accredited by the American Council of Construction Education (ACCE). Many course credits are transferable to the University of New Mexico's Construction Management Bachelor of Science degree program.

Career and Advancement Opportunities

Students are prepared for mid-management (supervisory) positions in the construction industries, including general contractor, estimator, assistant project manager, inspector, office manager, crew leader, expeditor, superintendent, sales representative and computer specialist.

Special Requirements

Because the level of experience for entering students varies, it is important that new students interview with the program chair to develop an appropriate schedule.

CONTACT INFORMATION

Program information is available from the program director or associate dean at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus).

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
 ENG 0950 Essay Writing	85
 MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of.....	81
 RDG 0950 Reading & Critical Thinking	80

Course	Credit Hours
 IT 1010 or division approval.....	3

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ►

Associate of Applied Science Degree in Construction Management Technology

Skill Sets in Construction Estimator, Construction Scheduler and Residential Superintendent

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
CM 1105 Construction Detailing	3
CM 1110 Construction Materials and Techniques	3
CM 1115 Commercial Construction Theory	3
ENG 1101 College Writing	3
MATH 1310 Intermediate Algebra	4
TERM 2	
CAD 1001 Basic CAD	1
CM 1205 Computer Aided Construction Drafting / Engineering	2
CM 1210 Mechanical & Electrical Systems	3
CM 1215 Construction Equipment & Methods	3
CM 1220 Introduction to Construction Project Management	3
CIS 1170 Excel Fundamentals	1
Or	
CIS 1171 Intermediate Excel	1
Or	
CIS 1172 Advanced Excel	1
TERM 3	
CM 1305 Construction Estimating	3
ENG 1119 Technical Communications	3
Or	
ENG 2119 Technical Writing	3
Or	
Approved Communications Elective (SEE LIST)	3
PHYS 1010 or higher	3
ACCT 1111 Accounting IA	3
ESH 2006 Occupational Safety for Construction I	1
ESH 2009 Occupational Safety for Construction II	2

Course	Credit Hours
TERM 4	
CM 2105 Construction Scheduling	3
CM 2115 Computer Estimating	3
CM 2120 Statics	3
★ HUMANITIES or SOCIAL/BEHAVIORAL SCIENCES Elective	3
TERM 5	
Technical Elective	3
CM 2205 Construction Surveying	3
CM 2210 General Contractor Preparation	3
CM 2999 Construction Management Capstone Course	1
BA 2240 Business Law	3
TOTAL CREDIT HOURS	69

APPROVED TECHNICAL ELECTIVES

CM 2215 Estimating and Bidding	3
CM 2220 Computerized Project Management & Scheduling	3
CM 2997 Independent Study	2-4
CM 2998 Internship	3
PM 2200 Budget & Resource Management	3
PM 2210 Contract Management	3
BA 2232 Supervision	3

APPROVED COMMUNICATIONS ELECTIVES

COMM 2221 Interpersonal Communications	3
COMM 2225 Small Group Communications	3
COMM 2232 Business and Professional Communications	3
COMM 2240 Organizational Communications	3

See page 289 to find information on course categories marked with a star (★).

– Course available through Distance Learning (see page 45.)

Skill Set Required Courses:

RESIDENTIAL SUPERINTENDENT SKILL SET

Course	Credit Hours
TERM 1	
___  CM 1105 Construction Detailing	3
Or	
___ CM 1205 Computer Aided Construction Drafting / Engineering	2
___  CM 1110 Construction Materials and Techniques	3
___  CM 2210 General Contractor Preparation.....	3
___ CM 2205 Construction Surveying	3

TERM 2

___ CM 1215 Construction Equipment & Methods	3
___  CM 1305 Construction Estimating	3
___  CM 1220 Introduction to Construction Project Management	3
___  CM 1210 Mechanical Electrical Systems & Construction.....	3

CONSTRUCTION ESTIMATOR SKILL SET

Course	Credit Hours
TERM 1	
___  CM 1105 Construction Detailing	3
Or	
___ CM 1205 Computer Aided Construction Drafting / Engineering	2
___  CM 1110 Construction Materials and Techniques	3
___  MATH 1310 Intermediate Algebra	4
___  CM 1305 Construction Estimating.....	3

TERM 2

___  CM 2210 General Contractor Preparation.....	3
___ CM 2115 Computerized Estimating Techniques	3
___  CM 2215 Estimating and Bidding	3
___  CM 1220 Introduction to Construction Project Management	3

CONSTRUCTION SCHEDULER SKILL SET

Course	Credit Hours
TERM 1	
___  CM 1105 Construction Detailing	3
Or	
___ CM 1205 Computer Aided Construction Drafting / Engineering	2
___  CM 1110 Construction Materials and Techniques	3
___  CM 1305 Construction Estimating.....	3
___  CM 1220 Introduction to Construction Project Management	3
TERM 2	
___  CM 2210 General Contractor Preparation.....	3
Or	
___ CM 1115 Commercial Construction Theory	3
___  CM 2105 Construction Scheduling	2
___ CM 2220 Computerized Project Management & Scheduling.....	3
___  CM 2215 Estimating and Bidding	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- Associate of Applied Science Degree in Construction Technology (Concentration in General Construction)
- Certificates in Carpentry, Residential Wiring or Electrical Trades
- Skill Set in Framing and Precision Woodworking Skill set

Program Description

The Construction Technology program offers courses of study concentrating in carpentry, residential wiring and electrical trades that are designed to provide students with the skills necessary to gain employment in a related construction or maintenance field. Carpentry classes meet in on- and off-campus labs designed for the practical study of residential and commercial construction, including blueprint reading, framing and the International Residential Code. Residential Wiring students take theory and lab classes (on- and off-campus) in residential wiring, including electrical circuitry, job-site safety and the National Electric Code (NEC), preparing students for the NM Residential Wireman's Certificate of Competence. The Electrical Trades program enables students to study commercial and industrial wiring methods and motor controls and helps prepare students for the State of New Mexico Journeyman Electrical Certificate (JE98).

Career and Advancement Opportunities

The New Mexico Department of Labor predicts a continued increase in the demand for construction workers. In recent years over 90 percent of Carpentry, Residential Wiring and Electrical Trades and Construction Technology graduates have obtained employment.

The AAS degree prepares graduates for career advancement and earning potential.

Special Requirements

Students are required to purchase textbooks, personal hand tools and personal protective equipment.

CONTACT INFORMATION

Information about these programs is available from the carpentry chair at (505) 224-3714, the electrical trades chair at (505) 224-3736, the program director at (505) 224-3716, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Carpentry Certificate	
MATH 0550 Basic Mathematics or Arithmetic score of	31
Degree	
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading Improvement.....	80

Course	Accuplacer equiv.
Residential Wiring and Electrical Trades Certificate	
MATH 0750 Basic College Mathematics or Arithmetic score of	57
RDG 0750 Reading Improvement.....	69
Degree	
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading Improvement.....	80

Associate of Applied Science Degree in Construction Technology (Concentration in General Construction) / Certificates in Carpentry

Skill Set in Framing and Precision Woodworking Skill set

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
____ CARP 1005 Carpentry & Blueprint Reading I.....	4
____ CARP 1010 Introduction to Carpentry	1
And	
____ CARP 1092 Construction Lab A.....	2
Or	
____ CARP 1320 Carpentry Fundamentals	3
____ CARP 1015 Structural Systems I.....	1
Or	
____ CARP 1020 Structural Systems II.....	1
____ CARP 1192 Construction Lab B.....	2
____ CARP 1292 Construction Lab C.....	2
____  ESH 2006 Occupational Safety 1 for Construction I	1

TERM 2

____ CARP 2005 Carpentry & Blueprint Reading 11	4
____ CARP 2010 Exterior Finishes	1
____ CARP 2015 Interior Finishes I.....	1
____ CARP 2020 Interior Finishes II.....	1
____ CARP 2092 Construction Lab A.....	2
____ CARP 2192 Construction Lab B.....	2
____ CARP 2292 Construction Lab C.....	2

Carpentry Certificate 25-26

TERM 3

____ CM 1205 Computer Aided Construction Drafting / Engineering.....	3
____  CM 1110 Construction Materials and Techniques	3
____  ENG 1101 College Writing	3
____  IT 1010 Introduction to Computers.....	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Course	Credit Hours
TERM 4	
____  CM 1305 Construction Estimating.....	3
____  MATH 1210 or higher.....	3-4
____  CM 1215 Construction Equipment & Methods.....	3
____  CM 1210 Mechanical Electrical Systems and Construction.....	3
____  CM 1115 Commercial Construction Theory	3
TERM 5	
____  COMM 1130 or higher.....	3
____  CM 2210 General Contractor Preparation.....	3
____  ★HUMANITIES or SOCIAL/BEHAVIORAL SCIENCES Elective	3
____ PHYS 1010 or higher.....	3
____ CARP 2999 Carpentry Capstone Course.....	1
TOTAL CREDIT HOURS.....	66-68

Skill Set Required Courses:

FRAMING SKILL SET

Course	Credit Hours
CARP 1005 Carpentry Blueprint Reading I.....	4
CARP 1010 Introduction to Carpentry	1
And	
CARP 1092 Construction Lab A.....	2
CARP 1015 Structural System I.....	2
Or	
CARP 1320 Carpentry Fundamentals	3
CARP 1020 Structural Systems II.....	1
CARP 1192 Construction Lab B.....	2
CARP 1292 Construction Lab C.....	2
 ESH 2006 Occupational Safety for Construction I.....	1

PRECISION WOODWORKING SKILL SET

Course	Credit Hours
CARP 1005 Carpentry Blueprint Reading I.....	4
CARP 1305 Furniture Making	3
CARP 1310 Advanced Furniture Making	3
CARP 1315 Cabinetmaking	3
 ESH 2006 Occupational Safety for Construction 1.....	1

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

CONSTRUCTION TECHNOLOGY

(Electrical (ELTR) Concentration / Residential Wiring and Electrical Trades Certificates)

Applied Technologies Division

Associate of Applied Science Degree in Construction Technology (Concentration in Electrical ELTR) / Certificates in Residential Wiring Certificate and Electrical Trades

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ELTR 1005 Electrical Theory I.....	4
ELTR 1010 Electrical Math I.....	3
ELTR 1092 Electrical DC / AC Lab.....	3
ELTR 1192 AC Circuitry, Motors & Generators.....	3

TERM 2	
ELTR 1205 Blueprint Reading I.....	3
ELTR 1210 Electrical Theory II.....	4
ELTR 1292 Residential Wiring Lab.....	3
ELTR 1392 Residential Electrical Services.....	3

Residential Wiring Certificate 26

TERM 3	
ELTR 2005 Electrical Theory III.....	4
ELTR 2010 Electrical Motor Control Theory.....	3
ELTR 2092 Industrial Motor Control Lab.....	3
ELTR 2192 Industrial Power Distribution.....	3

Electrical Trades Certificate 39

TERM 4	
COMM 1130 or higher.....	3
ELTR 2210 Programmable Logic Controller Theory.....	4
ELTR 2292 PLC Installation & Operation.....	3
ELTR 2999 Electrical Trades Capstone Course.....	1
PHYS 1010 Introduction to Physics or higher.....	3

Course	Credit Hours
TERM 5	
MATH 1210 Methods of Problem Solving or higher.....	3-4
ENG 1101 College Writing.....	3
★HUMANITIES or SOCIAL/BEHAVIORAL SCIENCES Elective.....	3
IT 1010 Introduction to Computer Applications.....	3
TOTAL CREDIT HOURS.....	65-66

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Associate of Applied Science Degree in Cosmetology

Program Description

Students will study basic cosmetology skills designed to meet the standards established by the New Mexico State Board of Barbers and Cosmetologists. The degree requires 70 credit hours in cosmetology and general education, which exceeds the minimum of 1,600 clock hours required by the State Board. The Pivot Point International-based curriculum covers theory and lab in the following State Board requirements: sterilization, bacteriology, shampoo, rinses, scalp treatments, chemical rearranging (perms and relaxers), hairstyling, hair coloring and lightening, hair cutting, facials, manicuring, pedicuring, salon business and retail sales. Students can earn licensure by the New Board of Barbers and Cosmetologists after passing the state exam.

Career and Advancement Opportunities

A cosmetologist career may offer opportunities in the areas of operator, consultant, sales representative or owner. Jobs are available in private salons, franchise salons and day spas. Attaining the AAS Degree in Cosmetology exceeds the State of New Mexico's requirements for licensure and may offer advancement opportunities to management positions in industry or entrepreneurial situations of salon ownership.

Special Requirements

Students are required to purchase textbooks and a cosmetology kit available at the CNM Bookstore. In order to become registered with the New Mexico Board of Barbers and Cosmetologists, students must have a high school diploma or equivalent, provide a birth certificate and pay a \$15 registration fee (personal money order) by the 5th day of term. Degree students must take COS 212 & 212L in their final term for assessment portfolio.

All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit / no credit, a grade of credit (CR) must be earned.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-5027, or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus).

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking	80

Associate of Applied Science Degree in Cosmetology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
___ COS 1010 Orientation.....	2
___ COS 1071 Sterilization / Sanitation Bacteriology	2
___ COS 1072 Shampoo / Rinses / Scalp Treatment.....	2
___ COS 1073 Chemical Rearranging	2
___ COS 1074 Cutting / Hairstyling	2
___ COS 1075 Hair Coloring.....	2
___ COS 1076 Manicuring / Pedicuring	2

TERM 2	
___ COS 1570 Facials	2
___ COS 1592 Sterilization / Sanitation / Bacteriology lab II.....	1
___ COS 1692 Shampoo / Rinses / Scalp Treatments Lab II.....	1
___ COS 1792 Chemical Rearranging: Perms and Relaxers Lab II.....	2
___ COS 1892 Cutting / Coloring / Hairstyling	3
___ COS 1992 Manicuring / Pedicuring Lab II.....	2
___  ENG 1101 College Writing	3

TERM 3	
___ COS 2092 Chemical Rearranging: Perms and Relaxers Lab III.....	2
___ COS 2192 Hair Cutting Lab III	2
___ COS 2292 Hair Coloring Lab III	1
___ COS 2392 Hairstyling Lab III	1
___ COS 2492 Facials / Manicuring / Pedicuring Lab III.....	4
___  ★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE	3

TERM 4	
___ COS 2501 State Laws / Regulations.....	1
___ COS 2505 Salon Operation Theory	1
___ COS 2510 Advanced Salon Theory	2
___ COS 2570 Advanced Salon Lab.....	5
___ COS 2580 Salon Operation Lab (Externship)	3

Course	Credit Hours
___ COS 2592 Hair Cutting Lab IV	2
___ COS 2692 Hair Styling Lab IV	1
___ COS 2792 Facials / Manicuring / Pedicuring Lab IV	1

TERM 5	
___  COMM 2221 Interpersonal Communication Studies	3
___ MATH 1210 Methods of Problem Solving or higher  (except MATH 2110 or 2096)	4
___  IT 1010 Introduction to Computers.....	3
___  ★ANY ARTS & SCIENCES COURSE	3

TOTAL CREDIT HOURS70

OPTIONAL COURSES

(These courses do not fulfill graduation requirements and may not be eligible for financial aid.)

___ COS 2096 Special Topics.....	1-6
___ COS 2097 Independent Study	variable
___ CSE 1120 Career Exploration	1

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Certificate in Court Reporting*
- *Skill Set in Stenotranscription*

Program Description

Students study machine shorthand theory and computer real-time technology with an emphasis on speed building and accuracy. The certificate requires the completion of Introduction to Court Reporting (CR 1111), Machine Shorthand II (CR 1131), Machine Shorthand III (CR 2211), Machine Shorthand IV (CR 2212) and Machine Shorthand V (CR 2213). Introduction to Court Reporting involves instruction on the theory principles used to write steno on the machine. MSII, MSIII, MSIV and MSV contain speed requirements that must be met in order to advance to the next level. These courses are open / entry, open / exit.

In addition to the machine shorthand classes, the following course-related classes are required: Punctuation for Court Reporters (CR 1123), Legal Terminology (CR 2240), Computer-aided Transcription (CR 2250), Court Reporting Procedures (CR 2260), Internship (CR 2298) and Medical Terminology and Anatomy (HIT 1020).

Career and Advancement Opportunities

One hundred percent of court reporting graduates who have passed the New Mexico State Exam are employed as court reporters. Other graduates who have moved to states not requiring a state exam are also employed as court reporters.

Graduates may apply for a provisional license with the New Mexico CCR Board. This would allow the graduate to be employed as a court reporter for up to two years while attempting to pass the state exam.

Employment opportunities include working as an official reporter in court, a freelance reporter in a deposition firm, a captioner for television stations, a CART (Communication Access Realtime Translation) writer for the hearing impaired, medical transcriptionist and hearing reporter.

Special Requirements

Students should purchase a basic manual steno machine before entering the program for use at home in order to practice and complete homework assignments. Computerized steno machines are provided for use in the classrooms and in the Business Resource Center for students to use outside of their regular class time.

CONTACT INFORMATION

Program and skill set information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this certificate. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
RDG 0750 Reading Improvement.....	69

Certificate in Court Reporting

Skill Set in Stenotranscription

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
CR 1111 Introduction to Court Reporting	4
TERM 2	
CR 1123 Punctuation for Court Reporters	3
CR 1131 Machine Shorthand II	3
TERM 3	
CR 1211 Machine Shorthand III	3
CR 2240 Legal Terminology	3
TERM 4	
CR 1212 Machine Shorthand IV	3
CR 2250 Computer-Aided Transcription	3
 HIT 1020 Medical Terminology and Anatomy	3
TERM 5	
CR 1213 Machine Shorthand V	3
CR 2260 Court Reporting Procedures	3
CR 2098 Internship	3
TOTAL CREDIT HOURS	34

Skill Set Required Courses:

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon satisfactory completion of the coursework.

Stenotranscription (Skill Set)

Students receive instruction on the functions and applications of stenotranscription software. This software allows students to transcribe tapes from the steno machine to produce a document. Students are graded on the production of medical and legal documents from tapes or CDs.

Employment opportunities can be found in medical offices, legal offices, transcription of legal proceedings held in courts where a tape monitor is used instead of a court reporter, insurance company statements, police department statements and interviews.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Program and skill set information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

STENOTRANSSCRIPTION

Course	Credit Hours
TERM I	
CR 1111 Introduction to Court Reporting	3
TERM 2	
CR 1131 Machine Shorthand II	3
TERM 3	
CR 2251 Stenotranscription	3

• Associate of Applied Science Degree in Criminal Justice

Program Description

Students will study fundamentals of law and procedures in adult criminal and juvenile areas, law enforcement, corrections and security. Classes include classroom study, critical thinking exercises, computer labs and field trips.

Students may receive credit for one specialty internship as an elective in the program.

Career and Advancement Opportunities

Many students in the criminal justice program obtain criminal justice jobs either during college or upon graduation. These jobs range from police officers to correctional officers and security. The associate's degree prepares students for further studies that will ultimately qualify them for jobs in the federal government and as state probation officers. Department of Labor projections indicate job opportunities will increase faster than average for all occupations.

During term III, students may select specific courses to concentrate for law enforcement or for probation; parole; corrections or security

Special Requirements

Students are required to purchase textbooks.

All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety courses offered only for credit/no credit, a grade of credit (CR) must be earned.

CONTACT INFORMATION

Program information is available from the program director, Kevin Daugherty at (505) 224-4201, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0950 Reading & Critical Thinking	80

Associate of Applied Science in Criminal Justice

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
CJ 1001 Introduction to Criminal Justice	3
CJ 1002 Criminal Law	3
CJ 1007 Criminal Procedure	3
IT 1010 Introduction to Computers.....	3
ENG 1101 College Writing or higher.....	3
SOC 1101 Introduction to Sociology	3
TERM 2	
CJ 1502 Juvenile Law and Procedure	3
CJ 1518 Report Writing	3
CJ 1509 or 1570 Introduction to Security Services.....	3
MATH 1210 Methods of Problem Solving or higher (except MATH 2110)	3 or 4
FITT 1392 or 1792 Candidate Physical Ability Test (CPAT) Preparation or Physical Fitness I.....	1
PSY 1105 Introduction to Psychology.....	3
TERM 3	
Criminal Justice Elective.....	6
SOC 2215 Criminology.....	3
COMM 2221 Interpersonal Communication Studies	3
Approved Electives	3
TERM 4	
CJ 2506 Community-Oriented Policing.....	3
CJ 2511 Correctional Services	3
CJ 2515/2692 Criminal Investigation/Laboratory.....	4
Criminal Justice Elective (SEE LIST)	3
Approved Elective (SEE LIST).....	3
CJ 2999 Criminal Justice Capstone Course.....	1

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
ADDITIONAL CRIMINAL JUSTICE APPROVED ELECTIVES (CHOOSE 9 CREDIT HOURS)	
CJ 2005 Probation and Patrol	3
CJ 2006 Rules of Criminal Evidence.....	3
CJ 2007 White Collar Crimes	3
CJ 2008 Organized Crime and Terrorism	3
CJ 2009 Management for Criminal Justice Professionals	3
CJ 2011 Public Policies and Strategies	3
CJ 2096 Special Topics.....	variable
CJ 2697 Independent Study	variable
CJ 2698 Internship*.....	3
CJ 2695 Cooperative Education.....	variable
* Students may receive credit for one specialty internship as an elective in the program.	
ADDITIONAL APPROVED ELECTIVES (CHOOSE 6 CREDIT HOURS)	
CSE 1120 or higher Career Exploration	1
EMS 1010 Basic Emergency Medical Technician Skills	6
PL 1110 Introduction To Paralegal Studies	3
PL 1120 American Law and Ethics	3
PL 2130 Criminal Litigation	3
PL 2150 Evidence.....	3
PL 2440 Criminal Litigation II.....	3
Any CJ Course	
Any EPT Course	
Any FS Course	
TOTAL CREDIT HOURS	66-67

– Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Culinary Arts**
- **Certificates in Baking (see page 82), Food Service Management (see page 175) and Professional Cooking (see page 255)**

Program Description

Culinary Arts is an excellent field for students seeking a challenging career in a rapidly growing industry. Students will study baking and pastry, professional cooking, safety, sanitation, nutrition, equipment use, human relations, supervisory skills, dining room skills and business practices. Classes include classroom and laboratory time. The American Culinary Federation (ACF) Accrediting Commission accredits this program. Upon completion of the associate of applied science degree program, students are eligible to become certified culinarians through ACF.

Career and Advancement Opportunities

Jobs are available in restaurants, resorts, schools, retirement homes, hospitals, convention centers, bakeries and other areas. Types of jobs range from bakers to cooks, managers to chefs and opportunities from the fast food industry, fine dining establishments, to casinos and resorts.

Special Requirements

Students are required to purchase at least four sets of chef’s uniforms, dining room service attire, textbooks and tools. Students should be able to lift 30 pounds and must present a physician’s certificate to CNM at the start of classes stating that the student is free from tuberculosis in a transmissible form. Students must be able to stand for the duration of laboratory classes.

CONTACT INFORMATION

Information about these programs is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking.....	80

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ▶

Associate of Applied Science Degree in Culinary Arts

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
CULN 1101 Introduction to Culinary Arts	1
CULN 1102 Applied Culinary Math.....	1
CULN 1103 Food Sanitation Principles	3
IT 1010 Introduction to Computers.....	3
ENG 1101 College Writing	3
NUTR 1010 Personal and Practical Nutrition.....	3
TERM 2	
CULN 1111 Cooking Fundamentals I.....	5
CULN 1112 Cooking Fundamentals II.....	5
TERM 3	
CULN 2211 Global Cuisines--Classical European.....	5
CULN 2212 Global Cuisines--Mediterranean, Asian and Pacific Rim.....	5
TERM 4	
CULN 1130 Introduction to Baking Fundamentals.....	5
CULN 1132 Applied Baking Principles.....	5
HT 1164 Food and Beverage Service	3
TERM 5	
CULN 2230 Baking and Pastry Fundamentals.....	5
CULN 2232 Advanced Baking and Pastry Techniques.....	5
HT 1132 Hotel/Motel Human Resources Management.....	3

Course | Credit Hours

TERM 6

COMM 1130 Public Speaking or higher.....	3
CULN 2999 Capstone.....	1
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 and 2096). 3 or 4	
★ HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE Elective.....	3
HT 2215 Hospitality Purchasing Management	3

TOTAL CREDIT HOURS73-74

NOTE: Students may elect to take baking labs (CULN 1130-1132 and 2230-2232) during terms two and three and cooking labs (CULN 1111-1112 and 2211-2212) during terms four and five rather than the sequence outlined above. Information about the Baking certificate is available on page 82, Professional Cooking, page 255 and Food Service Management, page 175.

• *Certificate in Dental Assisting*

Program Description

Dental Assisting is a three-term program which provides individuals the opportunity to attain the knowledge and skills necessary to work in a dental clinic or dental office. Upon completion of the program, graduates are prepared to provide basic support under the supervision of a licensed dentist or dental hygienist. Instruction occurs in classrooms, laboratories and dental clinics.

This program prepares graduates for state certification in dental radiographs, coronal polishing and topical fluoride application. It also prepares students to take the Dental Assisting National Board (DANB) exam.

Career and Advancement Opportunities

There is a demand for well-trained dental assistants in the metropolitan area as well as in rural areas across the state. Dental assistants work with dentists or a dental hygienist to promote dental health. In addition, they might find employment in office management, dental laboratories or dental sales. They can work in private offices, dental clinics, dental supply companies, dental laboratories, hospitals, mobile dental clinics or with school programs.

Special Requirements

Students must be 18 years of age prior to entering DA 1175 due to federal radiation guidelines.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students are required to have a physical exam, current professional BLS CPR certification, PPD and current immunizations (including MMR, DTP, PPD and hepatitis A & B) prior to beginning the clinical courses. Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may

include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

A program fee is charged in DA 1172 to cover the cost of a lab coat, two sets of scrubs, DA pin, a pair of safety goggles, nametags, criminal background check, drug screen and health tests in case of a needle stick or other exposure to bodily fluids. A program fee is charged in DA 1108/1175, 1510/1575, 2024/2080 and 2080 for dosimeter badges. Program fees are published in the **Schedule of Classes**. In addition, students must purchase their own textbooks.

Graduation Policy

- Students may be required to attend clinical lab courses on weekends and during evening hours. All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Information sessions are scheduled regularly. For dates and times, applicants may contact the Health, Wellness & Public Safety Division information line at (505) 224-4161 or the program director at (505) 224-5247; or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Certificate in Dental Assisting

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
High School diploma or equivalent	
ENG 0950 Essay Writing	85
MATH 0750 Basic College Mathematics	57
RDG 0950 Reading & Critical Thinking	80

REQUIRED PROGRAM COURSES

Course	Credit Hours
DA 1010 Dental Science I	3
HLTH 1001 Clinical Preparation	1
ENG 1101 College Analytic Writing or ENG 1102	3

Course | Credit Hours

TERM 1 FALL

COMM 2221 Interpersonal Communication	3
DA 1104 Tooth Morphology, Histology and Recordings	3
DA 1108/1175 Dental Radiology I	3
DA 1110/1172 Dental Materials and Application	3
DA 1120/1170 Chairside Procedures I	3

TERM 2 SPRING

DA 1510/1580 Clinical Application I	6
DA 1512 Dental Science II	3
DA 1520/1570 Chairside Procedures II	3
DA 1508/1575 Dental Radiology II	3

TERM 3 SUMMER

DA 2410/2470 Dental Practice Management and Patient Care	2
DA 2014 Dental Specialties	3
DA 2010/2080 Clinical application II	5

TOTAL CREDIT HOURS47

Description

Students in Developmental Education classes develop basic academic, work and life skills necessary for success. Developmental courses are numbered 0100 through 0999. Subjects are English (course subject code: ENG), English as a Second Language (ESL), math (MATH), reading (RDG), College Success Experience (CSE), biology (BIO), chemistry (CHEM), accounting (ACCT), computer science (IT) and health (HLTH). Classes include theory and lab hours.

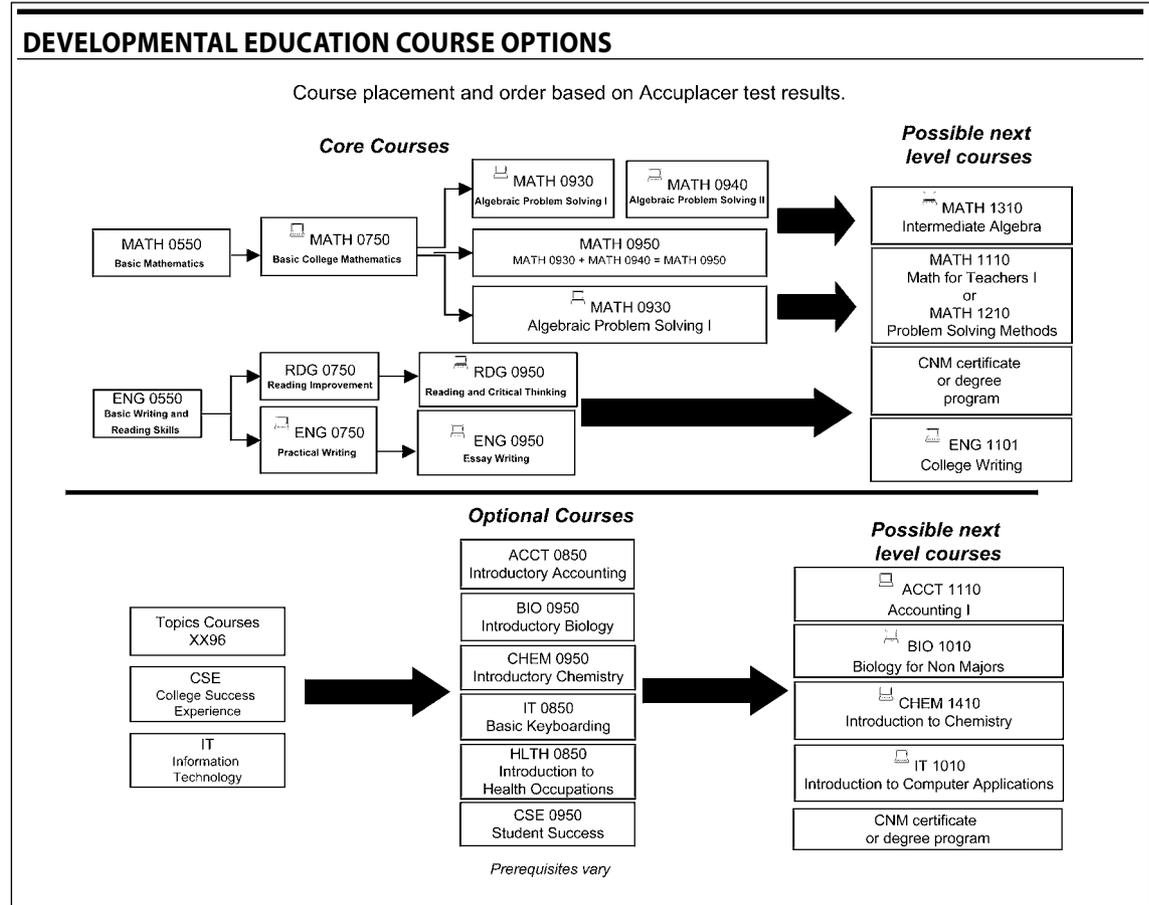
Developmental courses are graded CR (credit) and NC (no credit) to help students build their skills without the pressure of the traditional grading system (A, B, C, D, F). While credit from Developmental courses are not transferable to other degree-granting institutions, these courses typically help students meet admissions requirements and program prerequisites. Eligible students may receive financial aid for up to 30 credit hours in Developmental courses.

Career and Advancement Opportunities

Developmental courses prepare students for arts and sciences or career and technical majors, for self-improvement or for career enhancement.

CONTACT INFORMATION

Program information is available by contacting the Division of Educational & Career Advancement, Max Salazar Hall, room 570, at (505) 224-3939.



• Associate of Science Degree in Diagnostic Medical Sonography

Program Description

Diagnostic Medical Sonography (DMS) is a four-term associate of science degree program during which the student will attain the knowledge, skills and professional behaviors necessary for employment as a Diagnostic Medical Sonographer. A sonographer is a health care professional who uses high-frequency sound waves as a diagnostic tool to view the human body in order to aid the physician in the diagnosis of illness. Students study the use of sound waves to generate images of various parts of the human body. The successful graduate will have the ability to conceptualize in 3-dimensional form. The program provides classroom didactic instruction, hands-on scanning, laboratory instruction and clinical experiences in a variety of medical facilities and outpatient diagnostic centers.

Students are prepared to sit for the national board exams administered by the American Registry of Diagnostic Medical Sonographers in the specialty areas of Abdomen and Obstetrics and Gynecology. Successful completion of this exam results in attaining the RDMS (Registered Diagnostic Medical Sonographer) credential. The program is fully accredited by CAAHEP (Commission on Accreditation of Allied Health Education Programs).

Career and Advancement Opportunities

There is currently a nationwide shortage of registered sonographers. Graduates will be employed as sonographers in hospitals, physician's offices and private sonography practices.

Special Requirements

Information is available on the DMS program website (www.cnm.edu) and at program information sessions (224-4161). Students who have petitioned and given a start date will begin the program as scheduled.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Petitioning Process

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

Selection of students is based on a petition process. In order to petition, students must:

- Complete and pass the required program courses with a grade of "C" or better
- Complete the Workkeys assessment tests in required program courses (Reading for Information, Locating Information and Applied Mathematics) with a score of five or better
- Present proof of a GPA of 3.0 or greater

Those students whom successfully petitioned are then sorted by date on which the student declared DMS as their major at CNM. Sixteen students will be selected to begin the program each January

Students interested in the DMS program, must be in good physical and psychological health. The DMS program requires documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the program director at (505) 224-4127 for more information. Prior to enrollment in DMS clinical courses, students are required to provide proof of a recent physical exam, PPD and current immunizations (including tetanus, rubella, rubeola and hepatitis B).

Students will be required to attend clinical rotations at sites up to two hours away from Albuquerque and may also be scheduled during evening and/or weekend shifts. The program fee covers the cost of scrubs (two sets), nametags, hospital parking permits and preventive lab tests in case of a needle stick or other exposure to bodily fluids. Program fees are published in the **Schedule of Classes**.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

For more information, contact the program director at (505) 224-4127, or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Associate of Science Degree in Diagnostic Medical Sonography

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
MATH 1310 Intermediate Algebra or College Level Math score of.....	60
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80
High School diploma or equivalent	

Course	Credit Hours
BIO 1410 Biology for Health Sciences.....	3
BIO 1492 Biology for Health Sciences Laboratory	1
CHEM 1410/1492 Introduction to Chemistry or CHEM 1510/1592 General Chemistry.....	4

REQUIRED PROGRAM COURSES (Required program courses listed below must be completed with a grade of "C" or better and combined GPA in these courses must be 3.0 or greater.)

BIO 2110/2192 Microbiology/Laboratory.....	4
BIO 2210/2292 Human Anatomy and Physiology I/Laboratory.....	4
BIO 2310/2392 Human Anatomy and Physiology II/Laboratory	4
COMM 2221 Interpersonal Communication Studies.....	3
ENG 1101 College Writing or ENG 1102 Analytical Writing	3
★HUMANITIES OR SOCIAL/BEHAVIOR SCIENCE ELECTIVE.....	3
MATH 1315 College Algebra.....	3
PHYS 1510/1592 Physics I/Laboratory	5

PETITION IN FALL

In order to petition, students must complete and pass the required program courses with a "C" or better and complete the Workkeys Assessment Tests (Reading for Information, Locating Information and Applied Mathematics) with a score of five or better. Successful petitioners will be sorted first by GPA. Students with a GPA of 2.5 or greater in required program courses will be given preference. Students will next be sorted according to the date on which they declared DMS their major at CNM. Sixteen students will be selected to begin the program each January. Students who petitioned, prior to Fall 2007 and were given a start date, will begin the program as scheduled.

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

Course | Credit Hours

TERM 1 SPRING

_____	DMS 1010 Introduction to Diagnostic Medical Sonography.....	1
_____	DMS 1012/1072 Cross Sectional Anatomy	3
_____	DMS 1070 Medical Concepts.....	4
_____	DMS 1075 Introduction to Sonographic Physics.....	2
_____	HLTH 1001 Clinical Preparation	1

TERM 2 SUMMER

_____	DMS 1503 DMS Pathophysiology I.....	3
_____	DMS 1510/1570 General Sonography I	6
_____	DMS 1575 Sonographic Physics I.....	2

TERM 3 FALL

_____	DMS 2003 DMS Pathophysiology II.....	3
_____	DMS 2070/2080 General Sonography II	7
_____	DMS 2075 Sonography Physics II.....	2

TERM 4 SPRING

_____	DMS 2590 General Sonography Internship.....	10
_____	DMS 2592 Clinical Seminar	1

TOTAL CREDIT HOURS74

See page 289 to find information on course categories marked with a star (★).

– Course available through Distance Learning (see page 45.)

• **Certificate in Diesel Equipment Technology**

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

Program Description

Students study a variety of vehicle systems in classes combining theory and laboratory exercises that prepare graduates to work on a variety of medium- and heavy-duty trucks and equipment. The program provides extensive hands-on training opportunities to ensure competency at program completion.

Career and Advancement Opportunities

Career opportunities exist in government, independent repair facilities and dealerships for all aspects of the industry including line technician, field service technician, service writer, service manager, warranty and parts and overhaul specialist. The national shortage of technicians in the diesel truck and heavy equipment fields ensures plentiful employment opportunities with excellent pay and benefits.

Special Requirements

Hand tools and textbooks are required in all transportation technology programs and one must not be allergic to fuels, oils and chemicals used in the industry. Additionally, most employers require a valid driving license and a good driving record.

CONTACT INFORMATION

Information about these programs is available from the program chair at (505) 224-3741 or the director (505) 224-3730, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

RECOMMENDED COURSE PREREQUISITES

Course	Accuplacer equiv.
 MATH 0750 Basic College Mathematics or Arithmetic score of	57
RDG 0750 Reading Improvement.....	69

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information

Course	Credit Hours
TERM 1	
DETC 1110 Introduction to Diesel Technology	4
DETC 1120 Heavy Duty Brake Systems	4
DETC 1130 Heavy Duty Suspension & Steering.....	4
DETC 1140 Manual Shift Transmissions & Axles	4
TERM 2	
AUTC 1140 Automotive Electrical.....	4
DETC 1210 Heavy Duty Engine Repair	4
DETC 1220 Automatic Transmissions & Hydraulics	4
DETC 1230 Medium/Heavy Duty Air Conditioning & Heating	4
TERM 3	
DETC 2110 Preventive Maintenance	4
AUTC 1240 Automotive Electronics.....	4
DETC 2120 Diesel Engine Performance	4
TOTAL CREDIT HOURS	43

- **Certificate in Electrical Trades**
- **Certificate in Residential Wiring**

Program Description

The Electrical Trades Certificate Program provides students the opportunity to gain the knowledge and technical skills necessary to become an electrician. A certificate is obtained by the student after successful completion of three terms and is accepted by the State of New Mexico as two years experience toward the four-year experience requirement for the State of New Mexico Journeyman Electrical Certificate (JE98).

Theory and lab courses are designed to be taken together to give students an in depth understanding of the concepts of the electrical trade.

First term students obtain knowledge and hands-on training for personal and tool safety, meter reading, electrical circuitry, electrical formulas, electrical calculations, material identification and AC/DC motor operation and troubleshooting.

Second term students are taught residential blueprint reading, applications of the National Electrical Code (NEC), NM Electrical Code (NMEC) and local electrical codes, installation of branch circuits and feeders, residential services, single pole, three and four-way switch circuits, door chime installation, dryer, range, swamp cooler circuitry and conduit bending. Third term students receive Occupational Safety Hazard Administration (OSHA) compliance safety training, technical skills power distribution systems, 3-phase services, hazardous locations, commercial blueprint reading, circuitry, 3-phase motor starters, timers, mechanical and hydraulic conduit bending, power threaders, cutting and threading of rigid metal conduit, knock out punches, hammer drills, powder actuated fasteners, cable installation, wire pulling and applications of the NEC.

Career and Advancement Opportunities

The New Mexico Department of Labor predicts a continued increase in the demand for electrical workers for years to come. One hundred percent of CNM Electrical Trades graduates obtained employment in the electrical trade in 2005-2006. The Department of Labor reports that starting wages for electrical workers range from \$12.44 to \$23.02 per hour, or \$25,879 to \$47,874 per year. Coursework from Electrical Trades/Residential Wiring may be applied toward the associate degree in Construction Technology.

Special Requirements

Students must have normal color differentiation as electricians as they work with colored wires requiring accurate connection. The moving and installation of various electrical materials and equipment necessitate that the electrician be able to lift at least 50 pounds. Electricians may work in various internal and external environments and should be free of chronic respiratory diseases and allergies. Most employers require a valid driver's license and a clean driving record.

CONTACT INFORMATION:

Additional program information is available from the program chair at (505) 224-3766, or from Academic Advisement and Career Development at (505)224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
MATH 0750 Basic College Mathematics or Arithmetic score of	57
RDG 0750 Reading Improvement.....	69

Certificate in Electrical Trades / Certificate in Residential Wiring

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____  ELTR 1005 Electrical Theory I.....	4
_____ ELTR 1010 Electrical Math I.....	3
_____ ELTR 1092 Electrical DC/AC Lab.....	3
_____ ELTR 1192 AC Circuitry, Motors & Generators.....	3
TERM 2	
_____ ELTR 1205 Blueprint Reading I.....	3
_____ ELTR 1210 Electrical Theory II.....	4
_____ ELTR 1292 Residential Wiring Lab.....	3
_____ ELTR 1392 Residential Electrical Services.....	3
Residential Wiring Certificate	26
TERM 3	
_____ ELTR 2005 Electrical Theory III.....	4
_____ ELTR 2010 Electrical Motor Control Theory.....	3
_____ ELTR 2092 Industrial Motor Control Lab.....	3
_____ ELTR 2192 Industrial Power Distribution.....	3
TOTAL CREDIT HOURS	39

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Electronics Technology (Concentration in General or Process Control)**
- **Certificate in Electronics Technology**

Program Description

The Electronics Technology program provides students with a broad base of skills in analog and digital electronics with electromechanical and computer applications. The General Concentration complements the core curriculum with an understanding of a student-selected area or emphasis. Courses such as Electromechanical System Troubleshooting provide students troubleshooting techniques for the repair of electronic equipment and systems. Other courses teach upgrading and repairing PC's. Students will be given the opportunity to obtain the skills and knowledge necessary to obtain an A+ certification, which is an industry-recognized credential. The Process Control Concentration complements the core curriculum with an in-depth study of maintenance and troubleshooting of electromechanical systems, sensor and feedback theories, industrial robotics and computer integrated manufacturing. Laboratory exercises require students to apply their general education courses through written reports, computer-generated documents and mathematical calculations. Hands-on experiences are provided throughout the entire program.

The Electronics Technology Certificate Program provides students with a broad base of skills in AC, DC and digital electronics with electromechanical and computer applications. This foundation also provides students with an IPC 610 and J-standard certification in soldering. Laboratory exercises require students to apply their general education courses through written reports, computer-generated documents and mathematical calculations. Hands-on experiences are provided throughout the entire program.

Career and Advancement Opportunities

Electronics Technology is one of the most rapidly growing and changing technical fields in America today. Whether in the General Concentration or Process Control, the student will be a trained technician that can expect favorable job opportunities, promotion potential and rapid advancement in many electronics industries. Graduates will be eligible for entry-level technical positions in a wide range of scientific disciplines utilizing digital and semiconductor devices and even laser and fiber optic technology, depending on the concentration electives chosen to specialize in.

Special Requirements

Students applying for this program should be seriously interested in the study of analog and digital electronics with electromechanical and computer applications.

CONTACT INFORMATION

Program information is available from the program chair at (505) 224-3340, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Degree	
ENG 0950 Essay Writing	85
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of.....	81
RDG 0950 Reading Improvement.....	80

Associate of Applied Science Degree in Electronics Technology (General Concentration) / Certificate in Electronics Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ ELEC 1001 Electronics Fundamentals A.....	4
_____ ELEC 1010 Electronics Mathematics	4
_____ ELEC 1015 Digital Circuits I.....	3
_____  ENG 1101 College Writing	3
Or	
_____  ENG 1102 Analytical and Argumentative Writing.....	3
TERM 2	
_____ ELEC 1025 Soldering Techniques	3
_____ ELEC 1005 Electronics Fundamentals B.....	4
_____ ELEC 1020 Digital Circuits II.....	3
Electronics Technology Certificate	24
_____ MATH 1210 or higher  except MATH 1320, 2096, 2110	3-4
_____  ENG 1119 or ENG 2219	3
Or	
_____  COMM 2221 or COMM 2225 or COMM 2232	3
TERM 3	
_____ ELEC 2001 Semiconductor Devices.....	6
_____ ELEC 2005 Electromechanical Devices.....	6
_____ Concentration Elective or Technical Elective (SEE LIST).....	3
TERM 4	
_____ ELEC 2010 Introduction to Microprocessors.....	4
_____ Concentration Elective or Technical Elective (SEE LIST).....	3
_____ CHEM 1510/1592 General Chemistry I/Lab.....	4
Or	
_____ PHYS 1510/1592 Physics I/Lab.....	5
_____  ★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE	3

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
TERM 5	
_____ ELEC 2015 Analog Circuits.....	4
_____ PC 2001 Electromechanical System Troubleshooting.....	4
_____ Concentration Elective or Technical Elective (SEE LIST).....	3
TOTAL CREDIT HOURS	70-72
CONCENTRATION ELECTIVES	
_____ ELEC 2020 Upgrading and Repairing PCs	3
_____ ELEC 2025 Advanced Upgrading and Repairing PCs.....	3
_____ MEMS 2001 MEMS Manufacturing Process.....	5
_____ PHOT 1001 Introduction to Photonics & Photonics Safety.....	4
_____ PHOT 2001 Optics	6
_____ PHOT 2005 Introduction to Laser Systems	4
_____ PHOT 2020 Advanced Laser Systems with Applications	6
_____ PC 2020 Vacuum Systems II.....	2
TECHNICAL ELECTIVES	
_____ ELEC 1096 Topics.....	2-8
_____ ELEC 2097 Independent Study	2-8
_____ ELEC 2098 Internship.....	3
_____ ELEC 2095 Cooperative Education	3
_____ ELTR 2392 PLC Systems Operation and Troubleshooting	3
_____ MATT 1005 Metals Blueprint Reading I.....	2
_____ MATT 1292 Basic Supporting Machine Tool Principles	2
_____ MATT 1035 Metals Blueprint Reading II.....	2
_____ MEMS 1001 Introduction to MEMS	3

NOTE: The following upper level courses, MATH 1710, PHYS 1710/1792 or CHEM 1510/1592 will be necessary if your plans are for a four year college or work in research labs.

 – Course available through Distance Learning (see page 45.)

Associate of Applied Science Degree in Electronics Technology (Process Control Concentration) / Certificate in Electronics Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ ELEC 1001 Electronics Fundamentals A.....	4
_____ ELEC 1010 Electronics Mathematics	4
_____ ELEC 1015 Digital Circuits I.....	3
_____  ENG 1101 College Writing	3
Or	
_____  ENG 1102 Analytical and Argumentative Writing	3
TERM 2	
_____ ELEC 1025 Soldering Techniques.....	3
_____ ELEC 1005 Electronics Fundamentals B.....	4
_____ ELEC 1020 Digital Circuits II.....	3
Electronics Technology Certificate.....	24
_____ MATH 1210 Methods of Problem Solving or higher  except MATH 1320, 2110, 2096 ..	3-4
_____ ENG 1119 Technical Communications	3
Or	
_____  ENG 2219 Technical Writing	3
Or	
_____  COMM 2221 or COMM 2225 or COMM 2232	3
TERM 3	
_____ ELEC 2001 Semiconductor Devices.....	6
_____ ELEC 2005 Electromechanical Devices.....	6
_____ CHEM 1510/1592 General Chemistry I/Lab.....	4
Or	
_____ PHYS 1510/1592 Physics I/Lab	5
Or	
_____ Higher CHEM/PHYS	4-5

Course	Credit Hours
TERM 4	
_____ ELEC 2010 Introduction to Microprocessors.....	4
_____ ELEC 2015 Analog Circuits.....	4
_____ PC 2001 Electromechanical System Troubleshooting.....	4
_____ PC 2015 Power RF	2
_____ PC 2020 Vacuum Systems II.....	2
TERM 5	
_____ ELTR 2210 Programmable Logic Controller Theory	4
_____ ELTR 2292 PLC Installation and Operation.....	3
_____ Technical Elective (SEE LIST)	3
_____  ★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE	3
TOTAL CREDIT HOURS	75-77

TECHNICAL ELECTIVES

_____ ELEC 1096 Topics.....	2-8
_____ ELEC 2097 Independent Study	2-8
_____ ELEC 2098 Internship.....	3
_____ ELEC 2095 Cooperative Education	3
_____ ELTR 2392 PLC Systems Operation and Troubleshooting	3
_____ MATT 1005 Metals Blueprint Reading I.....	2
_____ MATT 1292 Basic Supporting Machine Tool Principles	2
_____ MATT 1035 Metals Blueprint Reading II.....	2
_____ MEMS 1001 Introduction to MEMS	3
_____ PC 2005 CIM Theory and Applications and Mobile Robot Design.....	3
_____ PC 2010 Robot Theory and Construction Applications	3
_____ SMT 2001 Semiconductor Manufacturing Technology Theory	3
_____ SMT 2092 Semiconductor Manufacturing Technology Lab.....	2

NOTE: Select Math and Science Electives based on your future plans for work or college.

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• **Associate of Arts Degree in Elementary Education (Concentrations in Bilingual Education, Elementary Education and Special Education)**

Program Description

The Elementary Education associate degree program facilitates the learning of theory and skills required for working with children in the public school system in kindergarten through eighth grade (K–8). Students interested in Early Childhood Licensure (K–3) should also consider the Early Childhood Multicultural Concentration in the Child, Youth and Family Development degree program (see page 99).

This four-term program includes classroom instruction and practical experience within the Albuquerque Public School System (APS). The program leads to an associate of arts degree with one of three concentrations:

- Bilingual education
- Elementary education
- Special education

Career and Advancement Opportunities

Graduates from the program may transfer to four-year institutions that grant bachelor’s degrees in Elementary Education. The associate of arts degree enables graduates to serve as educational assistants or substitute teachers within APS. Substitute positions require a high school diploma or GED and 60 + college credit hours.

The Education Department, pending approval from the State Public Education Department, also offers courses for students pursuing Alternative Teacher Licensure in the following areas:

- Early childhood multicultural education
- Elementary education
- Secondary education
- Special education

Student should refer to pages 72 and 73 for the recommended course sequence for each Alternative Teacher Licensure area.

Special Requirements

All courses required for transfer must be taken for a traditional grade of A, B, C, etc. For courses offered only for credit/no credit, a grade of credit (CR) must be earned. New Mexico state law requires a criminal background check on all persons seeking employment with the public school system.

Graduation Policy

Students must graduate under the current catalog.

- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student’s responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated.

CONTACT INFORMATION

For further information, please contact the Communication, Humanities & Social Sciences Division at (505) 224-3588 or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
RDG 0950 Reading & Critical Thinking	80

ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72

ELEMENTARY EDUCATION Degree (Concentration in Bilingual Education) Communication, Humanities & Social Sciences Division

Associate of Arts Degree in Elementary Education (Concentration in Bilingual Education)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
MATH 1110 Mathematics for Elementary and Middle School Teachers I	3
EDUC 2265 Computers in Schools	3
SPAN 1101 OR HIGHER (SPAN 1102, 2201, 2202 REQUIRED FOR BILINGUAL ENDORSEMENT)	4
TERM 2	
ENG 1102 Analytic and Argumentative Writing	3
MATH 1115 Mathematics for Elementary and Middle School Teachers II	3
HIST 1101 OR HIST 1102	3
EDUC 2204 Child Development for Teachers	3
NS 1010 OR BIOLOGICAL/PHYSICAL SCIENCE W/ LAB (SEE LIST)	4
TERM 3	
ARTH 1101 Introduction to Art	3
HIST 1161 OR HIST 1162	3
SPAN 1101 or higher (SPAN 1102, 2201, 2202 REQUIRED FOR BILINGUAL ENDORSEMENT)	3-4
HUMANITIES Elective (SEE LIST)	3
TERM 4	
MUS 1139 OR 1140 OR THEA 1122	3
BEHAVIORAL OR SOCIAL SCIENCE (SEE LIST)	3
EDUC 1101 OR EDUC 2290 (Students transferring to UNM should take 2290; all other students should take 1101.)	2-3
ANTH 1110 Language, Culture and the Human Animal	3
NS 1015 OR BIOLOGICAL/PHYSICAL SCIENCE W/ LAB (SEE LIST)	4
TERM 5	
HIST 2260 History of New Mexico	3
COMM 1130 OR COMM 2270 (COMM 2270 RECOMMENDED)	3
SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3

Course	Credit Hours
NS 1020 OR BIOLOGICAL/PHYSICAL SCIENCE AND LAB (SEE LIST)	4

TOTAL CREDIT HOURS69-70

SOCIAL/BEHAVIORAL SCIENCE ELECTIVES

ANTH 1101 Introduction to Anthropology	3
ANTH 1130 Cultures of the World	3
ECON 2200 Macroeconomics	3
ECON 2201 Microeconomics	3
GEOG 1102 Human Geography	3
PSCI 1110 The Political World	3
PSCI 2220 Comparative Government and Politics	3
PSCI 2240 International Politics	3
PSY 1105 Introduction to Psychology	3
SOC 1101 Introduction to Sociology	3

HUMANITIES ELECTIVES

HIST courses not used elsewhere	3
HUM 1111 Early World Civilization	3
PHIL 1110 Introduction to Philosophical Thought	3
PHIL 1156 Logic and Critical Thinking	3
RLGN 1107 Living World Religions	3
ENG 1150 Study of Literature	3
ENG 2206 Popular Literature: Detective Novel	3
ENG 2207 Popular Literature: Science Fiction	3
ENG 2208 Popular Literature: Espionage Fiction	3
ENG 2209 Popular Literature: Western	3
ENG 2096 Topics in Literature	3

BIOLOGICAL/PHYSICAL SCIENCE ELECTIVES

ASTR 1010/1192 Introduction to Astronomy I/Astronomy Lab	3
BIO 1010/1092 Biology for Non Majors/Bio for Non Majors Lab	3
BIO 1410/1492 Biology for Health Sciences/Bio for Health Sciences Lab	3
CHEM 1410/1492 Introduction to Chemistry/Introduction to Chemistry Lab	3
PHYS 1510/1592 Physics I/Physics I Lab	3
PHYS 1610/1692 Physics II/Physics II Lab	3
NS 1010 Physical Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3
NS 1015 Life Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3
NS 1020 Environmental Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3

 – Course available through Distance Learning (see page 45.)

See page 289 to find information on course categories marked with a star (★).

ELEMENTARY EDUCATION Degree (Concentration in Elementary Education) Communication, Humanities & Social Sciences Division

Associate of Arts Degree in Elementary Education (Concentration in Elementary Education)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
MATH 1110 Mathematics for Elementary and Middle School Teachers I	3
EDUC 2265 Computers in Schools	3
HIST 1101 OR HIST 1102	3
TERM 2	
ENG 1102 Analytic and Argumentative Writing	3
MATH 1115 Mathematics for Elementary and Middle School Teachers II	3
HIST 1161 OR HIST 1162	3
EDUC 2204 Child Development for Teachers	3
NS 1010 OR BIOLOGICAL/PHYSICAL SCIENCE W/ LAB (SEE LIST)	4
TERM 3	
ARTH 1101 Introduction to Art	3
EDUC 1101 OR EDUC 2290 (Students transferring to UNM should take 2290; all other students should take 1101.)	2-3
HUMANITIES Elective (SEE LIST)	3
NS 1015 OR BIOLOGICAL/PHYSICAL SCIENCE W/ LAB (SEE LIST)	4
TERM 4	
MUS 1139 OR 1140 OR THEA 1122	3
SOCIAL/BEHAVIORAL SCIENCE OR (SEE LIST)	3
ANTH 1110 Language, Culture and the Human Animal	3
SPAN 1101 Beginning Spanish I	4
TERM 5	
HIST 2260 History of New Mexico	3
COMM 1130 OR COMM 2270 (COMM 2270 RECOMMENDED)	3
SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
NS 1020 OR BIOLOGICAL/PHYSICAL SCIENCE AND LAB (SEE LIST)	4
TOTAL CREDIT HOURS	66

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
SOCIAL/BEHAVIORAL SCIENCE ELECTIVES	
ANTH 1101 Introduction to Anthropology	3
ANTH 1130 Cultures of the World	3
ECON 2200 Macroeconomics	3
ECON 2201 Microeconomics	3
GEOG 1102 Human Geography	3
PSCI 1110 Introduction to Philosophical Thought	3
PSCI 2200 U.S. Politics	3
PSCI 2220 Comparative Government and Politics	3
PSCI 2240 International Politics	3
PSY 1105 Introduction to Psychology	3
SOC 1101 Introduction to Sociology	3
HUMANITIES ELECTIVES	
HIST courses not used elsewhere	3
HUM 1111 Early World Civilization	3
PHIL 1110 Introduction to Philosophical Thought	3
PHIL 1156 Logic and Critical Thinking	3
RLGN 1107 Living World Religions	3
ENG 1150 Study of Literature	3
ENG 2206 Popular Literature: Detective Novel	3
ENG 2207 Popular Literature: Science Fiction	3
ENG 2208 Popular Literature: Espionage Fiction	3
ENG 2209 Popular Literature: Western	3
ENG 2096 Topics in Literature	3
BIOLOGICAL/PHYSICAL SCIENCE ELECTIVES	
ASTR 1010/1192 Introduction to Astronomy I/Astronomy Lab	3
BIO 1010/1092 Biology for Non Majors/Bio for Non Majors Lab	3
BIO 1410/1492 Biology for Health Sciences/Bio for Health Sciences Lab	3
CHEM 1410/1492 Introduction to Chemistry/Introduction to Chemistry Lab	3
PHYS 1510/1592 Physics I/Physics I Lab	3
PHYS 1610/1692 Physics II/Physics II Lab	3
NS 1010 Physical Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3
NS 1015 Life Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3
NS 1020 Environmental Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3

 – Course available through Distance Learning (see page 45.)

ELEMENTARY EDUCATION Degree (Concentration in Special Education) Communication, Humanities & Social Sciences Division

Associate of Arts Degree in Elementary Education (Concentration in Special Education)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
MATH 1110 Mathematics for Elementary and Middle School Teachers I	3
EDUC 2265 Computers in Schools	3
SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
TERM 2	
ENG 1102 Analytic and Argumentative Writing	3
MATH 1115 Mathematics for Elementary and Middle School Teachers II	3
HIST 1101 OR HIST 1102	3
EDUC 2204 Child Development for Teachers	3
NS 1010 OR BIOLOGICAL/PHYSICAL SCIENCE W/ LAB (SEE LIST)	4
TERM 3	
ARTH 1101 Introduction to Art	3
HIST 1161 OR HIST 1162	3
EDUC 2207 Educational Psychology	3
NS 1015 OR BIOLOGICAL/PHYSICAL SCIENCE W/ LAB (SEE LIST)	4
TERM 4	
MUS 1139 OR 1140 OR THEA 1122	3
SPED 2201 Education of the Exceptional Person	3
SPED 2290 Introduction to Special Education	2
HUMANITIES Elective (SEE LIST)	3
TERM 5	
HIST 2260 History of New Mexico	3
COMM 1130 OR COMM 2270 (COMM 2270 RECOMMENDED)	3
SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
NS 1020 OR BIOLOGICAL/PHYSICAL SCIENCE AND LAB (SEE LIST)	4
TOTAL CREDIT HOURS	65

Course	Credit Hours
SOCIAL/BEHAVIORAL SCIENCE ELECTIVES	
ANTH 1101 Introduction to Anthropology	3
ANTH 1130 Cultures of the World	3
ECON 2200 Macroeconomics	3
ECON 2201 Microeconomics	3
GEOG 1102 Human Geography	3
PSCI 1110 Introduction to Philosophical Thought	3
PSCI 2220 Comparative Government and Politics	3
PSCI 2240 International Politics	3
PSY 1105 Introduction to Psychology	3
SOC 1101 Introduction to Sociology	3
HUMANITIES ELECTIVES	
HIST courses not used elsewhere	3
HUM 1111 Early World Civilization	3
PHIL 1110 Introduction to Philosophical Thought	3
PHIL 1156 Logic and Critical Thinking	3
RLGN 1107 Living World Religions	3
ENG 1150 Study of Literature	3
ENG 2206 Popular Literature: Detective Novel	3
ENG 2207 Popular Literature: Science Fiction	3
ENG 2208 Popular Literature: Espionage Fiction	3
ENG 2209 Popular Literature: Western	3
ENG 2096 Topics in Literature	3
BIOLOGICAL/PHYSICAL SCIENCE ELECTIVES	
ASTR 1010/1192 Introduction to Astronomy I/Astronomy Lab	3
BIO 1010/1092 Biology for Non Majors/Bio for Non Majors Lab	3
BIO 1410/1492 Biology for Health Sciences/Bio for Health Sciences Lab	3
CHEM 1410/1492 Introduction to Chemistry/Introduction to Chemistry Lab	3
PHYS 1510/1592 Physics I/Physics I Lab	3
PHYS 1610/1692 Physics II/Physics II Lab	3
NS 1010 Physical Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3
NS 1015 Life Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3
NS 1020 Environmental Science for Teachers (NS COURSES ARE HIGHLY RECOMMENDED)	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Skill Sets in Emergency Medical Technician – Basic and Emergency Department Technician

Description

The EMT-B (Emergency Medical Technician-Basic) course is the introductory course in Emergency Medical Services (EMS). The basic course is designed to train emergency personnel to respond to life-threatening injuries or illnesses. The EMT-I (Emergency Medical Technician-Intermediate) builds upon the basic course and expands treatment and assessment skills. The Emergency Department Technician course trains students to work in large emergency departments. The learning environment consists of classroom (theory) and practical (lab) sessions.

The licensing agencies are the Injury Prevention and EMS Bureau, Department of Health and Human Services or The National Registry of Emergency Medical Technicians. There is constant demand for EMT basic, intermediate technicians, paramedic and emergency department technicians. However, the job market is very competitive. Typical job opportunities are: fire fighter, ambulance attendant, ER technician and combat medic. Places of employment include: fire departments, ambulance services, military medical units and emergency departments.

Special Requirements

Students must have a current professional-level BLS CPR card for the EMT-B, EMT-I and Emergency Department Technician courses. Intermediate students must have successfully completed EMS 1010 prior to starting the intermediate course and earned their New Mexico state license.

Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. EMT-I and ED Technician students are required to provide documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information. A recent physical exam and current immunizations (including Hepatitis B (Hepatitis A is recommended) MMR, DTP, PPD and varicella) are required for the EMT intermediate courses.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public

Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students should also contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the HWPS Division Office at (505) 224-4111 for more information. A high school diploma or equivalent is required for EMT licensing. Students enrolled in EMS 1210/1292 and 1390 pay a program fee. The program fees are published in the **Schedule of Classes**.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C or as otherwise indicated by program. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Contact the HWPS Division at (505) 224-4111, or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Skill Sets in Emergency Medical Technician — Basic and Emergency Department Technician

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

ENTRY-LEVEL COURSE OR PROGRAM PREREQUISITES

Course	Accuplacer equiv.
High School diploma or equivalent	
 MATH 0750 Basic College Mathematics or Arithmetic score of	57
 RDG 0950 Reading Improvement	80

Course	Credit Hours
HLTH 1001 Clinical Preparation	1

RECOMMENDED PREREQUISITE FOR SKILL SUCCESS

Course	Credit Hours
EMS 1005 First Responder	3

Skill Set Required Courses:

EMERGENCY MEDICAL TECHNICIAN – BASIC

Course	Credit Hours
EMS 1010 Basic Emergency Medical Technician Skills	6

TOTAL CREDIT HOURS 6

COURSE PREREQUISITES

ENTRY-LEVEL COURSE OR PROGRAM PREREQUISITES

Course	Accuplacer equiv.
High School diploma or equivalent	
 MATH 0750 Basic College Mathematics or Arithmetic score of	57
RDG 0950 Reading Improvement	80
EMS State certification at either the Basic or Intermediate license level	

Skill Set Required Courses:

EMERGENCY DEPARTMENT TECHNICIAN

Course	Credit Hours
EMS 1312/1392 Emergency Department Technician	4
EMS 1390 Emergency Division Technician Clinical.....	2

TOTAL CREDIT HOURS 6

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Certificate in Paramedic

Program Description

The paramedic program is a certificate program that offers the student training in the emergency medical field. The EMS program begins with the EMT-Basic course and allows the successful student to progress to the EMT-Paramedic level. The program is based on the National Department of Transportation curriculum. The paramedic student must complete all core courses along with the associated clinicals within two years. Upon successful completion of the core program courses, the paramedic student will take the competency finals course. This course assists the student to incorporate all the previous studies and be eligible to take the National Registry Paramedic test.

Career and Advancement Opportunities

Emergency medical personnel are employed with ambulance services, both private and public, provide medical care with fire departments or work as part of the health care team in the emergency department in hospitals. The nature of the work requires that the person be able to work nights, weekends and holidays. It also requires the provider to be in good physical condition as the job requires frequent climbing, lifting and other physical exertion.

Special Requirements

Before entering the program, students must have a high school diploma or equivalent, be at least 18 years old and have been admitted to CNM. The student must have had Reading 0950 or an Accuplacer reading score of 80 and Math 0930 or an Accuplacer Elementary Algebra score of 72. Students are required to maintain their license as either an EMT-Basic or EMT-Intermediate and maintain their Professional CPR certification during the Paramedic program.

Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health.

The student admitted to the paramedic core courses must have a recent physical exam, current immunizations (TB, tetanus, rubella, rubeola and hepatitis B; (hepatitis A is recommended) and a negative PPD prior to working with patients in a clinical setting. Students are required to provide documentation from a licensed health care provider that they can safely perform program specific objectives and lift a minimum of 50 lbs. prior to beginning their clinical experience.

Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting

the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs. Students should also contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the HWPS Division Office at (505) 224-4111 for more information.

Students pay a program fee in EMS 2292 to take their certification exam. The program fees are published in the **Schedule of Classes**.

Graduation Policy

- Students will be required to attend clinical lab courses on weekends and during evening hours. All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

CONTACT INFORMATION

For more information, contact the HWPS Division (505) 224-4111, or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Certificate in Paramedic

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
High School Diploma or Equivalent	
 MATH 0930 Algebraic Problem Solving I (Intermediate Algebra score of	72
 RDG 0950 Reading & Critical Thinking	80
Current EMT-B or EMT-I New Mexico State License	

Course	Credit Hours
EMS 1010 Basic Emergency Medical Technician Skills	6

REQUIRED PROGRAM COURSES

 BIO 1310 Human Anatomy and Physiology for Non-Majors.....	3
EMS 1012 EMS Drug Calculations	1
EMS 1030* EMS Pharmacology.....	3
EMS 1015*/1070* Advanced Trauma.....	5

**Must obtain a grade of "B" or higher.*

PETITION PROCESS

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>. More information available on the Health, Wellness & Public Safety Web page ([cnm.edu](http://www.cnm.edu))

Course	Credit Hours
TERM 1 FALL	
EMS 1098 Field Internship I.....	2
EMS 1512 Medical/Legal and Charting.....	1
EMS 1515 EMS Endocrine and GI/GU Systems.....	1
EMS 1570/1590 Cardiovascular System.....	5
EMS 2070 Respiratory System	4

Course	Credit Hours
TERM 2 SPRING	
EMS 1571/1690 Pediatric and Gynecology Emergencies.....	3
EMS 2005 Behavioral Emergencies In EMS and Communication.....	2
EMS 2072 Neurological System	3
EMS 2090 Respiratory/Neurology Clinical.....	1
EMS 2172 Environmental Emergencies	3
EMS 2292 Competency Finals	1
EMS 2198 Field Internship II.....	2

TOTAL CREDIT HOURS40

• *Associate of Science Degree in Engineering*

Program Description

The engineering degree includes foundation courses in math and the sciences, introducing the concepts and methods of engineering. The associate degree is designed as the first two years of a bachelor's degree in engineering and graduates are encouraged to continue their studies in a specialized area of engineering at a four-year institution. Students planning to transfer to a bachelor of science degree program are advised to refer to the catalogs of their intended transfer institution before making course selections.

Career and Advancement Opportunities

Engineers apply the principles of science and mathematics to develop useful objects or processes that meet the needs of commerce and society. The major functions of all branches of engineering include development and design, construction, production, testing and maintenance. According to the U.S. Labor Department, the demand for engineers is expected to continue to grow over the next 10 years.

Engineering offers a wide range of opportunities in a variety of specialized areas: Aerospace Engineering, Architectural Engineering, Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Physics, Industrial Engineering, Manufacturing Engineering, Mechanical Engineering, Nuclear Engineering, Petroleum Engineering and Surveying Engineering.

CONTACT INFORMATION

Program information is available from the dean's office of the Math, Science & Engineering Division at (505) 224-3561 or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80
MATH 1410 Trigonometry or College Level Math score of	100
MATH 1415 Advanced Algebra or College Level Math score of	100

Associate of Science Degree in Engineering

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ MATH 1710 Calculus I.....	4
_____  ENG 1101 College Writing	3
_____ ENGR 1010 Survey of Engineering Fields.....	1
_____ CHEM 1510/1592 General Chemistry I/General Chemistry I Lab	4
_____  ★HUMANITIES/FINE ARTS Elective	3
TERM 2	
_____ CSCI 1151 Introduction to Computer Programming	4
_____  ENG 1102 Analytic and Argumentative Writing	3
_____ PHYS 1710/1792 General Physics I/General Physics I Lab.....	5
_____ MATH 1715 Calculus II.....	4
TERM 3	
_____ MATH 2710 Calculus III.....	4
_____ PHYS 1810/1892 General Physics II/General Physics II Lab	5
_____  COMM 1130 or 2221 Public Speaking or Interpersonal Communication	3
_____  ★SOCIAL/BEHAVIORAL SCIENCE Elective	3
TERM 4	
_____ MATH 2910 Applied Ordinary Differential Equations	3
_____  ECON 2000 Macroeconomics	3
_____ PHIL 1102 Ethics In Society	3
_____  ★HUMANITIES or SOCIAL/BEHAVIORAL SCIENCE Elective	3

Course	Credit Hours
ADDITIONAL APPROVED ELECTIVES – MUST TAKE ONE (1) OF THE FOLLOWING:	
_____ ENGR 2810 Engineering Statics.....	3
_____ ENGR 2910 Circuit Analysis	4
_____ MATH 2810 Linear Algebra	3
_____ CHEM 1610/1692 General Chemistry II/General Chemistry Lab II.....	4
TOTAL CREDIT HOURS	61-62

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• **Associate of Applied Science Degree in Engineering Design Technology**

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS)

Program Description

Engineering designers translate technical ideas, sketches and specifications into workable models and plans. The program integrates the concepts of mathematics and science into technical courses. The use of computer-assisted design drafting (CADD) is emphasized and applied throughout the program. This program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Career and Advancement Opportunities

Excellent employment opportunities in the fields of Mechanical or Engineering Design, CAD Technology and Computer-Aided Engineering are available for graduates. EDT graduates can transfer the earned credits to New Mexico State University, Arizona State University, Purdue University, Pittsburg State University and other four-year engineering schools offering bachelor's degrees in Engineering Technology with ABET Credentials.

Special Requirements

Students must purchase their own drafting tools and a full-function scientific calculator. It is strongly recommended that all beginning students meet with the program chair to plan an individual course of study.

Note: the last semester that EDT courses will be offered will be Spring 2009. Please see the program director for a course schedule.

CONTACT INFORMATION

Program information is available from the program chair (505) 224-3340, or from Academic Advisement and Career Development at (505) 224-4321. Students may also visit www.cnm.edu and navigate to the Applied Technologies Division.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of.....	81
RDG 0950 Reading Improvement.....	80

Course	Credit Hours
MATH 1310 Intermediate Algebra.....	3

Associate of Applied Science Degree in Engineering Design Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
EDT 1001 Introduction to Engineering Technology	3
EDT 1005 Introduction to CAD (DDET 106L)	3
EDT 1010 Mechanical Design I (DDET 111L)	3
EDT 1030 Materials and Manufacturing Processes (DDET 102L)	3
 MATH 1315 Intermediate Algebra	3
Or	
MATH 1415 Advanced Algebra	4
TERM 2	
EDT 1015 Intermediate CAD (DDET 115L)	3
EDT 1020 Mechanical Design II	3
EDT 1025 Basic Electrical and Electronic System	3
MATH 1410 Trigonometry	3
 ENG 1101 College Writing	3
Or	
 ENG 1102 Analytic and Argumentative Writing	3

Course	Credit Hours
TERM 3	
EDT 2001 Applied Mathematics in Mechanics (DDET 201L)	3
EDT 2005 Advanced CAD/Solid Modeling (DDET 215L)	3
EDT 2010 Tooling Design (DDET 206L)	3
EDT 2020 Design of Machine Elements (DDET 205L)	3
CIS 1275 C++ Programming I	3
Or	
CSCI 1151 Introduction to Programming for Non-Computer Science Majors	3
Or	
CIS 1284 Visual Basic I	3
ENG 1119 Technical Communication	3
Or	
 ENG 2219 Technical Writing	3
TERM 4	
EDT 2015 Mechanics of Materials (DDET 220L)	5
EDT 2025 System Design (DDET 211L)	3
PHYS 1510/1592 Physics I/Lab	5
MATH 1710 Calculus I	4
Or	
MATH 1460 Elements of Calculus I	3

TOTAL CREDIT HOURS65-67

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Environmental Safety and Health**
- **Skill Set in Radiation Protection Technologist**

Program Description

Students will study the diverse fields of environmental sciences, safety and health, addressing such areas as biological and hazardous waste, air and water quality, domestic and industrial waste, workplace safety, energy management and recycling. Classes include classroom and laboratory study.

An associate of applied science degree is offered. Students who complete specific courses may receive the following training certifications:

- 40-Hour Hazardous Waste Operations Training Certification
- 10-Hour OSHA General Industry Training Certification
- 30-Hour OSHA General Industry Training Certification
- 8-Hour Confined Space Entry Training Certification
- 8-Hour Red Cross Workplace First Aid/CPR Training Certification

Career and Advancement Opportunities

Students are prepared for entry-level jobs in the environmental protection field and in industry as environmental health and safety technicians. Coursework also provides skills for upgrade/ advancement for individuals currently employed with industry. Department of Labor projections indicate job opportunities for technicians will continue to grow.

The AAS degree prepares students for jobs as entry-level environmental technicians for government departments or in private industry. The AAS degree is also transferable to certain 4-year degree programs.

Special Requirements

Students will be required to obtain medical clearance for the use of respiratory protection equipment and will be responsible for the cost of Red Cross First Aid/CPR certification cards.

All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.

Students are required to purchase textbooks.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-4221, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0950 Reading & Critical Thinking	80

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ►

Associate of Applied Science Degree in Environmental Safety and Health

Skill Set in Radiation Protection Technologist

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ESH 1009 Environmental Technology I	3
ESH 1010 Environmental Regulations and Compliance	3
ENG 1101 College Writing	3
MATH 1210 Methods of Problem Solving or higher except MATH 2110 & 2096	3-4
TERM 2	
ESH 1571 Environmental Instrumentation and Analysis	3
CHEM 1410/1492 Introduction to Chemistry (Prerequisite for CHEM 2210)	4
IT 1010 Introduction to Computers	3
TERM 3	
ESH 2016, 2017, 2018 or ESH 2006 and 2009 Occupational Safety I	3
ESH 2011 Watershed Protection	3
ENG 1119 or 2219 Technical Communication	3
BIO 1410/1492 Biology for Health Sciences	4
TERM 4	
ESH 1570 Water Quality Protection	3
ESH 2407 Air Quality Protection	3
ESH 2410 Environmental Sampling and Analysis	3
CHEM 2210 Organic Chemistry and Biochemistry	4
★ COMM Elective	3
TERM 5	
ESH 1809 Workplace Adult First Aid and CPR	1
ESH 2899 Environmental Safety and Health Capstone Course	2
ESH Elective	3
★ HUMANITIES/SOCIAL & BEHAVIORAL SCIENCE ELECTIVE	3
PHYS 1010 Introduction to Physics	3

Course	Credit Hours
TOTAL CREDIT HOURS	63-64

ENVIRONMENTAL SAFETY AND HEALTH APPROVED ELECTIVES

ESH 2002 Food Resources and The Environment	3
ESH 2008 Basic Site Remediation Technology	3
ESH 2408 Introduction to Safety Management	3
ESH 2409 Water/Wastewater Math	3
ESH 2414 Radiation Protection I	4
ESH 2415 Radiation Protection II	4

APPROVED ELECTIVES

- Any ESH Course
- Any CJ Course
- Any FS Course
- Any LAND Course
- ★ ANY BIOLOGICAL/PHYSICAL SCIENCE COURSE
- ★ ANY FOREIGN LANGUAGE COURSE
- ★ ANY HUMANITIES COURSE
- ★ ANY SOCIAL/BEHAVIORAL SCIENCE COURSE

Skill Set Required Courses:

RADIATION PROTECTION TECHNOLOGIST SKILL SET

ESH 1809 Workplace Adult First Aid and CPR	1
ESH 1811 Workplace Adult First Aid and CPR & Waste Site Refresher/DOT Chem	1
ESH 2016 Occupational Safety 1	1
ESH 2414 Radiation Protection I	4
ESH 2415 Radiation Protection II	4

Note: ESH Courses previously offered with an EPT prefix

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• *Certificate in Film Crew Technician*

Program Description

The Film Crew Technician Program certificate is designed as a two-term 24-credit cohort program. The first course will give the student an overview of the movie industry while affording an opportunity for hands-on experience via the production of various projects. During the second term the student will develop a specialization in one of the “below the line” craft areas. Topics covered will include: film production and procedures, film crew organization and job descriptions, film production safety issues, scripts and script breakdown, pre-production, production shooting, post-production/editing, art crafts, grip/electric crafts, camera, sound, makeup/hair/wardrobe and production office.

Career and Advancement Opportunities

Graduates are prepared for entry-level film crew positions. CNM’s Film Crew Technician Program is a component of the New Mexico Film Office’s Workforce Training Program.

Special Requirements

The nature of film work requires participants to stand for long durations and tolerate inclement weather conditions. Students will be required to commit extensive day, night and weekend hours while participating in class projects.

CONTACT INFORMATION

Program information is available from the program director or associate dean at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of.....	81
RDG 0950 Reading Improvement.....	80



Certificate in Film Crew Technician

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ FILM1010 Film Technician Training I	12
TERM 2	
_____ FILM1020 Film Technician Training II	12
Or	
_____ Elective Approved (elective from list below)	12
TOTAL CREDIT HOURS	24

APPROVED ELECTIVES

_____ CSE 1120 Career Exploration or higher	1-3
_____ FILM 2095 Cooperative Education	1-12
_____ FILM 2096 Special Topics	1-12
_____ FILM 2097 Independent Study	1-12
_____ FILM 2098 Internship	1-12

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Associate of Applied Science Degree in Financial Services*
- *Certificate in Financial Services*
- *Skill Set in General Business (see Business Administration)*

Program Description

The Financial Services program provides graduates with an introductory knowledge in the fields of banking, finance, insurance and risk management. Coursework provides a general background in business with a financial emphasis. This program is designed to allow students to obtain entry-level positions prior to continuing their education (completion of a bachelor's degree available from 4-year institutions) for careers in the above-mentioned fields.

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts and sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

Career and Advancement Opportunities

Financial Services is an associate of applied science degree program preparing students for entry-level positions in banking, finance, insurance and risk management.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking	80

Associate of Applied Science Degree in Financial Services / Certificate in Financial Services

Skill Set in General Business (see Business Administration)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

**STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.**

Course	Credit Hours
TERM 1	
ACCT 1109 Business Math	3
ACCT 1111 Accounting 1A	3
BA 1131 Business Interpersonal Skills	3
FIN 1100 Principles of Banking	3
IT 1010 Introduction to Computers	3
TERM 2	
ACCT 1112 Accounting 1B	3
BA 1101 Introduction to Business	3
BA 1121 Business English	3
FIN 1310 Fundamentals of Risk Management and Insurance	3
ENG 1101 College Writing	3
TERM 3	
ACCT 1210 Accounting II	3
BA 2222 Principles of Marketing	3
BA 2240 Business Law	3
★COMM Elective	3
FIN 2210 Finance	3
Financial Services Certificate	45
TERM 4	
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 and 2096) (MATH 1315 is recommended for transfer students.)	3 or 4
ECON 2000 Macroeconomics	3
Or	
ECON 2001 Microeconomics	3
SOCIAL/BEHAVIORAL SCIENCE Elective	3

Course	Credit Hours
PHIL 2245 Business Ethics	3
Or	
BA 2281 Business Ethics	3
Approved Financial Services Elective	3
BA 2999 Capstone Course	1
TOTAL CREDIT HOURS	61-62

APPROVED FINANCIAL SERVICES ELECTIVES

ACCT 1120 Payroll Accounting or higher (not used elsewhere)	1-3
BA 2230 Customer Relations	3
BA 2270 Real Estate Law	3
BA 2271 Real Estate Principles and Practice	3
BA 2272 Real Estate Appraisal	3
BA 2273 Real Estate Finance	3
BA 2275 Broker Basics	3
ECON 2000 Macroeconomics	3
Or (whichever not taken previously)	
ECON 2001 Microeconomics	3
IB 2210 Alternative Sources of Financing	1
IB 2211 Financing an Import/Export Business	1
FIN Courses	1-3
CSE 1120 Career Exploration or higher	1-3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Associate of Arts Degree in Fine Arts*
- *Concentrations in Art History and Art Studio*

Program description

The associate of arts degree in Fine Arts provides experience and training in the areas of Art Studio and Art History and for transfer purposes, covers the curriculum of the first two years of a baccalaureate in art study. It also serves as an end itself. The degree includes a general education curriculum of 35 credit hours, which is accepted by New Mexico's colleges and universities as part of the general education core for degree completion. The program includes both classroom and studio instruction. Students wishing to concentrate their studies on the applied aspects of art should take classes in the sequence suggested by the checklist. Those wishing to concentrate on the history of art should take classes in the sequence suggested by the Art History checklist.

Career and Advancement Opportunities

The course work in this degree will transfer to other institutions of higher learning.

CONTACT INFORMATION

For further information, contact the division of Communication, Humanities & Social Sciences (505) 224-3588 or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
RDG 0950 Reading & Critical Thinking	80
MATH 1210 OR 1310 or College Level Math score of	60
ENG 0950 Essay Writing	85

Associate of Arts Degree in Fine Arts / Concentration in Art History

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ARTS 1106 Drawing I	3
ARTH 2201 History of Art I	3
MATH 1315 OR ABOVE (RECOMMENDED MATH 1320 OR 1340)	3
★FOREIGN LANGUAGE	3-4
BIOLOGICAL/PHYSICAL SCIENCE (SEE LIST)	4
TERM 2	
ARTS 1121 Two-Dimensional Design	3
ARTH 2202 History of Art II	3
ENG 1101 College Writing	3
COMM 1130 Public Speaking	3
★FOREIGN LANGUAGE	3-4
ART STUDIO Elective (EXCEPT 1106 & 1121)	4
TERM 3	
ARTH 2250 Modern Art	3
ENG 1102 Analytic and Argumentative Writing	3
SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
HUMANITIES/FINE ARTS (SEE LIST)	3
HUMANITIES/FINE ARTS (SEE LIST)	3
TERM 4	
ARTH 2251 Art of the American Southwest 3	3
ARTH 2260 Architectural History: Ancient through Modern	3
SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
HUMANITIES/FINE ARTS (SEE LIST)	3
HUMANITIES/FINE ARTS (SEE LIST)	3
TOTAL CREDIT HOURS	66

Course	Credit Hours
BIOLOGICAL/PHYSICAL SCIENCE ELECTIVES (AT LEAST ONE LAB)	
ASTR 1010, 1110, 1192	1-3
BIO 1010/1092 OR 1410/1492 OR 1310/1392 (RECOMMENDED BIO 136/139)	4
CHEM 1410/1492 OR 1510/1592 OR 1610/192	4
PHYS 1010, 1510/1592, 1610/1692	3-4
SOCIAL/BEHAVIORAL SCIENCE ELECTIVES (AT LEAST TWO FIELDS OF STUDY)	
ANTH 1101 OR 1130	3
ECON 2200, 2201	3
GEOG 1102 Human Geography	3
PSCI 1110, 2200, 2220, 2240	3
PSY 1105 Introduction to Psychology	3
SOC 1101 Introduction to Sociology	3
HUMANITIES/FINE ARTS ELECTIVES (AT LEAST TWO FIELDS OF STUDY)	
ENG (Literature)	3
HIST 1101 OR 1102	3
HUM1111 OR 1121	3
MUS 1139 OR 1140	3
PHIL 1110 OR 1156	3
THEA 1122 Introduction to Theatre	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Associate of Arts Degree in Fine Arts / Concentration in Art Studio

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ARTS 1106 Drawing I	3
ARTS 1121 Two-Dimensional Design	3
ARTH 2201 History of Art I	3
MATH 1315 OR ABOVE (RECOMMENDED MATH 1320 OR 1340)	3
★FOREIGN LANGUAGE	3-4
BIOLOGICAL/PHYSICAL SCIENCE (SEE LIST)	4
TERM 2	
ARTS 1122 Three-Dimensional Design	3
ARTH 2202 History of Art II	3
ARTS 2205 Drawing II	3
ENG 1101 College Writing	3
COMM 1130 Public Speaking	3
BIOLOGICAL/PHYSICAL SCIENCE (SEE LIST)	4
TERM 3	
ARTS 2206 Printmaking I	3
ARTH 2250 Modern Art	3
ENG 1102 Analytic and Argumentative Writing	3
SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
HUMANITIES/FINE ARTS (SEE LIST)	3
TERM 4	
ARTS 2207 Painting I	3
ARTS 2210 Art Career Concerns	3
SOCIAL/BEHAVIORAL SCIENCE Elective (SEE LIST)	3
HUMANITIES/FINE ARTS (SEE LIST)	3
HUMANITIES/FINE ARTS (SEE LIST)	3
TOTAL CREDIT HOURS	68-69

Course	Credit Hours
BIOLOGICAL/PHYSICAL SCIENCE ELECTIVES (AT LEAST ONE LAB)	
ASTR 1010, 1110, 1192	1-3
BIO 1010/1092 OR 1410/1492 OR 1310/1392 (RECOMMENDED BIO 136/139I)	4
CHEM 1410/1492 OR 1510/1592 OR 1610/192	4
PHYS 1010, 1510/1592, 1610/1692	3-4
SOCIAL/BEHAVIORAL SCIENCE ELECTIVES (AT LEAST TWO FIELDS OF STUDY)	
ANTH 1101 OR 1130	3
ECON 2200, 2201	3
GEOG 1102 Human Geography	3
PSCI 1110, 2200, 2220, 2240	3
PSY 1105 Introduction to Psychology	3
SOC 1101 Introduction to Sociology	3
HUMANITIES/FINE ARTS ELECTIVES (AT LEAST TWO FIELDS OF STUDY)	
ENG (Literature)	3
HIST 1101 OR 1102	3
HUM1111 OR 1121	3
MUS 1139 OR 1140	3
PHIL 1110 OR 1156	3
THEA 1122 Introduction to Theatre	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Associate of Applied Science Degree in Fire Science

Program Description

Students will study fundamentals of fire fighting, fire protection and emergency response. Classes include classroom study and field trips.

Career and Advancement Opportunities

The CNM Fire Science program has a 100 percent placement rate for its graduates. Upon completion of the program, students will be qualified for a variety of fire science and emergency response positions in the fields of fire protection services, industrial fire protection, hazardous materials, insurance services, fire protection services, fire prevention and wild land fire fighting. Department of Labor projections show jobs in fire fighting should remain steady as replacements are always needed.

The AAS degree in Fire Science prepares students for entry-level positions in a fire service company or department. The degree is transferable to other institutes of higher learning that train in Federal Emergency Management Agency (FEMA) standards.

Special Requirements

Students with a criminal background may have limited employment opportunities in public service. Students should contact local or regional industry for hiring and employment practices. Contact the HWPS Division Office at (505) 224-4111 for more information.

All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.

Students are required to purchase textbooks.

CONTACT INFORMATION

Program information is available from the program director, Mike Kavanaugh at (505) 224-4207, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72

Associate of Applied Science Degree in Fire Science

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
EPT 2016 Occupational Safety I	1
FITT 1792 or 1392 Physical Fitness I	1
FS 1010 Introduction to Fire Science	3
IT 1010 Introduction to Computers	3
TERM 2	
ENG 1119 or 2219 Technical Communications	3
FS 1504 Wild Land Firefighting	3
FS 1512 Building Construction	3
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 & 2096)	3-4
TERM 3	
CHEM 1410/1492 or 1510/1592 Introduction to Chemistry/Laboratory	4
COMM 1130 Public Speaking or higher	3
FS 2001 Fire Protection Systems	3
FS 2003 Hazardous Materials I	1
FS 2008 Fire Protection Hydraulics and Water Supply	3
TERM 4	
FS 2402 Managing Community Fire Protection	3
FS 2416, 2417 & 2418 Command Strategy and Tactics I	3
FS 2422 Fire Behavior and Combustion	3
SOC 1101 Introduction to Sociology	3
TERM 5	
Approved Electives (SEE LIST)	6
FS 2814 Facilities Inspection	3
FS 2999 Fire Science Capstone Course	1
SOC 2216 Ethics and Minority Groups	3
TOTAL CREDIT HOURS	62-63

Course	Credit Hours
APPROVED ELECTIVES	
Any CJ Course	
Any EMS Course	
Any EPT Course	
Any FS Course	
CSE 101 Career Exploration or higher	
★Biological/Physical Science	
★Foreign Language	
★Humanities	
★Social/Behavioral Science	

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Certificate in Fitness Technician

Program Description

Students will study exercise physiology, kinesiology, nutrition, fitness assessment, exercise prescription and the business aspects of personal fitness training. Students will also be instructed in the *Job Analysis Task List* of the National Strength and Conditioning Association Certified Personal Trainer certification exam, the *Knowledge, Skills and Abilities* of the American College of Sports Medicine Health/Fitness Instructor certification exam and the *Basic Exercise Standards & Guidelines* of the Aerobics & Fitness Association of America's Primary Certification group for fitness leaders. Courses include classroom and lab time. All 1000-level physical activity courses are offered as CR/NC only.

The program begins every fall and can be completed in two consecutive terms if attending full time. The majority of fall term classes are prerequisites for the spring term classes.

All students enrolled in any physical activity course are required to fully and accurately fill out the *PAR-Q and You* and *Preparticipation Screening Questionnaire*. Students who fail to do so will not be able to participate in the course until that time all paperwork is filled out completely and to the instructor's satisfaction. The following individuals are required to have a signed medical release in order to participate in these classes.

- 1) Females over 55 years of age
- 2) Males over 45 years of age
- 3) Any other individuals as required by the instructor.

Career and Advancement Opportunities

The CNM Fitness Technician program has a 88 percent placement rate for its graduates. The majority of jobs available are as personal fitness trainers in various health and fitness clubs. Graduates have also been employed in hospitals, physical therapy clinics and senior centers.

Special Requirements

Required information sessions are scheduled during the summer term prior to enrollment in the Fitness Technician (FITT) Certificate Program, which begins every fall term. For the dates and times of these sessions, interested students must contact the program director of the FITT program at (505) 224-4211. These sessions review the program requirements, curriculum and the profession of personal fitness training in general. Interested students must attend one session. Students will not be allowed to enroll in the program unless they attend one of these sessions.

Students interested in certain Health, Wellness & Public Safety Division programs must be

in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

The fitness program is a very intense and difficult program requiring hard work and excellent time management skills. FITT course prerequisites are strongly enforced and will not be waived. BIO 1310/1392 (Human Anatomy and Physiology for Non-Majors and laboratory) are required courses for FITT 1010: Foundations of Exercise Science and must be completed prior to enrollment in the FITT Certificate Program fall courses. Completion of BIO 1310/1392 with a grade of "C" or better is indicative of a student's commitment to put forth the hard work necessary to successfully complete the FITT program.

All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-4211, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Certificate in Fitness Technician

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
 ENG 0950 Essay Writing or.....	85
 RDG 0950 Reading & Critical Thinking	80
 MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72

REQUIRED PROGRAM COURSE

Course	Credit Hours
 BIO 1310/1392 Human Anatomy and Physiology for Non-Majors Laboratory	4

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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TERM 1

_____ FITT 1010 Foundations of Exercise Science.....	3
_____ FITT 1071 The Business of Personal Fitness Training.....	3
_____ FITT 1072 Kinesiology	3
_____ FITT Fitness Elective (1000-level course or higher).....	1

TERM 2

_____ FITT 1098 or 1095 Fitness Technician Field Experience	3
_____ FITT 1503 Sport Safety Training.....	1
_____ FITT 1570 Applied Nutrition for Sport and Exercise.....	3
_____ FITT 1572 Fitness Assessment and Exercise Prescription	3
_____ FITT 1575 Exercise Prescription for Special Populations	3
_____ FITT 2492 Group Exercise Leadership Preparation	1

TOTAL CREDIT HOURS28

Course	Credit Hours
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ADDITIONAL ELECTIVES

_____ CSE 1120 Career Exploration or higher.....	1-3
_____ FITT 1092 Cardio Kick Boxing	1
_____ FITT 1093 Weight training for Women	1
_____ FITT 1192 Body Sculpting.....	1
_____ FITT 1193 Beginning Step Aerobics	1
_____ FITT 1097 Independent Study.....	1
_____ FITT 1292 Boxing Conditioning	1
_____ FITT 1293 Fall Prevention Training for Older Adults.....	1
_____ FITT 1392 Candidate Physical Ability Test (CPAT) Preparation	1
_____ FITT 1393 Flexibility Training	1
_____ FITT 1492 Step/Circuit Combo	1
_____ FITT 1493 Fit Ball Training	1
_____ FITT 1592 Step/Kick Combo.....	1
_____ FITT 1593 Fundamentals of Fitness Yoga	1
_____ FITT 1692 Beginning Country western Dance.....	1
_____ FITT 1693 Fundamentals of Pilates-Style Mat Training	1
_____ FITT 1792 Physical Fitness I	1
_____ FITT 1793 Pilates-Style Mat Training and Fitness Yoga Combo	1
_____ FITT 1892 Fitness for Older Adults.....	1
_____ FITT 1893 Gentle Fitness Yoga.....	1
_____ FITT 1992 Circuit Training	1
_____ FITT 1993 Ultimate Frisbee.....	1
_____ FITT 2092 Physical Fitness II	1
_____ FITT 2096 Special Topics.....	1
_____ FITT 2192 Fitness for Older Adults II.....	1
_____ FITT 2292 Fitness Yoga	1
_____ FITT 2392 Pilates-Style Mat Training	1

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• **Certificate in Food Service Management**

Program Description

The Food Service Management (FSMG) certificate program is available to persons interested in the hospitality/food service field who want the skills necessary to become entry-level supervisors or who want to enhance their current knowledge, skills and abilities as managers.

Food safety, sanitation procedures, HACCP and controls are stressed. Classroom instruction includes theory in human resources, beverages and business practices.

Students may sit for course examinations prepared by the National Restaurant Association Educational Foundation (NRAEF) and by the Educational Institute of the American Hotel and Lodging Association (EI). Upon successful completion, students will be awarded ServSafe® Food Protection Manager Certification from NRAEF and Course Completion Certification from EI. This is an additional certification available from a third party.

Students enrolled in this program may not be eligible to receive financial aid or Veterans Administration benefits.

Career and Advancement Opportunities

Jobs are available in restaurants, hotels, resorts, casinos, assisted-living properties and other areas. Types of positions range from entry level to supervisory/managerial positions, including service managers and kitchen managers.

Special Requirements

Students are required to purchase new textbooks for program courses with third party exams.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
RDG 0750 Reading Improvement	69
 MATH 0750 Basic College Mathematics or Arithmetic score of	57

Certificate in Food Service Management

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

**INFORMATION ABOUT THIS CERTIFICATE AND HOW IT FITS WITHIN THE CULINARY ARTS ASSOCIATE OF APPLIED DEGREE IS AVAILABLE ON PAGE 137.
THE HOSPITALITY & TOURISM ASSOCIATE OF APPLIED SCIENCE DEGREE IS ON PAGE 187.**

**STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.**

Course	Credit Hours
TERM 1	
 CULN 1103 Food Sanitation Principles	3
 HT 1132 Hotel/Motel Human Resources Management.....	3
 HT 1164 Food and Beverage Service	3
 IT 1010 Introduction to Computers.....	3
TOTAL CREDIT HOURS	12

- **Associate of Arts Degree in General Studies for Transfer**
- **Certificate in General Education for Transfer**

Program Description

The General Studies Transfer Associate Degree provides a transfer degree that includes the general education curriculum of the first two years of baccalaureate study. The 35-credit hour General Education Certificate subset of the degree is designed to fulfill the New Mexico Department of Higher Education “Common Core” requirements. Students must meet with a CNM Academic Advisor and are encouraged to meet with an advisor at the university to which they plan to transfer. Students are encouraged to choose elective courses that will correspond with their required majors and minors at the university to which they plan to transfer. Depending on the courses selected, the program includes classroom, studio, laboratory instruction and distance learning.

Associate of Arts Degree in General Studies

- Designed for students intending to transfer to a university baccalaureate program in New Mexico.
- To be eligible for the degree, students must complete 12 credit hours of program requirements at CNM after Summer 2006.
- The General Studies degree is financial aid eligible.

Certificate in General Education

- Students are eligible to graduate with this certificate beginning Fall 2006.
- The General Studies certificate is NOT financial aid eligible.

Special Requirements

Students are advised that New Mexico State University and New Mexico Institute of Mining and Technology do not require a foreign language credit.

Students declaring this major must meet with a CNM academic advisor who can assist with selecting courses to transfer successfully to intended university majors and minors. Visit any Academic Advisement and Career Development Office, e-mail AACD@cnm.edu, or call 224-4321.

CONTACT INFORMATION

For further information about the General Studies Degree and the General Education Certificate, contact the Communication, Humanities & Social Sciences Division at (505) 224-3588 or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
RDG 0950 Reading & Critical Thinking	80
ENG 0950 Essay writing	85
MATH 1210 Methods of Problem Solving or 1310 Intermediate Algebra or College Level Math score of	60

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page...

Associate of Arts Degree in General Studies for Transfer / Certificate in General Education for Transfer

Recommended Course Sequence for full-time students (Students must see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
MATH Elective (SEE LIST)	3
HUMANITIES Elective (SEE LIST)	3
SOCIAL/BEHAVIORAL SCIENCE Electives (SEE LIST)	3
TERM 2	
ENG 1102 Analytic and Argumentative Writing	3
BIOLOGICAL/PHYSICAL SCIENCE & LAB Elective (SEE LIST)	4
HUMANITIES Electives (SEE LIST)	3
SOCIAL/BEHAVIORAL SCIENCE Electives (SEE LIST)	3
TERM 3	
COMM 1130 Public Speaking or higher	3
BIOLOGICAL/PHYSICAL SCIENCE & LAB Elective (SEE LIST)	4
FINE ARTS Elective (SEE LIST)	3
General Education Certificate	35
ARTS AND SCIENCES Elective	3
TERM 4	
★ARTS AND SCIENCES Electives	9
★ARTS AND SCIENCES Electives (Foreign language suggested. Fren/Span)	3
TERM 5	
★ARTS AND SCIENCES Electives	10-12
TOTAL CREDIT HOURS	60 HRS. MINIMUM

Course	Credit Hours
BIOLOGICAL/PHYSICAL SCIENCE ELECTIVES	
ASTR 1110/1192 Introduction to Astronomy II & Astronomy Lab	4
BIO 1010/1092 or 1410/1492	4
CHEM 1410/1492, 1510/1592, 1610/1692	4
PHYS 1510/1592, 1610/1692, 1710/1792, 1810/1892	4
FINE ARTS/FOREIGN LANGUAGE ELECTIVES	
ARTH 1101, 2201, 2202	3
MUS 1139, 1140	3
FREN/SPANISH	3-4
THEA 1122	3
HUMANITIES ELECTIVES	
ENG 1150 Study of Literature	3
HIST 1101, 1102, 1161, 1162, 2260	3
PHIL 1110 Introduction to Philosophical Thought	3
RLGN 1107 Living World Religions	3
MATH	
★MATH Elective 1315, 1320, 1330, 1415, 1460 (or higher calculus)	
SOCIAL/BEHAVIORAL SCIENCE	
ANTH 1101, 1110, 1130	3
ECON 2200, 2201	3
PSCI 1101, 2200, 2220, 2240	3
PSY 1105 Introduction to Psychology	3
SOC 1101 Introduction to Sociology	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- Associate of Applied Science Degree in Geographic Information Technology
- Certificate in Geographic Information Technology

Program Description

Students will study Geographic Information Systems (GIS) and related geospatial technologies including GPS, remote sensing, photogrammetry and land survey. Practical, lab-based applications are emphasized. Both the certificate and associate degree options are offered as stand-alone choices for the student. Additionally, completion of the introductory certificate courses can be the foundation for the more rigorous associate degree curriculum.

Career and Advancement Opportunities

GIS is becoming increasingly common in a wide range of application areas in both the commercial and government sectors. Because of this, numerous organizations have indicated that they are looking for both one-year certificate trainees in the short term and two-year associate degree employees in the long term. Graduates from the program are prepared for entry-level jobs as GIS technicians in industries such as survey, environmental, government, land management, cartography, real estate, business or others.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Applied Technologies Division at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
MATH 1310 Intermediate Algebra or College Level Math score of.....	60
RDG 0950 Reading Improvement.....	80

Course	Credit Hours
IT 1010 Introduction to Computer	3

Associate of Applied Science Degree in Geographic Information Technology / Certificate in Geographic Information Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ CAD 1001 Basics of CAD.....	1
_____  ENG 1101 College Writing	3
_____ GIS 1001 Introduction to GIS.....	3
_____  MATH 1315 College Algebra.....	3
TERM 2	
_____ CIS 1207 Programming Logic and Design.....	3
_____ GEOG 1101 Physical Geography.....	3
Or	
_____ GEOG 1102 Human Geography.....	3
_____ GIS 1005 CAD for GIS/Surveying	3
_____ MATH 1410 Trigonometry.....	3
TERM 3	
_____ CM 2205 Construction Surveying.....	3
_____  CIS 1513 Database Management (MS Access)	3
_____ GEOG 2275 Cartography.....	3
_____ GIS 1010 Remote Sensing.....	3
Geographic Information Technology	36
TERM 4	
_____ CIS 2520 Oracle: SQL and PL/SQL I.....	3
_____  CIS 1284 Visual Basic I.....	3
Or	
_____ CIS 1275 C++ Programming I.....	3
_____ GIS 2001 Geographic Information Systems Software Applications I.....	3
_____  COMM 1110 and above or ENG 1102 and above	3
_____  Approved Electives (SEE LIST).....	3

Course	Credit Hours
TERM 5	
_____ Approved Electives (SEE LIST).....	6
_____ GIS 2999 Geographic Information Systems Software Applications II.....	3
_____ GIS 2005 Introductions to 3-D Computer Visualization Techniques	3
_____ SUR 1010 Introductions to Photogrammetry.....	3
TOTAL CREDIT HOURS	66

APPROVED ELECTIVE COURSES

_____ ARDR 1230 Intermediate Computer-Assisted Drafting.....	3
_____  CIS 1710 Beginning XHTML	varies
_____  EPT 2011 Watershed Protection	3
_____ EPT 1096 Special Topics.....	1-6
_____ FS 1504 Wild Land Firefighting	3
_____ FS 1096 Special Topics	1-6
_____ GEOG 2201 World Regional Geography	3
_____ GEOG 2096 Topics in Geography	3
_____ GIS 2095-GIS 2098 Geographic Information System classes	varies
_____ MATH 1310  through MATH 2096 Math courses.....	varies
_____  PHIL 1156 Logic and Critical Thinking.....	3
_____ SUR 1015 Public Lands Survey System Boundaries.....	3
_____ SUR 1017 Traffic Control & NSPS Survey Technician Certification Prep.....	2
_____ CSE 1120 or higher	1

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45).

• *Certificate in Geomatics Technology*

Program Description

Geomatics refers to the gathering and interpretation of spatial data. The program combines Geographic Information Systems (GIS), GPS technology and Land Survey to develop the skills commonly used by Mapping/Surveying Technicians. The Geomatics certificate is designed as a 36-credit hour program that encompasses the core of the National Society of Professional Surveyors' technician certification.

Career and Advancement Opportunities

Graduates are prepared for entry-level positions Surveying Technicians in the private and public sector.

CONTACT INFORMATION

Program information is available from the program director or associate dean at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
 ENG 0950 Essay Writing.....	85
 MATH 1310 Intermediate Algebra or College Level Math score of.....	60
 RDG 0950 Reading Improvement.....	80
Course	Credit Hours
 IT 1010 Introduction to Computer	3

Certificate in Geomatics Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
GIS 1001 Introduction to GIS	3
MATH 1315 College Algebra	3
CAD 1001 Basics of CAD	1
TERM 2	
MATH 1410 Trigonometry	3
GIS 1005 CAD for GIS/Surveying	3
GIS 1010 Remote Sensing	3
CM 2205 Construction Surveying	3
TERM 3	
Approved Elective (SEE LIST)	3-5
SUR 1010 Introductions to Photogrammetry	3
SUR 1015 Public Lands Survey System Boundaries	3
SUR 1017 Traffic Control & NSPS Survey Technician Certification Prep	2
TOTAL CREDIT HOURS	32

Course	Credit Hours
TECHNICAL ELECTIVE COURSES	
ARDR 1230 Intermediate Computer Assisted Drafting	3
ARDR 2096 Special Topics	1-7
CM 1105 Construction Detailing	3
GEOG 1101 Physical Geography	3
GEOG 2275 Cartography	3
GIS 2096 Topics	1-6
GIS 2097 Independent Study	1-6
GIS 2098 Internship	3
GIS 2095 Cooperative Education	3
MATH 1310 Intermediate Algebra	4

• Associate of Applied Science Degree in Health Information Technology

Program Description

The Health Information Technology (HIT) associate of applied science degree program provides students the opportunity to gain the knowledge and technical skills necessary for managing health information within the health care delivery system. Students will study: anatomy and physiology; medical terminology; diseases; pharmacology and laboratory procedures; the scope of the health information management system; the origin, use, content and format of health records and release of information; ICD-9-CM and CPT coding; health care reimbursement; legal/ethical aspects; data analysis, quality and supervision in health information.

The HIT program is an associate of applied science degree and is designed for the working student. The majority of students are part time and carry 6–7 credit hours per term while continuing to work full time. The HIT program courses are offered in the evening and on weekends. Some HIT courses may be offered every other term. The program accepts new students every fall.

The HIT program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). For further information on accreditation, contact CAHIIM at 233 N. Michigan Ave., Suite 2150, Chicago, IL 60601-5519, (312) 233-1100. Upon graduation students are eligible to take the national certification exam. Successful candidates earn the professional credential of Registered Health Information Technician (RHIT).

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts and sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

Students can complete several courses in the Health Information Technology Program through Distance Learning.

Career and Advancement Opportunities

The health information field has opportunities in hospital medical records/health information departments, clinics, physician offices, long-term care facilities, ambulatory care facilities,

managed care organizations, insurance agencies, state health departments, the federal government, entrepreneurship and private industry. Additional career information is available from the American Health Information Management Association at www.ahima.org.

Special Requirements

Students are encouraged to enroll in arts and sciences courses prior to admission to the program. Two unpaid clinical experiences must be completed during the program. Volunteer hours are recommended in addition to Professional Practice Experiences I and II. BIO 1310/1392 must be no more than 10 years old at the time of admission into the program.

The specific requirements that must be met before entering the HIT program include:

- Official transcripts must be on file in the CNM Records Office. High school diploma or GED score is required. College transcripts that are to be evaluated for transfer credit should be requested as soon as possible.
- Completion of program prerequisite courses.
- Completion of HIT 1010 (previously HIT 101) – Introduction to Health Information Technology.
- Completion of HIT 1030 (previously HIT 120) – Health, Data, Content and Structure.
- An information interview with the HIT program director.

CONTACT INFORMATION

Information about this program is available from the HIT program director at (505) 224-3905 or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking.....	80

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ▶

Associate of Applied Science Degree in Health Information Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BIO 1310 Human Anatomy and Physiology for Non-Majors	3
BIO 1392 Human Anatomy and Physiology for Non-Majors Laboratory	1
ENG 1101 College Writing	3
HIT 1010 Introduction to Health Information Technology	1
HIT 1020 Medical Terminology and Anatomy	3
IT 1010 Introduction to Computers	3
TERM 2	
CIS 1170 Excel Fundamentals	1
CIS 1171 Intermediate Excel	1
CIS 1180 Access Fundamentals	1
CIS 1181 Intermediate Access	1
HIT 1030 Health Data Content and Structure	4
HIT 1040 Principles of Diseases I	3
HIT 1050 Pharmacology and Laboratory Procedures	2
TERM 3	
HIT 1060 Health Information Management Systems	3
HIT 1070 Legal/Ethical Aspects of Health Information	3
HIT 1090 Professional Practice Experience I	1
HIT 2010 Classification of Diseases (ICD-CM)	3
MATH 1210 or higher (except MATH 2110 and 2096)	3 or 4
TERM 4	
ENG 1119 Technical Communications	3
HIT 2020 Classification of Diseases II	3
HIT 2040 Health Information Data Analysis	3
HIT 2050 Health Information Supervision	3

Course	Credit Hours
TERM 5	
HIT 2030 CPT Coding	3
HIT 2060 Reimbursement Methodologies	2
HIT 2290 Professional Practice Experience II	2
HIT 2999 Health Information Technology Seminar	1
or	
HIT 2097 Independent Study	1
COMM 1130 Public Speaking	3
or	
COMM 2221 Interpersonal Communication Studies	3
★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE Elective	3
TOTAL CREDIT HOURS	66-67

See page 289 to find information on course categories marked with a star (★).

– Course available through Distance Learning (see page 45.)

• Certificate in Health Unit Coordinator

Program Description

The Health Unit Coordinator Certificate program prepares persons to perform secretarial and management skills in the hospital, long-term care facilities or out-patient clinics. Transcribing doctors' written orders, typing, ordering supplies, answering the telephone, working with computers and communicating with patients, visitors and staff are typical activities.

The 13-week program has eight weeks of classroom theory and five weeks of clinical practice in local hospitals.

Career and Advancement Opportunities

Job placement after graduation is 100 percent in various locations such as hospitals and physicians offices.

Special Requirements

There is a program fee that covers the cost of a uniform top, hospital parking permits, nametag, criminal background check, drug screening and health tests. Neutral-colored slacks or skirts are required for clinicals but are not covered by the fee. The program fee is published in the **Schedule of Classes**. Students enrolled in this program may not be eligible to receive financial aid or Veterans Administration benefits.

All students will be required to have proof of CPR, a PPD and current immunizations (including MMR, Varicella and DTP) prior to clinicals.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform

program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Information is available from the program director at (505) 224-5069 or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Certificate in Health Unit Coordinator

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
High School diploma or equivalent	
 MATH 0750 Basic College Mathematics or Arithmetic score of	57
 ENG 0750 Practical Writing	69
RDG 0750 Reading Improvement	69

Course	Credit Hours
HLTH 1001 Clinical Preparation	1
IT 0850 Basic Keyboarding/Computer Skills (or program director approval)	3

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
HUC 1010 Health Unit Coordinator Theory and Lab	8
HUC 1090 Health Unit Coordinator Clinical Practice	3
TOTAL CREDIT HOURS	11

- **Associate of Applied Science Degree in Hospitality and Tourism (Concentrations in: Food and Beverage Management and Hospitality Operations and Services)**
- **Certificate in Hospitality and Tourism (Concentrations in: Food and Beverage Management and Hospitality Operations and Services)**
- **Skill Sets in Club Management, Food and Beverage, Human Resources, Marketing and Sales and Rooms Division**

Program Description

The Hospitality and Tourism program combines general business knowledge with practical hospitality and tourism skills necessary for a variety of employment opportunities. The goal is to prepare each student for the continually changing hospitality and tourism industry. The graduates are in a position to provide employers with specialized knowledge and skills related to hospitality and tourism and to engage immediately in the day-to-day activities of a hospitality and tourism business.

The program provides a foundation in supervision, human resources, marketing, food and beverage, basic accounting, basic computer skills and general tourism knowledge. Cooperative education or internship is required with the supervision of the instructor.

Students may sit for course examinations prepared by the Educational Institute of the American Hotel and Lodging Association (EI). Upon successful completion of the exams, students will be awarded a Course Completion Certification from EI.

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts and sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information. Courses may also transfer to New Mexico State University for credit toward a bachelor of science degree in Hotel, Restaurant and Tourism Management.

Career and Advancement Opportunities

Jobs are available in restaurants, hotels, resorts, casinos and other areas. Types of positions range from entry-level to supervisory and managerial positions, including hotel, food and beverage, casino and resort operations.

Special Requirements

Students are required to purchase new textbooks for program courses with EI exams. The Hospitality and Tourism program requires several courses needed for an EI Certificate of Specialization. These curriculum options are developed by industry leaders and link students with the global hospitality industry. This is an additional credentialing process. For those students interested in receiving the EI certificates, see the culinary arts/hospitality and tourism director.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0750 Practical Writing.....	69
ENG 0950 Essay Writing (for ENG 1101).....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0750 Reading Improvement.....	69
RDG 0950 Reading & Critical Thinking (for ENG 1101).....	80

Associate of Applied Science Degree in Hospitality and Tourism (Concentrations in Food and Beverage Management and Hospitality Operations and Services) / Certificate in Hospitality and Tourism (Concentrations in Food and Beverage Management and Hospitality Operations and Services)

Skill Sets in Club Management, Food and Beverage, Human Resources, Marketing and Sales and Rooms Division

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1121 Business English.....	3
BA 1131 Business Interpersonal Skills.....	3
HT 1101 Introduction to Hospitality and Tourism Today.....	3
Or	
HT 1102 Lodging and Food Service Industry.....	3
IT 1010 Introduction to Computers.....	3
TERM 2	
ACCT 1111 Accounting 1A.....	3
Or	
OTEC 1112 Office Accounting Procedures.....	3
BA 2232 Supervision.....	3
HT 1132 Hotel/Motel Human Resources Management.....	3
ENG 1101 College Writing.....	3
PHIL 2245 Business Ethics (required for degree only).....	3
TERM 3	
HT 1161 Hotel/Motel Food and Beverage Management.....	3
HT 2141 Marketing of Hospitality Services.....	3
HT 2098 Internship.....	4
Or	
HT 2095 Cooperative Education.....	4
★COMM Elective (required for degree only).....	3

Course	Credit Hours
TERM 4	
<i>Choose one block of concentration courses for the certificate</i>	
Food and Beverage Management Concentration (12 credit hours)	
CULN 1103 Food Sanitation Principles.....	3
HT 1164 Food and Beverage Service.....	3
HT 2210 Food and Beverage Controls.....	3
HT 2215 Hospitality Purchasing Management.....	3
Hospitality Operations and Services Concentration (12 credit hours)	
HT 1106 Front Office Procedures.....	3
Or	
HT 1146 Convention Management and Service.....	3
HT 1128 Hotel/Motel Housekeeping Management.....	3
Or	
HT 1131 Club Management.....	3
HT 2215 Hospitality Purchasing Management.....	3
Or	
BA 2226 Sales.....	3
HT 2205 Hospitality Industry Computer Systems.....	3
Or	
HT 2232 Event Planning.....	3
Hospitality & Tourism Certificate.....	46
TERM 5	
Approved elective (SEE LIST).....	3
HT 2221 Hospitality Law.....	3
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 & 2096).....	3 or 4
★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE Elective.....	3
BA 2999 Capstone Course (should be taken in students' last term).....	1
TOTAL CREDIT HOURS.....	65-66

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Course	Credit Hours
APPROVED ELECTIVES	
ACCT 1112 Accounting IB.....	3
BA 1101 Introduction to Business.....	3
BA 1133 Principles of Management.....	3
BA 2234 Organizational Behavior or higher	3
CIS courses	variable
CSE 1120 Career Exploration or higher.....	1-3
CULN 1103 Food Sanitation Principles	3
ECM 2220 Web Marketing	3
ENTR 2101 Entrepreneurship IA	3
ENTR 1101 Introduction to Entrepreneurship.....	3
HT courses (except those required for certificate or degree)	variable
IB 1010 Introduction to International Business	3
OTEC 1101 Beginning Keyboarding.....	2
PL 2415 Business Organizations.....	3

SKILL SET REQUIRED COURSES:

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon completion of the coursework.

Club Management (Skill Set)

The Club Management Skill Set is a specific sequence of courses for individuals who desire the knowledge and skills critical to the successful operations of a club, including working effectively with boards, committees and members and achieving profit levels through effective budgeting and staffing. A certificate and an associate of applied science degree in Hospitality and Tourism are available to students who wish to further enhance their technical and supervisory job skills and abilities.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

CLUB MANAGEMENT SKILL SET

Course	Credit Hours
BA 2232 Supervision.....	3
HT 1128 Hotel/Motel Housekeeping Management.....	3
HT 1131 Club Management	3
HT 1132 Hotel/Motel Human Resources Management	3
HT 2210 Food and Beverage Controls.....	3

Food and Beverage (Skill Set)

The Food and Beverage Skill Set is a specific sequence of courses for individuals who desire the knowledge and skills that promote safe food-handling procedures, satisfy guests' demands for value and quality and use forward-thinking and cost-saving purchasing practices. A certificate and an associate of applied science degree in Hospitality and Tourism are available to students who wish to further enhance their technical and supervisory job skills and knowledge.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

– Course available through Distance Learning (see page 45.)

See page 289 to find information on course categories marked with a star (★).

FOOD AND BEVERAGE SKILL SET

Course	Credit Hours
 BA 2232 Supervision.....	3
 CULN 1103 Food Sanitation Principles	3
 HT 1164 Food and Beverage Service	3
HT 2210 Food and Beverage Controls.....	3
 HT 2215 Hospitality Purchasing Management	3

Human Resources (Skill Set)

The Human Resources Skill Set is a specific sequence of courses for individuals who desire the knowledge, skills and best practices associated with hiring, training, motivating and supervising employees. Basic legal principles governing hospitality operations and the communication skills essential for effective leadership are covered. A certificate and an associate of applied science degree in Hospitality and Tourism are available to students who wish to further enhance their technical and supervisory job skills and abilities.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

HUMAN RESOURCES SKILL SET

Course	Credit Hours
 BA 2232 Supervision.....	3
 HT 1132 Hotel/Motel Human Resources Management.....	3
HT 2221 Hospitality Law.....	3
HT 2230 Hospitality Industry Training.....	3
HT 2235 Leadership and Management in the Hospitality Industry	3

Marketing and Sales (Skill Set)

The Marketing and Sales Skill Set is a specific sequence of courses for individuals who desire the knowledge and skills associated with effective hospitality marketing, advertising and promotions. Comparison of marketing and sales materials that benefit hospitality properties and increase their market share of the conventions and meetings is covered. A certificate and an associate of applied science degree in Hospitality and Tourism are available to students who wish to further enhance their technical and supervisory job skills and knowledge.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

MARKETING AND SALES SKILL SET

Course	Credit Hours
 BA 2226 Sales	3
 BA 2232 Supervision.....	3
HT 1101 Introduction to Hospitality and Tourism Today.....	3
Or	
 HT 1102 Lodging and Food Service Industry	3
HT 1146 Convention Management and Service.....	3
 HT 2141 Marketing of Hospitality Services.....	3

Rooms Division (Skill Set)

The Rooms Division Skill Set is a specific sequence of courses for individuals who desire the knowledge and skills essential in the hospitality environment including guest safety and expectations, front-office profitability and the supervision of day-to-day procedures. A certificate and an associate of applied science degree in Hospitality and Tourism are available to students who wish to further enhance their technical and supervisory job skills and abilities. Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

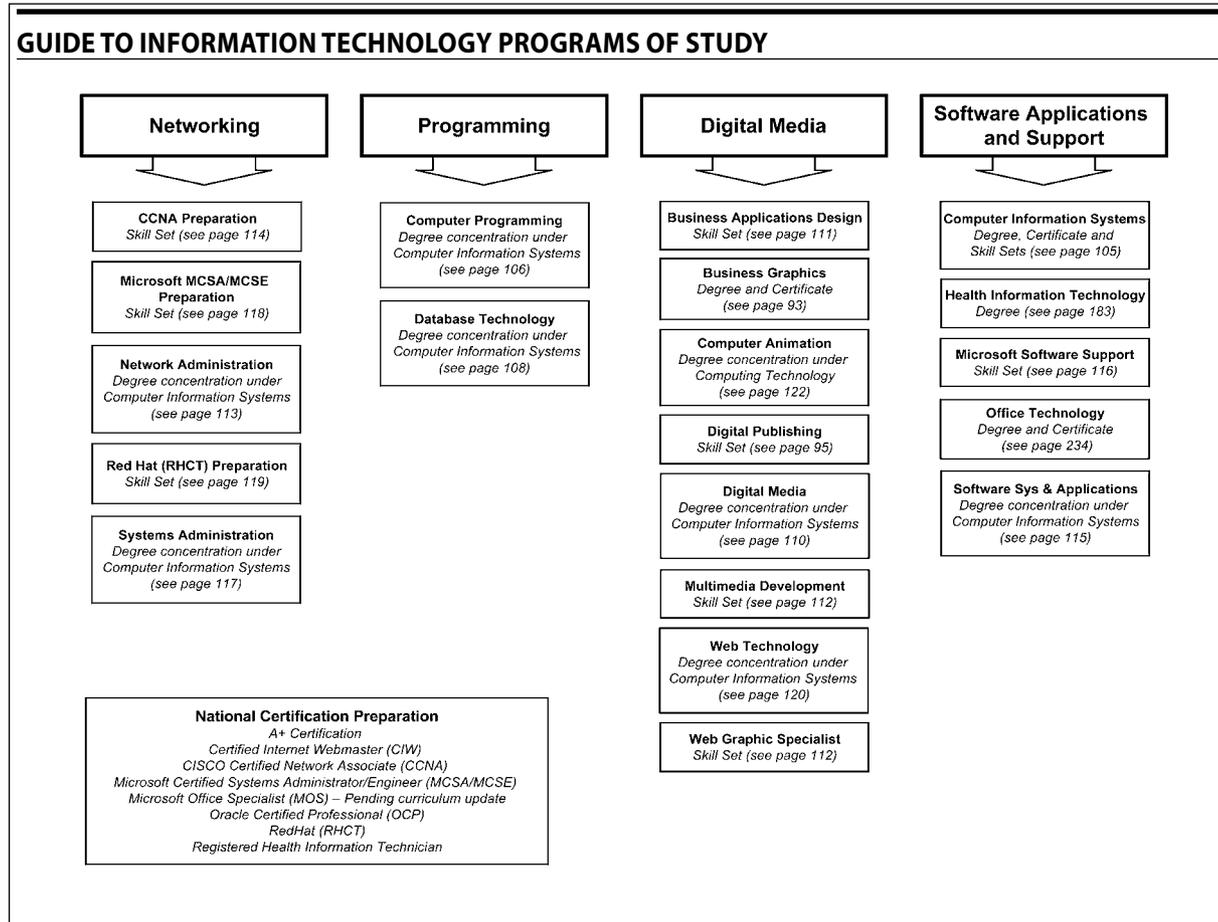
Information about these courses is available from the program director at (505) 224-3896, or from Academic Advisement and Career Development at (505) 224-4321.

ROOMS DIVISION SKILL SET

Course	Credit Hours
 BA 2232 Supervision.....	3
HT 1106 Front Office Procedures	3
HT 1128 Hotel/Motel Housekeeping Management.....	3
HT 2205 Hospitality Industry Computer Systems	3
HT 2221 Hospitality Law.....	3

CNM has organized information technology programs into the Information Technology (IT) Academy. The IT Academy offers students four pathways: networking, programming, digital media and software applications and support. These pathways cross-cut skills found in related IT occupations, aligning core knowledge and skills with industry standards and expectations.

The chart below cross-references existing programs of study with appropriate pathways. (Page numbers for more information on each program of study are listed.)



• Associate of Applied Science Degree in Integrated Studies

Program Description

The associate of applied science in Integrated Studies provides a degree designed for students who want to package a variety of job-related skills in order to achieve advancement and/or marketability in the workplace. This degree is not intended for transfer. Students with multiple credit hours may benefit from this degree path. **This program cannot be a students' second or subsequent degree.**

The program includes classroom, studio, laboratory instruction and distance learning.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
 RDG 0950 Reading & Critical Thinking	80
 ENG 0950 Essay Writing	85
 MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72

Associate of Applied Science Degree in Integrated Studies

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
IT 1010 Introduction to Computers.....	3
MATH 1210 Methods of Problem Solving	4
Or	
BIOLOGICAL/PHYSICAL SCIENCE Elective (SEE LIST)	3
★COMMUNICATION, ENGLISH, OR JOURNALISM COURSE.....	3
SOCIAL/BEHAVIORAL SCIENCE, FINE ARTS, OR HUMANITIES Elective (SEE LIST)	3
TERM 2	
CHOOSE ONE COURSE FROM HUMANITIES, BIOLOGICAL/PHYSICAL SCIENCE, FINE ARTS, Or SOCIAL/BEHAVIORAL SCIENCE, COMMUNICATION, ENGLISH OR JOURNALISM (SEE LIST)	3-4
**UNSPECIFIED Electives.....	6
ENG 1101 College Writing	3
TERM 3	
**UNSPECIFIED Electives.....	12
TERM 4	
**UNSPECIFIED Electives.....	12
TERM 5	
**UNSPECIFIED Electives.....	12

This associate of applied science degree is not intended for transfer to four-year institutions. See Academic Advisement and Career Development for information on transfer degrees. Program information is available from the Business & Information Technology Office at (505) 224-3811.

****Unspecified Electives: Any course numbered 1000 or above.**

Course	Credit Hours
HUMANITIES ELECTIVES	
★CST, ENG (literature), GNHN, HUM, HIST, PHIL, RLG	
BIOLOGICAL/PHYSICAL SCIENCE ELECTIVES	
★ASTR, BIO, CHEM, PHYS	
FINE ARTS ELECTIVES	
★ART, MUS, THEA	
SOCIAL/BEHAVIORAL SCIENCE ELECTIVES	
★ANTH, ECON, GNHN, GEOG, PSCI, PSY, SOC	
TOTAL CREDIT HOURS	60-62

See page 289 to find information on course categories marked with a star (★).

– Course available through Distance Learning (see page 45.)

• **Certificate in International Business**

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS. SEE THE INTERNATIONAL BUSINESS CONCENTRATION UNDER THE BUSINESS ADMINISTRATION PROGRAM.)

Program Description

The International Business (IB) certificate program focuses on business in today's global environment. Fundamental concepts and procedures to assess global market opportunities, to analyze international finance opportunities and to understand the challenges of managing cultural differences are emphasized. The program provides a foundation in the analytical, interpersonal and technology skills necessary to be effective in today's multinational organizations, government agencies or entrepreneurial small businesses.

The International Business Institute (IBI) is intended to meet the needs for expanding the capacity of international business in New Mexico. CNM, the Albuquerque Hispano Chamber of Commerce, the Mexican Consul and the CNM International Business Advisory Committee have partnered to form the IBI.

Note: A concentration in IB is offered in Business Administration for those interested in an associate of applied science degree.

Career and Advancement Opportunities

The international business field has opportunities for employment as international account representatives, U.S. customs agents, commercial trade officers, trade finance officers and general trade specialists in domestic, multinational and government organizations. Entrepreneurial opportunities exist in export/import manufacturing, export/import wholesaling and export/import retailing and service businesses.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0750 Practical Writing.....	69
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0750 Reading Improvement.....	69

Certificate in International Business

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS. SEE THE INTERNATIONAL BUSINESS CONCENTRATION UNDER THE BUSINESS ADMINISTRATION PROGRAM.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ACCT 1111 Accounting IA.....	3
BA 1121 Business English.....	3
IB 1010 Introduction to International Business.....	3
IT 1010 Introduction to Computers.....	3
TERM 2	
IB 2101 International Marketing.....	3
IB 2102 International Management.....	3
IB 2210 Alternative Sources of Financing.....	1
IB 2211 Financing and Import/Export Business.....	1
BA 1131 Business Interpersonal Skills.....	3
ECM 1010 Introduction to Internet Commerce.....	1
TERM 3	
ENTR 2104 Entrepreneurship in a Global Setting.....	3
Or	
ECM 1105 Web Business.....	3
IB 2215 Basics of Importing.....	1
IB 2216 Basics of Exporting.....	1
CIS 2135 Microsoft Expression.....	3
Or	
CIS 2340 Dreamweaver.....	2
Approved electives (SEE LIST).....	2-4
TOTAL CREDIT HOURS	33-36

Course	Credit Hours
INTERNATIONAL BUSINESS APPROVED ELECTIVES	
BA 1122 Business Writing.....	3
BA 2098 Internship.....	4
BA 2095 Cooperative Education.....	4
CIS 1130 Windows.....	1
CIS 1140 PowerPoint Fundamentals.....	1
ENG 1119 Technical Communications.....	3
Or	
ENG 2219 Technical Writing.....	3
ECM 2220 Web Marketing.....	3
★FOREIGN LANGUAGE (Spanish, French or other foreign language).....	3-4
CSE 1120 Career Exploration or higher.....	1-3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Certificate in Judicial Studies*
- *Skill Set in Judicial Studies Fundamentals*

Program Description

Students study the operations of New Mexico municipal, magistrate, metropolitan, district and appellate courts, as well as federal and tribal courts, ethics for court staff and other general coursework. The classes are taught in conjunction with the Judicial Education Center.

Students enrolled in courses for the Skill Set in Judicial Studies Fundamentals may not be eligible to receive financial aid or Veterans Administration benefits.

Career and Advancement Opportunities

The Judicial Studies certificate has been recognized by the Administrative Office of the Courts as being equal to one year of experience for job hiring or advancement purposes. Types of jobs include court clerk/judicial specialist, court administrator and other court-related positions. The Skill Set will allow the employee to show competency in core subjects.

Special Requirements

Application for a Skill Set may be made within the division upon completion of the course cluster.

Students with a criminal background may have limited employment opportunities. Students should contact appropriate agencies and employers for hiring and employment practices.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking.....	80

Certificate in Judicial Studies

Skill Set in Judicial Studies Fundamentals

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
IT 1010 Introduction to Computers	3
JUD 1110 Introduction to Judicial Studies	3
JUD 1120 Introduction to Court Operations and Ethics	2
Approved Elective (SEE LIST)	3
TERM 2	
ACCT 1109 Business Math	3
Or	
MATH 1210 Methods of Problem Solving or higher (except MATH 2096 and 2110)	3 or 4
BA 1121 Business English	3
Or	
COMM 2232 Business and Professional Communication Studies	3
JUD 2095 Cooperative Education	4
Or	
JUD 2098 Internship	4
JUD 2110 Principles of Court Management	3
Approved Elective (SEE LIST)	3
TOTAL CREDIT HOURS	30-31

Course	Credit Hours
APPROVED JUDICIAL STUDIES ELECTIVES	
ACCT 1111 Accounting 1A	3
BA courses (except BA 2226, 2270, 2271, 2272, 2273, 2274, 2275, 2278, 2280)	3
PL 2415 Business Organizations	3
CJ 1007 Criminal Procedure	3
Or	
PL 2130 Criminal Litigation	3
PL 1110 Introduction to Paralegal Studies	3
PL 1120 American Law and Ethics	3
Or	
PHIL 1102 Ethics In Society	3
Or	
PHIL 2245 Business Ethics	3
Or	
PHIL 2246 Environmental Ethics	3
Or	
PHIL 2247 Biomedical Ethics	3
Or	
PHIL 2248 Ethics of Technology	3
PL 1140 Legal Research and Writing I	3
PL 2120 Civil Litigation	3
PL 2420 Contract Law	3
PL 2455 Employment Law	3
SOC 2205 Crime, Public Policy and the Criminal Justice System	3
SOC 2212 Juvenile Delinquency	3
SOC 2215 Criminology	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Skill Set Required Courses:

JUDICIAL STUDIES FUNDAMENTALS SKILL SET

Course	Credit Hours
TERM 1	
_____  JUD 1110 Introduction to Judicial Studies	3
_____  JUD 1120 Introduction to Court Operations and Ethics	2
TERM 2	
_____ JUD 2095 Cooperative Education	4
Or	
_____ JUD 2098 Internship	4
_____  JUD 2110 Principles of Court Management.....	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Certificate in Landscaping*
- *Skill Set in Landscaping*

Program Description

Students will study landscape and irrigation design, plant and soil science, pest management and safety to prepare them for employment in the landscape construction and maintenance industry. Theory and lab classes are offered at Main Campus.

Career and Advancement Opportunities

Local job growth for skilled groundskeepers, landscape construction and maintenance specialists will increase seven to 10 percent yearly for the next three to five years due to expansion of existing businesses and their increasing need for skilled employees. Historically this program has a 100 percent placement rate.

Special Requirements

Students are required to purchase textbooks, tools and personal protection equipment.

CONTACT INFORMATION

Program information is available from the program chair at (505) 224-3796, the director at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
MATH 0550 Basic Mathematics or Arithmetic score of	31

Certificate in Landscaping

Skill Set in Landscaping

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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TERM 1

_____	LAND 1101 Plant Science.....	3
_____	LAND 1201 Soil Science.....	3
_____	LAND 1301 Landscape Irrigation Design.....	3
_____	ESH 2006 Occupational Safety for Construction I.....	1
_____	Approved Elective (SEE LIST).....	3

TERM 2

_____	LAND 1401 Integrated Pest Management.....	3
_____	LAND 1501 Landscape Design.....	3
_____	PLMB 1205 Backflow Prevention.....	2
_____	Approved Elective (SEE LIST).....	6

TOTAL CREDIT HOURS27

APPROVED ELECTIVES

_____	CARP 1005 Carpentry Blueprint Reading I.....	4
_____	CARP 1010 Introduction to Carpentry.....	1
_____	CARP 1092 Construction Lab A.....	2
_____	CARP 1320 Carpentry Fundamentals.....	3
_____	CARP 2596 Special Topics.....	1-6
_____	ESH 2009 Occupational Safety for Construction II.....	1
_____	ESH 2002 Food Resources and the Environment.....	3
_____	LAND 1192 Plant Science Lab.....	1
_____	LAND 1292 Soil Science Lab.....	1
_____	LAND 2201 Plant Selection.....	3
_____	LAND 2205 Landscape Irrigation II.....	3
_____	LAND 2210 Water Features.....	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Course	Credit Hours	
_____	LAND 1392 Landscape Irrigation Design Lab.....	1
_____	LAND 2396 Special Topics.....	3-6
_____	LAND 2997 Independent Study.....	variable
_____	LAND 2995 Cooperative Education.....	3

Skill Set Required Courses:

LANDSCAPING SKILL SET

_____	LAND 1101 Plant Science.....	3
_____	LAND 1201 Soil Science.....	3
_____	LAND 1301 Landscape Irrigation Design.....	3
_____	LAND 1401 Integrated Pest Management.....	3
_____	LAND 1501 Landscape Design.....	3

- Associate of Arts Degree Liberal Arts
- Skill Set in Pre-Professional Writing

Program Description

The AA in Liberal Arts provides, for transfer purposes, the general education curriculum of the first two years of baccalaureate study. It also serves as an end in itself. Additionally, the liberal arts curriculum supports degree program requirements in other CNM academic divisions. The degree includes a general education curriculum of 35 credit hours, which is accepted by New Mexico's colleges and universities as the general education core for degree completion. The General Honors program transfers to the University of New Mexico's General Honors program.

Depending on the courses selected, the program includes classroom, studio and laboratory instruction, with the option for some classes of distance learning. The AA in Liberal Arts is designed to accommodate diverse educational interests. See page 203 for information about the Pre-Professional Writing Skill Set.

Career and Advancement Opportunities

All Liberal Arts curriculum courses will transfer to other institutions of higher learning.

Special Requirements

Students must complete a certain number of credit hours in each discipline (see checklist chart for specific requirements). There are three specific requirements: English 1102 (prerequisite ENG 1101), one Communication course (either COMM 1130 or COMM 2221) and any Math course with a prerequisite of MATH 1210 or higher.

The term "applied arts" refers to THEA 1120, THEA 1121, THEA 1122 or any Art Studio course.

The General Honors program includes a core of two legacy courses and occasional honors topics courses. To qualify for the honors program, students must have:

- Completed nine hours of arts and sciences coursework
- Have a cumulative GPA of at least 3.2
- Have earned at least a B in English 1101

Interested students should see an advisor or counselor, or contact CHSS before registering for an honors course.

Assessment

The CHSS division wishes Liberal Arts students to have the best possible preparation for further educational studies, for expressing themselves effectively and for thinking critically. Therefore, faculty will confidentially sample students' work to assess the Liberal Arts program in the following areas:

- Oral Communication
- Critical Thinking
- Academic Inquiry
- Global Perspective
- Written Communication
- Numeracy
- Cultural Diversity

CONTACT INFORMATION

For further information about Liberal Arts programs, contact the Communication, Humanities & Social Sciences Division at (505) 224-3588, or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Skill Set Prerequisites	
ENG 0950 Essay Writing	85

Course	Accuplacer equiv.
Degree Prerequisites	
ENG 0950 Essay Writing	85
MATH 1210 OR 1310 or College Level Math score of	60
RDG 0950 Reading & Critical Thinking	80

Associate of Arts Degree Liberal Arts

Skill Set in Pre-Professional Writing

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG/COMM COURSE I (SEE LIST)	3
IT 1010 Introduction to Computers	3
SOCIAL/BEHAVIORAL SCIENCE COURSE I (SEE LIST)	3
HUMANITIES COURSE I (SEE LIST)	3
TERM 2	
ENG/COMM COURSE II (SEE LIST)	3
MATH COURSE (SEE LIST)	3-4
SOCIAL/BEHAVIORAL SCIENCE COURSE II (SEE LIST)	3
HUMANITIES COURSE II (SEE LIST)	3
FINE ARTS/LANGUAGE COURSE I (SEE LIST)	3-4
TERM 3	
ENG/COMM COURSE III (SEE LIST)	3
SOCIAL/BEHAVIORAL SCIENCE COURSE III (SEE LIST)	3
FINE ARTS/LANGUAGE COURSE II (SEE LIST)	3-4
BIOLOGICAL/PHYSICAL SCIENCE COURSE I (SEE LIST)	3-4
Elective (SEE LIST)	3-4
Elective (SEE LIST)	3-4
TERM 4	
HUMANITIES COURSE III (SEE LIST)	3
FINE ARTS/LANGUAGE COURSE III (SEE LIST)	3-4
BIOLOGICAL/PHYSICAL SCIENCE COURSE II (SEE LIST)	3-4
Elective (SEE LIST)	3-4
Elective (SEE LIST)	3-4
Elective (SEE LIST)	3-4

TOTAL CREDIT HOURS64

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
ENGLISH/COMMUNICATION (COMM, ENG, JOUR) (9 CREDITS IN AT LEAST TWO FIELDS OF STUDY)	
ENG 1102 Analytic and Argumentative Writing (REQUIRED COURSE)	3
COMM 1130 OR COMM 2221 (EITHER COURSE REQUIRED)	3
MATHEMATICS (3-4 CREDITS)	
MATH 1310 OR HIGHER (EXCEPT MATH 2110 OR 2096)	3-4
SOCIAL/BEHAVIORAL SCIENCE (9 CREDITS IN AT LEAST TWO FIELDS OF STUDY)	
★ ANTH, ECON, GEOG, GNHN, PSCI, PSY, SOC	3
HUMANITIES (9 CREDITS IN AT LEAST TWO FIELDS OF STUDY)	
★ CST, ENG (LITERATURE), GNHN, HIST, HUM, PHIL, RLG	3
FINE ARTS/LANGUAGE (9-12 CREDITS IN AT LEAST TWO FIELDS OF STUDY)	
★ ART, FREN, MUS, SPAN, THEA (ONLY 3 CREDITS IN APPLIED ARTS ALLOWED)	3
BIOLOGICAL PHYSICAL SCIENCE (7-8 CREDITS REQUIRED)	
★ ASTR, BIO, CHEM, PHYS (AT LEAST ONE LAB REQUIRED)	3-4
LIBERAL ARTS ELECTIVES (9-15 CREDITS REQUIRED)	
★ ANY LIBERAL ARTS DISCIPLINE (1 CREDIT OF PHYS ED MAY BE USED)	1-3

 – Course available through Distance Learning (see page 45.)

Skill Set Required Courses:

PRE-PROFESSIONAL WRITING SKILL SET

<i>Course</i>	<i>Credit Hours</i>
 ENG 1101 College Writing 3	3
 ENG 1102 Analytic and Argumentative Writing 3	3
 ENG 2219 Technical Writing 3	3
ENG 2220 Expository Writing 3	3
ENG 2280 Introduction to Professional Writing 3	3
ENG 2596 OR JOUR 1171 OR JOUR 2271 3	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Skill Set in Licensed Practical Nurse Refresher

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon completion of the coursework.

Description

This distance-learning/classroom course offers students updates in all major areas of nursing practice and includes 88 hours of clinical time.

Career and Advancement Opportunities

Graduates of this course have job opportunities in hospitals, nursing homes, outpatient clinics and with home health and hospice providers.

Special Requirements

A valid active or inactive Practical Nurse license is required. A physical exam, PPD, current immunizations (including MMR, DTP and Varicella) and current professional (BLS) CPR certification are required to start clinical practicum. Students will be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience.

Students are required to provide documentation from a licensed healthcare provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience.

A white uniform, shoes and a stethoscope are required for clinicals. The program fee covers the cost of supplies, criminal background check, drug screen and lab tests in the event of a needle stick or exposure to bodily fluids. There are additional fees payable to the New Mexico State Board of Nursing for licensure endorsement and reinstatement if a student's nursing license has expired. Students enrolled in this program may not be eligible to receive financial aid or Veterans Administration benefits.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students should also contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the HWPS Division Office at

(505) 224-4111 for more information.

Students interested in nursing must be in good physical and psychological health. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.

Graduation Policy

Health, Wellness & Public Safety Division students must graduate under the current catalog.

- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

For information, contact the program director, Rene Kagan at (505) 224-4112, rbarronkagan@cnm.edu, or Academic Advisement and Career Development at (505) 224-4321.

Skill Set in Licensed Practical Nurse Refresher

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
_____ Participant must have successfully completed State Board Exams (NCLEX) and have held a valid license to practice nursing.	
_____ Current CPR (BLS/for healthcare professionals)	

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Skill Set Required Courses:

LICENSED PRACTICAL NURSE REFRESHER SKILL SET

Course	Credit Hours
_____  LPNR 2010 Refresher Theory/Lab	7
_____ LPNR 2090 Refresher Clinical Experience (CR/NC)	2

TOTAL CREDIT HOURS9

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• *Certificate in Machine Tool Technology*

Program Description

Students will study hands-on Machine Tool technology, which includes blueprint reading, mathematics, metallurgy and other general course work. Classes include classroom and lab time. Upon completion of this certificate program, graduates will be eligible for entry level Basic Machinist on standard lathes and mills in a wide variety of industrial applications.

Career and Advancement Opportunities

One hundred percent of our graduating classes obtained employment in the metals technology field. Jobs are available in machine shops involved in research and development for the aerospace industry and scientific community. The certificate prepares students for career advancement and greater earning potential.

Special Requirements

Students are required to purchase textbooks, tools and personal safety equipment.

CONTACT INFORMATION

Information about this program is available from the program chair at (505)224-3738, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
 MATH 0750 Basic College Math or Arithmetic score of.....	57
RDG 0750 Reading Improvement.....	69

Certificate in Machine Tool Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ MATT 1001 Metals Math I.....	2
_____ MATT 1005 Metals Blueprint Reading I.....	2
_____ MATT 1092 Basic Lathe Principles.....	2
_____ MATT 1192 Basic Milling Machine Principles.....	2
_____ MATT 1292 Basic Supporting Machine Tool Principles	2
_____ MATT 1392 Basic Measurement and Inspection.....	2
TERM 2	
_____ MATT 1030 Metals Math II	2
_____ MATT 1035 Metals Blueprint Reading II.....	2
_____ MATT 1492 Intermediate Lathe Principles.....	2
_____ MATT 1592 Intermediate Milling Machine Principles.....	2
_____ MATT 1692 Intermediate Supporting Mach. Tool Principles.....	2
_____ MATT 1792 Computer Numerical Control I	2
TERM 3	
_____ MATT 1065 Metallurgy.....	2
_____ MATT 2092 Advanced Lathe Principles.....	2
_____ MATT 2005 Machine Tool Technology CAD.....	2
_____ MATT 2192 Advanced Milling Machine Principles.....	2
_____ MATT 2292 Advanced Supporting Machine Tool Principles	2
_____ MATT 2392 Computer Numerical Control II	2
_____ MATT 2999 Machine Tool Technology Capstone.....	1
TOTAL CREDIT HOURS	37

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Manufacturing Technology - MEMS/SMT**
- **Certificate in Manufacturing Technology – MEMS/SMT**

Program Description

The Manufacturing Technology AAS program provides students with a broad base of skills in analog and digital electronics with the focus on MEMS (Micro-Electro Mechanical Systems) and Semiconductor Manufacturing (SMT). Training is provided in the fundamental concepts of electronics and mechanical components. Circuits—which have application in micro-machines, digital equipment manufacturing, measurement and control, advanced materials science and semiconductors—are covered. The program of study uses laboratory facilities containing modern equipment for testing, troubleshooting, calibrating, analyzing and designing electronic and MEMS systems and for processing wafers in both MEMS and SMT applications. Other laboratory facilities provide the ability to analyze and test various materials and components.

Career and Advancement Opportunities

Entering the industry at the associate level, graduates will start as engineering assistants or support technicians. Typical assignments include design/production assistant, manufacturing support and mechanical/utilities technician. Manufacturing enterprises, private contracting businesses, consulting firms, government agencies and public utilities to name a few are among the companies that are the major employers of the technicians in this field.

Special Requirements

Students applying for this program should be seriously interested in the study of fundamental concepts of electronics and electromechanical systems and the design of electro-mechanical components.

CONTACT INFORMATION

Program Information is available from the program chair or Director at (505) 224-3340, or from Advisement and Counseling at (505) 224-4321 Main Campus or (505)-224-5646 Montoya Campus. Students may also visit cnm.edu and navigate to the Applied Technologies Division.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
 ENG 0950 Essay Writing.....	85
 RDG 0950 Reading Improvement.....	80
 MATH 1310 Intermediate Algebra or College Level Math score of	60

Associate of Applied Science Degree in Manufacturing Technology (MEMS/SMT Technician)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ ELEC 1001 Electronics Fundamentals A.....	4
_____ ELEC 1010 Electronics Mathematics	4
_____ ELEC 1015 Digital Circuits I.....	3
_____  ENG 1101 College Writing	3
Or	
_____  ENG 1102 Analytical and Argumentative Writing.....	3
_____ MEMS 1001 Introduction to MEMS	3
TERM 2	
_____ ELEC 1005 Electronics Fundamentals B.....	4
_____ ELEC 1020 Digital Circuits II.....	3
_____ MT 1001 Manufacturing Concepts.....	4
_____ MATH 1315 College Algebra  or higher except MATH 1320, 2110, 2096 (for degree only)	3-4
TERM 3	
_____ MEMS 2001 MEMS Manufacturing Process.....	5
_____ SMT 2001 Semiconductor Manufacturing Technology Theory	3
_____ SMT 2002 Semiconductor Manufacturing Technology Lab.....	2
_____ Manufacturing Technology Certificate	41-42
_____ CHEM 1510/1592 General Chemistry I.....	4
Or	
_____ PHYS 1510/1592 or higher	4-5
_____  ★ HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE Elective.....	3

Course	Credit Hours
TERM 4	
_____ MEMS 2005 MEMS Design I.....	3
_____ ELEC 2005 Electromechanical Devices.....	6
_____ MT 2005 Statistical Controls.....	3
_____ ENG 1119 Technical Communications	3
Or	
_____  COMM 2221  or COMM 2225 or COMM 2232 	3
TERM 5	
_____ PC 2001 Electromechanical System Troubleshooting	4
_____ MEMS 2015 MEMS Manufacturing Technology Theory.....	3
_____ MEMS 2092 MEMS Manufacturing Technology Lab	2
_____ MEMS 2010 MEMS Design II.....	3
TOTAL CREDIT HOURS	
75-76	

NOTE: The following upper level courses, MATH 1710, PHYS 1710/1792 or CHEM 1510/1592 will be necessary if your plans are for a 4 year college or work in research labs.

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Mechanical Technology (Concentrations in Air Conditioning, Heating and Refrigeration (ACHR) and Plumbing)**
- **Certificates in Air Conditioning, Heating and Refrigeration (ACHR) and Plumbing**

Program Description

The Mechanical Technology program offers courses of study concentrating in Air Conditioning, Heating and Refrigeration (ACHR) and Plumbing (PLMB). ACHR students are prepared to take EPA and ICE certification exams. Students will meet in classrooms and labs and at off-campus construction sites.

Career and Advancement Opportunities

Over 90 percent of ACHR and plumbing certificate graduates obtained jobs in 2005–06. Graduates are employed by local service and installation contractors as well as local manufacturers, hospitals and facilities. Both ACHR and plumbing students are prepared for the New Mexico State Journeymen Certificate exam.

The associate’s degree prepares students for further studies that will ultimately qualify them for faster career advancement and greater earning potential.

Special Requirements

Students are required to purchase textbooks, hand tools, personal protective equipment and pay for any certification testing fees.

CONTACT INFORMATION

Information about these programs is available from the program chair at (505) 224-3796, the director at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

ACHR Concentration

Course	Accuplacer equiv.
Certificate	
RDG 0750 Reading Improvement.....	69
Degree	
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking.....	80

Plumbing Concentration

Course	Accuplacer equiv.
Certificate	
MATH 0550 Basic Mathematics or Arithmetic score of	31
Degree	
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking	80

MECHANICAL TECHNOLOGY Degree / Certificate

(Air Conditioning, Heating and Refrigeration (ACHR) Concentration)

Applied Technologies Division

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

Associate of Applied Science Degree in Mechanical Technology (Concentration in Air Conditioning, Heating and Refrigeration (ACHR)) / Certificate in Air Conditioning, Heating and Refrigeration (ACHR)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ACHR 1105 Refrigeration Fundamentals	2
ACHR 1110 Basic Electricity.....	2
ACHR 1115 Refrigerant Management	2
ACHR 1120 Motors & Controls	2
ACHR 1125 Refrigeration Applications	2
ACHR 1130 Code & Safety Requirements I	1
ACHR 1135 Commercial Refrigeration	2
TERM 2	
ACHR 1205 Air Conditioning	2
ACHR 1210 Air Conditioning Controls	2
ACHR 1215 System Design	3
ACHR 1225 Heating Systems	2
ACHR 1230 Heating Control Systems	2
ACHR 1220 Installation & Retrofit of Heat/Cooling Systems.....	2
TERM 3	
ACHR 1305 Pumps & Valves	2
ACHR 1310 Basic Hydraulic Principles.....	2
ACHR 1315 Hot Water & Steam Generation Systems.....	2
ACHR 1320 Control I	2
ACHR 1325 Chilled Water Systems	2
ACHR 1335 Controls II	2
ACHR 1340 Code & Safety Requirements II	1
Air Conditioning, Heating & Refrigeration Certificate	39

Course	Credit Hours
TERM 4	
PLMB 1105 Plumbing & Safety Fundamentals.....	3
PLMB 1110 Blueprint Reading	2
PLMB 1120 Drain, Waste and Vent I.....	2
PLMB 1205 Backflow Prevention.....	2
PLMB 1210 Commercial Plumbing.....	2
 IT 1010 Introduction to Computers.....	3
TERM 5	
 ENG 1101 College Writing	3
 COMM 1130 or higher (Excluding COMM 2270 & 2282).....	3
MATH 1210 Methods of Problem Solving or higher 	3-4
PHYS 1010 Introduction to Physics or higher.....	3
 ★ HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE.....	3
ACHR 2999 ACHR Capstone Course	1
TOTAL CREDIT HOURS	69-70

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Associate of Applied Science Degree in Mechanical Technology (Concentration in Plumbing) / Certificate in Plumbing

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
PLMB 1105 Plumbing & Safety Fundamentals	3
PLMB 1110 Blueprint Reading	2
PLMB 1115 Introduction to Gas Fitting and Pipe Laying	2
PLMB 1120 Drain, Waste and Vent I	2
PLMB 1125 Drain, Waste and Vent II	2
PLMB 1130 Piping Systems	2
TERM 2	
PLMB 1205 Backflow Prevention	2
PLMB 1210 Commercial Plumbing	2
PLMB 1215 Plumbing Theory and Repair	2
PLMB 1220 Plumbing Code Applications	3
PLMB 1225 Building Maintenance and Repair	2
PLMB 1230 Hydronics & Plumbing Systems	2
Plumbing Certificate	26
TERM 3	
ACHR 1105 Refrigeration Fundamentals	2
ACHR 1110 Basic Electricity	2
ACHR 1115 Refrigerant Management	2

Course	Credit Hours
ACHR 1120 Motors & Controls	2
ACHR 1125 Refrigeration Applications	2
ACHR 1135 Commercial Refrigeration	2
TERM 4	
ACHR 1205 Air Conditioning	2
ACHR 1210 Air Conditioning Controls	2
ACHR 1225 Heating Systems	2
ACHR 1230 Heating Control Systems	2
WELD 1060 Welding Skills Improvement	3
PHYS 1010 Introduction to Physics or higher	3
TERM 5	
MATH 1210 Methods of Problem Solving or higher 	3-4
 ENG 1101 College Writing	3
 COMM 1130 or higher excluding COMM 2270 and 2282	3
 ★ HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE	3
 IT 1010 Introduction to Computer Applications	3
PLMB 2999 Plumbing Capstone Course	1
TOTAL CREDIT HOURS	68-69

• *Certificate in Medical Coding*

Program Description

The Medical Coding Certificate program provides students the opportunity to prepare for a future in the health care industry. Students will study anatomy and physiology, diseases, medical terminology, pharmacology and laboratory procedures, ICD-9-CM and CPT coding, reimbursement methodologies and the legal/ethical aspects of health information.

The Medical Coding program is designed for the working student. The majority of students are part time and carry 6–7 credit hours per term while continuing to work full time. The Health Information Technology (HIT) program courses are offered in the evening and on weekends. HIT courses are not offered every term. The program accepts new students every fall.

Note: An associate of applied science degree is offered in HIT. Several of the courses in the Medical Coding certificate program articulate to the HIT program.

Career and Advancement Opportunities

Individuals skilled in health information coding are employed as coders for hospitals, physicians' offices, peer review organizations, health maintenance organizations, ambulatory care facilities, skilled nursing facilities, state or federal government, entrepreneurship, national coding companies or insurance companies. Coders who obtain the certificate in Medical Coding will have the ability to sit for the Certified Coding Associate (CCA) title offered through the American Health Information Management Association (AHIMA). Additional career information is available from the American Health Information Management Association at www.ahima.org.

Special Requirements

An interview must be scheduled with the HIT program director during the student's first term. At the time of admission into the program, BIO 1310/1392 must have been taken within the last 10 years.

CONTACT INFORMATION

Information about this program is available from the HIT program director at (505) 224-3905 or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
BIO 0950 Introduction to Biology (recommended)	
 ENG 0950 Essay Writing	85
 RDG 0950 Reading & Critical Thinking	80

Certificate in Medical Coding

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
___  BIO 1310 Human Anatomy & Physiology for Non-Majors.....	3
___  BIO 1392 Human Anatomy & Physiology for Non-Majors Laboratory.....	1
___  HIT 1010 Introduction to Health Information Technology	1
___  HIT 1020 Medical Terminology and Anatomy	3
___  IT 1010 Introduction to Computers.....	3
TERM 2	
___  HIT 1030 Health Data Content and Structure.....	4
___  HIT 1040 Principles of Diseases.....	3
___ HIT 1050 Pharmacology and Laboratory Procedures	2
___ HIT 2010 Classification of Diseases I (ICD-CM)	3
TERM 3	
___  HIT 1070 Legal/Ethical Aspects of Health Information	3
___ HIT 2020 Classification of Diseases II	3
___ OTEC 1174 Computers in the Medical Office.....	1
TERM 4	
___ HIT 2030 CPT Coding	3
___  HIT 2060 Reimbursement Methodologies	2
TERM 5	
___ HIT 2070 Coding Applications	2
Or	
___ HIT 2090 Coding Professional Practice Experience I.....	2
TOTAL CREDIT HOURS	37

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Associate of Science Degree in Medical Laboratory Technician

Program Description

The Medical Laboratory Technician (MLT) associate of science degree program prepares students to perform laboratory procedures which aid the physician and pathologist in the diagnosis and treatment of disease. MLT's work in clinics, hospitals, private laboratories and physician office labs and collect blood specimens and perform test procedures in such disciplines as clinical chemistry, hematology, immunohematology, immunology, microbiology and urinalysis. The clinical practicum experience at affiliated hospitals and laboratories provides experience in performing laboratory tests under the direction of a clinical instructor.

Graduates are eligible to take both the American Society for Clinical Pathology and the National Credentialing Agency exams to obtain Certified Medical Laboratory Technician credentials. The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences: 8401 West Bryn Mawr Avenue, Suite 670; Chicago, IL 60631-3415; phone (773) 714-8880; <http://www.nacls.org>.

Program information sessions for the MLT program are scheduled regularly. Students should contact the Health, Wellness & Public Safety Division Office for dates and times. These sessions include detailed information about the petitioning and selection process, program requirements, physical demands of the job and general information about laboratory medicine as a career. For more information on these sessions, applicants may call (505) 224-4161.

Career and Advancement Opportunities

Job placement for MLT graduates is excellent due to a shortage of lab personnel. An agreement with the University of New Mexico Medical Laboratory Science (MLS) program allows for the transfer of credits earned at CNM to the UNM MLS bachelor of science degree.

Special Requirements

Prospective MLT students must submit a petition packet to the Health, Wellness & Public Safety Division Office during the summer term to be considered for the MLT classes beginning in the fall term. The packet must contain evidence of a high school diploma or equivalent, a completed CNM application declaring MLT as your major, transcripts from all postsecondary schools previously attended must have been sent to CNM's Record Office (allow three-four weeks) and a cumulative GPA of 2.0 or higher.

The arts and sciences courses are prerequisites for submitting a petition for enrollment in the advanced MLT courses in the Fall Term (MLT 1014/1190). Applicants may petition if they are currently enrolled in the remaining required arts and sciences courses in the Summer Term or have the program director's approval. Some students may be allowed to take the introductory MLT courses (MLT 1007 and 1290) along with their arts and sciences courses with the program director's approval. In the event that the number of petitioners exceeds the program capacity, completion of general college courses and grade point average will be used as selection criteria. The sequence of the MLT core courses may be modified with permission of the program director.

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions

can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

Students are responsible for meeting the eligibility requirements. Students interested in the MLT program must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Current certification in CPR, a physical exam and current vaccinations (including hepatitis A and B, MMR, DTP, PPD and Varicella) are required prior to clinical experiences. Students are responsible for providing their own disposable lab coats (see the MLT Student Handbook for specification). Some clinical sites require scrubs. There is a program fee for MLT for the purchase of a nametag, hospital parking permits, criminal background check, drug screening and lab tests in the event of a needle stick or exposure to bodily fluids. There is a program fee (MLT 2890) for an online practice exam for the national board of registry. The fees are published in the **Schedule of Classes**.

Advanced Placement: Applicants seeking advanced placement into the MLT program should contact the program director for more information.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career or technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-5021 or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Associate of Science Degree in Medical Laboratory Technician

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 1210 or 1310 Methods of Problem Solving or College Level Math score of	60
RDG 0950 Reading & Critical Thinking	80

Course	Credit Hours
MLT 1010 Introduction to Medical Laboratory Sciences	1

REQUIRED PROGRAM COURSES

Course	Credit Hours
BIO 1310 /1392 or BIO 2210/2292 and BIO 2310/2392	4-8
BIO 1410/1492 Biology for Health Sciences/Laboratory	4
BIO 2110/2192 Microbiology/Laboratory	4
ENG 1101 Essay Writing or ENG 1102	3
CHEM 1410/1492 or CHEM 1510/1592	4
CHEM 2210 (or a college-level organic chemistry or biochemistry course)	4
★ HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE	3
MATH 1330 Introduction to Probability and Statistics	3

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
MLT 1007 Clinical Success Seminar	1
MLT 1012 Clinical Urinalysis Theory	1
MLT 1014 Immunology	1
MLT 1090 Clinical Experience Urinalysis	1
MLT 1092 Clinical Experience Urinalysis Laboratory	1
MLT 1192 Clinical Immunology	1
MLT 1290 Clinical Experience Phlebotomy	3

Course	Credit Hours
TERM 2	
MLT 1510 Clinical Hematology	3
MLT 1511 Clinical Immunohematology	2
MLT 1592 Clinical Coagulation	1
MLT 1692 Clinical Hematology Laboratory	2
MLT 1792 Clinical Immunohematology Laboratory	2

TERM 3	
MLT 2010 MLT Microbiology	3
MLT 2011 Clinical Chemistry	3
MLT 2092 Clinical Chemistry Laboratory	1
MLT 2590 Clinical MLT Microbiology	3

TERM 4	
MLT 2890 Clinical Experience I	12

TOTAL CREDIT HOURS70

• **Certificate in Medical Office Assistant**

Program Description

The Medical Office Assistant program offers entry-level office-related skills for students who prefer to begin a career quickly in a medical office. Students acquire basic English, computer, word processing, telephone and interpersonal skills as well as medical terminology.

Note: The courses in this program may be applied toward an Office Technology certificate or an associate of applied science degree.

Career and Advancement Opportunities

Graduates are employed in physicians' offices and health organizations as medical office receptionists or medical office assistants. The New Mexico Department of Labor indicates that offices and clinics of medical doctors is one industry subsector with the largest projected number of jobs in Albuquerque (1998–2008).

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see **Course Descriptions** for prerequisite information.

Course	Accuplacer equiv.
ENG 0750 Practical Writing.....	69
RDG 0750 Reading Improvement.....	69

Certificate in Medical Office Assistant

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1121 Business English	3
BA 1131 Business Interpersonal Skills	3
IT 1010 Introduction to Computers	3
OTEC 1101 Beginning Keyboarding	2
OTEC 1160 Records Management	1
OTEC 1192 Keyboard Skillbuilding	2
TERM 2	
CIS 1130 Windows	1
HIT 1020 Medical Terminology and Anatomy	3
OTEC 1143 Word Processing	3
OTEC 1170 Business Telephone Techniques	1
OTEC 1171 Working with the Challenging Customer	1
OTEC 1174 Computers in the Medical Office	1
Approved Elective (see approved electives list)	3
TOTAL CREDIT HOURS	27

Course	Credit Hours
APPROVED ELECTIVES	
BA 1122 Business Writing	3
BA 2230 Customer Relations	3
CIS 1150 MS Outlook	1
CIS 1170 Excel Fundamentals	1
CIS 1180 Access Fundamentals	1
OTEC 1173 Time Management Skills	1
OTEC 1193 Intermediate Keyboard Skillbuilding	2
OTEC 2200 Advanced Word Processing	3
OTEC 2270 Medical Transcription	3
OTEC 2095 Cooperative Education	4
OTEC 2097 Independent Study	variable
OTEC 2098 Internship	4
CSE 1120 Career Exploration or higher	1-3

- Associate of Applied Science Degree in Metals Technology (Concentration in Machine Tool Technology and Welding)
- Certificates in Machine Tool Technology and Welding

Program Description

Students will study hands-on machine tool and welding technology, which includes blueprint reading, mathematics, metallurgy and other general course work. Classes include classroom and lab time. Upon completion of this program, depending on concentration, graduates will be eligible for entry level machinist or welder positions in a wide variety of industrial applications.

Career and Advancement Opportunities

One hundred percent of the 2003–04 graduating class obtained employment in the metals technology field. Jobs are available in machine shops involved in research and development for the aerospace industry and scientific community. Qualified Machine Tool Technology graduates are guaranteed interviews with Sandia National Labs with eight to 10 interns being accepted yearly. Welders work in fabrication shops, repair shops and artisan industries and are in demand in oil field work nationally as well as internationally. The associate of applied science degree prepares graduates for career advancement and earning potential.

Special Requirements

Students are required to purchase textbooks, tools and personal safety equipment.

CONTACT INFORMATION

Information about these programs is available from the program chairs at (505) 224-3726 (Welding) or (505)224-3738 (Machine Tool), or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

RECOMMENDED COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Machine Tool Technology Certificate

Course	Accuplacer equiv.
 MATH 0750 Basic College Mathematics or Arithmetic score of	57
RDG 0750 Reading Improvement.....	69

Welding Certificate

Course	Accuplacer equiv.
MATH 0550 Basic Mathematics or Arithmetic score of	31

Metals Technology Degree (Machine Tool Technology and Welding Concentrations)

Course	Accuplacer equiv.
 ENG 0950 Essay Writing	85
 MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
 RDG 0950 Reading & Critical Thinking.....	80

Course	Credit Hours
IT 1010 Introduction to Computers.....	3

Certificate in Machine Tool Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
 Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ MATT 1001 Metals Math I.....	2
_____ MATT 1005 Metals Blueprint Reading I.....	2
_____ MATT 1092 Basic Lathe Principles.....	2
_____ MATT 1192 Basic Milling Machine Principles.....	2
_____ MATT 1292 Basic Supporting Machine Tool Principles	2
_____ MATT 1392 Basic Measurement and Inspection.....	2
TERM 2	
_____ MATT 1030 Metals Math II	2
_____ MATT 1035 Metals Blueprint Reading II.....	2
_____ MATT 1492 Intermediate Lathe Principles.....	2
_____ MATT 1592 Intermediate Milling Machine Principles.....	2
_____ MATT 1692 Intermediate Supporting Mach. Tool Principles.....	2
_____ MATT 1792 Computer Numerical Control I	2
TERM 3	
_____ MATT 1065 Metallurgy.....	2
_____ MATT 2092 Advanced Lathe Principles.....	2
_____ MATT 2005 Machine Tool Technology CAD.....	2
Course	Credit Hours
_____ MATT 2192 Advanced Milling Machine Principles.....	2
_____ MATT 2292 Advanced Supporting Machine Tool Principles	2
_____ MATT 2392 Computer Numerical Control II	2
TOTAL CREDIT HOURS	36

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Associate of Applied Science Degree in Metals Technology *(Concentration in Machine Tool Technology)*

Recommended Course Sequence for full-time students *(Students should see an academic advisor to customize their educational plans.)*

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ MATT 1001 Metals Math I.....	2
_____ MATT 1005 Metals Blueprint Reading I.....	2
_____ MATT 1092 Basic Lathe Principles.....	2
_____ MATT 1192 Basic Milling Machine Principles.....	2
_____ MATT 1292 Basic Supporting Machine Tool Principles.....	2
_____ MATT 1392 Basic Measurement and Inspection.....	2
TERM 2	
_____ MATT 1030 Metals Math II.....	2
_____ MATT 1035 Metals Blueprint Reading II.....	2
_____ MATT 1492 Intermediate Lathe Principles.....	2
_____ MATT 1592 Intermediate Milling Machine Principles.....	2
_____ MATT 1692 Intermediate Supporting Mach. Tool Principles.....	2
_____ MATT 1792 Computer Numerical Control I.....	2
TERM 3	
_____ MATT 1065 Metallurgy.....	2
_____ MATT 2092 Advanced Lath Principles.....	2
_____ MATT 2005 Machine Tool Technology CAD.....	2
_____ MATT 2192 Advanced Milling Machine Principles.....	2
_____ MATT 2292 Advanced Supporting Machine Tool Principles.....	2
_____ MATT 2392 Computer Numerical Control II.....	2
_____ MATT 2999 Machine Tool Technology Capstone Course.....	1
Machine Tool Technology Certificate.....	37

Course	Credit Hours
TERM 4	
_____  ENG 1101 College Writing.....	3
Or	
_____  ENG 1102 Analytical & Argumentative Writing.....	3
_____ MATH 1210 or higher  (except for 1320, 2110 and 2096).....	3-4
_____ WELD 1060 Welding Skills.....	3
_____  ★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE.....	3
TERM 5	
_____  ★COMM Elective.....	3
_____ PHYS 1010 Introduction to Physics or higher.....	3-5
_____ WELD 1065 Advanced Welding Skills.....	3
_____ MATT 1060 Machine Tool Technology Skills.....	3
TOTAL CREDIT HOURS.....	61-64

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Certificate in Welding

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

**STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.**

<i>Course</i>	<i>Credit Hours</i>
TERM 1	
_____ WELD 1001 Welding Math I.....	2
_____ WELD 1005 Welding Blueprint Reading I.....	2
_____ WELD 1092 Oxyacetylene Welding & Cutting.....	2
_____ WELD 1192 Introduction to SMAW.....	2
_____ WELD 1020 Introduction to Metallurgy.....	2
_____ WELD 1292 Advanced SMAW.....	2
_____ WELD 1492 Introduction to GMAW & Fabrication Lab.....	2
TERM 2	
_____ WELD 1025 Welding Blueprint Reading II.....	2
_____ WELD 1030 Welding Math II.....	2
_____ WELD 1592 Introductions to GTAW & Fabrication Lab.....	2
_____ WELD 2001 Advanced Blueprint Reading.....	2
_____ WELD 2192 Pipe Layout & Welding.....	2
_____ WELD 1692 Advanced GMAW & Fabrication.....	2
_____ WELD 2292 Advanced GTAW & Fabrication.....	2
TOTAL CREDIT HOURS	29

Associate of Applied Science Degree in Metals Technology *(Concentration in Welding)*

Recommended Course Sequence for full-time students *(Students should see an academic advisor to customize their educational plans.)*

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
WELD 1001 Welding Math I.....	2
WELD 1005 Welding Blueprint Reading I.....	2
WELD 1092 Oxyacetylene Welding & Cutting.....	2
WELD 1192 Introduction to SMAW.....	2
WELD 1020 Introduction to Metallurgy.....	2
WELD 1292 Advanced SMAW.....	2
WELD 1492 Introduction to GMAW & Fabrication Lab.....	2
TERM 2	
WELD 1025 Welding Blueprint Reading II.....	2
WELD 1030 Welding Math II.....	2
WELD 1592 Introductions to GTAW & Fabrication Lab.....	2
WELD 2001 Advanced Blueprint Reading.....	2
WELD 2192 Pipe Layout & Welding.....	2
WELD 2692 Advanced GMAW & Fabrication.....	2
WELD 2292 Advanced GTAW & Fabrication.....	2
Welding Certificate	29
WELD 2999 Welding Capstone Course.....	1

Course	Credit Hours
TERM 3	
WELD 1392 Introduction to SMAW Qualifications & Fabrication.....	2
WELD 2092 Qualifications for GMAW.....	2
WELD 2492 Project & Fabrication Lab.....	2
MATT 1060 Machine Tool Technology Skills.....	3
IT 1010 Introduction to Computers.....	3
TERM 4	
WELD 2392 Qualifications for GTAW.....	2
MATT 2025 Advanced Machine Tool Technology Skills.....	3
ENG 1101 College Writing.....	3
Or	
ENG 1102 Analytical & Argumentative Writing.....	3
MATH 1210 or higher  except MATH 1320, 2110, 2096.....	3-4
TERM 5	
 ★COMM Elective.....	3
PHYS 1010 or higher.....	3-5
 ★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE.....	3
TOTAL CREDIT HOURS	61-64

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Science in Nursing (A.S.N.)**
- **Certificate in Practical Nursing (P.N.)**

Program Descriptions

Health, Wellness & Public Safety offers two nursing programs: an associate degree in nursing program, which leads to a Registered Nurse credential and a Practical Nursing program which leads to a Licensed Practical Nurse credential.

The curriculum for both programs includes classroom, laboratory and supervised clinical instruction that integrates the required arts and sciences courses with the nursing courses. Nursing courses emphasize a holistic approach to client care utilizing the concepts of communication, critical thinking/nursing process, caring and competence.

NURSING (Associate of Science in Nursing)

The associate degree in nursing (A.S.N.) program prepares nurses to provide nursing care to individuals in inpatient and outpatient health care facilities. Graduates are experiencing 100 percent placement in a wide variety of health care settings where they provide and manage client care, teach clients and promote communication while participating as members of the nursing profession.

PRACTICAL NURSING (P.N. Certificate)

The P.N. certificate program prepares practical nurses to care for patients in a variety of health care facilities under the supervision of registered nurses, physicians or dentists.

LPN MOBILITY (LPN to RN)

LPN Mobility is designed to enroll qualified licensed practical nurses into the third term of the A.S.N. program who meet the following requirements:

- Meet all enrollment criteria for the A.S.N. program including official transcripts of previous education in a vocational school or college;
- Provide proof of current licensure as an LPN and a minimum of 1,000 documented hours of work as an LPN within the past two years;
- Provide proof of completion of all required arts & science courses with a minimum grade of C . (Anatomy and physiology and microbiology courses must be taken within five years from the date of application to the nursing program.) Students must also have completed NURS 1007 and NURS 2070. Priority is given to those who have also completed NURS 2002.

Other Options: Several options are available for students who have completed nursing coursework outside of CNM.

- 1) Transfer: from an approved associate degree or baccalaureate nursing program with

equivalent courses. Nursing courses are only valid for three years from the date of the application. For specific information, students should contact the nursing programs director.

- 2) Challenge Exam for former nursing students with credits too old. Individuals interested in the challenge exam must make an appointment with the nursing programs director of the A.S.N. program.

Programs are approved by the New Mexico Board of Nursing and are accredited by the National League for Nursing Accrediting Commission (NLNAC). For further information on accreditation of either program, the NLNAC may be contacted at (800) 669-1656, extension 153 or mail to 61 Broadway-33rd Floor, New York, NY 10006.

Career Advancement Opportunities

CNM nursing programs have a 100 percent job placement rate for its graduates. Nurses can attain specialty credentials through employment and specialty course offering. CNM nursing students are encouraged to continue their education toward a bachelor of science in nursing degree in order to pursue leadership positions in nursing and in the community.

Special Program Requirements (for both the A.S.N. and P.N. programs)

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students should also contact the New Mexico Board of Nursing for licensing requirements. Contact the HWPS Division Office at (505) 224-4111 for more information.

Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Petitioning Process:

Once all criteria are fulfilled, students must petition for enrollment into the first clinical course in either nursing program.

Petitions for selection to the clinical courses are accepted early in the spring, summer and fall terms for both programs. Applicants may contact the Health, Wellness & Public Safety Division Nursing Office for the dates and times when petitions are accepted. To be eligible to petition a student must meet the following prerequisites: high school graduate or equivalent, a minimum score of 85 percent on the HWPS Basic Math test within 12 months prior to petitioning and a cumulative CNM GPA of 2.0 or higher. Anatomy, physiology and microbiology courses must be taken within five years from the date of petition to the nursing program. Note: anatomy and physiology courses have general biology (BIO 1410/1492) and chemistry (CHEM 1410/1492) prerequisites. These prerequisites may be met by a passing score on the biology placement exam. Permission to enroll is provided by the biology faculty.

Should there be more petitioners than available spaces, the date of declaration of A.D.N. or P.N. as a major will used as the final selection criterion. Should there be more than one person with the same declaration date competing for the same slot, the date of completion of all required arts & sciences courses will be used as the final selection criterion. Because of the high demand for these programs, it may take more than one year after petitioning to begin the nursing core coursework.

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

After petitioning, requirements for entering clinical courses are:

- Demonstrated competence in *Basic Patient Care Skills*. This requirement may be met by either demonstrating the skills at a *Competency Check-off Session* (a passing score is good for one year) or completing the CNM NA or NAHA courses no more than 18 months prior to beginning the nursing program. See website or attend an information session for more details.
- Completed physical examination and health forms with evidence of current immunizations (tetanus, rubella, Rubeola, hepatitis B, Varicella) and PPD before beginning clinical courses. Students are required to provide documentation from a licensed health care provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience.

- Evidence of current certification in cardiopulmonary resuscitation (CPR) for health professionals before beginning clinical courses; certification must be kept current throughout the program.

Students must arrange for their own transportation to all classes, observations and clinical experiences. There may be required evening and weekend clinical hours as well as daytime hours.

The first term has a program fee which includes the required uniforms, stethoscope, transfer belt, safety goggles, bandage scissors, name tags, criminal background checks, drug screening, lab tests in the event of a needle stick or exposure to bodily fluids, standardized testing and hospital parking permits.

Students are responsible for the expenses of the physical examination, immunizations, a watch with a second hand, pen light, uniform shoes, graduation pin, textbooks and licensing exam fees. In addition, courses have program fees for standardized testing and hospital parking permits.

Graduation Requirements

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information. In addition, competency in dosage calculations, as tested by clinical calculation exams, must be maintained for progress in either program.

CONTACT INFORMATION

Information sessions covering the petitioning process, program requirements and nursing career opportunities are scheduled monthly. Dates and times for Nursing Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division information line at (505) 224-4161.

Nursing program information is available from the administrative support specialist, Jennifer Cooke at jcooke1@cnm.edu, (505) 224-4143, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or

Associate of Science in Nursing (A.D.N.)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
High School diploma or equivalent	
ENG 0950 Essay Writing for ENG 101	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0950 Reading & Critical Thinking	80

Course	Credit Hours
BIO 1410/1492 or passing score on biology placement exam	4
CHEM 1410/1492 or CHEM 1510/1592 or passing score on biology placement exam	4

REQUIRED PROGRAM COURSES

Course	Credit Hours
BIO 2110/2192 Microbiology	4
BIO 2210/2292 Human Anatomy and Physiology I/ Laboratory	4
BIO 2310/2392 Human Anatomy and Physiology II/Laboratory	4
ENG 1101 College Writing	3
NUTR 2110 Human Nutrition	3
PHIL 2247 Biomedical Ethics	3
PSY 1105 Introduction to Psychology	3
PSY 2220 Developmental Psychology	3
★ ARTS AND SCIENCES Elective or IT 1010	3

PETITION IN JANUARY, MAY OR SEPTEMBER

Selection is based on the date of declaration of A.D.N. as a major and all the arts & sciences courses completed with grade of “C” or better. (Health, Wellness & Public Safety Basic Math Test score 85 percent or higher, CNM GPA 2.0 or higher)

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

See page 289 to find information on course categories marked with a star (★).

– Course available through Distance Learning (see page 45.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
NURS 1007 Dosage Calculations	1
NURS 1080 Introduction to Nursing	9
TERM 2	
NURS 1580 Nursing Care of the Adult Client	9
NURS 2002 Pharmacology in Nursing	3
TERM 3	
NURS 2580 Family Nursing	10
TERM 4	
NURS 2680 Complex Health Problems	9
NURS 2515 Manager of Care	1
TOTAL CREDIT HOURS	72

Certificate in Practical Nursing (P.N.)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
High School diploma or equivalent	
 ENG 0950 Essay Writing for ENG 1101	85
 MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
 RDG 0950 Reading & Critical Thinking	80

Course	Credit Hours
BIO 1410/1492 or passing score on biology placement exam	4
 CHEM 1410/1492 or CHEM 1510/1592 or passing score on biology placement exam	4

REQUIRED PROGRAM COURSES

Course	Credit Hours
BIO 2210/2292 Human Anatomy and Physiology I/Laboratory	4
BIO 2310/2392 Human Anatomy and Physiology II/Laboratory	4
 ENG 1101 College Writing	3
 NUTR 2110 Human Nutrition	3
 PSY 1105 Introduction to Psychology	3

PETITION IN JANUARY, MAY OR SEPTEMBER

Selection is based on the date of declaration of P.N. as a major and all the arts & sciences courses completed with grade of “C” or better. (Health, Wellness & Public Safety Basic Math Test score 85 percent or higher, CNM GPA 2.0 or higher)

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
NURS 1092 Supplemental Lab	1
NURS 1002 Strategies for Nursing	2
 NURS 1007 Dosage Calculations	1
NURS 1080 Introduction to Nursing	9

TERM 2

NURS 1592 Supplemental Lab	1
NURS 1580 Nursing Care of the Adult Client	9
 NURS 2002 Pharmacology in Nursing	3

TERM 3

NURS 2080 Family Nursing Across the Lifespan	7
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TOTAL CREDIT HOURS50

• Certificate in Nursing Assistant

Program Description

Students will study basic patient care skills, including classroom and lab (nine weeks) and clinical (six weeks). Graduates are eligible to take the state certification exam. This program provides training in Cardio Pulmonary Resuscitation (CPR), Blood Borne Pathogens (BBP), First Aid and the Health Insurance Portability and Accountability Act (HIPAA).

Career and Advancement Opportunities

One hundred percent of the graduates from the Nursing Assistant Program obtained jobs. Jobs are available in hospitals, outpatient clinics, nursing homes and in private homes. Students are eligible to take the state C.N.A. exam upon completion.

Special Requirements

Students are required to have a New Mexico driver's license, a physical exam, PPD and current immunizations (including hepatitis B, MMR and TD). A physical exam form will be provided the first day of class. Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. The nursing assistant program require documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students requiring New Mexico State testing information may contact Thomson Prometric at

(866) 391-1945 or www.prometric.com/nurseaide/nm.htm.

A program fee covers the cost of the required scrub top, name tag, stethoscope, lab tests in the event of a needle stick or exposure to bodily fluids, NA pin, hospital parking permits, criminal background checks, drug screening, transfer belt and health tests. The program fees are published in the **Schedule of Classes**. The student must provide a watch with a second hand, uniform slacks, shirt and shoes.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Program information is available from the nursing assistant director, Carol Ross at cross@cnm.edu, (505) 224-4121, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Certificate in Nursing Assistance

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
★ ENG 0750 Practical Writing.....	69
★ MATH 0750 Basic College Mathematics or Arithmetic score of	57
RDG 0750 Reading Improvement	69

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
NA 1010 Nursing Assistant Theory/Foundations	9 credit hours
NA 1092 Nursing Assistant Lab.....	3 credit hours
NA 1090 Nursing Assistant Clinical Experiences	3 credit hours

TOTAL CREDIT HOURS 15

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Skill Set in Nursing Home/Home Health Attendant

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills.

Description

Students will study basic patient care skills, classroom and lab (100 hours) and clinical (50 hours) sessions. Topics include basic patient care skills, geriatrics, simple anatomy and physiology, rehabilitation, residents' rights and housekeeping chores. Lab experiences focus on personal care, vital signs and mobility skills. This program provides Cardio Pulmonary Resuscitation (CPR), Blood Borne Pathogens (BBP), First Aid and the Health Insurance Portability and Accountability Act (HIPAA).

Students are eligible to take the state certification exam, CNA, at the completion of this course.

A program fee covers the cost of the required apron, nametag, criminal background check, drug screen, lab tests in the event of a needle stick or exposure to bodily fluids and transfer belt. A student must provide a watch with a second hand, uniform slacks, shirt and shoes. The program fee is published in the **Schedule of Classes**. Students are required to have a physical exam, PPD and current immunizations (tetanus, MMR and hepatitis B). A physical exam form is provided on the first day of class.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students should also contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the New Mexico Department of Health, Health Facility Licensing and Certification Bureau (505) 476-9025 for certification/recertification information. Students requiring New Mexico State test information may contact Thomson Prometric at (866) 391-1945 or www.prometric.com/nurseaide/nm/htm. Students are required to provide documentation from a licensed health care provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience.

Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health

screening from a licensed health care provider confirming the ability to safely perform program specific activities. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Special Requirements

Students are required to have a New Mexico driver's license.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Program information is available from the program director, Carol Ross, (505) 224-4121 or cross@cnm.edu, or HWPS Division office, (505) 224-4111, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Skill Set in Nursing Home/Home Health Attendant

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

NURSING HOME/HOME HEALTH ATTENDANT SKILL SET

Course	Credit Hours
TERM 1	
NAHA 1010 Nursing Home/Home Health Attendant Theory/Lab	5
NAHA 1090 Nursing Home/Home Health Attendant Clinical	1
TOTAL CREDIT HOURS	6

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• *Certificate in Office Assistant*

Program Description

The Office Assistant program offers entry-level, office-related skills for students who prefer to begin an office career quickly. Students acquire basic English, computer, word processing and interpersonal skills.

Note: The courses in this program may be applied toward an Office Technology certificate or associate of applied science degree.

Career and Advancement Opportunities

Many graduates decide to continue for their Office Technology Certificate or associate of applied science degree.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0750 Practical Writing.....	69
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0750 Reading Improvement.....	69

Certificate in Office Assistant

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
 BA 1121 Business English.....	3
 BA 1131 Business Interpersonal Skills	3
 IT 1010 Introduction to Computers.....	3
OTEC 1101 Beginning Keyboarding.....	2
 OTEC 1173 Time Management Skills	1
 OTEC 1192 Keyboard Skillbuilding.....	2
TERM 2	
 ACCT 1109 Business Math	3
 CIS 1130 Windows	1
 OTEC 1143 Word Processing.....	3
 OTEC 1160 Records Management	1
OTEC 1170 Business Telephone Techniques	1
OTEC 1171 Working with the Challenging Customer.....	1
 Approved Elective (see approved electives list)	3
TOTAL CREDIT HOURS	27

Course	Credit Hours
APPROVED ELECTIVES	
 BA 1122 Business Writing	3
 BA 2230 Customer Relations	3
 CIS 1140 PowerPoint Fundamentals.....	1
 CIS 1150 MS Outlook	1
CIS 1170 Excel Fundamentals.....	1
CIS 1171 Intermediate Excel	1
CIS 1180 Access Fundamentals.....	1
 OTEC 1193 Intermediate Keyboard Skillbuilding.....	2
OTEC 2200 Advanced Word Processing.....	3
OTEC 2095 Cooperative Education	4
OTEC 1096 and/or 2096 Topics	1-3
OTEC 2097 Independent Study	variable
OTEC 2098 Internship.....	4
CSE 1120 Career Exploration or higher.....	1-3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Office Technology (Concentrations in Legal and Office Technology)**
- **Certificate in Office Technology (Concentrations in Legal and Office Technology)**
- **Skill Sets in Records Clerk and Word Processing**

Program Description

The Office Technology program provides opportunities for individuals to develop marketable skills in the areas of office procedures, interpersonal relations, office technology, office accounting, written communication and computer applications to meet the demands and expanded responsibilities of today's administrative workforce. Individuals who have attained a Certified Professional Secretary (CPS) rating and who have successfully completed the Certified Administrative Professional (CAP) exam may receive credit hours toward the Office Technology associate of applied science degree. Students may contact the associate dean for more information about advanced placement.

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts and sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

Career and Advancement Opportunities

Graduate job placement for office technology (previously office administration) has been 88 to 100 percent since 1997. The office technology profession offers a challenging and rewarding career. The program provides graduates with the foundation to move into positions with more responsibility and higher wages. Many administrative professionals are taking over duties once held by middle managers.

Employment growth is expected in the office administration profession. According to the U.S. Department of Labor, opportunities should be best for applicants with extensive knowledge of software applications.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking	80

Associate of Applied Science Degree in Office Technology (Concentration in Legal) / Certificate in Office Technology (Concentration in Legal)

Skill Sets in Records Clerk and Word Processing

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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TERM 1

BA1121 Business English.....	3
IT1010 Introduction to Computers.....	3
IT 1020 Integrating Business and Technology.....	3
OTEC 1101 Beginning Keyboarding.....	2
OTEC 1160 Records Management	1
OTEC 1192 Keyboard Skillbuilding.....	2

TERM 2

BA 1122 Business Writing	3
OTEC 1143 Word Processing.....	3
OTEC 1193 Intermediate Keyboard Skillbuilding.....	2
PL 1110 Introduction to Paralegal Studies	3
★ARTS AND SCIENCES Elective	3

TERM 3

ACCT 1109 Business Math	3
CIS 1170 Excel Fundamentals.....	1
ENG 1101 College Writing	3
OTEC 2093 Advanced Keyboard Skillbuilding.....	2
OTEC 2200 Advanced Word Processing.....	3
PL 2233 Computer Applications in Law Practice.....	1
PL 2236 Specialized Legal Software.....	1

TERM 4

BA 1131 Business Interpersonal Skills	3
CIS 1150 MS Outlook.....	1
OTEC 2260 Business Procedures	3

Office Technology Certificate (Legal Concentration)..... 49

Course	Credit Hours
OTEC 1112 Office Accounting Procedures.....	3
OTEC 2231 Business English Applications.....	3
★COMM Elective	3

TERM 5

BA 2999 Capstone Course	1
★BIOLOGICAL/PHYSICAL SCIENCE Elective	3-4
Or	
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 & 2096)	
Approved OTEC Legal Concentration Elective (See electives list.)	3

*** TOTAL CREDIT HOURS.....65-66**

APPROVED OTEC LEGAL CONCENTRATION ELECTIVES

BA 2240 Business Law	3
CIS 1110 MS Applications and Integration.....	3
CSE 1120 Career Exploration or higher.....	variable
JUD 1110 Introduction to Judicial Studies	3
OTEC 2095 Cooperative Education	4
OTEC 1096 and/or 2096 Topics Course	1-3
OTEC 2097 Independent Study	variable
OTEC 2098 Internship.....	4
PL 1120 American Law and Ethics	3
PL 2120 Civil Litigation	3
PL 2160 Law Office Management.....	3
PL 2415 Business Organizations.....	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

OFFICE TECHNOLOGY Degree / Certificate (Concentration in Office Technology) Business & Information Technology Division

Associate of Applied Science Degree in Office Technology (Concentration in Office Technology) / Certificate in Office Technology (Concentration in Office Technology) Skill Sets in Records Clerk and Word Processing

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1121 Business English.....	3
IT 1010 Introduction to Computers.....	3
IT 1020 Integrating Business and Technology.....	3
OTEC 1101 Beginning Keyboarding.....	2
OTEC 1160 Records Management.....	1
OTEC 1192 Keyboard Skillbuilding.....	2

TERM 2	
ACCT 1109 Business Math.....	3
BA 1122 Business Writing.....	3
BA 1131 Business Interpersonal Skills.....	3
CIS 1130 Windows.....	1
OTEC 1143 Word Processing.....	3
OTEC 1193 Intermediate Keyboard Skillbuilding.....	2

TERM 3	
CIS 1170 Excel Fundamentals.....	1
CIS 1171 Intermediate Excel.....	1
CIS 1180 Access Fundamentals.....	1
ENG 1101 College Writing.....	3
OTEC 2093 Advanced Keyboard Skillbuilding.....	2
OTEC 2200 Advanced Word Processing.....	3
OTEC 2231 Business English Applications.....	3

TERM 4	
OTEC 2260 Business Procedures.....	3
★COMM Elective.....	3
Office Technology Certificate.....	49
CIS 1140 PowerPoint Fundamentals.....	1
CIS 1150 MS Outlook.....	1
OTEC 1112 Office Accounting Procedures.....	3
Approved OTEC Elective (See electives list.).....	3

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
TERM 5	
BA 2999 Capstone Course.....	1
CIS 2135 Microsoft Expression.....	3
Or	
CIS 2340 Dreamweaver.....	2
★BIOLOGICAL/PHYSICAL SCIENCE Elective or MATH 1210 Methods of Problem Solving or higher (except MATH 2110 & 2096).....	3-4
★ARTS AND SCIENCES Elective.....	3
TOTAL CREDIT HOURS.....	66-68

APPROVED OFFICE TECHNOLOGY ELECTIVES

ACCT 1411 Beginning QuickBooks.....	1
BA 2232 Supervision.....	3
BA 2240 Business Law.....	3
BA 2284 Strategic Management.....	3
CIS 1110 MS Applications and Integration.....	3
CIS 1172 Advanced Excel.....	1
CIS 1181 Intermediate Access.....	1
CIS 1182 Advanced Access.....	1
CIS 1185 Adobe Acrobat.....	1
CIS 1310 Introduction to Multimedia.....	3
CIS 1710 Beginning XHTML.....	1
CIS 1711 Intermediate XHTML.....	1
CIS 1712 Advanced XHTML.....	1
CIS 2110 Project Management Software.....	1
CIS 2310 Desktop Publishing.....	3
CIS 2340 Dreamweaver.....	2
CSE 1120 Career Exploration or higher.....	1-3
OTEC 1170 Business Telephone Techniques.....	1
OTEC 1171 Working with the Challenging Customer.....	1
OTEC 1173 Time Management Skills.....	1
OTEC 1174 Computers in the Medical Office.....	1
OTEC 2095 Cooperative Education.....	4
OTEC 1096 and/or 2096 Topics.....	1-3
OTEC 2097 Independent Study.....	variable
OTEC 2098 Internship.....	4

 – Course available through Distance Learning (see page 45.)

Skill Set Required Courses:

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon completion of the coursework.

Records Clerk (Skill Set)

The Records Clerk Skill Set is designed as an entry point for job opportunities in the records and information management field. This Skill Set was developed for the person interested in processing material in various medias for integration into manual and electronic records systems.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

RECORDS CLERK SKILL SET

Course	Credit Hours
TERM 1	
BA 1131 Business Interpersonal Skills	3
IT 1010 Introduction to Computers	3
OTEC 1101 Beginning Keyboarding	2
OTEC 1192 Keyboard Skillbuilding	2
TERM 2	
BA 1121 Business English	3
CIS 1180 Access Fundamentals	1
OTEC 1160 Records Management	1

Word Processing (Skill Set)

The Word Processing Skill Set is designed for the person interested in advanced applications for preparing business documents using Microsoft Word.

Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

WORD PROCESSING SKILL SET

Course	Credit Hours
TERM 1	
BA 1121 Business English	3
OTEC 1101 Beginning Keyboarding	2
OTEC 1192 Keyboard Skillbuilding	2
TERM 2	
OTEC 1143 Word Processing	3
OTEC 1193 Intermediate Keyboard Skillbuilding	2
TERM 3	
OTEC 2093 Advanced Keyboard Skillbuilding	2
OTEC 2200 Advanced Word Processing	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Paralegal Studies**
- **Post Degree Certificate in Paralegal Studies (Pending CNM Governing Board and American Bar Association (ABA) Approval)**

Program Description

The Paralegal Studies program prepares students for careers in the legal profession. Paralegals are skilled professionals who perform substantive legal tasks under the supervision of a licensed attorney. Paralegals may not provide legal services directly to the public except as permitted by law. Responsibilities include interviewing and assisting clients and witnesses, investigation, data analysis, drafting legal documents, research, litigation support and case management. The Paralegal Studies program is approved by the American Bar Association (ABA).

Note: The associate of applied science degree transfers at least 30 technical credits and applicable arts and sciences credits to the University of New Mexico College of Education toward the Technology and Training (2+2) program. Contact (505) 224-3811 for more information.

PL Current Goals and Objectives

The goal of the CNM Paralegal Studies program is to provide quality education and training to qualified men and women so that they might assist the legal profession in rendering more economical and efficient legal services to a greater number of persons. The following objectives support this goal:

- Understand the various functions and roles of a paralegal in a variety of legal specialty areas
- Knowledge of substantive and procedural law and the legal system
- Knowledge of the ethical responsibilities affecting paralegals and attorneys with emphasis on the prohibitions against unauthorized practice of law

- Master effective communication skills: oral, interpersonal and written
- Demonstrate proficiency in using technology, including performing legal research

Career and Advancement Opportunities

Employment opportunities include placement in law firms, corporate legal departments, legal aid offices, public agencies and insurance companies.

Special Requirements

Students with a criminal background may have limited employment opportunities. Students should contact appropriate agencies and employers for hiring and employment practices.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
Degree	
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72

Post Degree Certificate

Students must have a bachelor's or an associate's degree from an accredited college or university. Students with a prior associate of applied science degree must have at least 18 semester hours of general education coursework and must meet certain requirements for writing proficiency, oral communication skills and breadth of study. A meeting with the program chair or associate dean is required for individuals entering the Post Degree Paralegal Studies Certificate program.

Students must have division approval to declare the Post Degree Paralegal Studies Certificate as their major.

Associate of Applied Science Degree in Paralegal Studies

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
★ CIS 1120 Microsoft Word.....	3
★ COMM Elective.....	3
★ ENG 1101 College Writing	3
PL 1110 Introduction to Paralegal Studies	3
★ PL 1120 American Law and Ethics	3
TERM 2	
★ ENG 1102 Analytic and Argumentative Writing	3
★ PHIL 1156 Logic and Critical Thinking	3
★ PL 1130 Torts	3
★ PL 1140 Legal Research and Writing I.....	3
★ PSY 1105 Introduction to Psychology	3
TERM 3	
MATH 1210 Methods of Problem Solving or higher (except MATH 2096 and 2110).....	3 or 4
★ PL 2120 Civil Litigation	3
★ PL 2140 Legal Research and Writing II	3
★ PL 2150 Evidence.....	3
★ PL 2160 Law Office Management	3
TERM 4	
★ PL 2130 Criminal Litigation.....	3
★ PL 2220 Wills, Probate and Estate Planning	3
★ PL 2230 Computer-Aided Legal Research	1
★ PL 2233 Computer Applications in Law Practice.....	1
★ PL 2236 Specialized Legal Software.....	1
★ PL 2098 Internship.....	4
Or	
★ PL 2095 Cooperative Education	4
★ Approved Program Elective (SEE LIST).....	3
TOTAL CREDIT HOURS	61-62

Course	Credit Hours
APPROVED PARALEGAL STUDIES ELECTIVES	
★ ACCT 1111 Accounting 1A	3
And	
★ ACCT 1112 Accounting 1B.....	3
★ CJ 1001 Criminal Law	3
★ CJ 1007 Criminal Procedure	3
★ CJ 1502 Juvenile Law and Procedure	3
★ CJ 2007 White Collar Crimes	3
★ CJ 2515 Criminal Investigation	3
★ JUD 1110 Introduction to Judicial Studies	3
★ JUD 1120 Introduction to Court Operations and Ethics.....	2
★ PL 2415 Business Organizations.....	3
★ PL 2420 Contract Law.....	3
★ PL 2425 Domestic Relations.....	3
★ PL 2430 Constitutional Law.....	3
★ PL 2435 Civil Litigation II	3
★ PL 2440 Criminal Litigation II.....	3
★ PL 2445 Personal Injury Law	3
★ PL 2450 Administrative Law.....	3
★ PL 2455 Employment Law	3
★ PL 2460 Native American Law.....	3
★ PL 2465 Social Security Law	1
★ PL 2470 Bankruptcy Law.....	1
★ PL 2520 Mediation.....	3
★ PL 2530 Public Defender.....	3
★ PL 1096 and/or 2096 Topics	1-3
★ PL 2097 Independent Study	variable
★ CSE 1120 Career Exploration or higher.....	1-3

See page 289 to find information on course categories marked with a star (★).

★ – Course available through Distance Learning (see page 45.)

Post Degree Paralegal Studies Certificate (Pending CNM Governing Board and ABA Approval)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

PENDING CNM GOVERNING BOARD AND ABA APPROVAL

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
★ CIS 1125 Word Fundamentals	1
PL 1110 Introduction to Paralegal Studies	3
★ PL 1120 American Law and Ethics	3
★ PL 1130 Torts	3
PL 1140 Legal Research and Writing I.....	3
PL 2120 Civil Litigation	3
TERM 2	
PL 2130 Criminal Litigation	3
PL 2140 Legal Research and Writing II	3
PL 2230 Computer-Aided Legal Research	1
PL 2233 Computer Applications In Law Practice.....	1
PL 2236 Specialized Legal Software.....	1
PL 2098 Internship.....	4
Or	
PL 2095 Cooperative Education	4
★ Approved Program Elective (SEE LIST).....	3
TOTAL CREDIT HOURS	32

Course	Credit Hours
APPROVED POST DEGREE PARALEGAL STUDIES CERTIFICATE ELECTIVES	
★ JUD 1110 Introduction to Judicial Studies	3
★ JUD 1120 Introduction to Court Operations and Ethics.....	2
PL 2150 Evidence	3
PL 2160 Law Office Management.....	3
★ PL 2220 Wills, Probate and Estate Planning	3
PL 2415 Business Organizations.....	3
PL 2420 Contract Law.....	3
PL 2425 Domestic Relations.....	3
PL 2430 Constitutional Law.....	3
PL 2435 Civil Litigation II	3
PL 2440 Criminal Litigation II.....	3
PL 2445 Personal Injury Law	3
PL 2450 Administrative Law.....	3
PL 2455 Employment Law	3
PL 2460 Native American Law.....	3
PL 2465 Social Security Law.....	1
PL 2470 Bankruptcy Law	1
PL 2520 Mediation.....	3
PL 2530 Public Defender	3
PL 1096 and/or 2096 Topics	1-3
PL 2097 Independent Study	variable

• Skill Set in Perioperative Nursing

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills.

Description

These courses provide Registered Nurses with the skills and knowledge necessary to work in hospital operating rooms or freestanding day surgery units. Participants have the opportunity to apply theory to practice in surgical environments throughout the state of New Mexico.

Career and Advancement Opportunities

Jobs are available for perioperative nurses in Albuquerque and throughout the state. Registered nurses may find employment as scrub and/or circulating nurses.

Special Requirements

Current New Mexico license, CPR certification, a physical exam, PPD and current immunizations (including DTP, MMR and hepatitis B) are required.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students are required to provide documentation from a licensed health care provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience. Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health.

Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining

employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information. Permission from the program director is required for enrollment.

Students are required to pay a program fee for PRNS 2010 which covers the cost of x-ray badge, parking, criminal background checks, drug screening and health tests.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

For information contact the director of surgical programs at (505) 224-4166 or Academic Advisement and Career Development at (505) 224-4321.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

| Course

| Accuplacer equiv.

_____ Current NM license as an RN and permission of the chair

 – Course available through Distance Learning (see page 45.)

Skill Set in Perioperative Nursing

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
 Please see Course Descriptions for prerequisite information.

Skill Set Required Courses:

PERIOPERATIVE NURSING SKILL SET

	<i>Course</i>	<i>Credit Hours</i>
_____	PRNS 2010 Perioperative Nurse Specialist Theory/Lab	8
_____	PRNS 2090 Perioperative Nurse Specialist clinical Experience.....	6
TOTAL CREDIT HOURS		14

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• *Certificate in Pharmacy Technician*

Program Description

The program is designed to prepare students for careers as pharmacy technicians in hospital, retail, mail-order pharmacies and other pharmacy related industries. Students receive classroom, laboratory and practical experience covering all aspects of the profession. Included in the laboratory portions of the program is a 45-hour content-specific block of instruction dealing with the preparation of sterile intravenous products as required by the New Mexico Board of Pharmacy.

Career and Advancement Opportunities

The Pharmacy Technician program typically has a 100 percent placement rate for its graduates. Jobs are available in hospitals, retail and specialty pharmacies. Graduates are eligible to take the National Certification exam for pharmacy technicians. Graduates who have taken the certification exam have consistently scored higher than the national average. Students planning to continue their educations at higher education institutions are encouraged to take CHEM 1410/1492 and COMM 2221.

Special Requirements

Students are required to have a New Mexico driver's license, PPD and current immunizations (including DTP and MMR).

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. Students may be required to provide documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment.

Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

A program fee for the purchase of one lab coat and a name tag is published in the **Schedule of Classes**.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Program information is available from the program director, Douglas Scribner at (505) 224-4168, dscribner@cnm.edu, or from Academic Advisement and Career Development at (505) 224-4321.

• Certificate in Pharmacy Technician

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
High School diploma or equivalent	
 ENG 1101 College Writing	110
 MATH 0930 Algebraic Problem Solving or Elementary Algebra score of	72
 RDG 0950 Reading & Critical Thinking	80
Course	Credit Hours
CHEM 0950 or CHEM 1410  /1492	3-4

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
HLTH 1001 Clinical Preparation	1
 IT 1010 Introduction to Computers.....	3
 PT 1003 Pharmacy Calculations.....	3
 PT 1010 Introduction to Pharmacy Technology	3
 PT 1015 Pharmacy Technician Anatomy and Physiology.....	3
 PT 1092 Pharmacy Technician Lab I.....	2
TERM 2	
 COMM 1130 Public Speaking or COMM 2221 Interpersonal Communication.....	3
 PT 1510 Advanced Pharmacy Technology.....	3
 PT 1515 Pharmacology for Pharmacy Technicians	3
 PT 1590 Pharmacy Technician Practicum.....	5
 PT 1592 Pharmacy Technician Lab II.....	2
TOTAL CREDIT HOURS	31

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• Certificate in Phlebotomy

Program Description

Students study phlebotomy theory in the classroom, practice skills in campus labs and apply theory and skills learned in clinical experiences in area health care facilities. Upon successful completion of the program, students are eligible to take a national phlebotomist certification exam offered by the American Society for Clinical Pathology (ASCP) Board of Registry or the National Credentialing Agency (NCA) or American Medical Technologists (AMT).

Career and Advancement Opportunities

The CNM Phlebotomy program has a 100 percent placement rate for its graduates. Graduates seeking employment found phlebotomy jobs in area health care facilities and laboratories.

Special Requirements

Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. Students may be required to provide documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds.

Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Students must have a current PPD and physical exam, start the hepatitis B vaccination series and be current on other immunizations (including DTP and MMR) to participate in the clinical portion of the program.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

A program fee covers the cost of a set of scrubs, two disposable lab coats, health tests,

nametags, hospital parking permits, criminal background checks, drug screening and lab tests in the event of a needle stick or exposure to bodily fluids. Program fees are published in the **Schedule of Classes**. Students enrolled in this program may not be eligible for financial aid or Veterans Administration benefits.

Currently employed phlebotomists who wish only to take PHLB 1010 theory in order to prepare for national certification may do so with proof of one year full-time employment as a phlebotomist and permission to enroll from the program director.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Information concerning this program is available from the program director at (505) 224-5068, or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.

Certificate in Phlebotomy

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
High School Diploma or equivalent	
 ENG 0950 Essay Writing	85
 MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
 RDG 0950 Reading & Critical Thinking	80
Course	Credit Hours
HLTH 1001 Clinical Preparation-course must be taken no more than two terms prior to PHLB 1090	1

RECOMMENDED PREREQUISITES SUGGESTED FOR PROGRAM SUCCESS

Course	Credit Hours
HLTH 0850 Introduction to Health Occupations	3

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
PHLB 1010 Phlebotomy Theory	4
PHLB 1090 Clinical Phlebotomy	3
PHLB 1092 Phlebotomy Lab	2
TOTAL CREDIT HOURS	9

- *Associate of Applied Science Degree in Photonics Technology*
- *Certificate in Photonics Technology*

Program Description

The program is designed to expose students to four major areas: laser systems, electronics, optics and electro-optics. Students study the laser both as an instrument and as an integral part of a system designed for industrial application. The program covers topics such as laser alignment, safety and the use of lasers in electronics production, testing and maintenance. Through the program, students acquire a good working knowledge of light, geometrical and physical optics, optical components and optical systems. In addition, students receive in-depth classroom preparation in the scientific principles of laser and fiber optics to incorporate their skills and knowledge into developing electro-optical techniques and systems. A primary emphasis of the curriculum is to provide graduates with extensive hands-on training in the scientific procedures and applications utilized by laser and fiber optic companies and research laboratories.

Career and Advancement Opportunities

Photonics technology is one of the most rapidly growing technical fields in America today. Graduates will be eligible for entry-level technical positions in a wide range of scientific disciplines utilizing laser and fiber optic technology.

Special Requirements

Students applying for this program should be seriously interested in the study of scientific procedures and applications utilized by laser and fiber optics.

CONTACT INFORMATION

Additional program information is available from the program chair at (505) 224-3340, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of.....	81
RDG 0950 Reading & Critical Thinking.....	80

Associate of Applied Science Degree in Photonics Technology / Certificate in Photonics Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ ELEC 1001 Electronics Fundamentals A.....	4
_____ ELEC 1010 Electronics Mathematics	4
_____ ELEC 1015 Digital Circuits I.....	3
_____ PHOT 1101 Introduction to Photonics & Photonics Safety.....	4

TERM 2	
_____ ELEC 1005 Electronics Fundamentals B.....	4
_____ ELEC 1020 Digital Circuits II.....	3
_____ PHOT 2001 Optics.....	6
_____ MATH 1310  or higher (Except MATH 1320,2110, 2096).....	3-4

TERM 3	
_____ PHOT 1010 Fiber Optics.....	3
_____ PHOT 2005 Introduction to Laser Systems	4
_____  ENG 1101 College Writing	3
Or	
_____  ENG 1102 Analytical and Argumentative Writing.....	3
_____ Photonics Technology Certificate	41
_____  CHEM 1410/1492 Introduction to Chemistry/Lab.....	
Or	
_____ PHYS 1010 Introduction to Physics or higher.....	3
_____  ★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE	3

TERM 4	
_____ ELEC 2001 Semiconductor Devices.....	6
_____ PHOT 2010 Advanced Fiber Optics	3
_____ PHOT 2020 Advanced LASER Systems with Applications	6

Course	Credit Hours
TERM 5	
_____ PHOT 2025 Photonics Projects.....	4
_____ Technical Elective (SEE LIST)	6
_____ ENG 1119 Technical Communication	3
Or	
_____  ENG 2219 Technical Writing	3
TOTAL CREDIT HOURS	
75-78	

TECHNICAL ELECTIVES	
_____ ELEC 2005 Electromechanical Devices.....	6
_____ ELEC 2015 Analog Circuits.....	4
_____ ELEC 1025 Soldering Techniques	3
_____ MEMS 1001 Introduction to MEMS	3
_____ MT 2001 Applied Science.....	6
_____ PC 2001 Electromechanical System Troubleshooting	4
_____ PC 2020 Vacuum Systems	2
_____ PHOT 2030 Introduction to Biophotonics.....	3
_____ PHOT 2035 Biophotonics Applications	3
_____ PHOT 2096 Topics	1-6
_____ PHOT 2097 Independent Study.....	1-6
_____ PHOT 2098 Internship	3
_____ PHOT 2095 Cooperative Education.....	3

NOTE: The following upper level courses, MATH 1710, PHYS 1710/1792 or CHEM 1510/1592 will be necessary if your plans include transferring to a four year college or employment in a research lab.

• **Certificate in Plumbing**

Program Description

The Plumbing Certificate program provides students with opportunities to develop marketable skills in areas of installation, repair and maintenance of common plumbing systems. Mathematical computations; interpretation of code, manufacturer’s requirements, descriptions of technological advancements, public health and general public safety responsibilities are emphasized.

Core principles and concepts of plumbing systems are cornerstones for each course. Classroom theory leads to team and individual hands-on projects which are recorded completed and evaluated. Plumbing safety, blueprint reading, gas fittings, pipe layout, drain waste and vent piping systems are subjects covered during the first term. Backflow prevention, commercial plumbing, building maintenance and repair, hydronics and plumbing systems and plumbing code applications are subjects concentrated on during the second term. Completion of the Plumbing certificate program provides students with the education and experience for a New Mexico journeyman’s license.

Special Requirements

Text books, hand tools and personal protective equipment must be purchased. Students should be able to lift and carry at least 50 lbs. Students are required to plan their work and be able to understand detailed instructions. The ability to visualize completed systems before beginning to work on them is an important skill.

Career and Advancement Opportunities

Career opportunities are available in the public and private sector. A master plumber working for a systems installation business may advance to become a contractor, an inspector, educator or official in the plumbing trade.

An associate degree in mechanical technology with a concentration in plumbing is available to students earning a certificate in plumbing at CNM. The AAS degree prepares graduates for faster career advancement and greater earning potential.

CONTACT INFORMATION

Additional program information is available from the program chair at (505)224-3767, or from Academic Advisement and Career Development at (505)224-4321 (Main Campus) or (505) 224-5646.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
_____ MATH 0550 Basic Mathematics or Arithmetic score of	31

Certificate in Plumbing

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ PLMB 1105 Plumbing & Safety Fundamentals	3
_____ PLMB 1110 Blueprint Reading	2
_____ PLMB 1115 Introduction to Gas Fitting and Pipe Laying.....	2
_____ PLMB 1120 Drain, Waste and Vent I.....	2
_____ PLMB 1125 Drain, Waste and Vent II.....	2
_____ PLMB 1130 Piping Systems	2
TERM 2	
_____ PLMB 1205 Backflow Prevention.....	2
_____ PLMB 1210 Commercial Plumbing.....	2
_____ PLMB 1215 Plumbing Theory and Repair.....	2
_____ PLMB 1220 Plumbing Code Applications	3
_____ PLMB 1225 Building Maintenance and Repair.....	2
_____ PLMB 1230 Hydronics & Plumbing Systems	2
TOTAL CREDIT HOURS	26

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

POWERPLANT MAINTENANCE TECHNICIAN

Applied Technologies Division

• *Certificate in Powerplant Maintenance Technician, Part 147 (Pending FAA Approval)*

Program Description

The Powerplant Maintenance Technician program prepares students for licensure as Federal Aviation Administration (FAA) certified powerplant mechanics. Graduates will be qualified for employment in entry level positions in the aircraft maintenance and manufacturing fields. The curriculum will meet FAA requirement for students in general and powerplant subject areas. (The program is pending FAA approval).

Career and Advancement Opportunities

This program is positioned to help provide a sustainable workforce for the emerging aviation manufacturing industry cluster in Albuquerque and New Mexico. The aviation companies that have selected Albuquerque to establish manufacturing and assembly facilities will require Federal Aviation Administration (FAA) certified technicians as part of their assembly processes and after-sales servicing centers.

Special Requirements

Students wishing to enroll in the AVMT programs must complete an application before being considered for acceptance into the program.

CONTACT INFORMATION

Program information is available from the Applied Technologies Division Office at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

RECOMMENDED COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 1101 College Writing	110
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of.....	81
RDG 0950 Reading & Critical Thinking	80

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ▶

Certificate in Powerplant Maintenance Technician, Part 147

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSEWORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
____ AVMT 1240 Aircraft Forms & Regulations	5
____ AVMT 1260 Fundamentals of Math & Electricity	4
____ AVMT 1280 Fundamentals of Aviation Physics	4
____ PHYS 1010 Introduction to Physics	3
TERM 2	
____ AVMT 2260 Aircraft Turbine Engines	5
____ AVMT 2265 Engine Fuel Systems.....	6
____ AVMT 2270 Engine Electrical systems	6
TERM 3	
____ AVMT 2275 Engine Instruments	5
____ AVMT 2280 Propeller Systems.....	4
____  COMM 2221 Interpersonal Communication Studies	3
____  COMM 2232 Business And Professional Communications Studies	3
TOTAL CREDIT HOURS	48

• Associate of Arts Degree in Pre-Management

Program Description

Pre-management is an associate of arts degree designed to substantially fulfill the freshman and sophomore course requirements for admission to bachelor's degree programs in business at New Mexico colleges and universities; the degree's general education curriculum is accepted for transfer toward the general education core. Agreements have been made with New Mexico Highlands University (NMHU) and the University of New Mexico (UNM).

Students should communicate with the pre-management associate dean or program chairs as well as with admissions advisors at the college or university where they plan to complete the bachelor's degree. Courses taken with the credit/no credit option, transfer credits and non-traditional credits that have been accepted by CNM may not be accepted by the transfer institution. Many four-year institutions have minimum grade point average requirements for admission as well as a requirement that all coursework be completed with grades of C or better.

Career and Advancement Opportunities

Careers that may require a bachelor's degree in business range widely from accounting, financial analysts, personal financial advisors, employment, recruitment and placement specialists, insurance sales agents and marketing managers to name a few. The U.S. Department of Labor/Bureau of Statistics predicts that the demand for professionals in many of these areas is strong and is expected to remain so over the new few years.

Special Requirements

Optional Courses:

Contact CNM's Academic Advisement and Career Development office at (505) 224-4321 or the Business & Information Technology Division at (505) 224-3811 and transfer institution(s) to determine if optional courses are required and will be accepted toward specific four-year graduation requirements.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
RDG 0950 Reading & Critical Thinking.....	80
MATH 1310 Intermediate Algebra or College Level Math score of.....	60

Transfer Information:

Since some New Mexico schools classify ANTH 1150 and GEOG 1101 as physical sciences, CNM pre-management students may use either of these courses to meet the Biology/Physical Science requirement. However, CNM's acceptance of these classes to meet the Biology/Physical Science requirement does not bind transfer institutions to the same classifications. Students are cautioned to check with their transfer institutions to ensure that use of these classes to meet CNM's requirement in this category is acceptable to the transfer institution.

UNM: It is recommended that students coordinate their choices of classes with the Anderson Schools of Management (ASM) pre-admission requirements listed on the ASM website <http://bba.mgt.unm.edu/admissions/requirements.asp>.

Students should contact the ASM admissions office at (505) 277-3888 one to two semesters prior to their expected start date to begin the application process.

NMHU: Students should contact NMHU in Rio Rancho at (505) 891-2046 one to two semesters prior to their expected start date to begin the application process.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Associate of Arts Degree in Pre-Management

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
ACCT 1109 Business Math (optional)	3
Or	
BA 1101 Introduction to Business (optional)	3
Or	
BA 1133 Principles of Management (optional)	3
Or	
BA 2222 Principles of Marketing (optional)	3
MATH 1315 College Algebra	3
Or	
MATH 1415 Advanced Algebra	4
IT 1010 Introduction to Computers	3
PSY 1105 Introduction to Psychology	3
Or	
SOC 1101 Introduction to Sociology	3
★ FINE ARTS Elective	3
TERM 2	
ENG 1102 Analytic and Argumentative Writing	3
ECON 2000 Macroeconomics	3
MATH 1460 Elements of Calculus I or higher level calculus	3
★ BIOLOGICAL/PHYSICAL SCIENCE AND LAB COURSE	4
Or	
ANTH 1150 Evolutionary Anthropology w/Lab	4
Or	
GEOG 1101 Physical Geography w/Lab	4
★ SOCIAL/BEHAVIORAL SCIENCE Elective	3

Course	Credit Hours
TERM 3	
ECON 2001 Microeconomics	3
ACCT 1111 Accounting IA	3
★ BIOLOGICAL/PHYSICAL SCIENCE	3
Or	
ANTH 1150 Evolutionary Anthropology	3
Or	
GEOG 1101 Physical Geography	3
ENG 2219 Technical Writing (recommended)	3
Or	
ENG 2220 Expository Writing	3
Or	
COMM 1130 Public Speaking	3
Or	
COMM 2221 Interpersonal Communication Studies	3
Or	
COMM 2232 Business and Professional Communication Studies	3
MATH 1330 Introduction to Probability and Statistics	3
TERM 4	
★ SOCIAL/BEHAVIORAL SCIENCE Elective	3
★ FOREIGN LANGUAGE Elective	3
ACCT 1112 Accounting IB	3
★ HUMANITIES Elective	3
BA 2240 Business Law	3
ACCT 1210 Accounting II (optional)	3
TOTAL CREDIT HOURS	67-68

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• *Certificate in Professional Cooking*

Program Description

The Professional Cooking Certificate is a two-term, 28-credit-hour program. Professional cooking is an excellent field for students seeking a challenging career in a rapidly growing culinary and hospitality industry. Students will study buffet, banquet and à la carte cooking techniques, safety, sanitation, nutrition, knife skills, teamwork skills, equipment use, human relations, supervisory skills, dining room skills, business practices, menu development, culinary math and computer skills. Classes include classroom and lab time. The Professional Cooking Certificate program is a required part of the nationally accredited American Culinary Federation (ACF) Associate of Applied Science Degree, also offered at CNM. Students may participate in culinary competitions with ACF and SkillsUSA and in extracurricular activities such as the student BBQ club.

Career and Advancement Opportunities

Jobs are available in restaurants, resorts, schools, retirement homes, hospitals, cruise ships, bed and breakfasts, catering companies, convention centers and other areas. Types of employment range from prep and pantry cooks, to line or banquet cooks, as well as managers or chefs and includes employment opportunities from the fast food industry, fine dining establishments, to casinos and resorts.

Special Requirements

Students are required to purchase four sets of chef's uniforms, dining room service attire, textbooks and tools. Students should be able to lift 30 pounds and must present a physician's certificate to CNM at the start of classes stating that the student is free from tuberculosis in a transmissible form. Students must be able to stand for the duration of lab classes.

CONTACT INFORMATION

Information about these programs is available from the program director at (505) 224-3896, or from Advisement and Counseling at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
RDG 0750 Reading Improvement.....	69
MATH 0750 Basic College Mathematics or Arithmetic score of	57

Certificate in Professional Cooking

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

INFORMATION ABOUT THIS CERTIFICATE AND HOW IT FITS WITHIN THE CULINARY ARTS ASSOCIATE OF APPLIED SCIENCE DEGREE IS AVAILABLE ON PAGE 137.

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____ CULN 1101 Introduction to Culinary Arts	1
_____ CULN 1102 Applied Culinary Math.....	1
_____  CULN 1103 Food Sanitation Principles	3
_____  IT 1010 Introduction to Computers.....	3
TERM 2	
_____ CULN 1111 Cooking Fundamentals I.....	5
_____ CULN 1112 Cooking Fundamentals II.....	5
TERM 3	
_____ CULN 2211 Global Cuisine – Classical European	5
_____ CULN 2212 Global Cuisine – Mediterranean, Asian and Pacific Rim	5
TOTAL CREDIT HOURS	28

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Certificate in Professional Pilot and Flight Instruction*
- *Skill Sets in Aviation Sheet Metal Assembler Technician; Aviation Systems Installation Technician*

Program Description

The certificate in Professional Pilot and Flight Instruction offers students advanced single engine ratings and entry-level access as flight instructors. The certificate in Professional Pilot and Flight Instruction prepares students with multi-engine ratings. The Professional Pilot and Flight Instruction Training Program at CNM has a modern facility, state-of-the-art equipment (simulator) and training aircraft provided through a contractual agreement with Bode Aviation. Albuquerque Double Eagle Airport is the perfect place to learn to fly due to great weather, low air traffic and a large amount of air space for student pilots to practice maneuvers and landings. Double Eagle is a relatively new airport with new expanded runways.

Career and Advancement Opportunities

With the increased numbers of moderately priced business aircraft entering the market and the increasing retirements of current commercial pilots, the air transport industry will have an increased demand for pilots. In addition, the programs are positioned to help provide a sustainable workforce for the emerging aviation manufacturing industry cluster in Albuquerque and New Mexico.

Special Requirements

Individuals who wish to become pilots must meet the medical requirements for a second-class FAA medical certificate. Note: Please check course descriptions beginning on page 298 (subject code: AVIA) for course fees in this program.

CONTACT INFORMATION

Program information is available from the Applied Technologies Division Office at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking.....	80

Certificate in Professional Pilot and Flight Instruction

Skill Sets in Aviation Sheet Metal Assembler Technician; Aviation Systems Installation Technician

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSEWORK. Please see Course Descriptions for prerequisite information.

NOTE: *The student will pay professional pilot training lab fees directly to the flight training provider.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
MATH 1210 or higher (except MATH 2110 or MATH 2096)	4
AVIA 1110 Introduction to Modern Commercial Air Operations	2
AVIA 1400 Private Pilot	3
AVIA 1492 Private Pilot Lab *	3
TERM 2	
PHYS 1010 Introduction to Physics	3
AVIA 1500 Instrument Rating & Commercial Pilot I	3
AVIA 1592 Instrument Rating & Commercial Pilot I Lab *	3
AVIA 1140 Meteorology	3
AVIA 1145 Aircraft, Engines & Maintenance	3
TERM 3	
AVIA 1600 Commercial Pilot II	3
AVIA 1692 Commercial Pilot II Lab *	3
TERM 4	
AVIA 2100CFI & CFI II RATINGS	3
AVIA 2192 CFI & CFI II RATINGS LAB *	3
TOTAL CREDIT HOURS	42

Skill Set Required Courses:

AVIATION SHEET METAL ASSEMBLER TECHNICIAN SKILL SET

Course	Credit Hours
AVIA 1010 Introduction to Aircraft Structural Assembly	3
AVIA 1015 Aircraft Structural Assembly Manufacturing	3
AVIA 1092 Aircraft Structural Assembly Lab	3

AVIATION SYSTEMS INSTALLATION TECHNICIAN SKILL SET

Course	Credit Hours
AVIA 1292 Electrical Systems Installation	3
AVIA 1292 Plumbing, Hydraulic & Pneumatic systems Installation	3
AVIA 1392 Flight Control Cable & Rigging Assembly	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- *Associate of Applied Science Degree in Project Management*
- *Skill Set in Project Management*

Program Description

Project Management is one of the fastest growing disciplines and is used in a multitude of businesses and government agencies such as information technology, construction, engineering, financial services and health care to name a few. Project management is used for planning, scheduling and ensuring a project is completed on time and on budget. The courses in this program focus on the different aspects of project management. Students have the opportunity to create a project plan, prepare a project master schedule, develop a work breakdown structure, allocate resources and assign labor amounts to a project. Microsoft project management software is used.

Career and Advancement Opportunities

Positions in project management include project scheduling, expediting, oversight, estimating, job costing, project controls, forecasting and critical-path management.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing.....	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking	80

Associate of Applied Science Degree in Project Management

Skill Set in Project Management

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
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TERM 1

BA 1121 Business English	3
BA 1133 Principles of Management	3
ENG 1101 College Writing	3
IT 1010 Introduction to Computers	3
PM 1130 Project Management Fundamentals	3

TERM 2

BA 2232 Supervision	3
CIS 2110 Project Management Software	1
CIS 2149 MS Visio	1
PM 1150 Effective Project Leadership	3
ENG 1119 Technical Communications	3
Or	
ENG 2219 Technical Writing	3
MATH 1210 Methods of Problem Solving or higher (except MATH 2110 and 2096)	3 or 4

TERM 3

BA 1150 Introduction to Quality Management	1
BA 1151 Fundamentals of Continuous Quality Improvement (CQI)	1
BA 1152 Quality Tools	1
BA 2238 Human Resource Management	3
COMM 2225 Small-Group Communication Studies	3
PM 2200 Budget and Resource Management	3
PM 2210 Contract Management	3

TERM 4

BA 2284 Strategic Management	3
COMM 2232 Business and Professional Communication Studies	3
★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCE Elective	3

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
PM 2250 Advanced Project Management	3
Or	
PM 2097 Independent Study	3
Approved Electives (SEE LIST)	6

TOTAL CREDIT HOURS62-63

PROJECT MANAGEMENT APPROVED ELECTIVES

ACCT 1111 Accounting 1A or higher	3
BA Courses (except those required for degree)	3
CM 1105 Construction Detailing or higher	3
CSE 1120 Career Exploration or higher	1-3
PM 2220 Managing Multiple Projects	3
PM 2095 Cooperative Education	4
PM 1096 and/or 2096 Special Topics	1-3
PM 2097 Independent Study	variable
PM 2098 Internship	4

Skill Set Required Courses:

PROJECT MANAGEMENT SKILL SET

TERM 1

CIS 2110 Project Management Software	1
PM 1130 Project Management Fundamentals	3
PM 1150 Effective Project Leadership	3

TERM 2

PM 2200 Budget and Resource Management	3
PM 2210 Contract Management	3

 – Course available through Distance Learning (see page 45.)

• Associate of Science in Radiologic Technology

Program Description

Radiologic Technology is a five term associate of science degree program. Radiologic technology is a health care profession whose practitioners work in hospitals, clinics and freestanding imaging centers. The radiographer is a member of the health care team who works directly with the patient and the physician in performing a wide variety of diagnostic and interventional therapy procedures. The rapid expansion of medical diagnostic imaging has greatly increased the diversity and utility of medical diagnosis. The radiographer must be proficient in the knowledge of radiographic exposure, anatomy, patient positioning, the operation of specialized equipment and the care and management of the patient. The program meets the ARRT accreditation requirements through the NCACS-HLC instructional accreditation of Central New Mexico Community College.

Career and Advancement Opportunities

Hospitals are the primary employer of radiologic technologists although national indicators predict that a greater number of new jobs will be in physician offices and clinics. Department of Labor 2000 statistics indicated that there were 167,000 radiologic technologists employed in the U.S. Eighty percent of those technologists were employed full time. More than half worked in hospitals, with the remaining in positions in physicians' offices and clinics. The national vacancy rate for radiologic technologists is approximately 4.9 percent. A career in radiologic technology offers vast opportunities for advancement in specialized imaging techniques.

Special Requirements

Before entering the program, students must have a high school diploma or equivalent, be admitted to CNM, declare Radiologic Technology as a major, establish a CNM GPA of 2.0 or better and complete the arts & sciences prerequisites.

Once admitted to the core courses, students pay a program fee to cover the cost of the uniform, name tag, hospital parking permits, film markers, criminal background checks, drug screening and lab tests in the event of a needle stick or exposure to bodily fluids; a fee will also be charged to each clinical course for Dosimeter film badges and a certification practice exam. Program fees are published in the **Schedule of Classes**. Students are required to provide documentation of CPR certification, results of a recent health screening, be in good physical health and have current immunizations (tetanus, rubella, Rubeola and hepatitis B) and PPD, prior to working with patients in a clinical setting.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to

start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students should also contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the HWPS Division Office at (505) 224-4111 for more information. Students are required to provide documentation from a licensed health care provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience.

Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

CONTACT INFORMATION

Information concerning this program is available from the director of the program at (505) 224-5208 or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Associate of Science in Radiologic Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0950 Reading & Critical Thinking	80
Course	Credit Hours
BIO 1410/1492 Biology for Health Sciences/Laboratory	4
Or	
Passing score on the Bilology Placement Exam	
BIO 2210/2292 Human Anatomy and Physiology I/Lab	4
CHEM 1410 /1492 Introductiointo Chemistry/Lab or CHEM 1510/1592 General Chemistry/Lab	4
Or	
Passing score on the Bilology Placement Exam	
ENG 1101 Essay Writing	3

REQUIRED PROGRAM COURSES

BIO 2310/2392 Human Anatomy and Physiology II/Laboratory	4
HLTH 1001 Clinical Preparation	1
MATH 1210 Methods of Problem Solving or 1310 Intermediate Algebra	4
PSY 1105 Introduction to Psychology or SOC 1101 Introduction to Sociology	3

PETITION IN FALL

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
RADT 1003 Introduction to Radiologic Technology	1
RADT 1005 Fundamentals of Radiography	3
RADT 1070 Radiographic Positioning I	3
RADT 1090 Clinical Radiography I	5
TERM 2	
RADT 1503 Patient Care in Radiography	2
RADT 1510 Radiobiology and Protection	3
RADT 1570 Radiographic Positioning II	3
RADT 1590 Clinical Radiography II	4
TERM 3	
RADT 2005 Introduction to Quality Assurance	2
RADT 2010 Radiographic Imaging I	3
RADT 2090 Clinical Radiography III	6
RADT 2092 Radiographic Film Critique Lab	1
TERM 4	
RADT 2404 Radiographic Imaging II	1
RADT 2408 Radiographic Pathology	2
RADT 2410 Radiographic Physics and Instrumentation	3
RADT 2490 Clinical radiography IV	6
TERM 5	
RADT 2810 Radiologic Technology Seminar	2
RADT 2890 Clinical Radiography V	8
TOTAL CREDIT HOURS	70

See page 289 to find information on course categories marked with a star (★).

– Course available through Distance Learning (see page 45.)

Skill Set in Real Estate

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. In each of the courses in this Skill Set, a certificate approved by the New Mexico Real Estate Commission is issued upon successful completion of the course.

Description

The real estate and appraisal courses are for persons seeking New Mexico state licensing or continuing education credits in real estate and appraisal. The New Mexico Real Estate Commission approves all real estate courses. Courses listed may be used to meet requirements for the real estate concentration in business administration.

Education Requirements for Real Estate Associate Broker and Real Estate Qualifying Broker

Real Estate Associate Broker: Real Estate Law (BA 2270), Real Estate Practice (BA 2271) and Broker Basics (BA 2275) are required for the Real Estate Broker’s examination. Successful completion of these three courses allows a student to take the state examination and begin as a real estate associate broker under a licensed qualifying broker.

Real Estate Broker: Real Estate Law (BA 2270), Real Estate Principles and Practice (BA 2271), Broker Basics (BA 2275) and Real Broker Office Management developed by NMREC are required for the Real Estate Broker’s examination. Upon successful completion of these courses, passing the Real Estate Broker’s examination and 24-months experience as a real estate associate broker, the associate broker may be a qualifying broker (a broker in charge of a real estate office or have his/her own real estate office).

Education Requirements for Real Estate Appraisal

Individuals interested in earning a license are encouraged to contact the New Mexico Real Estate Appraisers Board at (505) 476-7096 to request the requirements and application packet for appraiser registration and licensing certification.

Special Requirements

Students must complete each course with a C grade or higher and meet the 75 percent attendance requirement for pre-licensing courses and the 90 percent attendance requirement for continuing education courses. The passing grade for the National Uniform Standards of Professional Appraisal Practice course is set by the Appraisal Qualifications Board of the Appraisal Foundation and may differ from CNM.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Skill Set in Real Estate

CNM Course Number	CNM Course Title	CNM Credit	Continuing Education Contact Hours	Pre-Licensing Contact Hours
 BA 2270	Real Estate Law	3	10	30*
 BA 2271	Real Estate Principles and Practice	3	10	30*
BA 2272	Real Estate Appraisal	3	10	30 (37.5**)
BA 2273	Real Estate Finance	3	10	0
BA 2274	Real Estate Investment	3	10	0
BA 2275	Broker Basics	3	10	30*
BA 2278	Property Management	3	10	0
BA 2279	The National Uniform Standards of Professional Appraisal Practice			15**
BA 2280	Appraising the Single Family Residence	3	10	30**

*Pre-licensing for New Mexico Real Estate Associate Broker

**Pre-licensing for Real Estate Appraisal Credit

NOTE: Students must complete each course with a C grade or higher and meet the 75 percent attendance requirement for pre-licensing courses and the 90 percent attendance requirement for continuing education courses.

• Skill Set in Registered Nurse Refresher

A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon completion of the coursework.

Program Description

This distance learning/classroom course offers students updates in all major areas of nursing practice and includes 88 hours of clinical time.

Career and Advancement Opportunities

Graduates of this course have job opportunities in hospitals, nursing homes, outpatient clinics and with home health and hospice providers.

Special Requirements

Students must have successfully completed State Board Examinations (NCLEX) and have held a valid license to practice nursing. A physical exam, PPD, current immunizations (including MMR, DTP and Varicella) and current professional (BLS) CPR certification are required to start clinical practicum.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students should also contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the HWPS Division Office at (505) 224-4111 for more information.

Students interested in nursing must be in good physical and psychological health. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information. Students are required to provide documentation from a licensed

healthcare provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience.

All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety courses offered only for credit/no credit, a grade of credit (CR) must be earned.

A white uniform, shoes and a stethoscope are required for clinicals. The program fee covers the cost of supplies, criminal background check, drug screen and lab tests in the event of a needle stick or exposure to bodily fluids. There are additional fees payable to the New Mexico State Board of Nursing for licensure endorsement and reinstatement if nursing license has expired.

Students enrolled in this program may not be eligible to receive financial aid or Veterans Administration benefits.

Graduation Policy

Health, Wellness & Public Safety Division students must graduate under the current catalog.

- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

CONTACT INFORMATION

Information about this skill set is available from the chair at (505) 224-4112 or from Academic Advisement and Career Development at (505) 224-4321.

Skill Set in Registered Nurse Refresher

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

- _____ Participant must have successfully completed State Board Exams (NCLEX) and have held a valid license to practice nursing.
- _____ Current CPR (BLS/for healthcare professionals)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Skill Set Required Courses:

REGISTERED NURSE REFRESHER SKILL SET

Course	Credit Hours
_____  RNR 2010 Refresher Theory/Lab.....	7
_____ RNR 2090 Refresher Clinical Experience (CR/NC)	2
TOTAL CREDIT HOURS	9

• **Certificate in Residential Wiring**

Program Description

The Residential Wiring Certificate program provides students the opportunity to gain knowledge and technical skills necessary to work in the residential electrical industry. A student completing the first two terms of the Electrical Trades Program may earn a certificate in Residential Wiring. This certificate is accepted by the State of New Mexico Construction Industries Division as one year of experience toward the two-year requirement for the State of New Mexico Residential Wireman's Certificate of Competence.

Residential Wiring emphasizes the applications of the National Electrical Code (NEC), NM State Electrical Code, (NMSEC) and local electrical codes. Students learn electrical theory, material identification and use, Occupational Safety Hazard Administration (OSHA) compliance, residential wiring and services, conduit bending, installation, blueprint reading and electrical troubleshooting. Theory and lab courses are designed to be taken together to give students an in-depth understanding of the concepts of the residential electrical trade. First term students obtain knowledge and hands on training for personal and tool safety, meter reading, electrical circuitry, electrical formulas, electrical calculations, material identification, AC/DC motor operation and troubleshooting. Second term students are taught residential blueprint reading, applications of the NEC, NMSEC and local electrical codes, installation of branch circuits and feeders, residential services, single pole, three-way and four-way switch circuits, door chime installation, dryer and range circuits, swamp cooler circuitry and hand bending of electrical metallic tubing.

Career and Advancement Opportunities

The New Mexico Department of Labor predicts a continued increase in the demand for electrical workers for years to come. One hundred percent of CNM Electrical Trades graduates obtained employment in the electrical trade in 2005-2006. The Department of Labor reports that starting wages for electrical workers range from \$12.44 to \$23.02 per hour, or \$25,879 to \$47,874 per year. Coursework from Electrical Trades/Residential Wiring may be applied toward then Associate Degree in Construction Technology.

Special Requirements

Students must have normal color differentiation as electricians as they work with colored wires requiring accurate connection. The moving and installation of various electrical materials and equipment necessitate that the electrician be able to lift at least 50 pounds. Electricians may work in various internal and external environments and should be free of chronic respiratory diseases and allergies. Most employers require a valid driver's license and a clean driving record.

CONTACT INFORMATION

Additional program information is available from the program chair at (505) 224-3766, or from Academic Advisement and Career Development at (505)224-4321(Main Campus or (505)224-5646 (Montoya Campus).

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
MATH 0750 Basic College Mathematics or Arithmetic score of	57
RDG 0750 Reading Improvement	69

Certificate in Residential Wiring

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
_____  ELTR 1005 Electrical Theory I.....	4
_____ ELTR 1010 Electrical Math I.....	3
_____ ELTR 1092 Electrical DC/AC Lab.....	3
_____ ELTR 1192 AC Circuitry, Motors & Generators.....	3
TERM 2	
_____ ELTR 1205 Blueprint Reading I.....	3
_____ ELTR 1210 Electrical Theory II.....	4
_____ ELTR 1292 Residential Wiring Lab.....	3
_____ ELTR 1392 Residential Electrical Services.....	3
TOTAL CREDIT HOURS	26

• Associate of Science Degree in Respiratory Therapy

Program Description

Respiratory care is an allied health profession, specializing in diagnostic testing, therapeutic treatment and critical care support for patients suffering from life-threatening or chronic cardiopulmonary diseases. Under medical direction, Respiratory Therapists assess and treat patients, monitor and evaluate cardiorespiratory function, perform diagnostic testing and maintain life-support systems for patients in critical care settings. The curriculum includes classroom, laboratory and supervised clinical instruction covering cardiorespiratory anatomy, physiology and pathophysiology, therapeutic treatments, cardiopulmonary diagnostic technology, critical care and life-support technology for adults, children and infants, respiratory home care and pulmonary rehabilitation. The CNM Respiratory Therapy Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Committee on Accreditation for Respiratory Care (CoARC) and prepares graduates for the Certification (CRT) and Registry (RRT) credentials by the National Board for Respiratory Care (NBRC) and for Licensure (RCP) by the State of New Mexico Respiratory Care Board.

Career and Advancement Opportunities

Graduates of the CNM Respiratory Therapy Program are employed by acute care hospitals, transitional care hospitals, home health care agencies, skilled nursing homes and cardiopulmonary rehabilitation centers within New Mexico and throughout the nation. The CNM program has a 100 percent placement rate for its graduates. Graduates can attain specialty credentials through employment training in specialized areas of cardiopulmonary care. They are also encouraged to continue education toward a bachelor of science degree in respiratory therapy, general science, education or management to pursue leadership positions in the field.

Special Requirements

Students are responsible for meeting prerequisite arts & sciences courses, being admitted to CNM as a Respiratory Therapy major, establishing a CNM GPA of 2.0 or better and completing the *Petition Process* for selection to begin the core Respiratory Therapy courses. Selection is based on the number of prerequisite and required arts & sciences courses completed and the date of declared major in Respiratory Therapy.

Once admitted to the RT core courses, students pay a program fee to cover the cost of the uniform, stethoscope, name tag, hospital parking permits, criminal background checks, drug screening and lab tests in the event of a needle stick or exposure to bodily fluids. Students will also pay an ACLS certification fee and a program fee during the final term of the program to cover the cost the National Board assessment tests.

Students enrolled in the division health programs must be in good physical and psychological health. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment.

Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505)

224-4111 for more information. Students must have a physical exam and a completed health form with evidence of current immunizations (PPD, DTP, MMR and hepatitis B), the ability to perform specific activities and the ability to safely lift a minimum of 50 lbs. before beginning clinical coursework.

Students are required to provide proof of CPR certification by the American Heart Association at the health provider level prior to beginning clinical experiences. This requirement may be met by completing HLTH 1001.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs. Students should contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the HWPS Division Office at (505) 224-4111 for more information.

All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.

Graduation Policy

- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-4138 or the Clinical Coordinator at (505) 224-4128 or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Associate of Science Degree in Respiratory Therapy

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
High School diploma or equivalent	
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0950 Reading & Critical Thinking	80

Course	Credit Hours
BIO 1410/1492 Bio/Health Science Lab	4
CHEM 1410/1492 Introduction to Chemistry/Lab or CHEM 1510/1592 General Chemistry I/Lab	4
HLTH 1001* Clinical Preparation	1

*(Must be completed no more than one term prior to beginning RT 1090)

REQUIRED PROGRAM COURSES

BIO 2110/2192 Microbiology/Laboratory	4
BIO 2210/2292 Human Anatomy and Physiology I/Laboratory	4
BIO 2310/2392 Human Anatomy and Physiology II/Laboratory	4
ENG 1101 College Writing	3
PHIL 2247 Biomedical Ethics	3

PETITION IN SUMMER

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

See page 289 to find information on course categories marked with a star (★).

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.

Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1 FALL	
RT 1010/1070 Respiratory Therapy Principles and Practices I	4
RT 1030 Pharmacology of Respiratory Therapy	3
RT 1090 Clinical Experiences I	4
TERM 2 SPRING	
RT 1510/1570 Respiratory Therapy Principles and Practices II	4
RT 1540 Cardiopulmonary Pathophysiology I	1
RT 1590 Clinical Experiences II	4

TERM 3 SUMMER

RT 2010/2070 Advanced Respiratory Therapy I	4
RT 2040 Cardiopulmonary Pathophysiology II	1
RT 2490 Advanced Clinical Experiences II	4

TERM 4 FALL

RT 2410/2470 Advanced Respiratory Therapy II	4
RT 2440 Cardiopulmonary Pathophysiology III	1
RT 2490 Advanced Clinical Experiences II	4

TERM 5 SPRING

RT 2810/2870 Advanced Respiratory Therapy III	4
RT 2840 Cardiopulmonary Pathophysiology IV	1
RT 2890 Advanced Clinical Experiences III	4

TOTAL CREDIT HOURS65

OPTIONAL COURSES

(These courses do not fulfill graduation requirements and may not be eligible for financial aid.)

RT 1592 Supplemental Skills Lab	1
RT 2092 Advanced Supplemental Skills Lab	1
CSE 1120 Career Exploration or higher	1

 – Course available through Distance Learning (see page 45.)

• Certificate in Surgical Technology

Program Description

Surgical Technology is a three-term certificate program that presents the knowledge and skills necessary to work in a surgical environment and function as a vital member of the operating room team. The learning environment consists of the campus classroom and laboratory along with local hospitals, day surgery centers and physicians offices. Accreditation is from the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Program information sessions are typically offered during the spring term. Contact the program director for information (505) 224-4166 and specific dates.

Students enrolled in the third term are eligible to take the Surgical Technologist National Certification Examination. The cost of this exam is the responsibility of the student and is approximately \$250. Surgical technology students who take and pass this examination are certified upon successful completion of the CNM Surgical Technology Program. The graduates are authorized to use the initials CST to designate their status as a Certified Surgical Technologist.

Career and Advancement Opportunities

Surgical Technologists perform many roles within and outside the operating room or surgical setting, but the primary role is to prepare and protect the sterile field, pass instruments and assist the surgeon in an operative procedure. There is a demand for Surgical Technologists in Albuquerque and throughout the state of New Mexico.

Special Requirements

Arts and sciences courses must be completed before beginning the surgical technology core courses.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs.

Students should also contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the HWPS Division Office at (505) 224-4111 for more information.

Before beginning surgical technology courses, students must have a physical exam, PPD and

current immunizations (tetanus, rubella, rubeola and hepatitis B). Students are required to provide documentation from a licensed health care provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience. Students must have the emotional and physical stamina to stand for extended periods of time (eight to 10 hours) while concentrating on a specific task. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Students are required to pay a program fee which covers the cost of a, one set of scrubs, hospital parking permits, name tags, self-assessment exam, dosimeter film badges, program assessment exam, criminal background check, drug screening and lab tests in the event of a needle stick or exposure to bodily fluids. Program fees are published in the **Schedule of Classes**.

Graduation Policy

- All Health, Wellness & Public Safety Division courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety courses offered only for credit/no credit, a grade of credit (CR) must be earned
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the department at (505) 224-4111 for more information.

CONTACT INFORMATION

For information contact the Health, Wellness & Public Safety Division at (505) 224-4111 or Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Certificate in Surgical Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
High School diploma or equivalent	
 ENG 1101 College Writing	110
 MATH 0750 Basic College Mathematics or Arithmetic score of	57
 RDG 0950 Reading & Critical Thinking	80
Course	Credit Hours
 CHEM 1410/1492 Introduction to Chemistry/Lab	4

One week prior to beginning ST 110A students are required to attend a program orientation. You may be dropped from the program if you do not attend the mandatory meeting. It is the responsibility of the student to insure the director has a current telephone and mailing address insure proper notification of this meeting. **Selection is based on the date of declaration of ST as a major. All arts & sciences courses must be completed prior to enrolling in ST 1010. It is strongly recommended that anatomy and physiology be completed within the past five years.**

REQUIRED PROGRAM COURSES

 COMM 2221 Interpersonal Communication Studies	3
 BIO 1410/1492  Biology for Health Sciences/ Laboratory	4
 BIO 1310/1392 Human Anatomy and Physiology for Non-Majors/ Laboratory	4
Or	
 BIO 2210/2292 Human Anatomy and Physiology I/Laboratory.....	4
And	
 BIO 2310/2392 Human Anatomy and Physiology II/ Laboratory	4
 HIT 1020 Medical Terminology and Anatomy	3

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
 HLTH 1001 Clinical Preparation	1
 ST 1010 Beginning Surgical Technology I	3
 ST 1092 Surgical Technology Lab I	6
TERM 2	
 ST 1510 Beginning Surgical Technology II	3
 ST 1590 Surgical Technology Clinical I	8
 ST 1592 Surgical Technology Lab II	2
TERM 3	
 ST 2010 Surgical Technology III	3
 ST 2090 Surgical Technology Clinical II	8
 ST 2092 Surgical Technology Lab III	2
TOTAL CREDIT HOURS	50-54

• Associate of Arts Degree in Technology Management and Training

Program Description

The Technology Management and Training associate of arts degree is designed to transfer to the University of New Mexico (UNM) College of Education Organizational Learning and Instructional Technologies (OLIT) program. This program allows the student with an associate of applied science degree that contains at least 30 technical hours (exclusive of IT 1010 or its equivalent and BA 1101) to take the required credit hours of arts and sciences coursework to earn the Technology Management and Training associate of arts degree at CNM. The CNM Associate of Applied Science (AAS) degree earned by a student must be within the last 10 years or the student will be required to demonstrate continued proficiency in the technical components. The credit hours earned in this degree are designed to transfer to the UNM College of Education OLIT program to earn a Bachelor of Science in Education in Technology and Training. The UNM College of Education program currently requires:

- (1) a 3.0 GPA in the technical discipline and
- (2) a C grade or better in all arts and sciences coursework

Courses taken with the credit/no credit option, transfer credits and non-traditional credits accepted by CNM toward this degree may not be accepted by the UNM College of Education.

Career and Advancement Opportunities

This Technology Management and Training Associate of Arts degree is designed to transfer to the UNM College of Education OLIT program to prepare students to earn a bachelor of science degree in Education in Technology and Training. The bachelor of science in Education in Technology and Training enables students with a technical major to develop the skills necessary for employment as a technical trainer or training developer in the business, government or corporate sector.

Special Requirements

- Since some New Mexico schools classify ANTH 1150 and GEOG 1101 as physical sciences, CNM Technology Management and Training students may use either of these courses to meet the Biology/Physical Science requirement.
- Departmental approval to declare Technology Management and Training as a first major
- An associate degree in a technical discipline, with at least 30 technical hours, excluding IT 1010 (or its equivalent) and BA 1101 received at least one semester prior to applying for the Technology Management and Training associate of arts degree.
- Overall GPA of 2.5.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
RDG 0950 Reading & Critical Thinking	80
MATH 1310 Intermediate Algebra or College Level Math score of	60

ENTRY-LEVEL COURSE OR PROGRAM PREREQUISITE

Associate degree with at least 30 technical credits (not including IT 1010 or its equivalent or BA 1101)

Associate of Arts Degree in Technology Management and Training

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
ENG 1101 College Writing	3
MATH 1315 College Algebra (or higher equivalent)	3
ECON 2000 Macroeconomics	3
Or	
ECON 2001 Microeconomics	3
SOC 1101 Introduction to Sociology	3
IT 1010 Introduction to Computers	3
TERM 2	
ENG 1102 Analytic and Argumentative Writing	3
MATH (higher than 1315)	3
★BIOLOGICAL/PHYSICAL SCIENCE W/LAB COURSE	4
Or	
ANTH 1150 Evolutionary Anthropology w/lab	4
Or	
GEOG 1101 Physical Geography w/lab	4
PSY 1105 Introduction to Psychology	3
TERM 3	
★FOREIGN LANGUAGE	3
★BIOLOGICAL/PHYSICAL SCIENCE	3
Or	
ANTH 1150 Evolutionary Anthropology	3
Or	
GEOG 1101 Physical Geography	3
COMM 1130 Public Speaking	3
Or	
COMM 2221 Interpersonal Communication Studies	3
★HUMANITIES Elective	3

Course	Credit Hours
TERM 4	
★HUMANITIES Elective	3
ENG 2219 Technical Writing	3
Or	
PHIL 1156 Logic and Critical Thinking	3
BA 1101 Introduction to Business	3
★FINE ARTS Elective	3
TOTAL CREDIT HOURS	82

(Including the 30 technical credits required from associate's degree)

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- Associate of Applied Science Degree in Transportation Technology (Concentration in Automotive Technology)
- Associate of Applied Science Degree in Transportation Technology (Concentration in Diesel Equipment Technology)
- Skill Set in Automotive Service Fundamentals

Program Description

Building on an Automotive Technology Certificate or a Diesel Equipment Technology Certificate, students receive instruction in additional technical skill areas including welding, environmental safety and health, as well as further studies in communication, physics and other topic areas.

Career and Advancement Opportunities

Career opportunities existing government, independent repair facilities and dealerships for all aspects of the industry including line technician, field service technician, service writer, service manager, warranty and parts and overhaul specialist. The national shortage of technicians in the automotive field ensures plentiful job opportunities with excellent pay and benefits.

Special Requirements

Hand tools and textbooks are required in all transportation technology programs and one must not be allergic to fuels, oils and chemicals used in the industry. Additionally, most employers require a valid driving license and a good driving record.

CONTACT INFORMATION

Information about these programs is available from the program chair at (505) 224-3741 or the director (505) 224-3730, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of.....	72
RDG 0950 Reading & Critical Thinking	80

Exit competencies (see page 5) for this program of study are available at <http://www.cnm.edu/facstaff/aqip/ExitComp.php>.

For a recommended course sequence, see next page... ▶

Associate of Applied Science in Transportation Technology (Concentration in Automotive Technology)
 Skill Set in Automotive Service Fundamentals

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
 Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
____ AUTC 1110 Introduction to Automotive Systems.....	4
____ AUTC 1120 Brake Systems.....	4
____ AUTC 1130 Suspension and Alignment.....	4
____ AUTC 1140 Automotive Electrical.....	4
TERM 2	
____ AUTC 1210 Manual Transmission.....	4
____ AUTC 1220 Engine Repair.....	4
____ AUTC 1230 Automatic Transmissions.....	4
____ AUTC 1240 Automotive Electronics.....	4
TERM 3	
____ AUTC 2120 Engine Performance I.....	4
____ AUTC 2130 Engine Performance II.....	4
____ AUTC 2110 Air Conditioning and Heating.....	4
Automotive Technology Certificate.....	44
____ ESH 2016 Occupational Safety I.....	1
____ ESH 2017 Occupational Safety II.....	1
____ ESH 2018 Occupational Safety III.....	1
TERM 4	
____ ESH 1809 Workplace Adult First Aid and CPR.....	1
____ ESH 2899 Environmental Safety and Health Capstone Course.....	2
____ WELD Elective.....	3
____  ENG 1101 College Writing.....	3
____  IT 1010 Introduction to Computers.....	3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Course	Credit Hours
TERM 5	
____  MATH 1210 or higher.....	3-4
____  COMM 1130 or higher.....	3
____  ★HUMANITIES* OR SOCIAL/BEHAVIORAL SCIENCE ELECTIVE.....	3
* HIST 2096 History of American Technology is recommended for the Humanities elective when course is available.	
____ PHYS 1010 or higher.....	3
____ AUTC 2999 Capstone.....	1
TOTAL CREDIT HOURS.....	72-73

Skill Set Required Courses:

AUTOMOTIVE SERVICE FUNDAMENTALS SKILL SET

Course	Credit Hours
____ AUTC 1110 Introduction to Automotive Systems.....	4
____ AUTC 1120 Brake Systems.....	4
____ AUTC 1130 Suspension and Alignment.....	4
____ AUTC 1140 Automotive Electrical.....	4

Associate of Applied Science in Transportation Technology (Concentration in Diesel Equipment Technology)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSEWORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
DETC 1110 Introduction to Diesel	4
DETC 1120 Heavy Duty Brakes	4
DETC 1130 Heavy Duty Suspension	4
DETC 1140 Manual Shift Transmissions	4
TERM 2	
AUTC 1140 Automotive Electrical	4
DETC 1210 Heavy Duty Engine Repair	4
DETC 1220 Automatic Transmissions & Hydraulics	4
DETC 1230 Medium/Heavy Duty Air Conditioning and Heating	3
TERM 3	
DETC 2110 Preventative Maintenance	4
AUTC 1240 Automotive Electronics	4
DETC 2120 Diesel Engine Performance	4
Diesel Equipment Technology Certificate	43
ESH 2016 Occupational Safety I	1
ESH 2017 Occupational Safety II	1
ESH 2018 Occupational Safety III	1

Course	Credit Hours
TERM 4	
ESH 1809 Workplace Adult First Aid and CPR	1
ESH 2899 Environmental Safety and Health Capstone Course	2
WELD Elective	3
ENG 1101 College Writing	3
IT 1010 Introduction to Computers	3
TERM 5	
MATH 1210 or higher	3-4
COMM 1130 or higher	3
★HUMANITIES* OR SOCIAL BEHAVIORAL SCIENCE ELECTIVE	3
<i>*HIST 2096 History of American Technology is recommended for the Humanities elective when course is available.</i>	
PHYS 1010 or higher	3
DETC 2999 Capstone	1
TOTAL CREDIT HOURS	71-72

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

- **Certificate in Truck Driving – Class “A” CDL**
- **Skill Set – Class “B” CDL**

Program Description

Provides students basic instruction required to earn either a Class A or Class B Commercial Driver’s License (CDL) to become professional commercial truck drivers.

Students learn how to operate a tractor trailer or Class B Truck safely and efficiently through classroom, range and over-the-road environments and through full-time and part-time course work. The Class A program is certified by the Professional Truck Driver Institute and Class A students will receive certificates through the Professional Truck Driving Institute and CNM. Class B students will receive a CNM skill set credential. This program meets federal regulation entry level requirements.

Career and Advancement Opportunities

Jobs are available with various types of trucking companies, including local delivery, in-state routes and over-the-road (regional and 48 states) opportunities.

Special Requirements

Students must meet the following requirements for both Class A and Class B:

- Be at least 18 years old
- Have a valid New Mexico driver’s license
- Have maintained a valid driver’s license for the previous three (3) years
- Provide original birth certificate
- Provide original social security card
- Provide a certified copy of his or her driving record for the past three years
- Have a Department of Transportation physical at a qualified testing facility
- Obtain pre-qualification testing for controlled substances use
- Not have been convicted of or forfeited bond for more than four moving violations in the past three years
- Not have more than one at-fault, preventable accident in the past three years
- Not have been convicted of or forfeited bond for reckless driving

- Not have any DWI/DUI convictions within the past five years
- Not have more than one (1) DWI/DUI conviction within the past ten (10) years
- Not have more than two (2) DWI/DUI convictions within a lifetime
- Must be a U.S. citizen or lawful permanent resident of the United States of America
- Students are subject to all Federal Highway Administration drug and alcohol testing rules.

Tests (pre-qualification, random, post accident, reasonable suspicion, return-to-duty and followup) are performed when applicable for alcohol and controlled substances. Instructors will provide students detailed information regarding federal drug and alcohol testing and physical examination requirements when they enter TRDR 1101. Students pay a non-refundable course fee of \$250 prior to entering TRDR 1292 and \$300 prior to entering TRDR 1392. This program may not qualify students for Veterans Administration benefits or other financial aid. Minimum behind-the-wheel driving time for each of the lab classes is as follows: TRDR 1292, 20 hours; TRDR 1392, 30 hours; TRDR 1492, 10 hours; TRDR 1592, 15 hours. The student is responsible for payment of the state CDL exam fee. All courses taken are for a traditional grade (A,B,C,D,F).

CONTACT INFORMATION

Program information is available from the program director at (505) 224-3744, the director at (505) 224-3730, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

The CNM Workforce Training Center can offer customized training for individuals or small groups in the following areas:

- Class B CDL to Class A CDL Upgrades
- CDL Exam Prep & Review
- Bus Driver Training

Call 224-5200 for more information.

Certificate in Truck Driving – Class “A” CDL

Skill Set – Class “B” CDL

Recommended Course Sequence for full-time students *(Students should see an academic advisor to customize their educational plans.)*

COURSE PREREQUISITES

Course	Accuplacer equiv.
_____ MATH 0550 Basic Mathematics or Arithmetic score of	31

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSEWORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
_____ TRDR 1101 Basic Operational Theory	7
_____ TRDR 1292 Basic Operational Lab.....	4
_____ TRDR 1392 Advanced Operational Lab.....	2
Truck Driving Certificate	13

Skill Set Required Courses:

CLASS B CDL SKILL SET

Course	Credit Hours
_____ TRDR 1101 Basic Operational Theory	7
_____ TRDR 1492 Class B CDL Basic Operational Lab	2
_____ TRDR 1592 Class B CDL Advanced Operational Lab.....	1

Note: Instructor approval required for entrance into TRDR 1292, 1392, 1492 and 1592.

• Associate of Applied Science Degree in Veterinary Technology

Program Description

Veterinary technology is a career in which skilled technicians participate in the exciting and challenging field of veterinary medicine working with animals and their owners under the supervision of veterinarians. The five-term associate of applied science degree program provides didactic, lab and clinical experiences necessary for employment in the field of veterinary care and medicine. Upon completion of the program, the graduate will be prepared to be an integral member of the veterinary health care team providing care and support to small and large animals. The program prepares graduates to sit for the National Veterinary Technician Examination and the New Mexico Board of Veterinary Practice Act examination. Upon passing both examinations successfully, the applicant is eligible for licensure as a veterinary technician in New Mexico by the New Mexico Board of Veterinary Medicine (NMBVM). The program has national accreditation from the American Veterinary Medical Association (AVMA) Committee on Veterinary Technician Education and Activities (CVTEA).

Career and Advancement Opportunities

Employment opportunities for veterinary technicians exist in private veterinary offices, animal control and animal humane centers, biomedical facilities, diagnostic laboratories, zoos and wildlife facilities. Graduates of the program may choose to continue their education by completing additional arts & sciences course requirements for pre-veterinary medicine and seeking admission to veterinary medicine schools.

Special Requirements

To enter the program, students must have a high school diploma or equivalent, a minimum score of 85 on the Health, Wellness & Public Safety Basic Math test within 12 months prior to petitioning, be admitted to CNM, declare Veterinary Technology as a major, establish a CNM GPA of 2.0 or better, complete prerequisites and the petition process. Each year, the selection of students to begin the Veterinary Technology core coursework will be based on the number of required arts & sciences courses completed. If necessary, the date of declaration of Veterinary Technology as a major at CNM will be used for prioritization. Basic computer literacy is strongly recommended.

Criminal Background/Drug Screen: Students are required to undergo a routine drug screening and a state and federal criminal background check with fingerprints prior to starting the program or prior to beginning their clinical experiences. For information on the criminal background check, please note the complete description on page 42 under the Health, Wellness & Public Safety Division description. Students with a disqualifying conviction will not be allowed to start or remain in the program; additionally any student found to have a disqualifying conviction will not be allowed to register for any Allied Health or Nursing programs. Students should also contact appropriate credentialing or licensing agencies and local or regional industry for hiring and employment practices. Contact the HWPS Division Office at (505) 224-4111 for more information.

Students interested in certain Health, Wellness & Public Safety Division programs must be in good physical and psychological health. This program requires documentation of a recent health screening from a licensed health care provider confirming the ability to safely perform program specific activities and lift a minimum of 50 pounds. Reasonable accommodations are made for those students with disabilities. However, some disabilities may prohibit students from completing program specific competencies or gaining employment. Students with a disability that may interfere with completing program competencies, which may include providing safe patient care, are advised to contact the HWPS Division Office at (505) 224-4111 for more information.

Students are required to provide their own health insurance and transportation to classes, labs and clinical sites. A program fee is charged in VT 1092 to cover the cost of consultation jacket, scrubs (two sets), stethoscope, penlight, safety glasses, nametags, criminal background checks, drug screening and lab tests in the event of a needle stick or exposure to bodily fluids. A program fee for a film badge is charged in VT 1274, 2180, 2690, 2810 courses. The various program fees are published in the **Schedule of Classes**.

Graduation Policy

- All Health, Wellness & Public Safety Division career and technical courses required for graduation must be taken for a traditional grade of A, B or C. For Health, Wellness & Public Safety career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be disenrolled if pre- or corequisites are not met.
- Students who have successfully completed courses that no longer exist from previous catalogs will be accommodated. Contact the division at (505) 224-4111 for more information.

Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-5043 or the Clinical Coordinator at (505) 224-5071 or from Academic Advisement and Career Development at (South Valley) or (505) 224-5056 (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

Associate of Applied Science Degree in Veterinary Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

COURSE PREREQUISITES

Course	Accuplacer equiv.
High School Diploma or equivalent	
ENG 0950 Essay Writing	85
MATH 0930 Algebraic Problem Solving I or Elementary Algebra score of	72
RDG 0950 Reading and Critical Thinking	80

RECOMMENDED PREREQUISITES SUGGESTED FOR PROGRAM SUCCESS

IT 0850 Basic Keyboarding/Computer Skills	80
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OPTIONAL COURSES

(These courses do not fulfill graduation requirements and may not be eligible for financial aid.)

Course	Credit Hours
VT 1192 Supplemental Lab for Veterinary Tech	1

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

PETITION IN SUMMER

Selection is based on the date of declaration of VT as a major and number of arts & sciences courses completed with a grade of C or better. Basic Math Test score of 85 percent or higher and GPA 2.0 or higher. Petition process is subject to change. Students should plan to attend an information session to remain current. Information sessions covering the petitioning process, program requirements and career opportunities are scheduled regularly. Dates and times for Program Information Sessions can be obtained by calling the Health, Wellness & Public Safety Division, (505) 224-4111 or at the website: <http://www.cnm.edu/depts/hwps/index.php>.

Course	Credit Hours
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REQUIRED PROGRAM COURSES

BIO 1410/1492  Biology for Health Sciences/Laboratory	4
CHEM 1410/1492  Introduction to Chemistry/Laboratory or CHEM 1510/1592 General Chemistry I/Lab	4

See page 289 to find information on course categories marked with a star (★).

Course	Credit Hours
ENG 1101 Essay Writing or ENG 1102 Analytical Writing	3
MATH 1210 Methods of Problem Solving	4
PSY 1105 Introduction to Psychology	3

TERM 1 FALL

VT 1004 Veterinary Medical Terminology	1
VT 1006 Veterinary Office Skills	1
VT 1008 Applied Mathematics for Veterinary Technicians	1
VT 1010 Introduction to Veterinary Technology	2
VT 1070 Animal Comparative Anatomy & Physiology I	3
VT 1092 Introduction to Veterinary Technology Lab	1

TERM 2 SPRING

VT 1210 Animal Comparative Anatomy & Physiology II	3
VT 1272 Surgical Technology for Veterinary Technicians	2
VT 1274 Radiology for Veterinary technicians	2
VT 1292 Veterinary Office Skills Lab	1

TERM 3 SUMMER

VT 2010 Clinical Pathology for Veterinary Technicians I	4
VT 2015 Non-Infectious and Infectious Diseases for Veterinary Technicians	3
VT 2180 Veterinary Technology Clinical II	4

TERM 4 FALL

VT 2610 Clinical Pathology for Veterinary Technicians II	4
VT 2672 Anesthesiology for Veterinary Technicians	3
VT 2674 Applied Therapeutics and Care for Veterinary Technicians I	3
VT 2690 Veterinary Technology Clinical II	4

TERM 5 SPRING

VT 2803 Pharmacology for Veterinary Technicians	3
VT 28880 Veterinary Technology Clinical III	5
VT 2819 Avin, Laboratory & Exotic Animal Therapeutics and Care	1
VT 2874 Applied Therapeutics and Care for Veterinary Technicians II	3
VT 2876 Dentistry for Veterinary Technicians	2

TOTAL CREDIT HOURS74

 – Course available through Distance Learning (see page 45.)

- **Associate of Applied Science Degree in Web Technology**
- **Certificate in Web Technology**

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS. SEE THE WEB TECHNOLOGY CONCENTRATION UNDER THE COMPUTER INFORMATION SYSTEMS PROGRAM.)

Program Description

The Web Technology program is designed to meet the needs of an ever-growing industry and career path involving the Internet's World Wide Web. The certificate offers basic entry-level skills in the field. These skills include hypertext markup language (HTML), basic scripting, Web design, programming and network management. The degree offers advanced skills in Web management, critical thinking and communication. Courses are grouped to closely mirror industry certification tracks and will assist students in achieving a vendor-neutral Certified Internet Webmaster (CIW) certification.

Career and Advancement Opportunities

Graduates are prepared for jobs as entry-level website designers, developers and/or maintainers.

Special Requirements

None.

CONTACT INFORMATION

Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
ENG 0950 Essay Writing	85
MATH 0940 Algebraic Problem Solving II or Elementary Algebra score of.....	81
RDG 0950 Reading & Critical Thinking	80

Associate of Applied Science Degree in Web Technology / Certificate in Web Technology

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS. SEE THE WEB TECHNOLOGY CONCENTRATION UNDER THE COMPUTER INFORMATION SYSTEMS PROGRAM.)

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK. Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
BA 1121 Business English.....	3
CIS 1710 Beginning XHTML.....	1
CIS 1711 Intermediate XHTML.....	1
CIS 1712 Advanced XHTML.....	1
IT 1010 Introduction to Computers.....	3
IT 1020 Integrating Business and Technology.....	3
MATH 1210 Methods of Problem Solving or higher (except MATH 1320/2110).....	3-4
(Required for degree only.)	
TERM 2	
BA 1131 Business Interpersonal Skills.....	3
CIS 1725 Extensible Markup Language.....	3
CIS 1330 PhotoShop.....	3
CIS 1715 Overview of Web Technologies.....	3
CIS 1207 Programming Logic and Design.....	3
TERM 3	
CIS 2340 Dreamweaver.....	2
CIS 1720 Website Maintenance.....	1
CIS 1410 IT Essentials I: PC Hardware and Software.....	3
CIS 1730 Web Programming with Javascript.....	3
CIS 1513 Database Design and Introduction to SQL.....	3
Web Technology Certificate.....	39

Course	Credit Hours
TERM 4	
CP 133 Survey of Active Server Pages (no equivalent 2007-2009 course).....	1
CIS 1750 Web Programming with PHP.....	3
CP 220 Advanced Database Concepts (no equivalent 2007-2009 course).....	3
Or	
CIS 2520 Introduction to SQL.....	3
CIS 1275 C++ Programming I.....	3
ENG 1101 College Writing.....	3
TERM 5	
BA 2999 Capstone Course.....	1
CP 134 Survey of ColdFusion (from prior catalog).....	1
CIS 2235 Java Programming I.....	3
ENG 1119 Technical Communications.....	3
Or	
ENG 2219 Technical Writing.....	3
★COMM Elective.....	3
★HUMANITIES OR SOCIAL/BEHAVIORAL SCIENCES Elective.....	3

TOTAL CREDIT HOURS69-70

OPTIONAL COURSES

(These courses do not fulfill graduation requirements and may not be eligible for financial aid.)

CIS 2095 Cooperative Education.....	4
CIS1096 and/or 2096 S Topics.....	1-3
CIS 2097 Independent Study.....	variable
CIS 2098 Internship.....	4
CSE 1120 Career Exploration or higher.....	1-3

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

• *Certificate in Welding Technology*

Program Description

Students will study hands-on Welding technology, which includes blueprint reading, mathematics, metallurgy and other general course work. Classes include classroom and lab time. Upon completion of this certificate program, graduates will be eligible for entry level Basic Welding in a wide variety of industrial applications.

Career and Advancement Opportunities

One hundred percent of our graduating classes obtained employment in the Welding Technology field. Jobs are available in construction and in the energy industry in gas and oil fields. The certificate prepares students for faster career advancement and greater earning potential.

Special Requirements

Students are required to purchase textbooks, tools and personal safety equipment.

CONTACT INFORMATION

Information about these programs is available from the program chair at (505) 224-3726, or from Academic Advisement and Career Development at (505) 224-4321.

Additional courses are available to enhance this program of study. Please contact the program chair or program director for information.

COURSE PREREQUISITES: Students must meet prerequisites by placement scores or specific course work. Please see Course Descriptions for prerequisite information.

Course	Accuplacer equiv.
_____ MATH 0550 Basic Mathematics or Arithmetic score of	31

Certificate in Welding Technology

Recommended Course Sequence for full-time students (Students should see an academic advisor to customize their educational plans.)

STUDENTS MUST MEET PREREQUISITES BY PLACEMENT SCORES OR SPECIFIC COURSE WORK.
Please see Course Descriptions for prerequisite information.

Course	Credit Hours
TERM 1	
WELD 1001 Welding Math I.....	2
WELD 1005 Welding Blueprint Reading I.....	2
WELD 1092 Oxyacetylene Welding & Cutting.....	2
WELD 1192 Introduction to SMAW.....	2
WELD 1020 Introduction to Metallurgy.....	2
WELD 1292 Advanced SMAW.....	2
WELD 1492 Introduction to GMAW & Fabrication Lab.....	2
TERM 2	
WELD 1025 Welding Blueprint Reading II.....	2
WELD 1030 Welding Math II.....	2
WELD 1592 Introductions to GTAW & Fabrication Lab.....	2
WELD 2001 Advanced Blueprint Reading.....	2
WELD 2192 Pipe Layout & Welding.....	2
WELD 1692 Advanced GMAW & Fabrication.....	2
WELD 2292 Advanced GTAW & Fabrication.....	2
WELD 2999 Capstone.....	1
TOTAL CREDIT HOURS.....	29

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Notes

See page 289 to find information on course categories marked with a star (★).

 – Course available through Distance Learning (see page 45.)

Course Descriptions

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Find your course.

le#.net

$v = \frac{4}{3} \pi^3$

vector-based

nuclear medicine

Quanta Magazine

creativity

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Non-Credit Course Descriptions *(listed alphabetically by subject code)*

Course Subject Code/Course number – Course Name

GED – Basic Skills Courses for GED (non-credit)

GEDR 0250 – Basic Language Skills

Previously BSK 040

Explores basic reading/writing strategies using phonics, development of sight vocabulary and collaborative use of materials in themes relevant to students' lives.

GEDR 0450 – Basic Language Skills II

Previously BSK 041

Improves developmental phonics, dictionary skills, grammar, response to reading and self-expression.

GEDR 0650 – Basic Skills Reading

Previously BSK 050

Analyzes nonfiction and fiction to identify main idea, point of view and organizational patterns. Includes summarizing, drawing conclusions and responding to readings.

GEDR 0820 – Reading in Literature and Arts

Previously BSK 051

Focuses on reading and analysis of literature (short stories, poetry, drama and commentary) with multicultural themes to improve comprehension and prepare for the literature and arts test of the GED.

GEDR 0830 – Science

Previously BSK 052

Presents physical, life and earth sciences; students learn and use critical thinking skills necessary for success in practical problem solving and on the GED exam.

GEDR 0840 – Social Studies

Previously BSK 053

Presents history, political science, geography and economics using critical thinking skills necessary for success in practical problem solving and on the GED exam.

GEDM 0450 – Math Fundamentals

Previously BSK 060

Reviews the language and basic concepts of math as they relate to addition, subtraction, multiplication and division using whole numbers and decimals.

GEDM 0550 – Decimals, Fractions and Measurements

Previously BSK 061

Covers intermediate math concepts with decimals, fractions and measurement applications.

GEDM 0650 – Proportions, Percentages and Data Analysis

Previously BSK 062

Presents intermediate math concepts with proportions, percentages and data analysis.

GEDM 0850 – GED Math

Previously BSK 063

Focus on understanding the concepts and types of applied problems found on the GED Math exam.

GEDW 0550 – Beginning Writing

Previously BSK 070

Covers the basics of grammar and the beginning writing process.

Course Subject Code/Course number – Course Name

GEDW 0650 – Spelling and Grammar

Previously BSK 071

Reviews language mechanics, usage and spelling improvement.

GEDW 0850 – General Composition

Previously BSK 074

Provides systematic study of the steps in the writing process focusing on sentence structure, grammar, punctuation, syntax and paragraph development, essay structure and organizational methods.

GEDI 0196, 0296 – Basic Skills Special Topics

(all courses ending in 96 are topics courses)

Previously BSK 082

Presents various topics. See **Schedule of Classes**.

GEDI 0500 – Basic Skills Integrated

Previously BSK 081

Provides comprehensive practice on basic reading, writing and math skills taught both on campus and at community sites to help students prepare for the GED examination or improve competencies. Computer assisted instruction available in some locations.

GEDI 0505 – Basic Skills Learning Center

Previously BSK 080

Includes individualized study and tutoring in basic skills math, reading and/or writing with access to computer, video and audio programs as well as other instructional materials in the Adult Education Learning Center at Main or Montoya campus.

GEDI 0520 – Spanish GED

Previously BSK 079

Prepares students for the GED exam conducted in Spanish, including instruction in math, writing, grammar and reading. Some English as a Second Language instruction in mechanics and usage to prepare for the English competency portion of the Spanish GED exam is included.

GEDI 0520 – GED en Español

Previously BSK 079

Preparación para el examen de GED en español, incluyendo instrucción en matemáticas, escritura, gramática, y lectura. Preparación incluido por el porción del examen que está en inglés.

GEDI 0900 – GED Refresher

Previously BSK 085

Half-semester course covering the five GED subject areas.

ESL – English as a Second Language (non-credit)

FOR ESL CREDIT COURSES, SEE ESOL ON PAGE 339

ESL 0250 – ESL Literacy

Previously ESL 040

Introduces alphabet, phonemic system, basic vocabulary and simple sentences in meaningful, communicative contexts. For students who have had no previous exposure to written or spoken English.

ESL 0350 – ESL Beginning

Previously ESL 050

Develops English language skills with an emphasis on pronunciation practice, listening comprehension, conversation and basic grammar.

ESL 0450 – Low Intermediate ESL

Previously ESL 060

Focuses on practice in communication skills for everyday life, which may include voicing opinions and responding appropriately in conversations on familiar topics, discussing short reading selections, learning and reviewing grammatical skills and conventions of oral and written English.

ESL 0550 – High Intermediate ESL

Previously ESL 061

Expands focus on practice in communication skills for everyday life, which may include voicing opinions and responding appropriately in conversations on familiar topics, discussing short reading selections, learning and reviewing grammatical skills and conventions of oral and written English.

ESL 0650 – Low Advanced ESL

Previously ESL 070

Covers English conversation, writing, reading and evaluation of materials and study of advanced grammar in meaningful, communicative contexts.

ESL 0500 – ESL Integrated

Previously ESL 081

Presents reading, writing, listening, speaking and grammatical skills through group work, paired practice and self-paced instruction. Comprehensive, community-based classes for students at all levels of English proficiency.

ESL 0505 – ESL Learning Center

Previously ESL 080

Includes individualized study and tutoring in English language skills with access to computer, video and audio programs as well as other instructional materials in the Adult Education Learning Center at Main or Montoya campus.

ESL 0196, 0296...0996 – ESL Special Topics*

(all courses ending in 96 are topics courses)

Previously ESL 082

Presents various topics. See **Schedule of Classes**.

ESL 0600 – Citizenship

Previously ESL 085

Covers English language skills, American history and government. For students who have a high intermediate to advanced level of English and are preparing to become American citizens.

** Note: Students may also study on an individual basis at Main Campus or Montoya Campus Adult Education Learning Centers.*

GEDI – Basic Job/Life Skills (non-credit)

GEDI 0450 – Job/Life Skills

Previously JLS 040

Examines critical life issues—self-esteem, study skills, parenting and job skills—and explores occupational choices and job placement services at CNM.

GEDI 0650 – Computer Literacy for Adult Education

Previously JLS 041

Introduces computer hardware and terminology, word processing programs and use of the Internet.

Communication, Humanities & Social Sciences and Math, Science & Engineering Discipline Categories

Courses numbered 1101 and above in the subject codes listed below are offered through CNM’s Communication, Humanities & Social Sciences and Math, Science & Engineering divisions and are grouped into specific discipline areas. Many programs of study require some coursework from these areas; the course sequence charts list the specific discipline area (for example, Social/Behavioral Science). These course categories are listed with a star (★) in the Programs of Study section. Below is a guide to which subject codes are in each discipline:

English/Communication

- ENG – English
- COMM – Communication
- JOUR – Journalism

Biological/Physical Science

- ASTR – Astronomy
- BIO – Biology
- CHEM – Chemistry
- PHYS – Physics

Fine Arts/Language

- ARTS – Art Studio
- ARTH – Art History
- FREN – French
- MUS – Music
- SPAN – Spanish
- THEA – Theatre

Humanities

- CST – Cultural Studies
- ENG – English (Literature)
- GNHN – General Honors
- HIST – History
- HUM – Humanities
- PHIL – Philosophy
- RLGN – Religion

Social/Behavioral Science

- ANTH – Anthropology
- ECON – Economics
- GEOG – Geography
- GNHN – General Honors
- PSCI – Political Science
- PSY – Psychology
- SOC – Sociology

Other liberal arts subject codes

- IT – Computer Science
- MATH – Mathematics
- NUTR – Nutrition

Credit Course Information

How to Read a Course Description

1 **AA 1002 – Keyboard Applications** **3**
4 *(Prerequisite: AA 101)*
 Requires production of business letters, reports and tables and continued development of speed and accuracy. A minimum average speed of 35 wpm on three five-minute timings is required to pass this course. *(30 theory and 45 lab hours per term)* Course fee: \$15. *Distance Learning option available (see page 45).*

- 1 Subject Code and Number:** The subject code identifies the discipline the course is in. Generally, the higher the number the more advanced the content.
- 2 Course Title**
- 3 Credits:** Credits earned for successfully completing this course.

- 4 Prerequisites, corequisites, or recommended prerequisites:** A prerequisite is a requirement that must be successfully completed before a student may enroll in a course. A corequisite is a course that is either recommended or required to be taken in combination with another course. (See page 17 for more details about prerequisites and corequisites.)
 A recommended prerequisite is a course that is strongly suggested for successful completion of the course, but is not required.
 If an **Accuplacer** test score applies, details will be listed here (see page 11)
- 5 Course description:** Details the content of the course.
- 6 Theory/Lab Hours:** If a course has both theory and lab hours or just lab hours, this note will include the total hours spent in each area (theory/lab) per term.
- 7 Special notes:** Notes concerning the course such as additional course or lab fees.
- 8 Distance Learning:** Indicates course is available through Distance Learning (see page 45 for more information)

Course Subject Code/Course number – Course Name

AA – Administrative Assistant Courses *(Business & Information Technology Division)*

THIS PROGRAM IS BEING DISCONTINUED AND WILL NOT ACCEPT NEW STUDENTS. PLEASE REFER TO THE OFFICE TECHNOLOGY PROGRAM
(See OTEC Courses on page 362)

ACCT – Accounting Courses *(Division of Educational & Career Advancement)*

ACCT 0850 – Introduction to Accounting **3**

Previously ACCT 100

Provides students with information about basic accounting cycle. Covers additional topics, such as payroll and taxes, as time permits. Helps students prepare for next-level accounting-related courses.
(45 theory hours + 15 lab hours per term)

ACCT – Accounting Courses *(Business & Information Technology Division)*

ACCT 1096, 1196...1996 – Topics **1–6**

(all courses ending in 96 are topics courses)

Previously ACCT 296 (Prerequisites: ACCT 1111 and 1112 and 1210 or division approval)
 Explores current topics in accounting.

Course Subject Code/Course number – Course Name

ACCT 1109 – Business Math **3**

Previously ACCT 111 (Prerequisite: MATH 0930 or Accuplacer Algebra score of 72 or equivalent. This course is a prerequisite for ACCT 1112 and a pre- or corequisite for ACCT 1110)
 Applies basic arithmetic operations to business applications and accounting.
Distance Learning option available (see page 45).

ACCT 1110 – Accounting I **6**

Previously ACCT 101 (Prerequisites: MATH 0930 or Accuplacer Algebra score of 72 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, Pre- or corequisite: ACCT 1109 or MATH 1315)
 This course is offered via distance learning only (see page 45). Students analyze and record business transactions, implement accrual basis accounting and prepare basic financial statements. In addition, students apply generally accepted accounting principles to the elements of the balance sheet. This class is fast paced (double the normal pace of ACCT 1111 and 1112). ACCT 1111 plus 1112 are equivalent to this course.
Distance Learning option available (see page 45).

ACCT 1111 – Accounting IA **3**

Previously ACCT 101A (Prerequisites: MATH 0930 or Accuplacer Algebra score of 72 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent)
 Note: Students going on to ACCT 1112 should take ACCT 1109 concurrently with ACCT 1111. Students analyze and record business transactions, implement accrual basis accounting and prepare basic financial statements. ACCT 1111 plus 1112 are equivalent to ACCT 101.
Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
ACCT 1112 – Accounting IB <i>Previously ACCT 101B (Prerequisite: ACCT 1109 and 1111 or MATH 1315)</i> Applies basic generally accepted accounting principles to the elements of the balance sheet. ACCT 1111 plus 1112 are equivalent to ACCT 101. <i>Distance Learning option available (see page 45).</i>	3	ACCT 1412 – Intermediate Quickbooks <i>Previously ACCT 158 (Pre- or corequisite: ACCT 1411 or division approval)</i> Expands Quickbooks knowledge to merchandise-oriented businesses. (5 weeks; 10 theory + 15 lab hours per term)	1
ACCT 1120 – Payroll Accounting <i>Previously ACCT 170 (Recommended prerequisite: ACCT 1111 or 1110)</i> Covers payroll accounting procedures and controls, tax and employment laws and tax reports that form the core of payroll responsibilities. <i>Distance Learning option available (see page 45).</i>	3	ACCT 1413 – Advanced Quickbooks <i>Previously ACCT 159 (Pre- or corequisite: ACCT 1412 or division approval)</i> Examines advanced topics including payroll transactions and reporting and conversion of existing manual records to Quickbooks. (5 weeks; 10 theory + 15 lab hours per term)	1
ACCT 1140 – Accounting Applications <i>Previously ACCT 180 (Prerequisites: ACCT 1109 and 1112 or 1110 and IT 1010 or division approval)</i> Simulates the complete accounting process using practice sets to expand skills in the performance of accounting functions.	3	ACCT 2095 – Cooperative Education <i>Previously ACCT 299 (Prerequisites: ACCT 1140 and division approval)</i> Provides students the opportunity to work a minimum of 150 hours in a new job experience in accounting or training-related supervised work. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer.	4
ACCT 1210 – Accounting II <i>Previously ACCT 102 (Prerequisites: ACCT 1110 or 1112 and IT 1010)</i> Presents utilization of accounting information for decision making by management in planning and controlling business activities. ACCT 1210 and 1140 from this catalog are equivalent to ACCT 102 from 1999 – 2000 and prior catalogs. <i>Distance Learning option available (see page 45).</i>	3	ACCT 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously ACCT 296 (Prerequisites: ACCT 1111 and 1112 and 1210 or division approval)</i> Explores current topics in accounting.	1-6
ACCT 1301 – Volunteer Tax Preparation <i>Previously ACCT 150</i> Introduces basic tax-return preparation issues and the software to do basic tax returns for low-income and elderly taxpayers. Offered fall and spring terms.	2	ACCT 2097 – Independent Study <i>Previously ACCT 297 (Prerequisite: division approval)</i> Requires the student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution applying analytical techniques and critical thinking to the problem. An oral presentation may be required.	Variable
ACCT 1303 – Volunteer Tax Review <i>Previously ACCT 152 (Prerequisites: ACCT 1301 and 1398)</i> Reviews changes in the tax code and tax software to prepare individual tax returns for low-income and elderly taxpayers. This course is designed for returning volunteers. Students must volunteer for a maximum of thirty hours and pass the certification examination.	1	ACCT 2098 – Internship <i>Previously ACCT 298 (Prerequisites: ACCT 1140 and division approval)</i> Provides students the opportunity to work a minimum of 150 hours in a new job experience in accounting or training-related supervised workstations. Students are not paid for their work but are supervised jointly by CNM and the company.	4
ACCT 1398 – Volunteer Tax Internship <i>Previously ACCT 151 (Pre- or corequisite: ACCT 1301)</i> Students apply current tax code to prepare individual tax returns for low-income and elderly taxpayers. Thirty hours of volunteer tax return preparation work during the spring term at one of CNM's Tax Help locations is required along with passing a certification examination. Offered spring term.	1	ACCT 2101 – Intermediate Accounting IA <i>Previously ACCT 201A (Prerequisite: ACCT 1140 or division approval)</i> Presents accounting theory, concepts, practical application and use of accounting facts and procedures in business contexts. Emphasis is on the rationale behind business transactions, the development of professional judgment and critical-thinking skills with regard to assets. <i>Distance Learning option available (see page 45).</i>	3
ACCT 1410 – Quickbooks Complete <i>Previously ACCT 160 (Recommended prerequisite: ACCT 1111)</i> This course is offered via distance learning only (see page 45). Covers QuickBooks software for small business. Includes transaction recording for service and merchandising businesses, bank reconciliation, payroll and end-of-period procedures, financial reporting and conversion of business records into QuickBooks. ACCT 1411/1412/1413 are equivalent to this course. (30 theory + 45 lab hours per term) <i>Distance Learning (see page 45).</i>	3	ACCT 2102 – Intermediate Accounting IB <i>Previously ACCT 201B (Prerequisite: ACCT 2101 or division approval)</i> Continues ACCT 2101 and completes the focus on the asset side of the balance sheet and starts the study of liabilities and stockholders' equity issues. <i>Distance Learning option available (see page 45).</i>	3
ACCT 1411 – Beginning Quickbooks <i>Previously ACCT 157 (Recommended prerequisite: ACCT 1111)</i> Covers Quickbooks General Ledger software for small business. The student will record transactions for a service-oriented business and prepare bank reconciliations and end-of-period financial statements. (5 weeks; 10 theory + 15 lab hours per term)	1	ACCT 2103 – Intermediate Accounting II <i>Previously ACCT 202 (Pre- or corequisite: ACCT 2102 or division approval)</i> Completes the accounting theory framework started in ACCT 2101 and ACCT 2102 with the remaining liabilities, stockholder equity issues and special topics.	3
		ACCT 2210 – Cost Accounting <i>Previously ACCT 260 (Prerequisite: ACCT 1210 or division approval)</i> Covers job order and process costing systems for construction and manufacturing.	3
		ACCT 2220 – Managerial Accounting <i>Previously ACCT 280 (Prerequisite: ACCT 1210 or division approval)</i> Expands the student's ability to use and interpret accounting information for decision making by management in planning and controlling business activities.	3

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Course Subject Code/Course number – Course Name**Credit Hours****ACCT 2340 – Tax Accounting I***Previously ACCT 240 (Prerequisite: ACCT 1111 or 1301/1302 or division approval)*

Covers fundamental characteristics of individual federal income taxes.

3**ACCT 2341 – Tax Accounting II***Previously ACCT 241 (Prerequisite: ACCT 2340 or division approval)*

Covers income tax aspects of corporations, partnerships, sub-chapter S corporations, fiduciaries and introduces some advanced concepts related to individual income taxes, tax planning and estate and gift taxation.

3**ACCT 2350 – Enrolled Agent Review I***Previously ACCT 242A (Pre- or corequisites: ACCT 1301 and 1302 and 2340 or division approval)*

Reviews the fundamental characteristics of individual taxation and related IRS rules and regulations to assist in the preparation for the IRS Enrolled Agent exam.

3**ACCT 2351 – Enrolled Agent Review II***Previously ACCT 242B (Pre- or corequisites: ACCT 2341 and 2350 or division approval)*

Reviews the fundamental characteristics of corporation, partnership, fiduciary, estate/gift and trust taxation and related IRS rules and regulations to assist in the preparation for the IRS Enrolled Agent exam.

3**ACCT 2410 – Electronic Spreadsheets***Previously ACCT 254 (Prerequisite: IT 1010 and ACCT 1111 and 1112 or division approval; recommended prerequisite: ACCT 1210)*

Applies electronic spreadsheets to accounting and business problems. (30 theory + 45 lab hours per term) Distance Learning option available (see page 45).

3**ACCT 2420 – Computerized Accounting***Previously ACCT 255 (Prerequisite: ACCT 1140 or division approval)*

Employs integrated accounting software for payroll, inventory control, accounts payable, accounts receivable and general ledger functions. Course reviews the accounting cycle both manually and computerized. (30 theory + 45 lab hours per term)

3**ACCT 2510 – Governmental Accounting***Previously ACCT 270 (Prerequisite: ACCT 1140 or 2101 or division approval)*

Examines fund accounting for governmental entities.

3**ACCT 2520 – Auditing***Previously ACCT 271 (Prerequisite: ACCT 1210 or division approval; recommended prerequisite: ACCT 2101)*

Surveys auditing concepts that include audit standards, reports, professional ethics, legal liability, evidence accumulation, audit planning, internal control, transaction cycles, other engagements and operational auditing.

3**ACHR – Air Conditioning, Heating & Refrigeration Courses (Applied Technologies Division)****ACHR 1105 – Refrigeration Fundamentals***Previously ACHR 131 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent, or division approval)*

Introduces fundamentals of refrigeration, including components, refrigerants, accessories and hands-on competencies. (15 theory + 37.5 lab hours per term)

2**ACHR 1110 – Basic Electricity***Previously ACHR 132 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent, or division approval)*

Presents principles of electricity, measurements, safety, wiring procedures, schematics, components of basic circuits and principles and practices in electricity. (15 theory + 37.5 lab hours per term)

2**Course Subject Code/Course number – Course Name****Credit Hours****ACHR 1115 – Refrigerant Management***Previously ACHR 133 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent, or division approval)*

Stresses accepted practices and procedures of refrigerant handling, containment, safety, leak detection, evacuation, recovery and charging systems. Students must take and pass the EPA Universal CFC Certification exam. Exam fees approximately \$50. (15 theory + 37.5 lab hours per term)

2**ACHR 1120 – Motors and Controls***Previously ACHR 134 (Pre- or corequisite: ACHR 1102 or division approval)*

Covers primary and control circuits in various applications, troubleshooting and components. Emphasizes attention to motors and starting devices. (15 theory + 37.5 lab hours per term)

2**ACHR 1125 – Refrigeration Applications***Previously ACHR 135 (Pre- or corequisite: ACHR 1105, 1110, 1115, 1120 or division approval)*

Covers system design, accessories, performance characteristics and problem diagnosis. (15 theory + 37.5 lab hours per term)

2**ACHR 1130 – Code and Safety Requirements I***Previously ACHR 137 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)*

Investigates code requirements and safety practices related to refrigeration. Code and safety searches are an integral part of the course.

1**ACHR 1135 – Commercial Refrigeration***Previously ACHR 155 (Pre- or corequisite: ACHR 1105, 1110, 1115, 1120 or division approval)*

Covers installation, service and maintenance of reach-in and walk-in refrigeration systems. (15 theory + 37.5 lab hours per term)

2**ACHR 1205 – Air Conditioning***Previously ACHR 151 (Prerequisite: ACHR 1115 or Universal EPA certificate or division approval)*

Covers installation, service and maintenance of air conditioning and heat pump systems. (15 theory + 37.5 lab hours per term)

2**ACHR 1210 – Air Conditioning Control***Previously ACHR 152 (Prerequisite: ACHR 1110 and 1120 or division approval)*

Covers installation, service and maintenance of air conditioning and heat pump systems controls. (15 theory + 37.5 lab hours per term)

2**ACHR 1215 – System Design***Previously ACHR 156*

Examines air properties, air movement, heat load calculations and water as a secondary refrigerant. (30 theory + 37.5 lab hours per term)

3**ACHR 1220 – Installation and Retrofit of Heat/Cooling Systems***Previously ACHR 159*

Covers the installation of new and retrofitting of existing heating and/or cooling units to duct systems. Test and balancing procedures are introduced. (15 theory + 37.5 lab hours per term)

2**ACHR 1225 – Heating Systems***Previously ACHR 157 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent, or division approval)*

Emphasizes gas, oil and electric heating systems used for residential and/or light commercial heating systems. Furnaces and package systems are covered. Alternative heating sources are discussed. (15 theory + 37.5 lab hours per term)

2**ACHR 1230 – Heating Control Systems***Previously ACHR 158 (Prerequisites: ACHR 1110 and 1120 or division approval)*

Emphasizes electrical and electronic control troubleshooting, service, maintenance and repair/replacement of residential and/or light commercial heating systems. (15 theory 37.5 lab hours per term)

2

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
ACHR 1305 – Pumps and Valves <i>Previously ACHR 210</i> Covers the types of valves and pumps used in hydronic systems; the sizing, selection and internal construction, disassembling, assembling and measurement of impellers. (15 theory + 37.5 lab hours per term)	2	AFAS 1120 – The Foundation of the United States Air Force I <i>Previously AFAS 120 (Corequisite: AFAS 1192. Concurrent enrollment in leadership laboratory required for cadet status)</i> Introduces students to the United States Air Force (USAF), providing an overview of the basic characteristics, missions and organization of the USAF. Meets once weekly. Fall only.	1
ACHR 1310 – Basic Hydronic Principles <i>Previously ACHR 211</i> Covers basic flow, nomenclature, physical principles of typical systems, piping layout and design. Investigates actual operating systems. (15 theory + 37.5 lab hours per term)	2	AFAS 1121 – The Foundation of the United States Air Force II <i>Previously AFAS 121 (Corequisite: AFAS 1292. Concurrent enrollment in leadership laboratory required for cadet status)</i> Provides an introduction to the USAF, including an overview of the basic characteristics, missions and organization of the USAF. Meets once weekly. Spring only.	1
ACHR 1315 – Hot Water and Steam Generation Systems <i>Previously ACHR 212 (Pre- or corequisites: ACHR 1305 and 1310 or division approval)</i> Covers types, design, construction of typical systems, sizing and controls of units. (15 theory + 37.5 lab hours per term)	2	AFAS 1192 – Leadership Laboratory I <i>Previously AFAS 120L</i> Develops personal leadership and managerial abilities. Examines Air Force customs and courtesies and requires demonstration of related abilities as well as participation in drill and ceremonies. Emphasizes standards of discipline and conduct. Graded CR/NC. Enrollment in the laboratory is required with AFAS 1120 course. Fall only.	1
ACHR 1320 – Controls I <i>Previously ACHR 213 (Pre- or corequisites: ACHR 1305 and 1310 or division approval)</i> Stresses pneumatic, electronic and electric control systems with computer interfacing. (15 theory + 37.5 lab hours per term)	2	AFAS 1292 – Leadership Laboratory II <i>Previously AFAS 121L</i> Continues course of study begun in AFAS 1120/1192. Graded CR/NC. Enrollment in the laboratory is required with AFAS 1121 course. Spring only.	1
ACHR 1325 – Chilled Water Systems <i>Previously ACHR 214 (Pre- or corequisites: ACHR 1205, 1210, 1305, 1310 or division approval)</i> Emphasizes commercial and industrial chilled water systems. (15 theory + 37.5 lab hours per term)	2	AFAS 2192 – Leadership Laboratory I <i>Previously AFAS 250L</i> Provides application of elements of personal leadership. Provides students an opportunity to demonstrate command and leadership abilities and knowledge of Air Force operating procedures. Graded CR/NC. Enrollment in the laboratory is required with AFAS 2250. Fall only.	1
ACHR 1335 – Controls II <i>Previously ACHR 215 (Pre- or corequisite: ACHR 1320 or division approval)</i> Covers advanced building controls using interfaced operating monitor equipment. (15 theory + 37.5 lab hours per term)	2	AFAS 2250 – The Evolution of USAF Air and Space Power I <i>Previously AFAS 250 (Corequisite: AFAS 2192. Concurrent enrollment in leadership laboratory required for cadet status)</i> Introduces topics on Air Force heritage and leaders; introduces air and space power through examination of competencies and functions; and continues application of communication skills. Designed to instill an appreciation of the development and employment of air power and to motivate sophomore students to make transition from AFROTC cadet to AFROTC officer candidate. In addition, aspects of the AS 200 course begin to prepare students for field training exercises. Meets once weekly. Fall only.	1
ACHR 1340 – Code and Safety Requirements II <i>Previously ACHR 216 (Prerequisite: ACHR 1130 or division approval)</i> Investigates code requirements and safety practices related to refrigeration. Code and safety searches are an integral part of this course.	1	AFAS 2251 – The Evolution of USAF Air and Space Power II <i>Previously AFAS 251 (Corequisite: AFAS 2292. Concurrent enrollment in leadership laboratory required for cadet status)</i> Introduces topics on Air Force heritage and leaders; introduction to air and space power through examination of competencies and functions; and continued application of communication skills. Course is designed to instill an appreciation of the development and employment of air power and to motivate sophomore students to make transition from AFROTC cadet to AFROTC officer candidate. In addition, aspects of the AS 200 course begin to prepare students for field training exercises. Meets once weekly. Spring only.	1
ACHR 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously ACHR 296</i> Provides an in-depth study of problems and advanced techniques.	1–6	AFAS 2292 – Leadership Laboratory II <i>Previously AFAS 251L</i> Continues course of study begun in AFAS 2250/2192. Graded CR/NC. Enrollment in the laboratory is required with AFAS 2251. Spring only.	1
ACHR 2297 – Independent Study <i>Previously ACHR 297 (Prerequisite: division approval)</i> Focuses on a specific problem while working with an instructor.	Variable		
ACHR 2999 – ACHR Capstone Course <i>Previously ACHR 295 (Prerequisite: division approval)</i> Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term).	1		
AFAS – Aerospace Studies (Communication, Humanities & Social Sciences Division)			
<i>Students may register at CNM for the University of New Mexico Aerospace Studies (Air Force) Uniforms and textbooks are provided. Because these courses are offered at the main campus of UNM, students should contact UNM before enrolling. For more information, contact:</i>			
<i>Aerospace Studies Curtis E. Johanson, Lt. Col., USAF University of New Mexico AFROTC Detachment 510 Aerospace Studies Building MSC 02 1650, 1 UNM 1901 Las Lomas NE; Albuquerque, NM 87131 (505) 277-4502</i>			
<i>Credits in Aerospace Studies may NOT be applied to any associate degree or certificate at CNM.</i>			

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ANIM – Computer Animation Courses *(Applied Technologies)*

ANIM 1001 – Survey of Computer Animation	3
<i>Previously ANIM 101</i>	
Progresses from traditional cell animation through building free-hand skills, use of paint software packages, digital media applications and introduces 3-D computer animation. (30 theory + 45 lab hours per term)	
ANIM 1003 – Techniques for Animation Text	3
<i>Previously ANIM 103 (Prerequisites: ENG 1101)</i>	
Introduces concepts required to create a story element, with emphasis on animation applications including project board techniques, structure for the short application, use of screenwriting software, information on the direct wants and needs of production houses and insights into legal aspects of the business. (30 theory + 45 lab hours per term)	
ANIM 1005 – Introduction to Lightwave	3
<i>Previously ANIM 105 (Prerequisites: IT 1010 and ARTS 1106 or ANIM 1001)</i>	
Explores various components of Lightwave 3-D animation software, modeling, texturing, lighting, animation and other bundled tools. Additional lab hours outside the regular class time are required. (30 theory + 45 lab hours per term)	
<i>Distance Learning option available (see page 45).</i>	
ANIM 1007 – Introduction to Maya	3
<i>Previously ANIM 107 (Prerequisites: IT 1010 and ARTS 1106 or ANIM 1001)</i>	
Uses, extensively, Maya 3-D computer animation software involving modeling, rendering, morphing, texture mapping, animation and image processing. Additional lab hours outside the regular class time are required. (30 theory + 45 lab hours per term)	
ANIM 1009 – Intermediate Lightwave	3
<i>Previously ANIM 109 (Prerequisites: ANIM 1005)</i>	
Expands the use of Lightwave 3-D animation software to professional applications. Emphasizes insights into the work environment and employer expectations. Additional lab hours outside the regular class time are required. (30 theory + 45 lab hours per term)	
ANIM 1011 – Intermediate Maya	3
<i>Previously ANIM 111 (Prerequisite: ANIM 1007)</i>	
Continues coverage of Maya character animation, scene design and simulation. Creates realistic characters and scenes, as well as a variety of special effects. (30 theory + 45 lab hours per term)	
ANIM 1013 – Advanced Computer Animation	3
<i>Previously ANIM 113 (Co – or – Prerequisites: ANIM 1009, ANIM 1011)</i>	
Explores advanced techniques such as inverse kinematics, constraints, character building, particle emission and dynamic forces. Emphasizes team project participation. Additional lab hours outside the regular class time are required. (30 theory + 45 lab hours per term)	
ANIM 1050 – Game Design Theory	3
<i>Previously ANIM 150 (Prerequisite: IT1010 and ENG 1101)</i>	
Study the history and genres of computer games. Learn the basics of designing games and create standard game design documents while investigating standard practices of the development industry. (30 theory + 45 lab hours per term)	
<i>Distance Learning option available (see page 45).</i>	
ANIM 2095 – Cooperative Education	3
<i>Previously ANIM 299 (Prerequisite: permission of director)</i>	
In cooperation with local industry, the student works for one term on a cooperative basis in an appropriate training program. The position is paid.	

ANIM 2096, 2196...2996 – Topics **1-9**

(all courses ending in 96 are topics courses)
Previously ANIM 296 (Prerequisite: permission of director)
 Topics vary based on the requests from the community and available software, hardware and instructors.

ANIM 2097 – Independent Study **1-9**

Previously ANIM 297 (Prerequisite: permission of director)
 The student and instructor define a specific problem in the area of the student's interest and directly related to the program. The student develops and executes a solution using analytical techniques appropriate to the problem. An oral presentation may be required.

ANIM 2098 – Internship **3**

Previously ANIM 298 (Prerequisite: permission of director)
 In cooperation with local industry, the student works for one term on a cooperative basis in an appropriate training program. The position is not paid.

ANIM 2999 – Animation Capstone **3**

(Pre- or corequisite: ANIM 1013)
 Create a video demo reel. Reviews strategies for content, themes, packaging, editing, sound effects and presentation. Tailor demo reels to specific companies and areas of industry. Incorporates methods of job seeking and applications. (30 theory + 45 lab hours per term)

ANTH – Anthropology Courses *(Communication, Humanities & Social Sciences Division)*

ANTH 1101 – Introduction to Anthropology **3**

Previously ANTH 101 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Surveys the breadth of anthropology, including archaeology, biological anthropology, cultural anthropology and linguistic anthropology.
Distance Learning option available (see page 45).

ANTH 1110 – Language, Culture and the Human Animal **3**

Previously ANTH 110 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Introduces concepts and practices of linguistics and anthropology. Study of the systematic nature of language: phonology, morphology, syntax, semantics and pragmatics.
Distance Learning option available (see page 45).

ANTH 1120 – Archaeology: Discovering Our Past **3**

Previously ANTH 120 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Surveys archaeological theory and methods including data from selected archaeological sites in various geographical areas and from different time periods.

ANTH 1130 – Cultures of the World **3**

Previously ANTH 130 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Surveys basic concepts of cultural anthropology as well as cultural characteristics illustrated by a variety of existing cultures in their native environments with societal examples in cross-cultural comparisons.
Distance Learning option available (see page 45).

ANTH 1150 – Evolutionary Anthropology **3**

Previously ANTH 150 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Introduces field of biological anthropology and concepts of organic evolution. Emphasizes fossil history of primates, prehistory of man and human genetics within a paleoecological context, modern primate behavior and its relevance to human evolution.

ANTH 2096, 2196...2996 – Topics in Anthropology **1-3**

Previously ANTH 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Presents various topics. See **Schedule of Classes**.

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ANTH 2222 – Ancient Mesoamerica <i>Previously ANTH 222 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Traces Mesoamerican archaeology from the earliest inhabitants through the Aztec period. Emphasizes cultural processes and dynamics of cultural evolution.	3	ARDR 1205 – Architectural CAD Drafting II <i>Previously ARDR 214L (Prerequisite: ARDR 1105; Pre- or corequisite: ARDR 1201, ARDR 1220)</i> Continues ARDR 1105. Students produce design development and representative architectural construction drawings using standard graphic, dimensioning and notation systems. (45 theory + 180 lab hours per term)	7
ANTH 2231 – North American Indians <i>Previously ANTH 231 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents comparative ethnology of North American Indian tribes on geographic, ecologic and cultural bases and explores life of North American Indians before European influence and the diversity of cultures existing on the North American continent.	3	ARDR 1220 – CAD Analysis II <i>Previously ARDR 213 (Corequisite: ARDR 1205 or division approval)</i> Applies beginning to advanced CAD concepts and commands to the production and coordination of A/E construction drawings. (30 theory + 45 lab hours per term)	4
ANTH 2238 – Cultures of the Southwest <i>Previously ANTH 238 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents basic concepts related to cultural patterns of the American Southwest from A.D. 1600 to the present and interactions of the ethnic groups that populate the Southwest. <i>Distance Learning option available (see page 45).</i>	3	ARDR 1230 – Intermediate Computer-Assisted Drafting <i>Previously ARDR 181 (Prerequisite: ARDR 1010)</i> Continues ARDR 1010 and CAD 1001 with practical applications to architectural projects. (30 theory + 45 lab hours per term)	3
ANTH 2255 – Southwestern Archaeology <i>Previously ANTH 255 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents interpretations and dynamics of Southwestern archaeology from the time of the earliest inhabitants until European contact.	3	ARDR 1305 – Architectural CAD Drafting III <i>Previously ARDR 119L (Prerequisites: ARDR 1201, 1220 and 1205)</i> Applies concepts and techniques of AutoCAD 3-D modeling resulting in presentation drawings in AutoCAD and 3-D Studio Viz. (45 theory + 180 lab hours per term)	7
ANTH 2265 – The Anthropology of Drugs <i>Previously ANTH 265 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Examines the nature and use of mind-altering drugs from a cross-cultural perspective, including study of the varieties and effects of such drugs around the world, socio-cultural contexts and functions of drugs, the social control of drugs and the political economy of world trade in both licit and illicit drugs.	3	ARDR 1330 – Customizing Auto Cad <i>Previously ARDR 185 (Prerequisite: ARDR 1220 or ARDR 1230)</i> Introduces AutoCAD customization concepts and applications. (30 theory + 45 lab hours per term)	3
ARDR – Architectural Drafting Courses (Applied Technologies Division)			
ARDR 1010 – CAD Analysis I <i>(Prerequisite: CAD 1001)</i> Applies the usage of CAD to Architectural/Engineering drafting. (20 theory + 30 lab hours per term)	2	ARDR 1392 – Advanced Computer-Assisted Drafting <i>Previously ARDR 182L (Prerequisites: ARDR 1220, 1205 or ARDR 1230)</i> Introduces third party CAD software-concepts and applications using Architectural Desktop. (75 lab hours per term)	2
ARDR 1101 – Building Materials and Methods I <i>Previously ARDR 109 (Prerequisite: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent)</i> Studies construction systems, sub-systems and components. Emphasizes foundations, light wood frame and masonry construction. A construction hard hat is required. (30 theory + 45 lab hours per term)	3	ARDR 1492 – Architectural Design <i>Previously ARDR 208L (Prerequisite: ARDR 1105)</i> Presents design principles, theories, methods and process. Facilitates learning through student-designed project. (75 lab hours per term)	2
ARDR 1105 – Architectural Drafting I <i>Previously ARDR 107L (Pre- or corequisite: ARDR 1010, ARDR 1110, ARDR 1101)</i> Introduces the fundamentals of architectural graphic representation as the foundation of all A/E drafting courses. Explores basic common assembly systems and introduces schedules. Note: Students must provide their own drafting kits. (15 theory + 135 lab hours per term)	4	ARDR 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously ARDR 296 (Prerequisite: permission of program chair)</i> Offers topics based on requests from the community and available instructors.	1-7
ARDR 1110 – Architectural Mathematics <i>Previously ARDR 108 (Prerequisite: MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent; Pre- or corequisite: ARDR 1010)</i> Covers basic concepts of problem solving, mathematics and geometry with an emphasis on architectural and engineering applications and calculator use. Students must provide a full-function scientific calculator with a ten-digit display. (30 theory + 45 lab hours per term)	3	ARDR 2101 – Structural Systems Analysis <i>Previously ARDR 201 (Prerequisite: ARDR 1305; Corequisite: ARDR 2102)</i> Introduces structural design and graphics in wood, steel and concrete and elementary beam design problems. (60 theory + 15 lab hours per term)	4
ARDR 1201 – Building Materials and Methods II <i>Previously ARDR 115 (Prerequisites: ARDR 1010, ARDR 1101; Pre- or corequisite: ARDR 1105)</i> Continues ARDR 1101 with emphasis on steel, concrete, roofing, glazing and cladding systems. (30 theory + 45 lab hours per term)	3	ARDR 2102 – Structural Systems CAD Drafting <i>Previously ARDR 203L (Prerequisite: ARDR 1305; Corequisite: ARDR 2101)</i> Develops representative structural engineering drawings in steel, concrete and/or wood structural systems. (15 theory + 180 lab hours per term)	5
		ARDR 2192 – Site Analysis <i>Previously ARDR 113L (Prerequisites: ARDR 1105)</i> Examines analytical factors of site design, such as orientation and view, sound and light intrusions, contours and grading, drainage and foliage. Introduces planning aspects of site size. (75 lab hours per term)	2

Course Subject Code/Course number – Course Name**Credit Hours****ARDR 2201 – Mechanical/Electrical Systems Analysis***Previously ARDR 215 (Prerequisite: ARDR 1305; Corequisite: ARDR 2202)*

Studies general theory and layout information and code requirements for non-residential systems. Includes lighting, plumbing and air conditioning. (60 theory + 15 lab hours per term)

4**ARDR 2202 – Mechanical/Electrical Systems CAD Drafting***Previously ARDR 212L (Corequisite: ARDR 2201)*

Reviews of conventional drafting methods of mechanical and electrical systems including overlaying electrical, heating, ventilation and plumbing systems on architectural views. Develop engineering drawings using engineering graphic skills. (15 theory + 180 lab hours per term)

5**ARDR 2295 – Cooperative Education***Previously ARDR 299 (Prerequisite: permission of program chair)*

Provides opportunity for the student to work for one term on a cooperative basis in an appropriate, defined training program. The position is paid.

3**ARDR 2297 – Independent Study***Previously ARDR 297 (Prerequisite: permission of program chair)*

Defines a specific problem in the area of the student's interest and directly related to the program. The student develops and executes a solution using analytical and drafting techniques. An oral presentation may be required.

1–7**ARDR 2298 – Internship***Previously ARDR 298 (Prerequisite: permission of program chair)*

Provides opportunity for the student to work for one term on a cooperative basis in an appropriate, defined training program. The position is not paid.

3**ARDR 2999 – Architectural/Engineering Drafting Seminar***Previously ARDR 221L (Prerequisites: division approval)*

Develops a résumé and presents a cumulative portfolio to a review committee. Examines needs, requirements, personnel procedures, expectations of employers and trends of the professional community. Taken in the student's last semester. (45 lab hours per term)

1**ART (ARTH and ARTS) – Art Courses (Communication, Humanities & Social Sciences Division)****ARTH 1101 – Introduction to Art***Previously ART 101 (Prerequisite: RDG 0950 or Accuplacer Reading Score of 80 or equivalent and Eng 0950 or Accuplacer Score of 85 or equivalent)*

Presents fundamental concepts of visual arts—the language of form and media of artistic expression. Possible museum exhibition attendance.

3**ARTH 2096, 2196...2996 – Topics in Art***(all courses ending in 96 are topics courses)**Previously ART 296*Presents various topics. See **Schedule of Classes**.**3****ARTH 2200 – Women in Art***(Prerequisites: RDG 0950 or Accuplacer Reading Score of 80 or equivalent and ENG 0950 or Accuplacer Score of 85 or equivalent)*

Students will examine the creative achievements of women artists, exploring the social and cultural contexts related to women's artwork in relationship to the history and contemporary practices of art.

3**ARTH 2201 – History of Art I***Previously ART 201 (Prerequisite: RDG 0950 or Accuplacer Reading Score of 80 or equivalent and Eng 0950 or Accuplacer Score of 85 or equivalent)*

Surveys Near Eastern, Egyptian, Greek, Roman, early Christian, Byzantine, early Medieval, Romanesque and Gothic art and architecture. Fall, summer only

3**Course Subject Code/Course number – Course Name****Credit Hours****ARTH 2202 – History of Art II***Previously ART 202 (Prerequisite: RDG 0950 or Accuplacer Reading Score of 80 or equivalent and Eng 0950 or Accuplacer Score of 85 or equivalent)*

Surveys Italian and Northern Renaissance, Baroque, Rococo and 19th century Western European painting, sculpture and architecture. Spring, summer only

3**ARTH 2250 – Modern Art***Previously ART 250 (Prerequisite: RDG 0950 or Accuplacer Reading Score of 80 or equivalent and Eng 0950 or Accuplacer Score of 85 or equivalent)*

Surveys major figures, movements and stylistic developments in Western art from 1850 to the present.

3**ARTH 2251 – Art of the American Southwest***Previously ART 251 (Prerequisite: RDG 0950 or Accuplacer Reading Score of 80 or equivalent and Eng 0950 or Accuplacer Score of 85 or equivalent)*

Presents interrelationships of three Southwestern cultures emphasizing major forms of expression in pottery, textiles, jewelry, architecture, painting and photography.

3**ARTH 2260 – Architectural History: Ancient through Modern***Previously ART 260 (Prerequisite: RDG 0950 or Accuplacer Reading Score of 80 or equivalent and Eng 0950 or Accuplacer Score of 85 or equivalent)*

Surveys the history of Western architecture from the pyramid to the post-modernist house; technological, stylistic and functional characteristics of monuments within their cultural contexts.

3**ARTS 1102 – Introduction to Studio Arts***Previously ART 102*

Covers techniques, materials and terminology in two-dimensional and three-dimensional image- and form-making, in hands-on studio format. Includes major studio concepts in design, drawing, painting, printmaking, ceramics, photography and sculpture.

3**ARTS 1106 – Drawing I***Previously ART 106 (Recommended prerequisite: ARTH 1101)*

Provides direct experience in exploring basic drawing concepts. It is a fundamentals course which introduces the language of drawing, the use of drawing media (both wet and dry) and technical associated with direct observational drawing skills.

3**ARTS 1121 – Two-Dimensional Design***Previously ART 121 (Recommended prerequisites: ARTH 1101 and ARTS 1106)*

Emphasizes visual awareness through direct experience with visual form—elements of line, shape, value, texture, color theory, space and volume, painting principles and visual vocabulary.

3**ARTS 1122 – Three-Dimensional Design***Previously ART 122 (Prerequisite: ARTS 1106 and ARTS 1121)*

Presents concepts, techniques, processes and vocabulary involved in working in the third dimension and emphasizes a variety of media and issues of space, form, mass and volume, line, texture, scale, proportion and the making of objects and spatial contexts.

3**ARTS 2096, 2196...2996 – Topics in Art***(all courses ending in 96 are topics courses)**Previously ART 296*Presents various topics. See **Schedule of Classes**.**3****ARTS 2204 – Life Drawing I***Previously ART 204 (Prerequisite: ARTS 1106)*

Continues descriptive and perceptual skills building of Drawing I, with an emphasis on human anatomical structures and historic concepts related to the drawing of the figure. Concludes with composition of the figure through use and study of models.

3

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
ARTS 2205 – Drawing II <i>Previously ART 205 (Prerequisite: ARTS 1106)</i> Continues course of study initiated in ART 1106, offering further concentration on basic drawing concepts with greater emphasis on descriptive and perceptual drawing skills using wet and dry media and color. Assigned problems explore aspects of experimental drawing, media and contemporary concerns, still life, landscape, portraiture and the figure in environmental contexts and in motion.	3	ASTR 2096, 2196...2996 – Topics in Astronomy <i>(all courses ending in 96 are topics courses)</i> <i>Previously ASTR 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents various topics. See Schedule of Classes .	3
ARTS 2206 – Printmaking I <i>Previously ART 206 (Prerequisite: ARTS 1106, ARTS 1121, or approval of instructor.)</i> Introduces the fundamental methods of printmaking. Explores techniques and creative aspects of monotype, collagraph, relief and intaglio printmaking. Discusses lithography and screen printmaking.	3	AUTC – Automotive Technology Courses <i>(Applied Technologies Division)</i>	
ARTS 2207 – Painting I <i>Previously ART 207 (Prerequisites: ARTS 1106 and ARTS 1121)</i> Explores the tradition of paint as a medium for artistic expression. Focuses on materials/media, tools, techniques, history and concepts of painting.	3	AUTC 1110 Introduction to Automotive Systems <i>(Recommended prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, or division approval)</i> Introduces essential shop skills including safety, tool identification and use, under-car and under-hood servicing, repair information retrieval and proper use and care of equipment. Introduces the relationships between all vehicle systems and sub-systems. Prepares students to perform basic service operations required of entry level technicians. Introduces students to program and CNM. <i>(30 theory + 90 lab hours per term)</i>	4
ARTS 2210 – Art Career Concerns <i>(Prerequisites: ARTS 1106, 1121 and either ARTS 2206 or 2207)</i> Presents the practicalities of building a fine art career with emphasis on developing a professional portfolio. It covers professional practices of the studio artist including self-promotion, contacts, research tools for exhibition venues and other art related opportunities.	3	AUTC 1120 – Brake Systems <i>Previously AUTC 121L (Pre- or corequisites: AUTC 1110 and AUTC 1140 or equivalent, or division approval)</i> Introduces principles of hydraulic brake operation and practical skills of diagnosis and repair of standard and anti-lock brakes. Includes lab activities on brake bleeding and adjustment, drum and rotor machining, master cylinder and brake caliper repair. <i>(30 theory + 75 lab hours per term)</i>	4
ARTS 2211 – Portraiture <i>Previously ART 211 (Prerequisites: ARTS 1106)</i> Develops skills in drawing and painting to depict the human likeness. Uses various artistic media to explore the anatomy of the human head and face in order to express individuality and mood. Examines the role of the portrait throughout history, together with the development of its skills.	3	AUTC 1130 – Suspension and Alignment <i>Previously AUTC 122L (Pre- or corequisites: AUTC 1110 and AUTC 1140 or equivalent or division approval)</i> Presents repair and service on a variety of modern vehicle suspension types. Includes strut replacement, wheel alignment and tire balancing, steering gear repair and rebuilding of common suspension components. <i>(30 theory + 75 lab hours per term)</i>	4
ARTS 2214 – Life Drawing II <i>Previously ART 214 (Prerequisite: ARTS 2204)</i> Continues course of study begun in ART 1106 and 2204.	3	AUTC 1140 – Automotive Electrical <i>Previously AUTC 126L (Recommended prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, or division approval)</i> Presents critical skills necessary for identifying and correcting problems found in automotive electrical/electronic systems. Includes DVOM and analog meter use, voltage drop testing, wiring schematic interpretation and electrical troubleshooting procedures. <i>(30 theory + 90 lab hours per term)</i>	4
ARTS 2217 – Painting II <i>Previously ART 217 (Prerequisite: ARTS 2207)</i> Continues course of study begun in ARTS 2207. Emphasizes more accomplished technical skills and more sophisticated conceptual understanding of content and form, with subjects drawn from imagination as well as observation. Focuses on the expressive potential of the medium.	3	AUTC 1210 – Manual Transmissions <i>Previously AUTC 123L (Pre- or corequisites: AUTC 1110 or AUTC 1140 or division approval)</i> Introduces fundamentals of design and operation in front and rear drive manual transmissions, differentials and drive line components. Activities include disassembly, measurement, inspection and repair of various transmissions in the car and on the bench. <i>(30 theory + 75 lab hours per term)</i>	4
ASTR – Astronomy Courses <i>(Math, Science & Engineering Division)</i>			
ASTR 1010 – Introduction to Astronomy I <i>Previously ASTR 101 (Prerequisite: RDG 0950 or Accuplacer score of 80 or equivalent, recommended: MATH 0940 or Accuplacer Elementary Algebra score of 81)</i> Introduces the science of astronomy, focusing on the solar system – the sun, planets, comets and meteors.	3	AUTC 1220 – Engine Repair <i>Previously AUTC 131L (Prerequisites: AUTC 1110 and Pre- or corequisites: AUTC 1140 or equivalent or division approval)</i> Introduces internal combustion engine theory, engine overhaul procedures and precision tool measuring. Includes essential engine testing and identification of needed repairs along with removal/replacement of engines. <i>(30 theory + 90 lab hours per term)</i>	4
ASTR 1110 – Introduction to Astronomy II <i>Previously ASTR 102 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, MATH 0940 or Accuplacer Elementary Algebra score of 81)</i> Explores life cycles of stars and stellar systems and the structure of the universe. Focuses on the births, lives and deaths of stars; the nature of the Milky Way galaxy and current concepts on cosmology and the large-scale structure of the universe.	3	AUTC 1230 – Automatic Transmissions <i>Previously AUTC 132L (Prerequisite: AUTC 1110 and Pre- or corequisites: AUTC 1140 or equivalent or division approval)</i> Explores the fundamentals of design and operation of automatic transmissions and transaxles, servicing and proper repair procedures. Students perform pump, clutch repair, valve body overhaul and gear replacement on a variety of transmissions. <i>(30 theory + 90 lab hours per term)</i>	4
ASTR 1192 – Astronomy Laboratory <i>Previously ASTR 111L (Pre- or corequisite: ASTR 1110)</i> Investigates in optional laboratory setting the principles discussed in ASTR 1110. <i>(45 lab hours per term)</i>	1		

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Course Subject Code/Course number – Course Name **Credit Hours****AUTC 1240 – Automotive Electronics** **4**

Previously AUTC 133L (Prerequisite: AUTC 1110 and AUTC 1140 or equivalent or division approval)
Builds on skills developed in AUTC 1140. Covers testing and diagnostic procedures in more complex automotive electronic systems. Includes lighting circuits, body computers and sensors, use of lab scopes and scan tools. (30 theory + 75 lab hours per term)

AUTC 1250 – Transportation Trades Machining **3**

Previously AUTC 170
Introduces the practices of basic machining as they relate to gasoline and diesel engines, safety, proper use of hand and special tools, how to set up and use the lathe, mill and drill press. (15 theory + 75 lab hours per term)

AUTC 2110 – Air Conditioning and Heating **4**

Previously AUTC 134L (Pre- or corequisites: AUTC 2130 or division approval)
Covers testing, evacuating and charging air conditioning systems while maintaining an awareness of potential environmental concerns caused by automotive refrigerants. Addresses cooling and heating diagnosis, climate control trouble-shooting and component repair. Includes a 40-hour industry shadow assignment (30 theory + 90 lab hours per term)

AUTC 2120 – Engine Performance I **4**

Previously AUTC 231L (Prerequisite: AUTC 1240 or division approval)
Provides the information for basic test and repairs on computer controlled automotive drive trains. It includes engine condition diagnosis, the diagnostic process, service bulletins, scan tool data, fuel and fuel delivery. Engine performance I give the learner mastery of the basic skills and knowledge contained in the ASE/NATEF engine performance program standards. (30 theory + 75 lab hours per term)

AUTC 2130 – Engine Performance II **4**

Previously AUTC 232L (Pre- or corequisite: AUTC 2120 or division approval)
Provides intermediate and advanced information to test and repair computer controlled automotive drive trains. It concentrates on ignition systems, computer sensor diagnosis, emission control devices and five gas exhaust analysis, advanced diagnostic procedures, OBD II design and function and an overview of hybrid systems. It provides further advanced mastery of ASE/NATEF engine performance program standards. (30 theory + 90 lab hours)

AUTC 2096, 2196...2996 – Special Topics **1–6**

(all courses ending in 96 are topics courses)
Previously AUTC 296 (Prerequisite: division approval)
Presents various problems and current automotive subjects.

AUTC 2197 – Independent Study **Variable**

Previously AUTC 297 (Prerequisite: division approval)
Focuses on a specific problem while working with an instructor.

AUTC 2999 – Automotive Technology Capstone Course **1**

Previously AUTC 295 (Prerequisite: division approval)
Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term).

AVIA – Aviation Courses (Applied Technologies Division)**AVIA 1010 – Introduction to Aircraft Structural Assembly** **3**

Previously AVIA 101A
Provides preparation for aircraft structural assembly with emphasis on safety, Foreign Object Damage (FOD) prevention, general aviation information, measurement and layout tools, military standards, fasteners and blueprint interpretation. Program fee: \$100

Course Subject Code/Course number – Course Name **Credit Hours****AVIA 1015 – Aircraft Structural Assembly Manufacturing** **3**

Previously AVIA 101B
Introduces metal working equipment and tools used to cut, form, bend and fasten aircraft sheet metal assemblies. Course emphasizes procedures and policies used throughout the aerospace industry. Program fee: \$100

AVIA 1092 – Aircraft Structural Assembly Lab **3**

Previously AVIA 101L
Utilizes metal working equipment and tools to measure, layout, form, cut, bend and fasten aircraft sheet metal assemblies with emphasis on aircraft manufacturing policies and procedures. Students will build various sheet metal assemblies including a Simulated Aircraft Structure TM. (90 lab hours) Program fee: \$100

AVIA 1110 – Introduction to Modern Commercial Air Operations **2**

Previously AVIA 125
Introduces the student to career opportunities in aviation disciplines, pilot requirements and responsibilities, crew coordination, aviation safety, aircraft characteristics and the regulatory environment associated with charter, commuter and major airlines flying. Topics include aircraft selection criteria, basing and maintenance, operational procedures, scheduling, routing, flight planning programs, roles and responsibilities of dispatchers, crew continuing training and utilization of large motion based simulators.

AVIA 1140 – Meteorology **3**

Previously AVIA 140
Studies weather recognition, icing, fog fronts, clouds, weather maps and symbols, forecasting pressure patterns, wind systems, temperature-humidity-dew point relationships and precipitation, with emphasis on the practical application of this knowledge to safe flying practices. The services and assistance available from the US government and the many commercial providers will be discussed.

AVIA 1145 – Aircraft, Engines and Maintenance **3**

Previously AVIA 144
Focuses on the study of the evolution, types of aircraft engines and the FAA requirements to maintain engines and aircraft. This study includes principles of internal combustion engines, engine design and construction, fuel, lubrication and cooling systems, propellers, aircraft electrical systems and aircraft trouble shooting, preventive maintenance, repair and maintenance, maintenance records and aircraft accessories.

AVIA 1150 – Aviation Electricity **2**

Previously AVIA 160
Provides an elementary basis for understanding the operating principles of modern aircraft electrical systems, instrumentation and avionics. Topics include fundamental concepts such as electromagnet force, current and resistance, Ohms law, interactions between electric and magnetic fields, interactions between magnetic fields and conductors, electrometric field phases, solid state junctions and system components such as inductors, resistors, capacitors, amplifiers, transistors and diodes.

AVIA 1192 – Electrical Systems Installation **3**

Previously AVIA 104L
An introduction to basic avionics systems installation to include wire termination, basic soldering practices, ground hook-ups, wire bundle build up and clamping, installation and documentation. Laboratory exercises will provide students with hands-on training in all aspects of electrical systems installation procedures and techniques used in the aircraft manufacturing industry. (75 lab hours per term) Program fee: \$100

Course Subject Code/Course number – Course Name	Credit Hours
AVIA 1292 – Plumbing, Hydraulic and Pneumatic System Installation <i>Previously AVIA 105L</i> This course provides skills necessary for the identification and installation of various pneumatic and hydraulic systems on aircraft to include tubing assemblies, oxygen and hydraulic plumbing procedures and documentation. Laboratory exercises will provide students with hands-on training in all aspects of plumbing, pneumatic and hydraulic systems installation procedures and techniques used in the aircraft manufacturing industry. (75 lab hours per term) Program fee: \$100	3
AVIA 1392 –Flight Control Cable and Rigging Assembly <i>Previously AVIA 106L</i> This course provides skills necessary for the identification and installation of various control cables and assembly procedures and documentation to include control cable installation, turn buckles, pulleys and materials used where bulkhead penetration is a factor. Laboratory exercises will provide students with hands-on training in all aspects of rigging and flight control cable assembly procedures and techniques used in the aircraft manufacturing industry. (75 lab hours per term) Program fee: \$100	3
AVIA 1400 – Private Pilot <i>Previously AVIA 132</i> Introduces basic principles of aircraft systems, flight and airport environments, aviation meteorology, navigation, radio communication and Federal Aviation Regulations to qualify the student for the FAA written examination for the Private Pilot Certification and meets the FAA requirements for ground instruction. Private Pilot Kit (includes \$84.00 exam fee) Program fee: \$359	3
AVIA 1492 – Private Pilot <i>Previously AVIA 132L (Pre- or co requisite: AVIA 1400)</i> Explores hands-on flight and simulator time including ground operations, take off and climb, flight at minimum control airspeeds, stalls, ground reference maneuvers, emergency procedures, landings, cross country navigation and basic instrument flying. Prepares the student with the practical knowledge and flight time to achieve the FAA Private Pilot certification. (135 lab hours per term) Program fee: The student will pay Professional Pilot Training Laboratory fees directly to flight training provider.	3
AVIA 1500 – Instrument Rating and Commercial Pilot I <i>Previously AVIA 138 (Prerequisite: AVIA 1400 and/or a Private Pilot License)</i> Introduces to basic principles of aviation, meteorology, navigation, radio communication and Federal Aviation Regulations to prepare the student for the FAA Instrument Pilot Rating written examination, meets the FAA requirements for Instrument ground instruction and introduces the student to the Commercial Pilot rating. Commercial/instrument pilot kit (includes \$84.00 exam fee). Program fee: \$396	3
AVIA 1592 – Instrument Rating and Commercial Pilot I Lab <i>Previously AVIA 138L (Prerequisite or corequisite: AVIA 1500)</i> Provides hands-on flight and simulation time that meets the required instructional time and aviation skills to pass the FAA Practical Standards Instrument Exam. The student also commences training for the Commercial Pilot rating. (135 lab hours per term) Program fee: The student will pay Professional Pilot Training Laboratory fees directly to flight training provider.	3
AVIA 1600 – Commercial Pilot II <i>Previously AVIA 170 (Prerequisite: AVIA 1500 and/or Pilot Instrument Rating with some Commercial instruction)</i> Reviews current Federal Aviation Regulations, government publications, commercial flight standards, aircraft loading and weight and balance. Review of all aeronautical knowledge required to pass the FAA Single Engine (SE) Commercial written examination. This course fulfills FAA requirements for SE Commercial ground instruction. (Use Kit from AVIA 138 – Exam fee \$84.00)	3

Course Subject Code/Course number – Course Name	Credit Hours
AVIA 1692 – Commercial Pilot II Lab <i>Previously AVIA 170L (Pre- or corequisite: AVIA 1600)</i> Provides hands-on flight and simulator time including the required skills and flight time to complete the FAA SE Commercial Pilot practical test check flight (135 lab hours per term) Course fee may be reduced based on any related prior flight. Program Fee: The student will pay Professional Pilot Training Laboratory fees directly to flight training provider.	3
AVIA 2100 – CFI and CFII Ratings <i>Previously AVIA 243 (Prerequisite: AVIA 1692 and/or SE Commercial Rating)</i> Reviews current Federal Aviation Regulations, government publications, CFI/CFII flight standards, the art of instruction and instructor requirements. Review of all aeronautical knowledge required to pass the FAA SE CFI and CFII written examinations. Preparation for the FAA oral exam is included. This course sequentially fulfills FAA requirements SE CFI and SE CFII ground instruction. SE Flight Instructor Pilot Kit (includes \$168.00 instructor & instrument exam fees): \$443.00.	3
AVIA 2110 – Aerodynamics for Pilots <i>Previously AVIA 241 (Prerequisite: AVIA 1592; Corequisites: AVIA 2115)</i> Studies the theory of single and multi-engine flight, aircraft design, construction and operational limitations for high performance propeller and jet powered aircraft. The mathematical basis and relationships of fundamental properties such as lift, drag, angle of attack, power curves and the importance of specific excess power (Ps) for multi- and single-engine performance will be developed.	3
AVIA 2115 – Aerobatics, Spin and Up-Set Flight <i>Previously AVIA 242 (Prerequisite: AVIA 1592, Corequisite: 2110)</i> Explores the theory of flight characteristics over the entire range of an aircraft's aerodynamic and structural flight capabilities (V-N envelope). Emphasis is on performance on the boundaries of the V-N envelope and excursions beyond normal controlled flight. The course develops the details of the interactions among specific aerodynamic and inertial forces characteristic of spinning flight. Conditions potentially leading to up sets, such as autopilot flight in icing conditions, are described.	1
AVIA 2130 – Modern Avionics <i>Previously AVIA 245</i> Introduces emerging integrated aircraft instrumentation and navigational and flight control systems to include "glass cockpits" with primary flight displays (PFDs), multifunctional displays (MFDs), ground and collision avoidance systems (GPWS), collision avoidance systems (TAWS), electronic power management systems and full integrated auto flight systems with precision instrument approach and landing capabilities.	3
AVIA 2135 – Introduction to Air Traffic Control <i>Previously AVIA 246</i> Describes the components, functions and interactions of the US Air Traffic Control (ATC) system. Elements include flight service stations, tower control, approach control and ATC Centers. Operations and capabilities, including weather, radar and communications are described in terms of benefits to and obligations of, the pilot.	3
AVIA 2192 – CFI and CFII Ratings <i>Previously AVIA 243L (Pre- or corequisite: AVIA 2100)</i> Provides hands-on flight and simulator time including the required skills and flight time to complete the FAA SE CFI and SE CFII practical tests. (135 lab hours per term) Program Fee: \$11,773.00	3
AVIA 2200 – Multi-Engine (ME) Commercial/ME Certified Flight Instructor (MEI) <i>Previously AVIA 248 (Prerequisite: AVIA 2192 and/or SE Commercial Rating and SE CFI-CFII Ratings)</i> Studies the principles of flight unique to multi-engine aircraft. Single engine flight in twin-engine aircraft is presented in detail, with emphasis on the dramatic reduction in specific excess power (Ps) and flight control trim requirements. The student receives the required ground instruction to pass the FAA ME Commercial and MEI written tests and to become a ME rated pilot with Commercial and MEI ratings. CFI FAA oral exam preparation is included. Multiengine Pilot Kit (includes \$84.00 exam fee) Program Fee: \$189.00	3

Course Subject Code/Course number – Course Name**Credit Hours****AVIA 2250 – Global Air Navigation** 3*Previously AVIA 250*

Surveys international and over-water flight navigation procedures and equipment used by airline, air cargo and general aviation aircraft. Navigation elements include basic dead reckoning and position plotting with the aid of ground and satellite based navigational aids, wide area systems such as Loran, GPS and on-board inertial navigation systems. Procedural elements include international aviation governing groups and rules such as Reduced Vertical Separation Minimums and worldwide charting information services.

AVIA 2255 – Aviation Physiology 2*Previously AVIA 253*

Provides an in-depth study of aero-medical factors for pilot. The course covers recognition, treatment and prevention of problems associated with exposure to reduced atmospheric pressure, sensory (visual and vestibular) problems in flight, environmental stressors and health and wellness factors that can impact human performance in flight.

AVIA 2260– Crew Resource Management (CRM) 2*Previously AVIA 254*

Focuses on integrating crewmembers and enhancing performance in the cockpit. Topics include: pilot judgment, decision making, leadership styles, techniques for effective cockpit communication in the task-saturated environment and accident / mishap review processes.

AVIA 2265– Management of Air Operations 2*Previously AVIA 255*

Describes oversight requirements and techniques for managing various categories of air operations: commercial, public and military. The Code of Federal Regulations 14, Parts 135 and 121 are surveyed to include operational specifications, pilot and management requirements, crew rest considerations and operational procedures typically employed by on-demand, commuter and airline operations. Differences in management between commercial and public and military management are described.

AVIA 2270– Turbine Aircraft Systems 6*Previously AVIA 256 (Prerequisite: AVIA 2192)*

Introduces the student to complex systems associated with modern turbine powered aircraft (turboprop/turbojet). It provides a working knowledge of turbine engines, propellers, advanced avionics and hydraulic, electrical, pneumatic, environmental and safety systems commonly found on commercial, business and military aircraft.

AVIA 2285 – Advanced Flight Labs (Frasca SE FTD) 1*Previously AVIA 262A (Prerequisite: AVIA 1492)*

Enables the student to build instructor supervised advanced proficiencies and flight experience in single engine aircraft training options in the FTD. Instruction includes: airport area, cross country flight and terminal procedures. (15 hours ground instruction – 30 hours FTD time) Program Fee: \$2326.00

AVIA 2290 – Advanced Flight Labs (Frasca ME FTD) 1*Previously AVIA 262B (Prerequisite: AVIA 2192)*

Enables the student to build instructor supervised advanced proficiencies and flight experience in multiengine aircraft training options in the FTD. Instruction includes: airport area, cross country flight and terminal procedures. (15 hours ground instruction – 30 hours FTD time) Program Fee: \$3,019.00

AVIA 2292 – Multi-Engine (ME) Commercial/ME Certified Flight Instructor (MEI) 3*Previously AVIA 248L (Pre- or corequisite: AVIA 2200)*

Provides the hands on flight and simulator skills and flight time required to complete the FAA ME Commercial Pilot and MEI Commercial Pilot ratings. Course emphasis includes recognizing impending or actual engine failure, taking immediate and appropriate action, while maintaining control and appropriate airspeed in both visual and instrument environments. The MEI adds multi-engine instrument flight and instruction skills, to include simulated single engine instrument approaches and the CFI Pilot practical check flight. (135 lab hours) Program Fee; \$11,342.00

Course Subject Code/Course number – Course Name**Credit Hours****AVIA 2392 – Advanced Flight Labs (Cessna 172)** 1*Previously AVIA 260L (Prerequisite: AVIA 1492)*

Enables the student to build instructor supervised advanced proficiencies and flight experience in single engine aircraft training options. Instruction includes: airport area, cross country flight and terminal procedures. (15 hours ground instruction – 30 hours flight time) Program Fee: \$4,471.00

AVIA 2492 – Advanced Flight Labs (BE-95) 1*Previously AVIA 261L (Prerequisite: AVIA 2192)*

Enables the student to build instructor supervised advanced proficiencies and flight experience in multiengine aircraft training options. Instruction includes: airport area, cross country flight and terminal procedures. (15 hours ground instruction – 30 hours flight time) Program Fee: \$6880.00

AVMT – Aviation Maintenance Courses (Applied Technologies Division)**AVMT 1240 – Aircraft Forms and Regulations, Weight and Balance, Drawings, Ground Operations and Federal Aviation Maintenance Publications, Forms and Records** 5*Previously AVMT 124 (Recommended prerequisites: ENG 0750, RDG 0950, MATH 0940; Corequisites: AVMT 1260, AVMT 1280 or permission of program director)*

Provides overview of technician's privileges and limitations. Perform aircraft weight and balance, aircraft ground operations and fuel servicing techniques. Includes drawings, symbols and schematic diagrams. (60 theory + 45 lab hours per term) Program Fee: \$100

AVMT 1260 – Fundamentals of Mathematics and Electricity 4*Previously AVMT 126 (Recommended prerequisites: ENG 0750, RDG 0950, MATH 0940; Corequisites: AVMT 1240, AVMT 1280 or permission of program director)*

Presents mathematical computations of fundamental electrical circuit parameters. Includes basic definitions, law and concepts. Includes schematic, wiring and parts placement diagrams. Test and troubleshoot electrical and electronic components and circuits. (45 theory + 45 lab hours per term) Program Fee: \$100

AVMT 1280 – Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings 4*Previously AVMT 128 (Recommended prerequisites: ENG 0750, RDG 0950, MATH 0940; Corequisites: AVMT 1240, AVMT 1260 or permission of program director)*

Provides basic concepts of motion, fluid dynamics, heat and sound, aerodynamics, aircraft structure and theory of flight. Includes fluid lines and fittings, component identification, function, inspection and installation. Presents cleaning and corrosion control, materials and processes, non-destructive testing and precision measurement techniques. (45 theory + 45 lab hours per term) Program Fee: \$100

AVMT 2220 – Fundamentals of Aircraft Wood Structures, Covering and Finishing and Bonded Structures: Part 65 3*Previously AVMT 220 (Prerequisites: AVMT 1240, AVMT 1260, AVMT 1280 or permission of program director)*

Presents theories and techniques of aircraft wood structures. Presents inspection, test and repair of aircraft fabric and wood structures. Aircraft structural design and methods of working with selected materials. Characteristics of composites, inspections and repairs. (15 theory + 90 lab hours per term) Program Fee: \$100

AVMT 2225 – Atmosphere Control, Fire Detection, Ice and Rain Protection Systems: Part 65 3*Previously AVIA 222*

Presents operation and maintenance of aircraft auxiliary systems, inspection, servicing, troubleshooting and repair of environmental control, ice and rain control, fire protection and warning systems. (30 theory + 90 lab hours per term) Program Fee: \$100

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
AVMT 2230 – Aircraft Sheet Metal: Part 65 <i>Previously AVMT 224 (Prerequisites: AVMT 1240, AVMT 1260, AVMT 1280 or permission of program director)</i> Presents inspection, fabrication and repair techniques of aircraft structural and nonstructural components and sheet metal heat-treating techniques. (45 theory + 90 lab hours per term) Program Fee: \$100	5	AVMT 2275 – Engine Instruments, Fire Protection and Lubrication, Cooling and Exhaust Systems: Part 65 <i>Previously AVMT 270 (Prerequisites: AVMT 124, AVMT 126, AVMT 128; Corequisite: AVMT 272 or permission of program director)</i> Presents operation, maintenance, servicing, inspection, repair and troubleshooting of engine instruments, fire detection and extinguishing, engine lubrication, cooling and exhaust systems. (30 theory + 135 lab hours per term) Program Fee: \$100	5
AVMT 2235 – Aircraft Landing Gear, Hydraulic, Pneumatic, Fuel, Position and Warning Systems: Part 65 <i>Previously AVMT 226 (Prerequisites: AVMT 1240, AVMT 1260, AVMT 1280 or permission of program director)</i> Presents identification, inspection, repair and troubleshooting techniques of aircraft landing gear, hydraulic, fuel, pneumatic and position and warning system components. (15 theory + 90 lab hours per term) Program Fee: \$100	3	AVMT 2280 – Propeller Systems and Engine Inspections: Part 65 <i>Previously AVMT 272 (Prerequisites: AVMT 1240, AVMT 1260, AVMT 1280; Corequisite: AVMT 2275 or permission of program director)</i> Discusses historical development, operation, disassembly, inspection, repair and maintenance of propellers. Reciprocating and turbine engine inspection and documentation. (15 theory + 135 lab hours per term) Program Fee: \$100	4
AVMT 2240 – Aircraft Electrical Systems, Instruments, Fuel, Communication and Navigation Systems: Part 65 <i>Previously AVMT 228 (Prerequisites: AVMT 1240, AVMT 1260, AVMT 1280 or permission of program director)</i> Presents proper operation, inspection, servicing and troubleshooting of DC (Direct Current) generator, DC alternator, AC (Alternating Current) alternator, voltage regulator, reverse current relay, generator and alternator protection devices, magnetos and ignition system components. Includes mechanical and electrical sensing, communications and information display systems, transmitter and receiver fundamentals. Includes avionics installation, inspection and testing, fuel systems inspection, repairs, troubleshooting and handling. (15 theory + 90 lab hours per term) Program Fee: \$100	3	BA – Business Administration Courses (<i>Business & Information Technology Division</i>)	
AVMT 2245 – Airframe Assembly, Inspection and Welding: Part 65 <i>Previously AVMT 230 (Prerequisites: AVMT 1240, AVMT 1260, AVMT 1280 or permission of program director)</i> Presents aircraft assembly and rigging, flight control balancing and rigging, airframe inspection techniques, reporting procedures, aircraft jacking, welding techniques, theory and materials identification. (15 theory + 90 lab hours per term). Program Fee: \$100	3	BA 1096, 1196...1996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously BA 296</i> Explores current topics in business.	1–3
AVMT 2260 – Aircraft Turbine Engines: Part 65 <i>Previously AVMT 263 (Prerequisites: AVMT 1240, AVMT 1260, AVMT 1280; Corequisites: AVMT 2035, AVMT 2270 or permission of program director)</i> Presents historical development and application of turbine engines. Theory of thrust and the design and environmental factors, which influence thrust. Turbine engine troubleshooting, inspection, service, repair and overhaul. Operational characteristics and engine test techniques on the aircraft and in test cells. (30 theory + 135 lab hours per term) Program Fee: \$100	5	BA 1101 – Introduction to Business <i>Previously BA 113 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent and ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent or division approval)</i> Presents an overall integrated picture of business and its operations. Topics include: economies, external environments, stock markets. Forms of business ownership, management, internal organization, production, personnel, labor relations, marketing, short and long-term finance, insurance, etc. <i>Distance Learning option available (see page 45).</i>	3
AVMT 2265 – Engine Fuel Systems, Fuel Metering and Induction System: Part 65 <i>Previously AVMT 266 (Prerequisites: AVMT 1240, AVMT 1260, AVMT 1280; Corequisite: AVMT 2260, AVMT 2270 or permission of program director)</i> Presents inspection, servicing, troubleshooting, overhaul and repair of aircraft fuel systems and components, fuel metering devices, injection systems, turbochargers and superchargers. Induction system principles of operation and design. (30 theory + 180 lab hours per term) Program Fee: \$100	6	BA 1121 – Business English <i>Previously BA 121 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent and ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Focuses on the principles of effective written communication in the business environment. Emphasizes correct grammar, punctuation, sentence structure and vocabulary. <i>Distance Learning option available (see page 45).</i>	3
AVMT 2270 – Engine Electrical, Ignition and Starter Systems: Part 65 <i>Previously AVMT 268 (Prerequisites: AVMT 124, AVMT 126, AVMT 128; Corequisite: AVMT 263, AVMT 266 or permission of program director)</i> Presents inspection, service, troubleshoot, overhaul and repair of engine electrical, ignition, starter systems and components. (30 theory + 180 lab hours per term) Program Fee: \$100	6	BA 1122 – Business Writing <i>Previously BA 122 (Prerequisite: BA 1121; 25 wpm typing skill recommended)</i> Builds on principles presented in BA 1121 and integrates those principles in composing effective business letters, memos and reports; students develop oral presentation skills. <i>Distance Learning option available (see page 45).</i>	3
		BA 1131 – Business Interpersonal Skills <i>Previously BA 131 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent and ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Focuses on developing interpersonal skills appropriate for the business environment. Topics include: attitude, diversity, communication skills, teamwork/team building, meeting management, conflict resolution and presentation skills. Incorporates training for Teamwork WorkKeys. <i>Distance Learning option available (see page 45).</i>	3
		BA 1133 – Principles of Management <i>Previously BA 133 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)</i> Introduces the basic theory of organization and includes the management functions of planning, organizing, staffing, directing and controlling, human relations, group process, problem solving, team building and leadership skills. <i>Distance Learning option available (see page 45).</i>	3

Course Subject Code/Course number – Course Name	Credit Hours
BA 1150 – Introduction to Quality Management <i>Previously BA 101 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Presents concepts and theories of quality improvement. (5 weeks) <i>Distance Learning option available (see page 45).</i>	1
BA 1151 – Fundamentals of Continuous Quality Improvement (CQI) <i>Previously BA 102 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Focuses on data gathering for process improvement and organizational culture change. (5 weeks) <i>Distance Learning option available (see page 45).</i>	1
BA 1152 – Quality Tools <i>Previously BA 103 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Examines the tools and techniques such as the cause and effect diagram, brainstorming, control charts and Pareto diagrams. (5 weeks) <i>Distance Learning option available (see page 45).</i>	1
BA 1165 – Personal Finance <i>Previously BA 165 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Focuses on the personal and financial planning process.	1
BA 1166 – Personal Investment Management <i>Previously BA 166 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Presents the basics of investment, securities markets, stocks and bonds, mutual funds, risk associated with each and sources of investment information.	1
BA 1167 – Retirement Investment <i>Previously BA 167 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Focuses on retirement and estate planning.	1
BA 2095 – Cooperative Education <i>Previously BA 299 (Prerequisite: division approval)</i> Requires a minimum of 150 hours at a business or training-related supervised workstation. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer.	4
BA 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously BA 296</i> Explores current topics in business.	1-3
BA 2097 – Independent Study <i>Previously BA 297 (Prerequisite: division approval)</i> Requires the student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.	Variable
BA 2098 – Internship <i>Previously BA 298 (Prerequisite: division approval)</i> Requires a minimum of 150 hours at a business or training-related supervised workstation. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Students are not paid for their work but are supervised jointly by CNM and the company.	4

Course Subject Code/Course number – Course Name	Credit Hours
BA 2153 – Team Building for Quality <i>Previously BA 104 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Presents group process as it applies to team building. (5 weeks) <i>Distance Learning option available (see page 45).</i>	1
BA 2154 – Re-engineering for Quality <i>Previously BA 105 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Integrates tools and techniques to formulate action plans for process improvements. (5 weeks) <i>Distance Learning option available (see page 45).</i>	1
BA 2155 – Quality Leadership <i>Previously BA 106 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Focuses on mission statement, goals and strategies to implement quality leadership throughout an organization. (5 weeks) <i>Distance Learning option available (see page 45).</i>	1
BA 2222 – Principles of Marketing <i>Previously BA 222 (Prerequisites: BA 1101 and 1121 or division approval)</i> Introduces the methods, policies and organization 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, market research, market segmentation and target marketing, strategic marketing, product planning, pricing, promotion and distribution. <i>Distance Learning option available (see page 45).</i>	3
BA 2223 – Consumer Behavior <i>(Prerequisites: BA 1101 and 1121 or division approval)</i> Explores the basic principles of consumer behavior which offers insight into the needs, motivations, perceptions and attitudes of consumers and the influence of social class, culture and subculture on consumer behavior. Application of theories from psychology, social psychology and economics are examined. Course explores implications of concepts for marketing decisions. Emphasis on model building and marketing strategy formulation.	3
BA 2224 – Introduction to Market Research <i>(Prerequisites: BA 2222 or division approval)</i> Designed to enhance student understanding of the marketing, environmental and dynamic interrelationships of the functions of marketing price, channels of distribution, promotion and product development and management. Provides a simulated marketing environment for experience in marketing decision making and provides practical experience in analyzing market cases for students. Emphasis on design of measurement instruments, sampling, data collection and analysis.	3
BA 2225 – Niche Marketing <i>(Prerequisites: BA 2222 or division approval)</i> Focuses on basic marketing principles applied to sports venues, non-profit organizations and special events. The course provides a simulated marketing environment for experience in marketing decision making and provides practical experience in implementing specialized marketing tools.	3
BA 2226 – Sales <i>Previously BA 284 (Prerequisite: HT 1132, BA 2222 or 1141 or division approval)</i> Covers the principles and techniques of personal selling as a form of persuasive communication basic to business and other types of interpersonal relationships. Sales principles, demonstrating selling skills and promoting goods and services are emphasized. Each student presents sales presentations. <i>Distance Learning option available (see page 45).</i>	3

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
BA 2228 – Advertising <i>Previously BA 286 (Prerequisite: BA 2222 or division approval)</i> Covers the history of advertising promotion and media available today, the psychological approach to consumer persuasion, the techniques used in media selection and the creative processes of advertising. Students develop an advertising plan, select and schedule media, create budgets, design and produce advertisements and evaluate advertising effectiveness. <i>Distance Learning option available (see page 45).</i>	3	BA 2260 – Purchasing <i>Previously BA 260 (Prerequisites: ACCT 1111 and 1112 or division approval)</i> Focuses on public and private sector purchasing, value analysis, solicitation process, negotiation techniques, vendor selection, purchasing law, transportation considerations and inventory control practices.	3
BA 2230 – Customer Relations <i>Previously BA 252 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent and ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent or division approval)</i> Focuses on the relationship of self to customers, problem solving and communicating with customers, understanding customers, anticipating customers' needs and offering assistance. <i>Distance Learning option available (see page 45).</i>	3	BA 2270 – Real Estate Law <i>Previously BA 270</i> Focuses on the fiduciary relationship between real estate agent and client, ownership rights, law of agency and law of contracts. Course has been certified to earn 30 hours of credit toward the New Mexico Real Estate Broker's License Exam. <i>Distance Learning option available (see page 45).</i>	3
BA 2232 – Supervision <i>Previously BA 255 (Prerequisite: BA 1101 or 1133 or 1132 or division approval)</i> Focuses on the fundamental elements of supervision and the different supervisory roles. Planning and control, organizing, staffing and employee development, motivating individual and group performance and coping with workplace dynamics are covered. <i>Distance Learning option available (see page 45).</i>	3	BA 2271 – Real Estate Principles and Practice <i>Previously BA 271 (Pre- or corequisite: BA 2270)</i> Covers the real estate market, real property ownership and interest, deeds and descriptions, property transfer, contracts, finance and appraising. Course has been certified to earn 30 hours of credit toward the New Mexico Real Estate Broker's License Exam. <i>Distance Learning option available (see page 45).</i>	3
BA 2234 – Organizational Behavior <i>Previously BA 233 (Prerequisites: BA 1121 and 1133 or division approval)</i> Covers the fundamentals of human behavior within business organizations, organizational relationships and communication processes that affect motivation and human behavior. <i>Distance Learning option available (see page 45).</i>	3	BA 2272 – Real Estate Appraisal <i>Previously BA 272 (Recommended prerequisite: BA 2271)</i> Presents methods for estimating the value of real property that includes real estate appraisal techniques of both land and improved residential property.	3
BA 2236 – Retail Management <i>Previously BA 251 (Pre- or corequisite: BA 2222 or division approval)</i> Focuses on the changing demographics of retail marketing, the growth of new retail formats and the use of information technology to enable quick response to market dynamics through customer service, vendor-retailer partnering and employee diversity. <i>Distance Learning option available (see page 45).</i>	3	BA 2273 – Real Estate Finance <i>Previously BA 273 (Prerequisite: BA 2271)</i> Focuses on financing real property, money markets and sources of mortgage money, financial leverage, value of existing mortgage in the current market and purchaser qualification.	3
BA 2238 – Human Resource Management <i>Previously BA 236 (Prerequisites: BA 1121 and 1133 or division approval)</i> Focuses on the role of human resource management in relation to organizational requirements. Topics include human resource management, employee staffing, compensation and benefits, labor relations, Equal Employment Opportunity, affirmative action, training and development and other related topics. <i>Distance Learning option available (see page 45).</i>	3	BA 2274 – Real Estate Investment <i>Previously BA 274 (Prerequisites: BA 2270 and 2271)</i> Introduces the principles for investment decisions, assessment of property potential and an awareness of the marketplace and the needs of the public.	3
BA 2240 – Business Law <i>Previously BA 211 (Prerequisites: BA 1101 or 1133 or division approval)</i> Business Law is an introductory law course that provides an overview of the legal system and an introduction to common legal principles. The course focuses on topics particularly relevant to business, including the legal system, torts, contracts, product liability and agency. The course will assist students in identifying and understanding the sources of liability and strategies to minimize legal risk. <i>Distance Learning option available (see page 45).</i>	3	BA 2275 – Broker Basics <i>Previously BA 285 (Prerequisites: BA 2270 and 2271 or division approval)</i> Covers the establishment of a real estate office, agency relationships and law, signage, brokers' duties, trade names, listing and purchasing agreements, common forms, property management and trusteeship/trust accounts. Course has been certified to earn 30 hours of credit toward the New Mexico Real Estate Brokers License Exam.	3
BA 2242 – Employment Law for Business <i>Previously BA 230 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent and ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent or division approval)</i> Presents law and employment decisions from a managerial perspective. Areas covered include the employment relationship, discrimination in employment, the employment environment and other forms of regulation.	3	BA 2278 – Property Management <i>Previously BA 275</i> Explores residential and commercial property management, marketing of services, market analysis, record keeping, related laws, legal documents, property maintenance, employee relations, insurance, security and administration.	3
		BA 2279 – The National Uniform Standards of Professional Appraisal Practice <i>Previously BA 279 (Prerequisite: BA 2272 or division approval)</i> Focuses on the requirements for ethical behavior and competent performance by appraisers. (7.5 weeks)	2
		BA 2280 – Appraising the Single Family Residence <i>Previously BA 282 (Prerequisite: BA 2272 or division approval)</i> Explores the techniques used to estimate the market value of single-family residential property. Market value and analyses, inspection, appraisal and appraisal reports are covered.	3

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Course Subject Code/Course number – Course Name **Credit Hours****BA 2281 – Business Ethics** **3***Previously BA 234 (Prerequisites: BA 1101 and 1121 or division approval)*

Focuses on the identification, analysis and practical resolution of ethical issues that managers and business leaders face in the workplace with particular emphasis on the role of business managers and leaders in establishing and maintaining the ethical culture of a business. Case studies and real-life problems are used to study the competing values and interests involved in ethical situations, develop a framework and strategy to make practical decisions and learn about some of the laws that may impact these issues.

*Distance Learning option available (see page 45).***BA 2282 – Leadership and Group Dynamics** **3***Previously BA 238 (Prerequisite: BA 2234 or division approval)*

Focuses on the development of leadership skills. Course is designed to provide basic steps in leadership and group dynamics to help individuals develop a personal philosophy of leadership of the moral and ethical responsibility of leadership.

*Distance Learning option available (see page 45).***BA 2284 – Strategic Management** **3***Previously BA 289 (Prerequisite: BA 1101 or 1133 or division approval)*

Examines strategic planning as a tool for management to provide overall direction for organizations, interpretation of plans, gap analysis, organizational culture, value classification and strategic management in a global environment.

*Distance Learning option available (see page 45).***BA 2999 – Capstone Course** **1**

Previously BA 295 (Prerequisites: ACCT 2101 and 2420; or BA 2222 and 2240; or CIS 2110 and 2145 and 2355 and 2650; or FIN 1310 and 2210; or OTEC 2231 and 2260; or HT 2141 and 1161; or CIS 2275 and 1284 and 2235; or CIS 2522 and 2520 and 2521; or CIS 2423; or BGC 2020 and 2040)

Focuses on assessment of exit competencies for program of study and assessment of CNM's core competencies. (Taken in student's last term)

*Distance Learning option available (see page 45).***BGC – Business Graphics Courses (Business & Information Technology Division)****BGC 1096, 1196...1996 – Topics** **1-3***(all courses ending in 96 are topics courses)**Previously BCG 296*

Explores current topics in business graphics and communication.

BGC 2010 – Introduction to Digital Publishing **3***Previously BGC 200 (Prerequisite: IT 1010)*

Introduces students to computing on a Mac, professional graphics software, design concepts and visual literacy skills. (30 theory + 45 lab hours per term)

*Distance Learning option available (see page 45).***BGC 2015 – Advanced Digital Publishing** **3***Previously BGC 201 (Prerequisite: BGC 2010)*

Explores design layout with professional software. Presents design concepts, introduction to typography, print production terminology and graphic design history. (30 theory + 45 lab hours per term)

*Distance Learning option available (see page 45).***BGC 2020 – Digital Drawing** **3***Previously BGC 202 (Prerequisite: BGC 2010; recommended prerequisite: CIS 2355)*

Examine and practice vector-based illustration. Skills are taught as they relate to a production and PDF workflow. Advanced typography and color theory. (30 theory + 45 lab hours per term)

*Distance Learning option available (see page 45).***Course Subject Code/Course number – Course Name** **Credit Hours****BGC 2030 – Production Photoshop** **3***Previously BGC 203 (Prerequisite: BGC 2010; recommended prerequisite: CIS 1330, BGC 2015, BGC 2020)*

Discover print production skills using Photoshop for the practical aspects of halftone and separation production including color models, dot gain, linescreen, other production techniques and graphics for the Web. (30 theory + 45 lab hours per term)

*Distance Learning option available (see page 45).***BGC 2040 – Digital Printing Production** **3***Previously BGC 204 (Prerequisites: BGC 2015 and 2020; Pre- or corequisite: BGC 2030)*

Learn pre-press, pre-flight and the practical aspects of print production, plus advanced layout and the development of a professional portfolio. (30 theory + 45 lab hours per term)

*Distance Learning option available (see page 45).***BGC 2095 – Cooperative Education** **4***Previously BGC 299 (Prerequisites: BGC 2015 and 2020 and 2030 and division approval)*

Provides students the opportunity to work a minimum of 150 hours in a new office-related position. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer. The student and employer determine the weekly contact hours.

BGC 2096, 2196...2996 – Topics **1-3***(all courses ending in 96 are topics courses)**Previously BCG 296*

Explores current topics in business graphics and communication.

BGC 2097 – Independent Study **Variable***Previously BCG 297 (Prerequisite: division approval)*

Allows student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.

BGC 2098 – Internship **4***Previously BGC 298 (Prerequisites: BGC 2015 and 2020 and 2030 and division approval)*

Provides students the opportunity to work a minimum of 150 hours at office-related supervised workstations. Students are not paid for their work but are supervised jointly by CNM and the employer. The student and employer determine the weekly contact hours.

BIO – Biology Courses (Division of Educational & Career Advancement)**BIO 0950 – Introduction to Biology** **3***Previously BIO 100 (Prerequisites: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent and RDG 0750 or Accuplacer Reading score of 69 or equivalent, recommended: RDG 0950)*

Explores basic topics such as characteristics of life, biological molecules, cells, anatomy and classification, while developing a sense of scale, observation and diagramming skills, familiarity with the microscope, reading and note taking skills. Complements, but does not replace, CHEM 0950. (60 theory/lab hours per term)

BIO – Biology Courses (Math, Science & Engineering Division)**BIO 1010 – Biology for Non-Majors** **3***Previously BIO 110 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)*

Emphasizes biological principles and current topics for non-biologists or liberal arts students: cellular and molecular biology, microbiology, human genetics, ecology, complexity theory and animal behavior.

Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
BIO 1092 – Biology for Non-Majors Laboratory <i>Previously BIO 112L (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent; Pre- or corequisite: BIO 1110)</i> Provides in optional laboratory setting lab the use of microscopes, culturing bacteria, chemical analysis of biomolecules, plant and animal behavior. (45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1	BIO 1510/1592 – Molecular and Cell Biology <i>Previously BIO 201/201L (Pre- or corequisite: CHEM 1510/1592)</i> Introduces a number of related cell biology topics. The scientific method, the role of water in cell biology, diversity of organic molecules and macromolecules, introduction to metabolism, cellular respiration and photosynthesis, cell structure and functions, cell communication and the cell cycle. (45 theory + 45 lab hours per term)	4
BIO 1110 – Environmental Science <i>Previously BIO 111 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents an academic study of the environment, including basic ecology, a comparison of scientific approaches and world views with respect to ecology and the environment, relationship of humans to the environment and solutions to local, regional and global environmental problems. <i>Distance Learning option available (see page 45).</i>	3	BIO 1610/1692 – Genetics <i>Previously BIO 202/202L (Prerequisite: BIO 1510/1592; Pre- or corequisite: CHEM 1610/1692)</i> Builds upon concepts presented in Bio 1510/1592 to explore a wide range of materials related to genetics. Mitosis, meiosis, Mendelian genetics, chromosomal inheritance, molecular inheritance, replication, transcription and translation, genetics of viruses, bacteria and eukaryotes, genomics, developmental genetics and human genetics. (45 theory + 45 lab hours per term)	4
BIO 1192 – Environmental Science Laboratory <i>Previously BIO 111L (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Investigates in optional laboratory setting the principles discussed in BIO 1110; emphasizes analysis of water, soil and air pollutants. Moderately strenuous field trips to special interest sites may be scheduled outside regular laboratory hours. (45 lab hours per term)	1	BIO 2096, 2196...2996 – Topics in Biology <i>(all courses ending in 96 are topics courses)</i> <i>Previously BIO 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents various topics. See Schedule of Classes .	3
BIO 1210/1292 – Southwestern Natural History <i>Previously BIO 224/224L (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents in lecture and labs or field trips (one or more overnight) the natural history and identification of southwestern flora and fauna. (45 theory + 45 lab hours per term)	4	BIO 2110 – Microbiology <i>Previously BIO 239 (Prerequisites: BIO 1410/1492 or BIO 1610/1692 (pre- or corequisite) and either CHEM 1410/1492 or 1510/1592 or a passing score of 64 on the Biology Placement Exam; Pre- or corequisite: BIO 2192)</i> Introduces concepts of microbiology, host-parasite relationships, infection and immunity. <i>Distance Learning option available (see page 45).</i>	3
BIO 1310 – Human Anatomy and Physiology for Non-Majors <i>Previously BIO 136 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent; Recommended: BIO 0950 or CHEM 0950)</i> Examines the structure (anatomy) and function (physiology) of the human body. Investigates molecular, cellular, tissue and organ levels and study of organ systems. Course available online. <i>Distance Learning option available (see page 45).</i>	3	BIO 2192 – Microbiology Laboratory <i>Previously BIO 239L (Prerequisites: BIO 1410/1492 or BIO 1610/1692 (pre- or corequisite) and either CHEM 1410/1492 or 1510/1592 or a passing score of 64 on the Biology Placement Exam; Pre- or corequisite: BIO 2110)</i> Investigates a variety of techniques designed to facilitate the growth, identification and control of microorganisms. (45 lab hours per term)	1
BIO 1392 – Human Anatomy and Physiology for Non-Majors Laboratory <i>Previously BIO 139L (Pre- or corequisite: BIO 1310)</i> Introduces lab exercises, which complement concepts presented in BIO 1310, including histological study, biochemical processes, mammal organ dissections and use of models to illustrate anatomical arrangement. Course available online. (45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1	BIO 2210 – Human Anatomy and Physiology I <i>Previously BIO 237 (Prerequisites: BIO 1410/1492 or BIO 1610/1692 (pre- or corequisite) and either CHEM 1410/1492 or 1510/1592; or a passing score of 64 on the Biology Placement Exam)</i> Presents integrated study of human structure and function covering the integumentary, skeletal, muscular and nervous systems.	3
BIO 1410 – Biology for Health Sciences <i>Previously BIO 123 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent; Recommended: either CHEM 1410, BIO 0950 or CHEM 0950)</i> Presents principles of cell biology, cell chemistry, genetics and organismic biology with an emphasis on human systems. <i>Distance Learning option available (see page 45).</i>	3	BIO 2292 – Human Anatomy and Physiology I Laboratory <i>Previously BIO 247L (Prerequisites: BIO 1410/1492 or BIO 1610/1692 (pre- or corequisite) and either CHEM 1410/1492 or 1510/1592; or a passing score of 64 on the Biology Placement Exam; Pre- or corequisite: BIO 2210)</i> Introduces lab exercises in anatomy and physiology, which complement topics covered in BIO 2110, including specimen dissection and cadaver study. (45 lab hours per term)	1
BIO 1492 – Biology for Health Sciences Laboratory <i>Previously BIO 124L (Prerequisite: MATH 0750 or Accuplacer Arithmetic score of 57; Pre- or corequisite: BIO 1410)</i> Introduces exercises and demonstrations related to cell biology, biochemical processes and genetics. (45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1	BIO 2310 – Human Anatomy and Physiology II <i>Previously BIO 238 (Prerequisite: BIO 2210)</i> Continues course of study begun in BIO 2210, covering structure and function of the cardiovascular, respiratory, digestive, urinary, reproductive and endocrine systems.	3
		BIO 2392 – Human Anatomy and Physiology II Laboratory <i>Previously BIO 248L (Prerequisites: BIO 2292; Pre- or corequisite: BIO 2310)</i> Provides lab exercises in anatomy and physiology, which complement BIO 2210, including specimen dissection and cadaver study. (45 lab hours per term)	1

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Course Subject Code/Course number – Course Name**Credit Hours****BIO 2410/2492 – Ecology and Evolution** 4

Previously BIO 203/203L (Prerequisite: BIO1510/1592 & 1610/1692; Pre- or corequisite: MATH 1710 or 1460)
Presents various topics associated with the principles of ecology and evolutionary biology. Darwinian principles, origin theory, the fossil record and patterns of diversification of ancient life, evolution of populations, speciation, phylogenetics, basics of ecology and study of the biosphere, behavioral ecology, population ecology, community ecology, ecosystem ecology and conservation biology. (45 theory + 45 lab hours per term)

BIO 2510/2592 – Plant and Animal Form and Function 4

Previously BIO 204/204L (Prerequisite: BIO1510/1592 & 1610/1692)
Focuses on comparative botany and zoology. Topics covered are plant structure and growth, transport, nutrition, reproduction and development in plants. Introduction to animal form and function, animal nutrition, circulation and gas exchange, immune system function and evolution, control of the internal environment, chemical signaling, reproduction and development, nervous systems, sensory and motor mechanisms. (45 theory + 45 lab hours per term)

BIO 2710 – Pathophysiology I 3

Previously BIO 240 (Prerequisites: BIO 2210, 2310, 2110 and 2192)
Focuses on building a basic understanding of pathophysiology for health science students. Presents diseases of the circulatory, nervous, musculoskeletal and dermal systems.

BIO 2711 – Pathophysiology II 3

Previously BIO 241 (Prerequisite: BIO 2710)
Continues course of study begun in BIO 2710, covering pathology of cardiovascular, pulmonary, gastrointestinal, urinary and endocrine systems.

BIOT – Biotechnology Courses (Health, Wellness & Public Safety Division)**BIO 1005 – Math in the Biotechnology Laboratory** 3

Previously BIOT 170
Provides a review of common math manipulations used in a bioscience laboratory. Students apply concepts including exponents, scientific notation, logarithms, unit conversion, equations, percents, concentration and dilutions to routine laboratory applications.

BIOT 1010 – Biotechnology Seminar I 2

Previously BIOT 164A
Explores current issues and topics related to biotechnology. Development of productive learning techniques and establishment of a learning community will be covered. Review, discussion and presentation of the social, medical and ethical considerations of biotechnology.

BIOT 1210/1270 – Biotechnology Laboratory Techniques I 4

Previously BIOT 263/263L (Prerequisites: BIOT 1010, 1005, program director approval; Pre- or corequisite: BIO 219/219L or 1510/1592, 221/222 or 1610/1692 and CHEM 2210; Corequisite: BIOT 1211)
Presents theory of laboratory safety, documentation and GLP (good laboratory practices) are emphasized. Techniques include laboratory measurement and solutions, bacterial cloning and tissue culture. (45 theory + 45 lab hours per term) [Previously offered as Biotechnology Laboratory Instrumentation]

BIOT 1211 – Biotechnology Seminar II 1

Previously BIOT 164B (Prerequisite: BIOT 1010; Corequisite: BIOT 1210/1270; Pre- or corequisite: BIO 1610/1692)
Continues topics presented in BIOT 1010. Current issues and topics related to biotechnology will be explored. Current literature will be read, reviewed and discussed.

Course Subject Code/Course number – Course Name**Credit Hours****BIOT 1510/1570 – Biotechnology Laboratory Techniques II** 5

Previously BIOT 264/264L (Prerequisites: BIO 221/222 or 1610/1692, BIOT 1210/1270; pre- or corequisites: BIO 2110/2192; Corequisite: BIOT 1512)
Provides experience with various research/manufacturing tools and protocols used to characterize and manipulate nucleic acids. Techniques include tissue culture, PCR, RT-PCR, gel electrophoresis, recombinant DNA technology, cloning and sequencing. (45 theory + 90 lab hours per term)

BIOT 1512 – Biotechnology Seminar III 1

Previously BIOT 164C (Prerequisite: BIOT 1211; Corequisite: BIOT 1510/1570)
Continues topics presented in BIOT 1211. Current issues and topics related to biotechnology will be explored. Current literature will be read, reviewed and discussed.

BIOT 2096, 2196...2996 – Biotechnology Topics 1-6

(all courses ending in 96 are topics courses)
Previously BIOT 296
Explore various topics of interest in the field of Biotechnology.

BIOT 2098 – Internship 8

Previously BIOT 298 (Prerequisite: BIOT 2410/2470 and 2475, program director approval; Corequisite: BIOT 2810)
Provides an internship with a research or manufacturing laboratory. Internship locations vary based upon availability and student interests. This course will provide the student with actual work experience prior to graduation. (315 internship hours and 45 lab hours per term)

BIOT 2410/2470 – Biotechnology Laboratory Techniques III 5

Previously BIOT 265/265L (Prerequisites: BIOT 1510/1570; Pre- or corequisite: PHIL 2247; Corequisite: BIOT 2413 and BIOT 2475)
Applies concepts and techniques begun in 1510/1570 to the characterization of proteins. Techniques include protein isolation, denaturing and nondenaturing polyacrylamide gel electrophoresis, isoelectric focusing, 2-D gel analysis, recombinant protein purification and column chromatography. Students will also prepare for a cumulative final exam. (45 theory + 90 lab hours per term)

BIOT 2413 – Biotechnology Seminar IV 1

Previously BIOT 164D (Prerequisite: BIOT 1512; Corequisite: BIOT 2410/2470, 2475)
Continues topics presented in BIOT 1512. Current issues and topics related to biotechnology will be explored. Current literature will be read, reviewed and discussed.

BIOT 2475 – Bioinformatics and Proteomics 3

Previously BIOT 274L (Prerequisites: BIOT 1510/1570, IT 1010, MATH 1330; Pre- or corequisite: PHIL 2247; Corequisites: BIOT 2413 and 2410/2470)
Introduces the data management systems associated with DNA and protein information gathering, organization and retrieval. Extensive use of Internet resources, search protocols and data analysis. (30 theory and 45 lab hours per term)

BIOT 2810 – Biotechnology Seminar 2

Previously BIOT 280 (Prerequisite: BIOT 2475; Corequisite: BIOT 2098)
Provides a capstone experience for students preparing for employment in the biotechnology industry. Topics will include preparation of a written and oral presentation summarizing internship accomplishments.

BT – Building Trades Courses (Applied Technologies Division)**BT 1005 – Remodeling** 3

Previously BT 178
Introduces hand and power tools and the safety measures associated with their use. OSHA regulations and job safety. Provides basic structural, electrical, plumbing and other typical remodeling repair principles and techniques. (15 theory + 75 lab hours per term)

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
BT 1010 – Advanced Remodeling <i>Previously BT 179 (Prerequisite: BT 1005 or division approval)</i> Provides information on job site safety, OSHA regulations, design and construction techniques for remodeling and additions to existing buildings. (15 theory + 75 lab hours per term)	3	CARP 1292 – Construction Lab C <i>Previously CARP 124C (Pre- or corequisite: CARP 1005 and 1010 or division approval)</i> Provides beginning carpentry students with additional practical, hands-on learning experience by taking advantage of building opportunities on and off campus. (75 lab hours per term)	2
BT 1092 – Metal Framing <i>Previously BT 177L</i> Introduces commercial and residential construction design, Uniform Building Code requirements, job site and tool safety and erection of metal buildings. (75 lab hours per term)	2	CARP 1305 – Furniture Making <i>Previously CARP 126</i> Covers fundamental design and construction of simple furniture including safety and use of hand and power tools. Includes designing and constructing a furniture project. (15 theory + 75 lab hours per term)	3
CAD – Computer Assisted Drafting (Applied Technologies Division)			
CAD 1001 – Basics of CAD <i>(Prerequisite: IT 1010)</i> Introduces the fundamentals of computer aided drafting. (10 theory + 15 lab hours per term)	1	CARP 1310 – Advanced Furniture Making <i>Previously CARP 127 (Prerequisite: CARP 1305 or division approval)</i> Covers advanced design and construction of simple furniture including safety and use of hand and power tools. Includes designing and constructing a furniture project. (15 theory + 75 lab hours per term)	3
CAD 1003 – CAD for Landscaping <i>(Recommended Prerequisites: IT 1010 and CAD 1001)</i> Introduces the application of computer aided drafting for Landscaping Architecture. (10 theory + 15 lab hours per term)	1	CARP 1315 – Cabinetmaking <i>Previously CARP 128</i> Fundamentals of cabinet construction. Emphasis is on safety and use of tools. European construction is emphasized. (15 theory + 75 lab hours per term)	3
CARP – Carpentry Courses (Applied Technologies Division)			
CARP 1005 – Carpentry Blueprint Reading I <i>Previously CARP 101 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Covers lumber sizing, scaling, centering and triangle theory, interpretation of elevation drawings, floor plans, symbols, notations, dimensions and structural information.	4	CARP 1320 – Carpentry Fundamentals <i>Previously CARP 170</i> Covers safety and use of hand and power tools. Includes designing a project, estimating bills for materials, building and completing the project are covered. (15 theory + 90 lab hours per term)	3
CARP 1010 – Introduction to Carpentry <i>Previously CARP 121 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Introduces students to the construction trade and demonstrates the correct and safe use of hand and power tools commonly used in the construction trades.	1	CARP 1325 – Construction Trades Blueprint Reading <i>Previously CARP 171</i> Focuses on reading and interpreting blueprints with emphasis on terminology, symbols, notations, scaling, dimensioning and drawing techniques. Reviews construction methods, materials, calculations for material take-off and estimates.	3
CARP 1015 – Structural Systems I <i>Previously CARP 122 (Pre- or corequisite: CARP 1005 or division approval)</i> Explains concrete and concrete reinforcing materials, foundations and flatwork, concrete forms and handling and finishing concrete.	1	CARP 1330 – Manufactured Housing Set-Up <i>Previously CARP 172</i> Provides instruction in manufactured housing carpentry work, set-up, leveling and blocking to satisfy NMMHD industry standards. Work practices and safety are emphasized.	1
CARP 1020 – Structural Systems II <i>Previously CARP 123 (Pre- or corequisite: CARP 1005 or division approval)</i> Explains floor framing systems, wall, ceiling, stair and roof framing and the installation of exterior doors and windows.	1	CARP 2005 – Carpentry Blueprint Reading II <i>Previously CARP 111 (Prerequisites: CARP 1005 or division approval)</i> Introduces blueprint applications for residential homes, multiple family dwellings and commercial buildings, along with material estimating and volume measure.	4
CARP 1092 – Construction Lab A <i>Previously CARP 124A (Pre- or corequisite: CARP 1005 and 1010 or division approval)</i> Provides beginning carpentry students with practical, hands-on learning experience by taking advantage of building opportunities on and off campus. (75 lab hours per term)	2	CARP 2010 – Exterior Finishes <i>Previously CARP 131 (Pre- or corequisite: CARP 2005 or division approval)</i> Introduces common materials and methods used for thermal and moisture protection, exterior siding and roofing.	1
CARP 1192 – Construction Lab B <i>Previously CARP 124B (Pre- or corequisite: CARP 1005 and 1010 or division approval)</i> Provides beginning carpentry students with additional practical, hands-on learning experience by taking advantage of building opportunities on and off campus. (75 lab hours per term)	2	CARP 2015 – Interior Finishes I <i>Previously CARP 132 (Pre- or corequisite: CARP 2005 or division approval)</i> Introduces metal framing for interior walls, drywall installation and finishing.	1
		CARP 2020 – Interior Finishes II <i>Previously CARP 133 (Pre- or corequisite: CARP 2005 or division approval)</i> Introduces the installation of doors, windows, flooring, ceiling trim and cabinet installation.	1
		CARP 2092 – Construction Lab A <i>Previously CARP 134A (Pre- or corequisite: CARP 2005 and 1010 or division approval)</i> Provides advanced carpentry students with additional practical, hands-on learning experience by taking advantage of building opportunities on and off campus. (75 lab hours per term)	2

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CARP 2096, 2196...2996 – Special Topics (all courses ending in 96 are topics courses) Previously CARP 296 Provides an in-depth study of methods and advanced techniques.	1–6
CARP 2192 – Construction Lab B Previously CARP 134B (Pre- or corequisite: CARP 2005 and 1010 or division approval) Provides advanced carpentry students with additional practical, hands-on learning experience by taking advantage of building opportunities on and off campus. (75 lab hours per term)	2
CARP 2292 – Construction Lab C Previously CARP 134C (Pre- or corequisite: CARP 2005 and 1010 or division approval) Provides advanced carpentry students with additional practical, hands-on learning experience by taking advantage of building opportunities on and off campus. (75 lab hours per term)	2
CARP 2997 – Independent Study Previously CARP 297 (Prerequisite: division approval) Focuses on a specific problem while working with an instructor.	Variable
CARP 2999 – Carpentry Capstone Course Previously CARP 295 (Prerequisite: division approval) Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term).	1

CCAP – Commercial Carpentry Apprenticeship (Applied Technologies Division)

CCAP 1115 – Commercial Carpentry Apprenticeship Previously CCAP 198A (Prerequisite: current full-time employment in the carpentry industry or division approval) Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.	5-7
CCAP 1125 – Commercial Carpentry Apprenticeship Previously CCAP 198B (Prerequisite: current full-time employment in the carpentry industry or division approval) Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.	5-7
CCAP 1215 – Commercial Carpentry Apprenticeship Previously CCAP 198C (Prerequisite: current full-time employment in the carpentry industry or division approval) Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.	5-7
CCAP 1225 – Commercial Carpentry Apprenticeship Previously CCAP 198D (Prerequisite: current full-time employment in the carpentry industry or division approval) Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.	5-7

Course Subject Code/Course number – Course Name	Credit Hours
CCAP 1315 – Commercial Carpentry Apprenticeship Previously CCAP 198E (Prerequisite: current full-time employment in the carpentry industry or division approval) Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.	5-7
CCAP 1325 – Commercial Carpentry Apprenticeship Previously CCAP 198F (Prerequisite: current full-time employment in the carpentry industry or division approval) Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.	5-7
CCAP 1415 – Commercial Carpentry Apprenticeship Previously CCAP 198G (Prerequisite: current full-time employment in the carpentry industry or division approval) Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.	5-7
CCAP 1425 – Commercial Carpentry Apprenticeship Previously CCAP 198H (Prerequisite: current full-time employment in the carpentry industry or division approval) Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.	5-7

CDV – Child, Youth & Family Development Courses (Communication, Humanities & Social Sciences)

CDV 1020 – 45-Hour Entry-level Course Previously CDV 120B Assists entry-level early care, education and family support individuals to advance their understanding and practice in the seven competency areas as defined by the state of New Mexico. The course provides opportunities for students to construct knowledge about children, families, communities and support systems through discussion, reflection and skill practice. This course does not require a high school diploma or GED.	3
CDV 1101 – Parents and Young Children Previously CDV 101 Examines interactions of parents and children and diverse family configurations throughout the life cycle.	3
CDV 1103 – Preschool Growth and Development Previously CDV 103 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent) Examines the cognitive, physical and social/emotional development of the preschool child. Requires observations in appropriate settings.	3
CDV 1105 – Infant Growth and Development Theory and Lab Previously CDV 105L (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent) Examines the basic needs and growth factors of children with an emphasis on the prenatal period through 36 months. [This course replaces CDV 102 and CDV 102L] (45 theory + 45 lab hours per term)	4

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
CDV 1106 – Healthy Young Children <i>Previously CDV 106 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Provides an awareness of basic health and safety management procedures that contribute to the prevention of childhood illnesses. Emphasis on safe environments, child abuse and neglect and children's nutrition.	3	CDV 2212 – Special Issues in Child and Family Development <i>Previously CDV 212 (Prerequisites: Must be in final term or have permission of program director; summer and fall graduates may enroll in spring term)</i> Presents in an exit seminar a balance of research findings, theory and application. Focuses on critical contemporary issues in the field. Students complete a professional portfolio. Spring only.	3
CDV 1107 – Art and Play <i>Previously CDV 107 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Focuses on the importance of play and art in the development of children. Students will be introduced to basic analysis techniques.	3	CDV 2218 – Strengthening Family Structures <i>Previously CDV 218 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Examines families from a structural perspective by being exposed to systems thinking. Explores how families are similar to and different from others in society, including biological and social systems. Strength-based perspective is studied and encouraged in practice.	3
CDV 1120 – Introduction to CDA Training <i>Previously CDV 120 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Examines the history of CDA, the assessment system and competency standards. A review of the six competency and 13 functional areas as well as what is needed to complete the CDA through the direct assessment route. Presents clarification of the steps involved in preparation for CDA assessment.	2	CDV 2219 – Marriages and Families <i>Previously CDV 219 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Provides insights into contemporary marriage and family situations. Focus on decision making for better understanding of families and the broader society.	3
CDV 1190: Supervised Field Experience <i>Previously CDV 124 (Prerequisite: CDV 1020 45hr Class and CVD 1120 Intro to CDA Training)</i> Practicum experience required for CDA candidates in process of completing the Formal Assessment. Practicum requires working with children in one of four settings: Infant Toddler, Preschool, Home Visitor, or Family Home Provider Setting including bilingual programs at any of the levels, 0-5 years. Advisors are assigned to observe and evaluate students in one of the above licensed settings. Students may continue enrollment in Field Experience until the Formal Assessment requirements are completed. (90 hours per term)	3	CDV 2297 – Independent Study <i>Previously known as CDV 297 (Prerequisite: program director approval)</i> Defines and studies a specific problem while working with the instructor.	1-3
CDV 1890 – Family Studies Practicum I <i>Previously CDV 108C (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Demonstrates skills and competencies as indicated in coursework/objectives. Course provides practical experiences in an approved FS, ECME, or community setting in working with families and children from birth to age 36 months. (60 hours per term)	2	CDV 2299 – Cooperative Education <i>Previously CDV 299 (Prerequisite: program director approval)</i> Works for one term on a cooperative basis in an appropriate training program with local employers. The position is paid.	1-3
CDV 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously CDV 296</i> Various special topics in the field are offered as elective hours. See Schedule of Classes .	1-3	CDV 2890 – Family Studies Practicum II <i>Previously CDV 208C (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Demonstrates skills and competencies as indicated in coursework/objectives. Course provides practical experiences in an approved FS, ECME or community setting in working with families and children three years to eight years. (60 hours per term)	2
CDV 2201 – Middle Childhood Growth and Development <i>Previously CDV 201 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Presents the principles of growth and development for 6 to 11-year-old children in cognitive, physical and social-emotional areas.	3	CHEM – Chemistry Courses (Division of Educational & Career Advancement)	
CDV 2202 – Adolescent Growth and Development <i>Previously CDV 202 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Examines the development and communication patterns of adolescents within the family setting.	3	CHEM 0950 – Basics of Chemistry <i>Previously CHEM 100 (Prerequisite: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, Recommended: MATH 0930)</i> Focuses on the study of chemistry: the periodic table, chemical bonds and reactions, solutions and energy. Integrates applied math (metric system, unit analysis, significant figures), reading academic text and study skills. Provides essential background for CHEM 1410, BIO 1410 and BIO 1310. (60 theory/lab hours per term)	3
CDV 2207 – Management of Early Childhood Programs <i>Previously CDV 207 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Presents information and skills to develop an effective early childhood program. Students examine staff responsibilities, program development, scheduling, behavioral observation and evaluation techniques.	3	CHEM – Chemistry Courses (Math, Science & Engineering Division)	
		CHEM 1410 – Introduction to Chemistry <i>Previously CHEM 111 (Corequisite: CHEM 1492, Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent and MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent)</i> Introduces qualitative and quantitative aspects of general chemistry: atomic and molecular structure, periodic table, acids and bases, mass relationships, solutions and brief introduction to organic chemistry. <i>Distance Learning option available (see page 45).</i>	3
		CHEM 1492 – Introduction to Chemistry Laboratory <i>Previously CHEM 112L (Pre- or corequisite: CHEM 1410)</i> Introduces experiments complementing CHEM 1410. (45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1

Course Subject Code/Course number – Course Name**Credit Hours****CHEM 1510/1592 – General Chemistry I****4**

Previously CHEM 121/121L (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent and MATH 1310 or Accuplacer College Level Math score of 60)
[First semester of a two-semester sequence for students in sciences, engineering or pre-med.] Introduces atomic and molecular structure, chemical periodicity, mass and energy relationships and chemical reactions. Required enrollment in a three-hour lecture and a three-hour lab. (45 theory + 45 lab hours per term)

CHEM 1610/1692 – General Chemistry II**4**

Previously CHEM 122/122L (Prerequisite: CHEM 1510/1592 within past 3 years and MATH 1315)
Emphasizes acids and bases, equilibrium, kinetics, thermodynamics, solubility, electro- and nuclear chemistry. Introduces coordination and organic chemistry. Required enrollment in a three-hour lecture and a three-hour lab. (45 theory + 45 lab hours per term)

CHEM 2096, 2196...2996 – Topics in Chemistry**3**

(all courses ending in 96 are topics courses)
Previously CHEM 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
Presents various topics. See **Schedule of Classes**. Recommended for entry-level students. (45 theory + 15 lab hours per term)

CHEM 2210 – Organic Chemistry and Biochemistry**4**

Previously CHEM 212 (Prerequisite: CHEM 1410/1492 or 1510/1592)
Introduces organic and biochemistry for students in health or environmental occupations: survey of organic functional groups including chemistry of living organisms. Emphasis on medical aspects.

CHEM 2710 – Organic Chemistry I**3**

Previously CHEM 291 (Prerequisite: CHEM 1610/1692)
Introduces study of modern organic chemistry including bonding theory, structure and reactivity, physical properties and the reactions of organic compounds. Systematic examination of organic compounds based on their functional groups, including their synthesis and characterization by instrumental methods.

CHEM 2792 – Organic Chemistry I Laboratory**1**

Previously CHEM 293L (Pre- or corequisite: CHEM 2710)
A three-hour per week laboratory class containing experiments complementing the CHEM 2710 lecture class. (45 lab hours per term)

CIS – Computer Information Systems Courses (Business & Information Technology Division)**CIS 1096, 1196...1996 – Topics****1-3**

(all courses ending in 96 are topics courses)
Previously CIS 296
Explores current topics in computers.

CIS 1110 – MS Applications and Integration**3**

Previously CIS 105 (Recommended prerequisite: IT 1010)
Extends the fundamental knowledge of Word, Excel, Access and PowerPoint. Incorporates and emphasizes the integration capabilities among the individual applications. (30 theory + 45 lab hours per term)
Distance Learning option available (see page 45).

CIS 1120 – Microsoft Word**3**

Previously CIS 123 (Recommended prerequisite: IT 1010)
Focuses on word processing using Microsoft Word for Windows with emphasis on functions and practical office applications. (30 theory + 45 lab hours per term)
Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name**Credit Hours****CIS 1125 – Word Fundamentals****1**

Previously CIS 121 (Recommended prerequisite: CIS 1130)
Focuses on creating, editing, enhancing and merging documents. (5 weeks; 10 theory + 15 lab hours per term)
Distance Learning option available (see page 45).

CIS 1130 – Windows**1**

Previously CIS 130
Explores basic elements of Windows with emphasis on software functions. (5 weeks; 10 theory + 15 lab hours per term)
Distance Learning option available (see page 45).

CIS 1140 – PowerPoint Fundamentals**1**

Previously CIS 140 (Recommended prerequisites: 25 wpm typing skill and CIS 1130)
Focuses on basic text charts and graph charts. (5 weeks; 10 theory + 15 lab hours per term)
Distance Learning option available (see page 45).

CIS 1145 – Microsoft PowerPoint**2**

Previously CIS 142 (Recommended prerequisite: IT 1010)
Provides hands-on experience in graphics presentation software, which emphasizes charting, drawing, organizing and displaying text and images. (20 theory + 30 lab hours per term)
Distance Learning option available (see page 45).

CIS 1150 – MS Outlook**1**

Previously CIS 143 (Recommended prerequisite: CIS 1130)
Covers concepts such as managing messages, appointments, contacts and tasks, as well as tracking activities. (5 weeks; 10 theory + 15 lab hours per term)

CIS 1160 – Introduction to Information Management**3**

Previously CIS 147 (Recommended prerequisite: IT 1010)
Provides a broad overview of important topics of information systems that are reviewed from the managerial point of view.
Distance Learning option available (see page 45).

CIS 1170 – Excel Fundamentals**1**

Previously CIS 150 (Recommended prerequisites: 25 wpm typing skill and CIS 1130)
Stresses concepts such as creating, editing and enhancing worksheets, formatting cells, basic formulas and charts. (5 weeks; 10 theory + 15 lab hours per term)

CIS 1171 – Intermediate Excel**1**

Previously CIS 151 (Recommended prerequisite: CIS 1170 or division approval)
Manages multiple worksheets and workbooks, manage data and design forms. (5 weeks; 10 theory + 15 lab hours per term)

CIS 1172 – Advanced Excel**1**

Previously CIS 152 (Recommended prerequisite: CIS 1171 or division approval)
Focuses on creating pivot tables, using advanced data analysis techniques and Excel with other programs. (5 weeks; 10 theory + 15 lab hours per term)

CIS 1173 – Excel Complete, DL Only**3**

Previously CIS 153
This course is offered via distance learning only. Covers Excel software from creating and editing spreadsheets to advanced data analysis tools. This course may substitute for CIS 1170, CIS 1171 and CIS 1172.

CIS 1180 – Access Fundamentals**1**

Previously CIS 155 (Recommended prerequisites: 25 wpm typing skill and CIS 1130)
Focuses on creating database tables, queries, forms and reports. (5 weeks; 10 theory + 15 lab hours per term)

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
CIS 1181 – Intermediate Access <i>Previously CIS 156 (Recommended prerequisite: CIS 1180 or division approval)</i> Covers concepts such as managing data, creating special action queries and tools, adding features to forms and adding hyperlinks to database. (5 weeks; 10 theory + 15 lab hours per term)	1	CIS 1310 – Introduction to Multimedia <i>Previously CIS 170 (Recommended prerequisites: IT 1010, knowledge of Windows)</i> Explores concepts of how text, graphics, sound, images and video come together in a multimedia program. <i>Distance Learning option available (see page 45).</i>	3
CIS 1182 – Advanced Access <i>Previously CIS 157 (Recommended prerequisite: CIS 1181 or division approval)</i> Examines concepts such as Access macros, advanced reports, data filters using parameters and sharing databases. (5 weeks; 10 theory + 15 lab hours per term)	1	CIS 1320 – Digital Sound Processing <i>Previously CIS 171 (Recommended prerequisite: CIS 1310)</i> Focuses on integrating and editing sound files for a multimedia program. (5 weeks; 10 theory + 15 lab hours per term)	1
CIS 1183 – Access Complete, DL Only <i>Previously CIS 158</i> This course is offered via distance learning only. Covers Access software from creating basic databases, macros and advanced design tools in databases. This course may substitute for CIS 1180, CIS 1181 and CIS 1182.	3	CIS 1325 – Visual Communication for Business Design <i>Previously CIS 173</i> Explores how we see and use visuals to communicate information. Students will develop critical-thinking skills in applying these concepts. Students will apply the concepts with hands-on design projects and media-analysis assignments. These concepts will then be applied to design for advertising, print, multimedia, Web design and 3-D design.	3
CIS 1185 – Adobe Acrobat <i>Previously CIS 172 (Prerequisite: IT 1010)</i> Focuses on how to use Adobe Acrobat to create, save, modify and publish PDF files for electronic access. Additional topics to be covered are sharing PDF files, document security, digital signatures, forms, buttons and searching and extracting images and text from PDF documents. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1	CIS 1330 – PhotoShop <i>Previously CIS 193 (Prerequisite: IT 1010 or division approval)</i> Focuses on concepts such as using painting, selections, layers and color correction tools to modify photographic images; using paths, channels, clipping groups, special effects and masks with finer selections; using Web tools such as optimization, slicing images for rollovers and animations, to manipulate images for the web; using color management, monitor calibration and setting up PhotoShop files for two-color and four-color printing. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3
CIS 1187 – FrontPage Complete <i>Previously CIS 192</i> Surveys concepts such as planning, creating, publishing and managing websites using MS FrontPage. Develop and publish projects that include text, images, hyperlinks, forms, tables and frames. <i>Distance Learning option available (see page 45).</i>	2	CIS 1410 – IT Essentials I: PC Hardware and Software <i>Previously CP 128 (Prerequisites: IT 1010 or challenge exam)</i> Introduces PC hardware/software components while preparing students for the software portion of the A+ certification exam. Includes MS-DOS, Windows and UNIX concepts. (30 theory + 45 lab hours per term)	3
CIS 1207 – Programming Logic and Design <i>Previously CP 107 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent and MATH 0940 or Accuplacer Elementary Algebra score of 81 or equivalent, Pre- or corequisite: IT 1010)</i> This course introduces students to the fundamentals of computer programming, including programming concepts, enforcing good style and logical thinking. The course covers key concepts of structure and the use of pseudocode and flow charts. An overview of programming languages is presented. Students begin the course by coding simple HTML tags and seeing their results in a browser. The students then use JavaScript to learn key language concepts including syntax, variables, program control statements, function calls, mathematical operations and array use. The course also introduces object-oriented concepts. (30 theory + 45 lab hours per term)	3	CIS 1415 – IT Essentials II: Network Operating Systems <i>Previously CP 183 (Prerequisite: CIS 1410 or ELEC 2025 as alternative prerequisite or division approval)</i> Introduces installing and administering the most common microprocessor-based NOS environments (Novell, Windows NT, etc.) Students run these NOS systems on a variety of data link protocols and install and maintain devices for inter-network communication. (30 theory + 45 lab hours per term)	3
CIS 1275 – C++ Programming I <i>Previously CP 278A (Prerequisite: CIS 1207 or division approval)</i> Includes structured programming techniques, programming logic and control using C++. Covers data types, variables, arithmetic, control statements, basic functions, pointers, arrays and structures. Object-oriented concepts are presented. Students who have successfully completed similar introductory C++ programming courses, such as those at APS/CEC, may have this course waived and proceed to CIS 2275. (30 theory + 45 lab hours per term)	3	CIS 1420 – Introduction to Computer Networking <i>Previously CIS 145 (Recommended prerequisite: IT 1010)</i> Offers concepts of data communications theory. Concepts include data communications networking terms, topologies, media, components and applications. <i>Distance Learning option available (see page 45).</i>	3
CIS 1284 – .NET I/Visual Basic <i>Previously CP 284 (Prerequisite: CP 1207 or division approval)</i> Introduces the capabilities of the .NET Framework and the Visual Studio development environment within a Visual Basic context. Course scope includes VB.NET language syntax and structure, development of Visual Basic.NET event driven applications incorporating a graphical user interface, .NET Framework and user defined classes and interfaces. Emphasis is on building simple, relevant object-oriented .NET applications. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3	CIS 1425 – Network Topologies/Cisco Academy Semester I <i>Previously CP 182 (Prerequisite: CIS 1410 or division approval)</i> Introduces building networks and running a network operating system. Uses the OSI model as a guide for study of cabling protocols, data link protocols (Ethernet, FDDI, ATM, etc.) and network protocols (IP and IPX) Introduces switches, bridges, gateways and routers. (30 theory + 45 lab hours per term)	3
		CIS 1430 – Fundamentals of Voice & Data Cabling <i>Previously CP 184 (Prerequisite: IT 1010)</i> Focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmissions. (30 theory + 45 lab hours per term)	3

GETTING STARTED

ACCESSING CMM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

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GLOSSARY, INDEX, MAPS

Course Subject Code/Course number – Course Name	Credit Hours
CIS 1440 – Convergent Technologies I <i>Previously CP 186 (Co- or Prerequisite: CIS 1425)</i> Introduces students to the integration/convergence of IP network-based technologies (IP telephony, video conferencing, networked audio/video) (30 theory + 45 lab hours per term)	3
CIS 1513 – Database Design and Introduction to SQL <i>Previously CP 213 (Corequisite: IT 1010 or division approval)</i> This course lays the foundation for understanding relational databases and database design. Data modeling concepts and Entity Relationship Diagramming (ERD) are introduced. Students will create Data Models and ERD's from complex business scenarios while building collaboration and problem solving skills. The SQL portion of the course teaches the student the basics of retrieving data from a database server. Each student benefits by learning industry standards while utilizing the latest database software and online training materials. (30 theory hours + 45 lab hours per term)	3
CIS 1610 – Windows Professional for Systems Administrators <i>Previously CIS 137 (Recommended prerequisite: CIS 1420)</i> Focuses on managing the Windows operating system to manage user accounts and groups and to control access to files and other resources. Covers concepts such as internetworking, protocols, remote access, performance tuning and troubleshooting. This course may assist in preparation for MCP or MCSE certification. Version taught subject to change. Please check with division. (30 theory + 45 lab hours per term)	3
CIS 1620 – Windows Operating System User Support and Troubleshooting <i>Previously CIS 138 (Prerequisite: CIS 1610)</i> Focuses on supporting and troubleshooting the Windows operating system in either a corporate or home environment. Topics will include managing and troubleshooting; access to resources, hardware devices and drivers, desktop and user environments and network protocols and services. Installation and upgrading as well as remote assistance will also be covered. This course may assist in preparation for MCP and MCDST certification. Version taught subject to change. Please check with division. (30 theory + 45 lab hours per term)	3
CIS 1625 – Windows Operating System Desktop Applications Support and Troubleshooting <i>Previously CIS 139 (Prerequisite: CIS 1610)</i> Focuses on supporting and troubleshooting user applications on a Windows operating system in either a corporate or home environment. Topics will include application issues involving: configuring, troubleshooting, usability, customization, connectivity and security. This course may assist in preparation for MCP and MCDST certification. Version taught subject to change. Please check with division. (30 theory + 45 lab hours per term)	3
CIS 1680 – Linux Essentials <i>Previously CP 274L (Prerequisites: IT 1010 or division approval)</i> Introduces the student to the LINUX operating system, with emphasis on the basic commands of the environment. Students will learn the LINUX file system and how to perform common file maintenance from the command line as well as the GUI. Covers how to install, upgrade and delete application packages, use network utilities and perform common system administration tasks. (30 theory + 45 lab hours per term)	3
CIS 1710 – Beginning XHTML <i>Previously CIS 164 (Recommended Pre- or corequisites: CIS 1130)</i> Focuses on the concepts of a format used for writing documents to be viewed with a Web browser. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1
CIS 1711 – Intermediate XHTML <i>Previously CIS 165 (Recommended prerequisite: CIS 1710)</i> Applies the concepts of intermediate XHTML markup such as forms, tables and cascading style sheets. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1

Course Subject Code/Course number – Course Name	Credit Hours
CIS 1712 – Advanced XHTML <i>Previously CIS 166 (Recommended prerequisite: CIS 1711)</i> Introduces concepts such as incorporating multimedia Javascripts and controlling the layout of the page. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1
CIS 1715 – Overview of Web Technologies <i>Previously CP 106 (Prerequisite: IT 1010 or division approval)</i> Covers basic UNIX commands for manipulating and managing CNM Web accounts, different Web servers, client to Web server interaction. Demonstration and incorporation of client side scripting (JavaScript, JScript and VB Script) Java applets and server side scripting (ASP, ColdFusion and Perl) (30 theory + 45 lab hours per term)	3
CIS 1720 – Website Maintenance <i>Previously CP 117 (Prerequisite: CIS 1710 or division approval)</i> Covers the ease of use ratings, link verifiers, performance tuning and site statistics. (10 theory + 15 lab hours per term)	1
CIS 1725 – Extensible Markup Language <i>Previously CIS 183 (Recommended prerequisite: CIS 1710)</i> Focuses on creating XML documents, binding XML data, Document Type Definitions and XML Schema Language, Namespaces, Cascading Style Sheets and Extensible Style Sheet Language (XSL) (15 weeks; 30 theory + 45 lab hours per term)	3
CIS 1730 – Web Programming with JavaScript <i>Previously CP 132 (Prerequisites: CIS 1207 and 1710 and CIS 1711 or division approval)</i> Covers the fundamentals of the Common Gateway Interface (CGI) protocol and JavaScript. Uses compiled programs and introduces CGI security concerns. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3
CIS 1750 – Web Programming with PHP <i>Previously CP 135 (Prerequisite: CIS 1730)</i> Continues skill development with focus on integrating scripting into Web designs and structures using PHP. Develops both client and server application, incorporating many advanced Web page development techniques. (30 theory + 45 lab hours per term)	3
CIS 2095 – Cooperative Education <i>Previously CIS 299 (Prerequisites: CIS 1172 or 1182 or 2111 or 2350 or 2620 and division approval)</i> Provides students the opportunity to work a minimum of 150 hours at business or training-related supervised work stations. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer.	4
CIS 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously CIS 296</i> Explores current topics in computers.	1–3
CIS 2097 – Independent Study <i>(all courses ending in 97 are independent study courses)</i> <i>Previously CIS 297 (Prerequisite: division approval)</i> Allows student and instructor to define a specific problem in the area of the student's interest and directly related to the program. The student develops and executes a solution using analytical techniques appropriate to the problem. An oral presentation may be required.	Variable

Course Subject Code/Course number – Course Name	Credit Hours
CIS 2098 – Internship <i>Previously CIS 298 (Prerequisites: CIS 1172 or 1182 or 2111 or 2350 or 2620 and division approval)</i> Provides students the opportunity to work a minimum of 150 hours at business or training-related supervised work stations. Students are not paid for their work but are supervised jointly by CNM and the company.	4
CIS 2110 – Project Management Software <i>Previously CIS 186 (Recommended prerequisites: IT 1010 and CIS 1130)</i> Focuses on planning, scheduling, managing and communicating project information. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1
CIS 2111 – Project Management <i>Previously CIS 254 (Corequisite: CIS 2110)</i> Focuses on the project management framework and covers each of the project management knowledge areas in the context of information technology projects. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3
CIS 2120 – Hardware and Software Administration <i>Previously CIS 201 (Prerequisites: CIS 1130 or 1610 or division approval)</i> Introduces concepts such as Windows operating systems, installation of boards and hardware, troubleshooting and disassembling/building a microcomputer system. This course may assist in preparation for the A+ exams. (30 theory + 45 lab hours per term)	3
CIS 2121 – Advanced Hardware and Software Management <i>Previously CIS 202 (Prerequisite: CIS 2120 or division approval)</i> Focuses on computer system software including advanced installation/troubleshooting of software, conflict resolutions, evaluating and troubleshooting operating systems. This course may assist in preparation for the A+ exams. (30 theory + 45 lab hours per term)	3
CIS 2130 – Word Certification Prep <i>Previously CIS 220 (Recommended prerequisite: CIS 1120)</i> Focuses on integrating all levels of Word and may assist in preparation for the Word MOS certification exam. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1
CIS 2131 – MS Outlook Certification Prep <i>Previously CIS 221 (Recommended prerequisite: CIS 1150)</i> Focuses on integrating all levels of MS Outlook and may assist in the preparation for the Outlook MOS certification exam. (5 weeks; 10 theory + 15 lab hours per term)	1
CIS 2132 – PowerPoint Certification Prep <i>Previously CIS 222 (Recommended prerequisite: CIS 1145)</i> Focuses on integrating all levels of PowerPoint and may assist in preparation for the PowerPoint MOS certification exam. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1
CIS 2133 – Excel Certification Prep <i>Previously CIS 224 (Recommended prerequisite: CIS 1172)</i> Focuses on integrating all levels of Excel and may assist in preparation for the Excel MOS certification exam. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1
CIS 2134 – Access Certification Prep <i>Previously CIS 226 (Recommended prerequisite: CIS 1182)</i> Focuses on integrating all levels of Access and may assist in preparation for the Access MOS certification exam. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1

Course Subject Code/Course number – Course Name	Credit Hours
CIS 2135 – Microsoft Expression <i>(Recommended prerequisite: IT 1010)</i> Microsoft Expression is used to build websites that include designing a layout for a page, using Cascading Style Sheets, designing tables and forms and publishing a website. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3
CIS 2140 – Business Database Management <i>Previously CIS 230 (Prerequisite: CIS 1182)</i> Focuses on using Access advanced features to support the business-decision process through modeling, analysis and control structures and converting simple forms and reports into essential business tools. Additional topics include switchboards, macros and domain aggregate functions, controlling code executions, creating complex Access Web pages and sharing Access data. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3
CIS 2145 – Excel Advanced Business Applications <i>Previously CIS 231 (Prerequisites: ACCT 2410 or CIS 1172)</i> Focuses on using Excel advanced features to create a decision support system using general management tools, statistical models, financial models and analyzing advanced macros for general business practices. Additional topics include converting and using lists, primary and secondary charts, troubleshooting functions, creating custom functions and forms, controlling code executions and sharing Excel data with other programs. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3
CIS 2146 – MS SQL Server – Database Design <i>Previously CIS 232 (Recommended prerequisites: CIS 1513, 1610 and 1182; recommended Pre- or corequisite: CIS 2620)</i> Focuses on using logical and physical modeling to design a database. Topics include: database objects, database testing, code management procedures and developing applications that use SQL Server Support Services. This course may assist in preparation for MCP certification. (30 theory + 45 lab hours per term)	3
CIS 2147 – Macro Programming <i>Previously CIS 237 (Pre- or corequisite: ACCT 2410 or CIS 1172)</i> Provides students with basic procedures for writing and running a macro. (5 weeks; 10 theory + 15 lab hours per term)	1
CIS 2149 – MS Visio <i>Previously CIS 252 (Recommended prerequisite: IT 1010)</i> Focuses on using Visio to create a broad range of diagrams for networks, databases, application software and the Web. (5 weeks; 10 theory + 15 lab hours per term)	1
CIS 2150 – MS SQL Server – Implementation and Maintenance <i>Previously CIS 290 (Recommended prerequisites: CIS 1513, 1610 and 1182; recommended Pre- or corequisite: CIS 2620)</i> Students will gain valuable experience with: installing, configuring, security, disaster recovery, maintaining databases, monitoring and troubleshooting SQL Server performance. They will also be creating and implementing database objects (views, triggers, functions, procedures, constraints) and supporting data consumers (Queries, Insert, Update, Delete statements) This course may assist in preparation for MCP certification. (30 theory + 45 lab hours per term)	3
CIS 2151 – MS Exchange Server <i>Previously CIS 291 (Recommended prerequisite: CIS 1610; recommended Pre- or corequisite: CIS 2620)</i> Provides students with the concepts of Microsoft Exchange Server. Instruction is provided on Exchange installation, configuration, user accounts, security and performance. This course may assist in preparation for MCP certification. (30 theory + 45 lab hours per term)	3

Course Subject Code/Course number – Course Name	Credit Hours
CIS 2160 – Office Integration (Prerequisite: IT 1010) Covers the relationship between Word, Excel, PowerPoint and Access and offers practice in projects using all applications. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 45).	1
CIS 2235 – JAVA Programming I Previously CP 235 (Prerequisite: CIS 1275 or division approval) Provides an accelerated introduction to JAVA programming language. Covers class design and implementation, object-oriented design topics, Graphic User Interface development, exception handling, file input/output, inheritance, polymorphism. (30 theory + 45 lab hours per term)	3
CIS 2237 – JAVA Programming II Previously CP 237 (Prerequisite: CIS 2235) Covers advanced Java technologies including JSP's and servlets. Covers design, implementation and deployment of intermediate and advanced web applications using NetBeans IDE and Tomcat server. (30 theory + 45 lab hours per term)	3
CIS 2270 – Open GL Programming Previously CP 260L (Prerequisites: CIS 1275 or division approval) Explores the OpenGL Application Programming Interface as it is implemented under Windows-based operating systems. The course covers the fundamentals of graphical programming using the C/C++ language. The course begins by exploring orthographic and perspective clipping and window viewpoints. Programming projects include building scenes with basic primitives including points, lines and polygons. Color, material, lighting properties and texture maps are incorporated into program later in the course. Students will use OpenGL's GLUT library for the necessary GUI capabilities. (30 theory + 45 lab hours per term)	3
CIS 2275 – C++ Programming II (Object-Oriented Programming) Previously CP 278B (Prerequisites: CIS 1275 or division approval) Continues coverage of C++ programming. Covers structures, enumerated data types, C++ function enhancements, classes and objects, inheritance and virtual functions. This advanced course provides a solid foundation in object-oriented programming methods. (30 theory + 45 lab hours per term)	3
CIS 2277 – C++ Programming III (Advanced OOP) Previously CP 278C (Prerequisite: CIS 2275 or division approval) Covers advanced programming including stacks, queues, linked lists, template classes, inheritance and polymorphism and other computer science problems. (30 theory + 45 lab hours per term)	3
CIS 2279 – Windows Programming in C++ Previously CP 290 (Prerequisites: CIS 2275 or division approval) Provides an introduction to writing Windows-based programming applications. The course topics include building windows, drawing into the window, building menus, dialog boxes, toolbars and other graphical user interface components. Advanced C++ concepts and classes are incorporated into programs. The course begins with Microsoft Foundation Class (MFC) overview and message handling concepts. The majority of programs are written using wxWidgets, a cross-platform windows library. The development environment is Microsoft Visual C++. (30 theory + 45 lab hours per term)	3
CIS 2280 – .NET I/C# Previously CP 280 (Prerequisite: CIS 2275 or 2235 or 1284) Explores program development topics using Microsoft's C#.NET development environment. Topics include the .NET environment, program development using Visual Studio.NET, designing and implementing C# classes using standard object-oriented class relationships and desktop application, Web application and Web service development. The course begins with an exploration of Visual Studio and the .NET environment from a C# context and moves on to building relevant C#.NET desktop and Web applications, noting the differences between C#.NET, Java and Visual Basic.NET as well as the synergistic relationship between C#.NET and Visual Basic.NET. The course examines C#.NET's role in replacing C++ and MFC technologies and finish with C#.NET Web service development within a multiple	3

Course Subject Code/Course number – Course Name	Credit Hours
platform environment. Some applications will manipulate a relational database and involve Web service technologies (XML, SOAP, IIS, SQL server) (30 theory + 45 lab hours per term)	
CIS 2284 – .NET II/C#/Visual Basic Previously CP 287 (Prerequisite: CIS 2280 or 1284 or division approval) Course focuses on development of advanced ASP applications and ASP Web services. A substantial portion of the course curriculum includes applications that manipulate a relational database. All classes are written in either VB.NET or C#.NET. (30 theory + 45 lab hours per term)	3
CIS 2310 – Desktop Publishing Previously CIS 255 (Prerequisites: IT 1010 and CIS 1130 or division approval) Focuses on professional high-quality page design for business publications, newsletters, flyers, brochures, business cards and advertisements-using page layout tools for print and the Web. (30 theory + 45 lab hours per term)	3
CIS 2320 – Fireworks Previously CIS 265 (Recommended prerequisites: IT 1010 and CIS 1130) Covers concepts such as preparing graphics for the Web. (5 weeks; 10 theory + 15 lab hours per term)	1
CIS 2330 – Authorware Previously CIS 270 (Recommended prerequisite: CIS 1310) Explores concepts of interactive multimedia authoring program with emphasis on learning to combine a variety of media. (30 theory + 45 lab hours per term)	3
CIS 2335 – Director Previously CIS 271 (Recommended prerequisite: CIS 1310) Emphasizes concepts such as the use of interactive multimedia script language to create dynamic multimedia productions. (30 theory + 45 lab hours per term)	3
CIS 2340 – Dreamweaver Previously CIS 272 (Recommended prerequisites: IT 1010) Explores concepts such as building websites using rollovers, tables and style sheets. (10 weeks; 20 theory + 30 lab hours per term) Distance Learning option available (see page 45).	2
CIS 2350 – Flash Previously CIS 273 (Recommended prerequisites: IT 1010 and CIS 1310) Focuses on concepts such as animation, drawing and interactivity in Flash as well as sound and introduction to actions. (30 theory + 45 lab hours per term) Distance Learning option available (see page 45).	3
CIS 2355 – Adobe Illustrator Previously CIS 274 (Prerequisites: CIS 1330 or division approval) Explores concepts such as vector-based artwork for print, presentation and the Web using draw tools to produce templates, patterns and logos for a wide variety of business publications ranging from business cards to banners. (30 theory + 45 lab hours per term) Distance Learning option available (see page 45).	3
CIS 2360 – Digital Video Editing Previously CIS 275 (Pre- or corequisite: CIS 1310) Explores concepts of choosing appropriate software and media to design and produce a cost-effective multimedia presentation. (30 theory + 45 lab hours per term) Distance Learning option available (see page 45).	3

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
CIS 2370 – Business Web Graphics <i>Previously CIS 276 (Prerequisites: ECM 1010 and CIS 1711, or CIS 2340)</i> Analyzes production techniques for design and creation of professional business websites and optimize the appearance of business websites by incorporating appropriate graphics. Tools include animations, rollover effects, buttons, thumbnail galleries, image slices and icons. Attention given to bandwidth and presentation needs unique to the Web. Focuses on developing business websites that are attractive, professional and appropriate to business representation and functions on the Web. (10 weeks; 20 theory + 30 lab hours per term)	2	CIS 2455 – Intrusion Detection Systems & Firewalls <i>Previously CP 240 (Prerequisites: CIS 1415 and 1425)</i> Covers the installation, configuration and monitoring of various intrusion Detection Systems (IDS) and Firewalls that are used to repel and track network attacks. (30 theory + 45 lab hours per term)	3
CIS 2380 – PhotoShop Practicum <i>Previously CIS 263 (Prerequisite: CIS 1330 or division approval)</i> Expands on the Photoshop skill set to develop proficiency with Masks, Channels, Clipping Paths, Clipping Groups, History, Blending Modes, Curves and Color Correction. The focus is on the core image-editing tools of Photoshop that can be universally applied to photography, print, or the Web. The material is covered in production-oriented projects. (10 weeks; 20 theory + 30 lab hours per term) <i>Distance Learning option available (see page 45).</i>	2	CIS 2520 – Introduction to SQL (Structured Query Language) <i>Previously CP 221 (Prerequisites: CIS 1513 or division approval)</i> Introduction to Structured Query Language (SQL) within the context of an Oracle database. Students will create basic and complex queries (joining, sub-queries, aggregate functions, grouping data), manipulating data using insert, update and delete statements. Create tables, views, constraints, indexes and sequences. Each student benefits by learning the industry standards while utilizing the latest database software and online training materials. This course also prepares students to pass the 1st Oracle Associate Certification Test. (30 theory hours+ 45 lab hours perform)	3
CIS 2420 – Basic Router Config./Cisco Academy Semester 2 <i>Previously CP 205 (Prerequisite: CIS 1425)</i> Configure routers, other layer 3 devices and their associated protocols in different network scenarios. Prepares students for the Cisco Certified Networking Associate certification. (30 theory + 45 lab hours per term)	3	CIS 2521 – Database Programming with PL/SQL <i>Previously CP 222 (Prerequisites: CIS 2520 or division approval)</i> Introduces students to the PL/SQL programming language which is Oracle's standard procedural language for relational databases. Students will learn and develop PL/SQL programs that: use built-in SQL functions, conditional and iterative control structures, stored procedures, functions, packages, triggers and how to trap exceptions. Each student benefits by learning the industry standards while utilizing the latest database software and online training materials. (Prepares students for 2nd Test, which will award them with the Oracle Certified Associate Certification) (30 theory hours + 45 lab hours per term)	3
CIS 2423 – Local Area Network Management/Cisco Academy Semester 3 <i>Previously CP 206 (Prerequisite: CIS 2420)</i> Configure and troubleshoot routers/switches in a LAN environment. Prepares students for the Cisco Certified Networking Associate certification. (30 theory + 45 lab hours per term)	3	CIS 2522 – Oracle Internet Forms <i>Previously CP 218 (Prerequisites: CIS 2520 or division approval)</i> Students will build, test and deploy Internet applications with Oracle Forms. Working in a graphical user interface (GUI) environment, they will learn how to build forms with user input items such as check boxes, list items and radio groups and customize forms by creating event-related triggers. (Prepares students for 3rd and final Test, which will award them with the Oracle Certified Professional Certification) (30 theory hours + 45 lab hours per term)	3
CIS 2425 – Wide Area Network Management/Cisco Academy Semester 4 <i>Previously CP 207 (Prerequisite: CIS 2423)</i> Configure and troubleshoot routers/switches in a WAN environment. Prepares students for the Cisco Certified Networking Associate certification. (30 theory + 45 lab hours per term)	3	CIS 2524 – Oracle Reports <i>Previously CP 224 (Prerequisite: CIS 2520)</i> Students learn how to design and build a variety of standard and custom Web and paper reports using Oracle Reports Developer. Students will learn Reports Builder to set up a Data Model, retrieve and display data and format data from any data source in numerous reporting styles and publish the output to any destination. (30 theory + 45 lab hours per term)	3
CIS 2427 – Troubleshooting Networks <i>Previously CP 285 (Prerequisite: CIS 2423 or division approval)</i> Allows students run a wide variety of applications over a network and apply troubleshooting techniques using software and LAN and WAN analyzing equipment. (30 theory + 45 lab hours per term)	3	CIS 2610 – Foundations of Network+ <i>Previously CIS 239 (Recommended prerequisites: IT 1010 and CIS 1420)</i> Provides students with the skills and knowledge expected of networking professionals. It provides a foundational knowledge in diverse operational environments and operating systems. This course may assist in preparation for Network+ certification. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3
CIS 2430 – Fundamentals of Wireless LANs <i>Previously CP 185 (Pre- or corequisite: CIS 2420)</i> Focuses on the design, planning, implementation, operation and troubleshooting of wireless networks. (30 theory + 45 lab hours per term)	3	CIS 2620 – Windows Server Management <i>Previously CIS 243 (Recommended Pre- or corequisites: CIS 1420 and 1610)</i> Focuses on user and group management, client and server management and file-sharing management. This course may assist in preparation for MCP or MCSE certification. Version being taught subject to change. Please check with division. (30 theory + 45 lab hours per term)	3
CIS 2440 – Convergent Technologies II <i>Previously CP 187 (Pre- or corequisite: CIS 1440)</i> Expands upon the convergence technologies covered in CP 1440. (30 theory + 45 lab hours per term)	3	CIS 2630 – Windows Network Infrastructure Management <i>Previously CIS 245 (Prerequisites: CIS 2620 or 1425 and CIS 1415 or division approval)</i> Focuses on networking protocols, protocol bindings, application layers, managing clients and servers, utilizing user and group accounts and profiles. This course may assist in preparation for MCP or MCSE certification. Version being taught subject to change. Please check with division. (30 theory + 45 lab hours per term)	3
CIS 2445 – Networked Video Applications <i>Previously CP 188 (Pre- or corequisite: CIS 2440)</i> Focuses on the design, planning, implementation, operation and troubleshooting of networked video, IP/TV type applications. (30 theory + 45 lab hours per term)	3		
CIS 2450 – Fundamentals of Network Security <i>Previously CP 231 (Prerequisite: CIS 2423)</i> Introduces Network Security and overall security processes. The focus of the course will be hands-on experience for students with emphasis on: security policy design and management, security technologies, products and solutions. (30 theory + 45 lab hours per term)	3		

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Course Subject Code/Course number – Course Name**Credit Hours****CIS 2635 – Windows Directory Services Management 3**

Previously CIS 246 (Prerequisites: CIS 2620 or 1425 and CIS 1415 or division approval)
 Focuses on organizing objects into a structure that provides for a means of searching and locating objects within the network database directory and making information available to authorized users, applications and operating system services. This course may assist in preparation for MCP or MCSE certification. Version being taught subject to change. Please check with division. (30 theory + 45 lab hours per term)

CIS 2640 – Designing Windows Directory Services/Network 3

Previously CIS 247 (Prerequisites: CIS 2620 or 1425 and CIS 1415 or division approval)
 Focuses on analyzing business requirements and designing a directory service architecture that meets the requirements for desktop management and design for businesses and service locations. This course may assist in preparation for MCP or MCSE certification. Version being taught subject to change. Please check with division. (30 theory + 45 lab hours per term) Course fee: \$10

CIS 2645 – Designing Windows Network Security 3

Previously CIS 249 (Prerequisites: CIS 2620 or 1425 and CIS 1415 or division approval)
 Focuses on analyzing and evaluating information needed to design a security solution for Windows and access between networks that meet business needs. This course may assist in preparation for MCP and MCSE certification. Version being taught subject to change. Please check with division. (30 theory + 45 lab hours per term)

CIS 2650 – Windows Network Environment 3

Previously CIS 251 (Recommended prerequisites: CIS 1610 and 2620 or division approval)
 Helps create, configure, manage, secure and troubleshoot file, print, Web resources, network infrastructure and remote access. Additional topics include managing, securing and troubleshooting servers and client computers. This course may assist in preparation for MCP and MCSA certification. Version being taught subject to change. (30 theory + 45 lab hours per term)

CIS 2660 – Principles of Information Security 3

Previously CIS 257 (Prerequisite: CIS 1420; recommended prerequisite: CIS 2630)
 Explores network security in depth. Topics included are risk management, network security policy, security training, implementing security and security maintenance.
Distance Learning option available (see page 45).

CIS 2670 – Computer Security+ 3

Previously CIS 258 (Prerequisite: CIS 1420; recommended prerequisite: CIS 2630)
 Focuses on an overview of network and computer security. Topics included are general security concepts, communication security, infrastructure security, operational and organization security. (30 theory + 45 lab hours per term)

CIS 2680 – Linux Administration 3

Previously CP 275 (Prerequisite: CIS 1680 or division approval)
 Allows students to build and customize a LINUX server in a network environment and administer it remotely. Covers the tasks involved in the installation, configuration and administration of a LINUX server. Students will learn to perform the common tasks of user and group administration, integration of a server into a LAN and the configuration of Linux services. (30 theory + 45 lab hours per term)

CIS 2685 – Linux Advanced Administration 3

Previously CP 232 (Prerequisite: CIS 2680)
 Presents installation, maintenance and troubleshooting of network-based applications/programs on a UNIX platform. Prepares students for Linux certification. (30 theory + 45 lab hours per term)

CIS 2687 – High Performance Computing Configuration 3

Previously CP 291 (Prerequisite: CIS 2680)
 Focuses on configuring computer clusters to act in unison in an HPC environment. (30 theory + 45 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours****CIS 2740 – Cascading Style Sheets 3**

(Recommended prerequisite: CIS 1710 and 1711)
 Introduces the fundamentals of Cascading Style Sheets and their role in separating the content of Web pages from their presentation. Provides a firm understanding of how CSS works and how they are used to format and style Web pages. (30 theory + 45 lab hours per term)

CIS 2745 – ASP.NET 3

(Prerequisite: CIS 1750 or division approval)
 This course covers aspects of server side scripting using Active Server Pages. Focuses on how to develop interactive and dynamic Web applications using ASP and the .NET framework. (30 theory + 45 lab hours per term)

CIS 2750 – ColdFusion 3

(Prerequisite: CIS 1730 or division approval)
 Covers one of the most common forms of “middle ware” in the Web environment. The focus will be on data manipulation via ColdFusion. (30 theory + 45 lab hours per term)

CIS 2755 – JavaServer Pages 3

(Recommended prerequisite: CIS 1750)
 Introduces the main concepts of JSP technology, syntax and components of JSP development. Focuses on how to design and develop dynamic Web pages with JSP and how to build database driven Web applications using JSP. (30 theory + 45 lab hours per term)

CJ – Criminal Justice Courses (Health, Wellness & Public Safety Division)**CJ 1001 – Introduction to Criminal Justice 3**

(Prerequisites: ENG 0750 or Accuplacer Sentence Skills score of 69, MATH 0750 or Accuplacer Elementary Algebra score of 57, RDG 0750 or Accuplacer Reading score of 69, or division approval)
 Introduces the structural framework for the criminal justice system in the United States. The function, role and practices of the police, the courts and corrections will be explained and career opportunities in the administration of justice are explored.

CJ 1002 – Criminal Law 3

Previously CJ 101 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85, MATH 0750 or Accuplacer Elementary Algebra score of 57, RDG 0950 or Accuplacer Reading score of 80, or division approval)
 Covers the historical development, elements and goals of common and statutory criminal laws which control actions in the criminal justice system.

CJ 1007 – Criminal Procedure 3

Previously CJ 107 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 69, MATH 0750 or Accuplacer Elementary Algebra score of 57, RDG 0950 or Accuplacer Reading score of 69, or division approval)
 Examines the method of enforcing the substantive criminal law. Includes the process of applying the established law, constitutional law, rules of evidence, case law and an understanding of the logic used by the courts.
Distance Learning option available (see page 45).

CJ 1096, 1196...1996 – Special Topics 1-6

(all courses ending in 96 are topics courses)
Previously CJ 296 (Prerequisite: division approval)
 Provides the in-depth study of problems and the advanced techniques that criminal justice expert’s use in responding to them.

CJ 1502 – Juvenile Law and Procedure 3

Previously CJ 102 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85, MATH 0750 or Accuplacer Elementary Algebra score of 57, RDG 099 or Accuplacer Reading score of 80, or division approval)
 Covers the juvenile court and justice system including the Children’s Code and the Rules of Procedure.

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
CJ 1509 – Introduction to Security Services <i>Previously CJ 109 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 69, MATH 0750 or Accuplacer Elementary Algebra score of 57, RDG 0950 or Accuplacer Reading score of 69, or division approval)</i> Covers the development of security services, relationships to the legal process, career roles and operational processes in security operations. The course also helps homeowners and covers Homeland Security, report writing and emergency procedures.	3	CJ 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously CJ 296 (Prerequisite: division approval)</i> Provides the in-depth study of problems and the advanced techniques that criminal justice expert's use in responding to them.	1-6
CJ 1518 – Report Writing <i>Previously CJ 118 (Prerequisites: RDG 0950 or Accuplacer Reading score of 69, MATH 0750 or Accuplacer Arithmetic score of 57, or division approval)</i> Covers criminal justice reports, including writing and use of forms. <i>Distance Learning option available (see page 45).</i>	3	CJ 2505 – Community-Oriented Policing <i>Previously CJ 208 (Prerequisites: CJ 1002 and 1007 or division approval)</i> Examines the history of policing, problems with earlier methods, re-thinking of the basic role of police and using police for problem solving, improving relations and crime prevention with the public.	3
CJ 1570 – Patrol Procedures <i>Previously CJ 104L (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 69, MATH 0750 or Accuplacer Elementary Algebra score of 57, RDG 0950 or Accuplacer Reading score of 69, or division approval)</i> Introduces basic patrol function and the problems faced by law enforcement officers. (30 theory + 37.5 lab hours per term) <i>Hybrid option available (see page 45).</i>	3	CJ 2511 – Correctional Services <i>Previously CJ 216 (Prerequisites: CJ 1002 and 1007 or division approval)</i> Covers the duties and authorities of correctional officers, admission procedures, cell searches, lockdown, penal terminology, key control measures and operations, as well as court decisions dealing with corrections. <i>Distance Learning option available (see page 45).</i>	3
CJ 2005 – Probation and Parole <i>Previously CJ 203 (Prerequisites: CJ 1502 and 1007 or division approval)</i> Presents the history, philosophy and legal basis governing investigation and supervision of juvenile offenders and adult violators placed on probation and parole. <i>Distance Learning option available (see page 45).</i>	3	CJ 2515 – Criminal Investigation <i>Previously CJ 212 (Prerequisites: CJ 1002, 1007 and 1518 or division approval)</i> Presents basic criminal investigation from the preliminary investigation to final preparation and presentation in court.	3
CJ 2006 – Rules of Criminal Evidence <i>Previously CJ 210 (Prerequisites: CJ 1002 and 1007 or division approval)</i> Covers the application of the Federal Rules of Evidence and the New Mexico Rules of evidence in a criminal case from investigation through sentencing. <i>Distance Learning option available (see page 45).</i>	3	CJ 2692 – Criminal Investigation Laboratory <i>Previously CJ 212L (Pre- or corequisite: CJ 2515 or division approval)</i> Introduces exercises and practical demonstrations related to the investigations of crime. (45 lab hours per term)	1
CJ 2007 – White Collar Crimes <i>Previously CJ 211 (Prerequisites: CJ 1002 and 1007 or division approval)</i> Presents the criminal elements of white collar crimes and the techniques and methods to investigate these specific crimes to include computer crimes.	3	CJ 2695 – Cooperative Education <i>Previously CJ 299 (Prerequisite: division approval)</i> Employs the student at an approved program-related work site and applies learned theory based on goals and objectives.	3
CJ 2008 – Organized Crime and Terrorism <i>Previously CJ 213 (Prerequisites: CJ 1002 and 1007 or division approval)</i> Covers the history of organized crime and terrorism and presents methods and practices of both. Presents current trends and the growing relationship between the two entities.	3	CJ 2697 – Independent Study <i>Previously CJ 297 (Prerequisite: division approval)</i> Focuses on a specific problem while working with an instructor	Variable
CJ 2009 – Management for Criminal Justice Professionals <i>Previously CJ 215 (Prerequisites: CJ 1002 and 1007 or division approval)</i> Presents management methods in a criminal justice environment to include law enforcement, corrections and security. Covers basic management theory, leadership, assertiveness, time management, performance evaluation, legal issues, ethics and supervision.	3	CJ 2698 – Internship <i>Previously CJ 298 (Prerequisite: division approval)</i> Provides opportunity for student to work as a volunteer in an appropriate criminal justice division. Position is not paid. (135 lab hours per term)	3
CJ 2011 – Public Policies and Strategies <i>Previously CJ 217 (Prerequisites: CJ 1002 and 1007 or division approval)</i> Presents issues and strategies involved in developing and implementing public policy, including problems in criminal justice, standard police operations, public security, public safety, corrections and juvenile justice. <i>Distance Learning option available (see page 45).</i>	3	CJ 2999 – Criminal Justice Capstone Course <i>Previously CJ 295 (Prerequisite: division approval)</i> Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term)	1
CLA – Clinical Laboratory Assistant Courses (Health, Wellness & Public Safety Division)			
		CLA 1010 – Introduction to Laboratory Technique <i>Previously CLA 101L (Prerequisites: RDG 0950 or Accuplacer Reading score of 80, ENG 0950 or Accuplacer Sentence Skills score of 85, MATH 0930 or Accuplacer Elementary Algebra score of 72, Corequisites: CLA 1075)</i> Introduces basic medical laboratory techniques with an emphasis on urinalysis and immunology. Includes laboratory instrumentation, communication, quality control and safety. (7.5 weeks; 4 theory + 6 lab hours per week = 30 theory + 45 lab hours per term) Program fee: See Schedule of Classes <i>Distance Learning option available (see page 45).</i>	3

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Course Subject Code/Course number – Course Name**Credit Hours****CLA 1075 – Basic Hematology/Coagulation** 2*Previously CLA 104L (Corequisite: CLA 1010)*

Presents theory and procedures associated with routine hematology and coagulation tests. Students apply theory in performing basic hematology and coagulation tests procedures. Includes instrumentation, calibration and quality control. (7.5 weeks; 2 theory + 6 lab hours per week = 15 theory + 45 lab hours per term)

Distance Learning option available (see page 45).

CLA 1096, 1196...1996 – Special Topics in Clinical Lab Assistant 1-6

(all courses ending in 96 are topics courses)

Previously CLA 296

Explore various topics of interest in the field of Clinical Lab Assistant.

CLA 1570 – Basic Chemistry/Microbiology 2

Previously CLA 106L (Corequisite: CLA 1590)

Presents theory and procedures associated with routine chemistry and microbiology tests. Students apply theory in performing basic chemistry and microbiology tests procedures. Includes instrumentation, calibration and quality control. (7.5 weeks; 2 theory + 6 lab hours per week = 15 theory + 45 lab hours per term)

Distance Learning option available (see page 45).

CLA 1590 – Clinical Experience 3

Previously CLA 103C (Prerequisites: CLA 1010, 1075, 1570, HLTH 1001, PHLB 1010, 1092, 1090 or equivalent)

Provides practical experience in chemistry, hematology, microbiology and urinalysis procedures in hospital and clinic medical laboratories. (7.5 weeks; 135 clinical hours per term)

CM – Construction Management Courses *(Applied Technologies Division)***CM 1105 – Construction Detailing** 3

Previously CM 130

Introduces the basics of manual drawing and drafting, construction detailing, construction contract documents, working drawings and blue print reading. (30 theory + 37.5 lab hours per term)

Distance Learning option available (see page 45).

CM 1110 – Construction Materials and Techniques 3

Previously CM 171

Introduction to the construction industry, educational opportunities, materials, techniques and terminology of construction.

Distance Learning option available (see page 45).

CM 1115 – Commercial Construction Theory 3

Previously CM 203

Through exercises and lecture students will become familiar with model building codes, the project manual specifications and zoning and planning codes. Students will investigate how they effect and govern the construction process.

Distance Learning option available (see page 45).

CM 1205 – Computer Aided Construction Drafting/Engineering 2

Previously CM 132L (Prerequisite CAD 1001 or division approval)

Introduces principles and techniques of computer graphic applications used in the construction industry. (15 theory + 45 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours****CM 1210 – Mechanical Electrical Systems and Construction** 3

Previously CM 279

Introduces materials and equipment associated with the mechanical and electrical systems used in commercial and residential buildings.

Distance Learning option available (see page 45).

CM 1215 – Construction Equipment and Methods 3

Previously CM 263

Presents large equipment used to move, lift and assemble components of commercial buildings. Covers earth work, concrete forms and construction, along with steel, wood and masonry methods, productivity, licenses and contract options.

Distance Learning option available (see page 45).

CM 1220 – Introduction to Construction Project Management 3

Previously CM 267

Introduction to construction project planning and scheduling. Students will be introduced to management topics such as leadership, quality control, document control and risk management. (45 Theory Hours)

Distance Learning option available (see page 45).

CM 1305 – Construction Estimating 3

Previously CM 257 (Prerequisites: CM 1105, CM 1205, CM 1110 or division approval. MATH 0940 is recommended)

Covers cost estimates on buildings based on Construction Specifications Institute, formatted budgets, take-off techniques. (15 theory + 75 lab hours per term)

Distance Learning option available (see page 45).

CM 2096, 2196...2996 – Topics 1-4

(all courses ending in 96 are topics courses)

Previously CM 296 (Prerequisite: permission of program chair)

Provides in-depth study of topics related to construction management.

CM 2105 – Construction Scheduling 3

(Prerequisite: CM 1305 or division approval)

Introduction to techniques for transforming contract documents into project schedules, including Gantt, Pert and CPM development. Students break down a job into its basic tasks and reassemble it in a framework that controls time, work materials and related activities. During the course students will apply theory, knowledge and technique to actual projects using computer scheduling programs. (15 hours theory + 45 hours lab)

Distance Learning option available (see page 45).

CM 2115 – Computerized Estimating Techniques 3

Previously CM 260 (Prerequisite CM 1305 or division approval)

Covers various methods of computerized estimating techniques including spreadsheets, estimating software, digitized take-off and Web based plan rooms and project files. This class will utilize industry standard applications. (15 theory + 75 lab hours per term)

CM 2120 – Statics 3

Previously CM 256 (Pre- or corequisite: MATH 1310 or division approval)

Introduces the use of graphic and algebraic formulas, static forces, equilibrium, moments and stress and strain. During the course forces in beams and columns in wood, steel and concrete will be analyzed.

CM 2205 – Construction Surveying 3

Previously CM 261L (Prerequisite MATH 1310 or GIS 1001 or division approval)

Introduces the basic techniques and equipment used in surveying including tape, level and theodolite; leveling, distance and angle measurement; traversing; and note-keeping. (15 theory + 75 lab hours per term)

Course Subject Code/Course number – Course Name **Credit Hours**

CM 2210 – General Contractor Preparation **3**

Previously CM 175
Using the New Mexico Contractors Reference Manual this course covers licensing requirements, rules and regulations, business and law and other important aspects of owning and running a construction business. Completion of this course substitutes for the Business and Law portion of the licensing exam. *Distance Learning option available (see page 45).*

CM 2215 – Estimating and Bidding **3**

Previously CM 262 (Prerequisites: CM 1305, CM 2115)
Students will develop unit cost estimates and become familiar with project bidding processes. Computerized estimating software will be introduced to prepare estimates and replicate the bidding process. *(30 theory + 45 lab hours per term)*
Distance Learning option available (see page 45).

CM 2220 – Computerized Project Management and Scheduling **3**

Previously CM 280 (Prerequisites: CM 1110, IT 1010 or division approval)
Covers various methods of computerized scheduling methods and techniques. Exposes the student to state of the art project scheduling software and project management techniques used by local industry. The student will participate in group projects and will develop real world project schedules. *(15 theory + 75 lab hours per term)*

CM 2995 – Cooperative Education **3**

Previously CM 299 (Prerequisite: permission of program chair)
Provides opportunities for the student to be employed at an approved course-related work site and applies learned theory based on goals and objectives for one term. The position is paid.

CM 2997 – Independent Study **2-4**

Previously CM 297 (Prerequisite: permission of program chair)
Allows the student and instructor to define a specific problem directly related to the program in the area of the student's interest. The student develops and executes a solution using analytical and drafting techniques. An oral presentation may be required.

CM 2998 – Internship **3**

Previously CM 298 (Prerequisite: permission of program chair)
Provides opportunities for the student to work for one term on a cooperative basis in an appropriate defined training program. The position is not paid.

CM 2999 – Construction Management Capstone Course **1**

Previously CM 295 (Prerequisite: division approval)
Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. *(Taken during student's last term.)*

COMM – Communication Courses (Communication, Humanities & Social Sciences)

COMM 1110 – Mass Media and Society **3**

Previously COMM 110 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 1101 or Accuplacer Sentence Skills score of 110)
Examines the roles media play in American society and their effects on other forms of communication.

COMM 1130 – Public Speaking **3**

Previously COMM 130 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 1101 or Accuplacer Sentence Skills score of 110)
Combines theory and practical application. Focuses on organizing and delivering, listening and responding to various types of presentations. Note: COMM 1130 is required in the UNM Core Curriculum. Liberal Arts students intending to transfer to UNM may want to take COMM 1130. *Distance Learning option available (see page 45).*

Course Subject Code/Course number – Course Name **Credit Hours**

COMM 2096, 2196...2996 – Topics in Communication Studies **3**

(all courses ending in 96 are topics courses)
Previously COMM 293 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 and COMM 2221)
Presents various topics. See **Schedule of Classes**.

COMM 2221 – Interpersonal Communication Studies **3**

Previously COMM 221 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent and ENG 1101 or Accuplacer Sentence Skills score of 110)
Provides overview of perception, emotions, nonverbal communication, language, listening, defensiveness and relational conflict. Emphasizes developing communication styles and skills to enhance effectiveness in professional and personal relationships. Note: COMM 1130 is required in the UNM Core Curriculum, Liberal Arts students intending to transfer to UNM may want to take COMM 1130 in addition to COMM 2221 to fulfill this requirement.
Distance Learning option available (see page 45).

COMM 2223 – Introduction to Nonverbal Communication Studies **3**

Previously COMM 223 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
Examines how the face and eyes, gestures, touch, voice, physical appearance, space, time and environment communicate in personal and professional interactions.

COMM 2225 – Small-Group Communication Studies **3**

Previously COMM 225 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 1101 or Accuplacer Sentence Skills score of 110)
Examines group types, characteristics, dynamics, conflicts, norms, roles, leadership, problem solving and decision making in small group processes.

COMM 2232 – Business and Professional Communication Studies **3**

Previously COMM 232 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
Emphasizes developing, organizing and supporting ideas in interpersonal business encounters, groups, teams, meetings, interviews and platform presentations.
Distance Learning option available (see page 45).

COMM 2240 – Organizational Communication Studies **3**

Previously COMM 240 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
Focuses on communication networks, power and authority, manager/employee relationships, leadership and interviewing in organizational contexts.

COMM 2270 – Communication Studies for Teachers **3**

Previously COMM 270 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
Introduces systems approach to classroom communication at any level, providing a means to analyze, develop and facilitate effective communication.

COMM 2280 – Gender Communication Studies **3**

Previously COMM 290 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 110 or Accuplacer Sentence Skills score of 110 and COMM 2221)
Focuses on communication differences between men and women, implications and consequences of these differences and discussion of various strategies for change in business, media, educational and intimate contexts.

Course Subject Code/Course number – Course Name**Credit Hours****COMM 2281 – Intercultural Communication Studies****3**

Previously COMM 291 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 and COMM 2221)
Focuses on culture and differences in communication values and styles (verbal and nonverbal) Analysis of intercultural encounters and development of skills for more effective intercultural communication.

COMM 2282 – Family Communication Studies**3**

Previously COMM 292 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 and COMM 2221)
Examines family systems theory, communication patterns, rules, roles, themes, power, intimacy, ethnicity and conflict in families.

COMM 2289 – Listening**3**

Previously COMM 289 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 and COMM 2221)
Investigates and applies current research in listening theory. Analyzes the appropriateness and applicability of five major types of listening in academic, business, media and interpersonal contexts.

COS – Cosmetology Courses (Health, Wellness & Public Safety Division)**COS 1010 – Orientation****2**

Previously COS 101

Introduces cosmetology. Presents theory in the areas of professional image, first aid and work ethics.

COS 1071 – Sterilization/Sanitation Bacteriology**2**

Previously COS 102A (Pre- or corequisite: COS 1010 or division approval)

Presents related theory and practical application applied to preparation, procedures, products, materials and implements. Demonstrating methods of sanitation, sterilization and disinfection; the use of chemical agents, fumigants, UV light to inhibit bacterial, viral and fungal growth to prevent infections.
(15 Theory & 37.5 lab hours per term)

COS 1072 – Shampoo/Rinses/Scalp Treatment**2**

Previously COS 103A (Pre- or corequisites: COS 1010 & 1071, or division approval)

Presents, products, materials and implements related to shampoo service, hair analysis and treatments for scalp and hair. Demonstrating skills of cleansing, treatments, related chemistry, safety and record keeping that shows evidence of customer service. (15 Theory & 37.5 lab hours per term)

COS 1073 – Chemical Rearranging**2**

Previously COS 104A (Pre- or corequisites: COS 1010, 1071, & 1072 or division approval)

Introduces in theory and practice the anatomy, physiology, preparation, procedures, products, materials and implements used in permanent waving and relaxer treatments; demonstrating basic skill development in client consultation, protection, safety, recordkeeping; to include hair analysis, related chemistry, tools used and techniques of chemical rearranging. (15 Theory & 37.5 lab hours per term)

COS 1074 – Cutting/Hairstyling**2**

Previously COS 105A (Pre- or corequisites: COS 1010, 1071, & 1072 or division approval)

Introduces in theory and practice the anatomy, physiology, preparation, procedures, products, materials and tools used in hair sculpture and styling services; Demonstrating basic skill development in safety, consultation, record keeping and the technical procedures to perform cutting and styling services. Cut and styling techniques for wigs and hairpieces. (15 Theory & 37.5 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours****COS 1075 – Hair Coloring****2**

Previously COS 106A (Pre- or corequisites: COS 1010, 1071, & 1072 or division approval)

Introduces in theory and practice the anatomy, physiology, preparation, procedures, products, materials and tools used in temporary, semi-permanent, permanent hair coloring, lightening, special effects; demonstrating basic skills in application, techniques using related chemistry and problem solving. Focus on safety, client protection, consultation and client service records to be included. (15 Theory & 37.5 lab hours per term)

COS 1076 – Manicuring/Pedicuring**2**

Previously COS 107A (Pre- or corequisites: COS 1010 & 1071 or division approval)

Introduces in theory and practice the anatomy, physiology, preparation, procedures, products, materials and tools used in nail services for hands and feet; demonstrating basic skills in client consultation, recommendations, record keeping, use of tools, application of nail cosmetics and massage with focus on safety and client protection. (15 Theory & 37.5 lab hours per term)

COS 1096, 1196...1996 – Special Topics**1-6**

(all courses ending in 96 are topics courses)

Previously COS 296 (Prerequisite: division approval)

Provides an in-depth study of problems and advanced techniques.

COS 1097 – Independent Study**Variable**

Previously COS 297 (Prerequisite: division approval)

Focuses on a specific problem while working with an instructor.

COS 1570 – Facials**2**

Previously COS 112A (Prerequisites: COS 1010, 1071, 1072, 1073, 1074, 1075 & 1076 or division approval)

Introduces in theory and practice the anatomy, physiology, preparation, procedures, products, materials and tools used in facial treatments, makeup application, hair removal, eyelash/brow techniques and electro therapy; demonstrating basic skill development in client consultation, recommendations, record keeping, use of machines and appliances, application of cosmetics and massage with focus on safety and client protection. (15 Theory & 37.5 lab hours per term)

COS 1592 – Sterilization/Sanitation/Bacteriology Lab II**1**

Previously COS 113L (Prerequisite: COS 1071 or division approval)

Continues basic application of sterilization, sanitation and bacteriology techniques in a supervised lab setting. (37.5 lab hours per term)

COS 1692 – Shampoo/Rinses/Scalp Treatments Lab II**1**

Previously COS 114L (Prerequisite: COS 1072 or division approval)

Continues basic application of shampoo rinses and scalp treatment techniques in a supervised lab setting. (37.5 lab hours per term)

COS 1792 – Chemical Rearranging: Perms and Relaxers Lab II**2**

Previously COS 115L (Prerequisite: COS 1073 or division approval)

Continues basic application of chemical rearranging, perms and relaxers techniques in a salon setting. (75 lab hours per term)

COS 1892 – Cutting/Coloring/Hairstyling Lab II**3**

Previously COS 116L (Prerequisites: COS 1074 & 1075 or division approval)

Continues basic application of hair cutting, coloring and styling techniques in a supervised lab setting. (112.5 lab hours per term)

COS 1992 – Manicuring/Pedicuring Lab II**2**

Previously COS 117L (Prerequisite: COS 1076 or division approval)

Continues basic application of manicuring, Pedicuring, massage and advanced nail techniques in a supervised lab setting. (75 lab hours per term)

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
COS 2092 – Chemical Rearranging: Perms and Relaxers Lab III <i>Previously COS 201L (Prerequisite: COS 1792 or division approval)</i> Provides intermediate application of chemical rearranging, perms and relaxers in a supervised salon setting. (75 lab hours per term)	2	COS 2792 – Hair Cutting Lab IV <i>Previously COS 214L (Pre- or corequisite: COS 2192 or division approval)</i> Focuses on advanced application of scissors, shears, razor and clippers, products, materials and implements in a supervised salon setting. (75 lab hours per term)	2
COS 2192 – Hair Cutting Lab III <i>Previously COS 202L (Prerequisite: COS 1892 or division approval)</i> Provides intermediate application of scissors, shears, razor and clippers, products, materials and implements in a supervised salon setting. (75 lab hours per term)	2	COS 2892 – Hair Styling Lab IV <i>Previously COS 215L (Pre- or corequisite: COS 2392 or division approval)</i> Focuses on advanced application of wet styling, blow drying, finger waving, air waving, hair pressing, hair extensions, hair weaving, braiding and corn-rowing techniques in a supervised salon setting. (37.5 lab hours per term)	1
COS 2292 – Hair Coloring Lab III <i>Previously COS 203L (Prerequisite: COS 1892 or division approval)</i> Provides intermediate application of temporary, semi-permanent and permanent hair coloring techniques, bleaching, tinting, toning, frosting, special effects and problem solving in a supervised salon setting. (37.5 lab hours per term)	1	COS 2992 – Facials/Manicuring/Pedicuring Lab IV <i>Previously COS 216L (Pre- or corequisite: 2492 or division approval)</i> Presents advanced application of massage, facial treatments and makeup applications, use of electric appliances, currents and specialized machines for treatments, artificial eyelashes, removal of unwanted hair, eyelashes and eyebrow tinting and light therapy techniques in a supervised salon setting. (37.5 lab hours per term)	1
COS 2392 – Hairstyling Lab III <i>Previously COS 204L (Prerequisite: COS 1892 or division approval)</i> Provides intermediate application of wet styling, blow drying, finger waving, air waving, hair pressing, hair extensions, hair weaving, braiding and corn rowing techniques in a supervised salon setting. (37.5 lab hours per term)	1	CP – Computing Technology Courses (<i>Business & Information Technology Division</i>) FOR CP COURSES, SEE ANIM OR CIS COURSES ON PAGES 294 AND 310.	
COS 2492 – Facials/Manicuring/Pedicuring Lab III <i>Previously COS 205L (Prerequisites: COS 1570 & 1992 or division approval)</i> Provides intermediate application of massage, facial treatments and makeup applications, use of electric appliances, currents and specialized machines for treatments, artificial eyelashes, removal of unwanted hair, eyelash and brow tinting and light therapy techniques in a supervised salon setting. (150 lab hours per term)	4	CR – Court Reporting Courses (<i>Business & Information Technology Division</i>)	
COS 2505 – Salon Operation Theory <i>Previously COS 212 (Pre- or corequisite: COS 2511 or division approval)</i> Focuses on opening a salon and business plan, written agreements, regulations, laws, salon operation, policies, practices, personnel, compensation, payroll deductions, use of telephone, advertising, retail and sales, client communication, public relations, insurance and salon safety.	1	CR 1096, 1196...1996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously CR 296</i> Explores current topics in court reporting and stenotranscription.	1-3
COS 2510 – Advanced Salon Theory <i>Previously COS 213 (Pre- or corequisites: COS 2505 and 2592 or division approval)</i> Presents advanced theory applied to sterilization, sanitation, bacteriology, shampoo, rinses, scalp treatments, chemical rearranging, perms, relaxers, hair cutting, hair coloring, bleaching, hairstyling, facials, manicuring and pedicuring, community health issues, salon safety, problem solving and special projects.	2	CR 1111 – Introduction to Court Reporting <i>Previously CR 111 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)</i> Presents steno machine keyboard and conflict-free machine shorthand theory. Theory tests must be passed with a C or better. Tutorials on real-time translation are available with teacher interaction.	4
COS 2511 – State Laws/Regulations <i>Previously COS 211 (Prerequisites: COS 2092, 2192, 2292, 2392, & 2492 or division approval)</i> Presents state laws and regulations, professional image, employability skills, ethics, professional standards, State Board standards, job-seeking and retention skills, customer service, teamwork, problem solving and quality principles.	1	CR 1123 – Punctuation for Court Reporters <i>Previously CR 123</i> Covers fundamental rules for punctuating syntax and presents verbatim English and modifies the rules to punctuate the spoken word.	3
COS 2592 – Salon Operation Lab (Externship) <i>Previously COS 212L (Pre- or corequisite: COS 2505 or division approval)</i> Exposes student to salon business and retail sales concepts as outlined in the State Board standards upon completion of 75 percent (1,243 hours) of the course of study in cooperation with a CNM-approved employer. This externship may not exceed eight hours per day or one day per week. (112.5 lab hours per term)	3	CR 1131 – Machine Shorthand II <i>Previously CR 113 (Prerequisite: CR 1111)</i> Presents vocabulary building along with a review of conflict-free, real-time machine shorthand theory principles. Open-exit course. Students may advance to CR 1211 after reaching speeds of 60 and 80 wpm. The speed building and five-minute takes will be comprised of literary, jury charge and testimony dictation. All takes must be passed with 95 percent accuracy or better. CAT and real-time translation are introduced. Enrollment is limited to 45 weeks or three terms.	3
COS 2692 – Advanced Salon Lab <i>Previously COS 213L (Pre- or corequisite: COS 2510 or division approval)</i> Offers advanced application of safety, shampoo, rinses, scalp treatments, chemical rearranging, perms and relaxers, hair cutting, hair coloring, bleaching, hairstyling, facials, manicuring and pedicuring or other areas with minimal supervision in a salon setting. (187.5 lab hours per term)	5	CR 1211 – Machine Shorthand III <i>Previously CR 211 (Prerequisite: CR 1131)</i> Covers continued vocabulary building of steno outlines and English. Open-entry, open-exit course. Students may advance to CR 1212 after reaching speeds of 100, 120 and 140 wpm. The speedbuilding and five-minute takes will be comprised of literary, jury charge and testimony dictation. All takes must be passed with 95 percent accuracy or better. CAT and real-time translation are used each class period. Four-voice dictation will be introduced to provide speaker identification instruction and dictionary entries. Enrollment limited to 45 weeks or three terms.	3

CR 1212 – Machine Shorthand IV **3**

Previously CR 212 (Prerequisite: CR 1211)
Emphasizes medical terminology and dictation, vocabulary building and speedbuilding. Open-entry, open-exit course. Students may advance to CR 1213 after reaching speeds of 140, 160 and 180 wpm. The speedbuilding and five-minute takes will be comprised of literary, jury charge and testimony dictation. All takes must be passed with 95 percent accuracy or better. CAT and real-time translation are used each class period. Four-voice video dictation will be provided to improve speed and accuracy with speaker identification. Steno dictionary building and transcript production on CAT will also be emphasized. Enrollment limited to 45 weeks or three terms.

CR 1213 – Machine Shorthand V **3**

Previously CR 213 (Prerequisite: CR 1212)
Emphasizes vocabulary and speedbuilding to include advanced medical and technical terminology. Open-entry, open-exit course. Students must reach the speeds of 180, 200 and 225 wpm. Students must pass three five-minute tests at each of the following speeds: 225 wpm 2-voice testimony, 200 wpm jury charge and 180 wpm literary. All takes must be passed with 95 percent accuracy or better. Four-voice video practice dictation will be given at speeds ranging from 180 to 230 wpm. Extensive dictionary building and transcript production on CAT will be emphasized. Enrollment limited to 45 weeks or three terms.

CR 2096, 2196...2996 – Topics Course **1-3**
(all courses ending in 96 are topics courses)

Previously CR 296
Explores current topics in court reporting and stenotranscription.

CR 2097 – Independent Study **Variable**

Previously CR 297 (Prerequisite: division approval)
Allows student and instructor to define a specific problem in the area of the student's interest and directly related to the program. The student develops and executes a solution using analytical techniques appropriate to the problem. An oral presentation may be required.

CR 2098 – Internship **3**

Previously CR 298 (Prerequisite: CR 1213, passage of one five-minute dictation take at 200 wpm on 2-voice testimony and division approval)
Arranged by program chair. Students acquire a minimum of 75 clock hours of practical experience under the supervision of a certified shorthand reporter; a minimum of 40 hours spent in actual writing time. The intern is required to record and transcribe a 40-page or two 20-page saleable transcripts from a court hearing or deposition.

CR 2240 – Legal Terminology **3**

Civil law, criminal law, the judicial system and Latin/legal terminologies.

CR 2250 – Computer-Aided Transcription **3**

Instruction on production of transcripts on computer-aided transcription software to include title pages, index pages, certifications, parentheticals, court and deposition formats. *(30 theory + 45 lab hours per term)*

CR 2251 – Stenotranscription **3**

Previously CR 251 (Prerequisites: CR 1131)
Provides instruction on the functions and applications of stenotranscription software. This software allows students to transcribe tapes or CDs directly from the steno machine to produce documents. Grading is done on the production of medical and legal documents from audio tapes or CDs.

CR 2260 – Court Reporting Procedures **3**

Covers instruction on depositions, administering oaths, handling exhibits, storing notes and applying ethics. Also, includes instruction on interviewing skills and résumé preparation.

CSCI – Computer Science Courses *(Business & Information Technology Division)*

CSCI 1151 – Introduction to Programming for Non-Computer Science Majors **4**

Previously CSCI 151 (Prerequisite: MATH 1415 or a higher level math course)
Designed for non-computer science majors interested in programming, or developing useful problem-solving skills; explores the relationship between programming and problem solving using programming languages.

CSCI 1163 – Intermediate Computer Literacy **3**

Previously CSCI 163 (Prerequisite: IT 1010 or division approval)
Emphasizes creating graphics and Web documents; research using the Internet.

CSCI 2201 – Mathematical Foundations of Computer Science **4**

Previously CSCI 201 (Prerequisites: CSCI 1151 and MATH 1710)
Introduces formal mathematical concepts of computer science for the beginning student. Topics include elementary logic, induction, algorithmic processes, graph theory and models of computation. Some programming required.

CSCI 2251 – Intermediate Computer Programming **4**

Previously CSCI 251 (Prerequisite: CSCI 1151)
Continues course of study begun in CSCI 1151, significantly extending students' understanding and use of algorithmic problem solving as it applies to software development/computer programming. Covers recurring themes of Abstract Data Types, complexity analysis, program correctness, debugging and testing; includes contiguous and dynamic implementations of linked lists, stacks and queues, binary search trees, sorting and searching algorithms and recursion.

CSE – College Success Experience Courses *(Division of Educational & Career Advancement)*

CSE 0196, 0296...0996 – Special Topics **1-3**

(all courses ending in 96 are topics courses)
Previously CSE 096
Presents various topics in study skills.

CSE 0450 – Career Options **2**

Previously CSE 094
Introduces students to majors/careers offered through CNM's occupational programs. Students will participate in dynamic, interactive activities and will learn information about each career area such as educational requirements, salary and working conditions. Also, students will assess their interests, abilities and values to find their dream job.

CSE 0650 – College Survival **3**

Previously CSE 099
Introduces students to the basic skills needed to survive and thrive in the college environment. Topics covered will include organizational skills, basic study skills, goal setting and self-management strategies. Students will explore majors and careers and receive a complete orientation to CNM campus resources including the library, tutoring services, CNM Passport, student activities, academic advisement and career development.

CSE 0850 – Study Skills **2**

Previously CSE 095
Introduces essential components of study skills and self-management techniques needed for academic success.

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
CSE 0950 – Student Success <i>Previously CSE 100 (Pre- or corequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Provides an opportunity to learn and practice strategies for success in college. Includes goal setting, learning styles, time management, test taking strategies, note taking techniques and development of a personal study system for academic success. (45 theory hours + 15 lab hours per term)	3	CST 2254 – Asian American Studies <i>Previously CST 250S (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Investigates present-day perspectives and historical and social conditions that have shaped and affected the lives of Asian Americans.	3
CSE 1120 – Career Exploration <i>Previously CSE 101 (Pre- or corequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Assists students through career exploration and decision-making processes to help chart academic and career pathways. Explores four self-assessments including personal styles/characteristics, interests, values and skills for self-understanding.	1	CST 2260 – Popular Culture and Cultural Identity <i>Previously CST 260 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Examines ways in which popular culture, from film and television to formula fiction, art and music, define and reveal cultural values.	3
CSE 1140 – Learning Strategies <i>Previously CSE 102 (Prerequisite: CSE 1120 OR pre- or corequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Assists students to develop academic and personal skills in critical thinking, critical reading, problem solving and memory enhancement. Presents effective ways to learn systematically, prepare for exams and apply academic skills across all courses.	1	CST 2265 – Introduction to Women’s Studies <i>Previously CST 265 (Prerequisite: RDG 0950)</i> Provides an introduction to the study of women’s issues by examining the diversity of women’s lives in the United States within a global context. Content will include topics such as race, ethnicity, class, age, disability, sex, women’s work, women’s health and women and crime.	3
CSE 1160 – Research Techniques <i>Previously CSE 103 (Prerequisite: CSE 1120 or CSE 1140 OR pre- or corequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Assists students to access, retrieve and critically evaluate information in various formats. Includes information on effective use of all research formats, electronic and paper, within the library.	1	CULN – Culinary Arts Courses (<i>Business & Information Technology Division</i>)	
CSE 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously CSE 296 (Prerequisites vary)</i> Presents various topics on college success.	1-3	CULN 1096, 1196...1996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously CULN 296</i> Explores current topics in Culinary Arts.	1-6
CST – Cultural Studies Courses (<i>Communication, Humanities & Social Sciences Division</i>)			
CST 1150 – Introduction to Cultural Studies <i>Previously CST 150 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Explores cultural constructions of differences, including but not limited to gender, race, ethnicity, social class and sexual orientation in contemporary U.S. society. <i>Distance Learning option available (see page 45).</i>	3	CULN 1101 – Introduction to Culinary Arts <i>Previously CULN 101 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)</i> Prepares students for entry into the Culinary Arts lab classes and provides information to support student success as students navigate through the Culinary Arts program. Lectures, guest speakers and field trips provide students an opportunity to learn about career opportunities in culinary arts.	1
CST 2096, 2196...2996 – Topics in Cultural Studies <i>(all courses ending in 96 are topics courses)</i> <i>Previously CST 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents various topics. See Schedule of Classes .	3	CULN 1102 – Applied Culinary Math <i>Previously CULN 102 (Prerequisite: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent)</i> Apply math skills to determine measurements, the selling price of menu items, the process of recipe yield adjustment, recipe costing, labor and food costs and percentages, inventory and basic management/chef responsibilities for restaurant cost control. <i>Distance Learning option available (see page 45).</i>	1
CST 2250 – African American Studies <i>Previously CST 250A (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Investigates present-day perspectives and historical and social conditions that have shaped and affected the lives of African Americans.	3	CULN 1103 – Food Sanitation Principles <i>Previously CULN 103 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent and MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent)</i> Introduces Food Code guidelines for food safety and sanitation. Emphasis is on identification and controls of biological, chemical and physical hazards. ServSafe® Food Protection Manager Certification is available. Hazard Analysis Critical Control Point (HACCP) based models and facility controls are introduced. <i>Distance Learning option available (see page 45).</i>	3
CST 2251 – Chicano Studies <i>Previously CST 250H (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Investigates present-day perspectives and historical and social conditions that have shaped and affected the lives of Mexican Americans.	3	CULN 1111 – Cooking Fundamentals I <i>Previously CULN 111 (Prerequisite: CULN 1101 and 1102, Pre- or corequisite CULN 1103 or division approval)</i> Introduces students to culinary skill development and buffet procedures and introduces the production and service of American regional cuisines. Students practice the principles of cooking methods and learn about ingredients and kitchen staples. Topics include professional knife skills, stocks and sauces, soups, salads, plate presentation, breakfast, quick breads, sandwiches, custards, soufflés and desserts, beef, veal, pork, poultry, seafood, potatoes, grains, pasta and fruits and vegetables. (15 theory + 150 lab hours per term)	5
CST 2253 – Native American Studies <i>Previously CST 250N (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Investigates present-day perspectives and historical and social conditions that have shaped and affected the lives of Native Americans.	3		

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

Course Subject Code/Course number – Course Name**Credit Hours****CULN 1112 – Cooking Fundamentals II****5***Previously CULN 112 (Pre- or corequisite: CULN 1111 or division approval)*

Develops the skills needed to work as a *Line Cook* in preparing a la carte menu items to order. Continued focus on American regional cuisines with emphasis on seasonal ingredients and the historical and geographical significances of each region is continued. Students rotate through various cooking stations (depending on menu requirement) while serving meals to the public in a student-operated restaurant. In addition to practicing hands-on cooking methods, instruction will focus on mise en place, teamwork, organization, time management, sanitation, safety and plate presentation. (15 theory + 150 lab hours per term)

CULN 1130 – Introduction to Baking Fundamentals**5***Previously CULN 130 (Prerequisites: CULN 1101 and 1102; Pre- or corequisite CULN 1103 or division approval)*

Includes the theory, skills and techniques of baking fundamentals. Topics include scaling, methods of mixing, processing of ingredients, ingredient functions and baking math. The retail production and merchandising of cookies, pies, pastries, quick breads, breads, sweet yeast and cakes will be introduced. Proper equipment use and safety will be stressed. (15 theory + 150 lab hours per term)

CULN 1132 – Applied Baking Principles**5***Previously CULN 132 (Pre- or corequisite: CULN 1130 or division approval)*

Applies learned fundamentals and concepts to continue skill development. Students relate theory and demonstrations to formulate more difficult products to complete and merchandise them to industry standards. Included are laminated sweet dough, hearth breads and rolls, decorated cakes, soft pies and cheesecake. Multitasking is stressed. (15 theory + 150 lab hours per term)

CULN 1140 – Catering**10***Previously CTRG 170L (Prerequisites: CULN 1101 and 1102; Pre- or corequisite: CULN 1103 or division approval)*

Covers basic knowledge and hands-on experience of how to plan, organize and set up catered functions. Includes basic knowledge of how to read and prepare recipes. (60 theory + 225 lab hours per term)

CULN 2096, 2196...2996 – Topics**1-6***(all courses ending in 96 are topics courses)**Previously CULN 296*

Explores current topics in Culinary Arts.

CULN 2097 – Independent Study**Variable***Previously CULN 297 (Prerequisite: division approval)*

Requires the student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.

CULN 2211 – Global Cuisines – Classical European**5***Previously CULN 211 (Prerequisite: CULN 1112 or division approval)*

Introduces flavor principles of Classical European cuisines and their cooking techniques, ingredients and cultural menus. Topics include hors d'oeuvres, canapés, charcuterie and game, as well as French, American, English and Russian service techniques. Students develop menus and prepare and serve cuisine in a student-operated restaurant based on Classical European cuisine. (15 theory + 150 lab hours per term)

CULN 2212 – Global Cuisines – Mediterranean, Asian & Pacific Rim**5***Previously CULN 212 (Pre- or corequisite: CULN 2211 or division approval)*

Introduces flavor principles of Mediterranean, Asian and Pacific Rim cuisines and their cooking techniques, ingredients and cultural menus. Topics include hors d'oeuvres and canapés, as well as American service techniques. Students develop menus and prepare and serve cuisine in a student-operated restaurant based on Mediterranean, Asian and Pacific Rim cuisines. (15 theory + 150 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours****CULN 2230 – Baking and Pastry Fundamentals****5***Previously CULN 230 (Prerequisite: CULN 1132 or division approval)*

This course will include baking and pastry theory topics, demonstrations and hands-on applications. Students will have opportunities to further develop proficiencies in a variety of breads, fillings, tarts, pies and specialty desserts. (15 theory + 150 lab hours per term)

CULN 2232 – Advanced Baking and Pastry Techniques**5***Previously CULN 232 (Pre- or corequisite: CULN 2230 or division approval)*

Continues to emphasize advanced theory topic, skills and techniques of classical and contemporary pastry arts. Specialty topics will include génoise, international buttercreams, icings, sugar and chocolate decoration. (15 theory + 150 lab hours per term)

CULN 2999 – Capstone**1***Previously CULN 295 (Prerequisite: division approval)*

Focuses on developing portfolios, résumé writing, job interviewing, developing menus and assessing program exit competencies and CNM core competencies.

DA – Dental Assistant Courses (Health, Wellness & Public Safety Division)**DA 1010 – Dental Science I****3***Previously DA 101L (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 and MATH 0750 or Accuplacer Arithmetic score of 57, ENG 0950 or Accuplacer Sentence Skills score of 85)*

This course will introduce the student to the field of dental assisting. It will instruct the student in the history of dentistry, prevention, anatomy, histology and physiology of the head, neck and body system as they relate to dentistry. The laboratory component will include observation of a working dental office and use of computers for employability skills. (30 theory + 45 lab hours per term)

DA 1104 – Tooth Morphology, Histology and Recordings**3***Previously DA 104 (Prerequisite: DA 1010; Corequisites: DA 1110/1172, 1120/1170, 1108/1175)*

Presents dental terminology as it relates to tooth morphology, oral embryology, oral pathology and oral anatomy and histology, universal charting, numbering systems, cavity classification, oral diagnosis and treatment planning.

DA 1108/1175 – Dental Radiology I**3***Previously DA 108T/108L (Prerequisite: DA 1010; Corequisites: 1110/1172, 1104, 1120/1170)*

Presents production and projection of x-rays, operation and care of standard x-ray equipment, operational safety precautions, exposure and mounting of dental x-rays, darkroom procedures and the chemistry of processing films. (30 theory + 45 lab hours per term) Program Fee: Published in the **Schedule of Classes**.

DA 1110/1172 – Dental Materials and Application**3***Previously DA 102T/102L (Prerequisite: DA 1010, ENG 1101, HLTH 1001; Corequisites: DA 1104, 1120/1170, 1108/1175; Pre- or corequisite: COMM 2221)*

Introduces the physical and chemical properties of dental materials and their application including placement of temporary restorations, cements, bases and liners, preliminary and final impression materials, composite and crown and bridge materials and procedures. (30 theory + 45 lab hours per term) Program fee: Published in the **Schedule of Classes**.

DA 1120/1170 – Chairside Procedures I**3***Previously DA 106T/106L (Prerequisite: DA 1010; Corequisites: 1110/1172, 1104, 1108/1175)*

Presents theory and care of dental equipment, identification of instruments and their use, tray set-up, fourhanded dentistry techniques and preparation for assisting in a clinical setting. (30 theory + 45 lab hours per term)

Course Subject Code/Course number – Course Name	Credit Hours
DA 1508/1575 – Dental Radiology II <i>Previously DA 118T/DA 118L (Corequisites: DA 1512, 1520/1570, 1510/1580)</i> Presents production, processing and mounting of x-rays on patients. Record keeping essential to x-ray procedures in the dental office. Reading of dental radiographs, locating anatomical landmarks and maxillary and mandibular and the procedures and reasons for intra oral radiographs and extra oral radiographs included. (30 theory + 45 lab hours per term) Program Fee: Published in the Schedule of Classes .	3
DA 1510/1580 – Clinical Application I <i>Previously DA 120T/120C (Corequisites: DA 1512, 1520/1570, 1508/1575)</i> Introduces clinical practice through student perceptorships utilizing four-handed dentistry at chair-side including extended function in general dentistry delegated to the DA as designated by the New Mexico Dental Practice Act (coronal polishing, fluoride application) (15 theory + 240 clinical hours per term)	6
DA 1512 – Dental Science II <i>Previously DA 112 (Corequisites: DA 1520/1570, 1508/1575, 1510/1580)</i> Presents microbiology as it relates to control of infection and disease in dental environments and teaches oral pathology, nutrition and pharmacology as they relate to dentistry. Also included are applied psychology and communication skills with dental patients and co-workers.	3
DA 1520/1570 – Chairside Procedures II <i>Previously DA 116T/116L (Corequisites: DA 1512, 1570, 1508/1575, 1510/1580)</i> Provides advanced knowledge of dental assisting functions including hands-on training, instrumentation, chair-side techniques and patient management. Includes coronal polishing, fluoride application and introduction to sealants. (30 theory + 45 lab hours per term)	3
DA 2010/2080 – Clinical Application II <i>Previously DA 124T/124C (Prerequisite: DA 1510/1580; Corequisites: DA 2410/2470, 2014)</i> Provides student internship in dental offices to practice utilization of four-handed techniques in expanded functions and dental specialties. This course further prepares the student to take the National Dental Assistant exam and the New Mexico State exam. (15 theory + 190 clinical hours per term) Program Fee: Published in the Schedule of Classes .	5
DA 2014 – Dental Specialties <i>Previously DA 114 (Corequisites: DA 2410/2470, 2010/2080)</i> Provides introduction into dental specialties with an emphasis on hands-on practice of DA functions that can be delegated in dental specialty offices.	3
DA 2096, 2196...2996 – Special Topics in Dental Assistant <i>(all courses ending in 96 are topics courses)</i> <i>Previously DA 296</i> Explores various topics of interest in the field of Dental Assistants.	1-6
DA 2410/2470 – Dental Practice Management and Patient Care <i>Previously DA 110T/110L (Pre- or corequisite: COMM 2221; Corequisites: DA 2014, 2010/2080)</i> Provides basic skills and background in all phases of dental reception functions and office management procedures to include: computer management, oral and written communication, bookkeeping skills, case presentation and financial arrangements, banking procedures and computing salaries and tax records. Emphasis on patient care including communication techniques, interviewing skills and conflict management. Includes clinical observation experiences. (15 theory + 45 lab hours per term)	2

DETC – Diesel Equipment Technology Courses (*Applied Technologies Division*)

DETC 1110 – Introduction to Diesel Technology <i>Previously DETC 110L (Recommended prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval; MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, or division approval.)</i>	4
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Course Subject Code/Course number – Course Name	Credit Hours
Introduces theory of operation and basic service procedures for heavy equipment/heavy duty truck powertrain and chassis systems. Includes general industry orientation, shop/vehicle safety, tool care and use and repair information retrieval. (30 theory + 75 lab hours per term.)	4
DETC 1120 – Heavy Duty Brake Systems <i>Previously DETC 121L (Recommended prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval; MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent or division approval)</i>	4
Introduces the principles of hydraulic and air brake operation and design. Develops skills in the diagnosis and repair of standard and anti-lock brake systems. (30 theory + 75 lab hours per term)	4
DETC 1130 – Heavy Duty Suspension & Steering <i>Previously DETC 122L (Recommended prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval; MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent or division approval)</i>	4
Presents theory, repair and service on a variety of heavy duty suspension and steering systems. Includes steering gear repair, power steering systems, kingpin service, air suspension systems and steering and axle alignment. (30 theory + 75 lab hours per term)	4
DETC 1140 – Manual Shift Transmissions & Axles <i>Previously DETC 123L (Recommended prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval; MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent or division approval)</i>	4
Introduces the principles of operation and design for a variety of single- and twin-countershaft transmissions, clutches, drive axles and drive lines. Develops skills in the diagnosis, service and repair of drivetrain components. (30 theory + 90 lab hours per term)	4
DETC 1210 – Heavy Duty Engine Repair <i>Previously DETC 131L</i>	4
Presents internal combustion engine theory, engine components and designs, engine overhaul procedures and precision measurement. Includes essential engine testing and identification of needed repairs. (30 theory + 90 lab hours per term)	4
DETC 1220 – Automatic Transmissions & Hydraulics <i>Previously DETC 132L</i>	4
Presents the principles of operation of heavy-duty automatic transmissions and hydraulic systems. Develops skills in the service, diagnosis and repair of automatic transmissions, hydraulic pumps, valves, actuators and controls. (30 theory + 90 lab hours per term)	4
DETC 1230 – Medium/Heavy Duty Air Conditioning and Heating <i>(Prerequisite: AUTC 1140 or division approval)</i>	3
Covers testing, evacuating and charging air conditioning systems while maintaining an awareness of potential environmental concerns caused by medium/heavy equipment refrigerants. Addresses cooling and heating diagnosis, climate control trouble shooting and component repair. (15 theory + 75 lab hours per term)	3
DETC 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously DETC 296 (Prerequisite: division approval)</i>	1-6
Provides an in-depth study of advanced techniques.	1-6
DETC 2110 – Preventive Maintenance <i>Previously DETC 175L</i>	4
Presents theory and application of basic preventive maintenance operations. Includes under-vehicle and under-hood service procedures, repair information retrieval and proper use and care of service equipment. (30 theory + 75 lab hours per term)	4

Course Subject Code/Course number – Course Name**Credit Hours****DETC 2120 – Diesel Engine Performance** 4*Previously DETC 233L*

Presents theory of operation of diesel fuel injection and electronic engine management systems. Includes service, diagnosis and repair of a variety of systems found on modern heavy-duty diesel engines. (30 theory + 90 lab hours per term)

DETC 2197 – Independent Study Variable*Previously DETC 297 (Prerequisite: division approval)*

Focuses on a specific problem while working with an instructor.

DETC 2999 – Diesel Equipment Technology Capstone Course 1*Previously DETC 295 (Prerequisite: division approval)*

Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term).

DMS – Diagnostic Medical Sonography Courses (Health, Wellness & Public Safety Division)**DMS 1010 – Introduction to Diagnostic Medical Sonography** 1*Previously DMS 101 (Prerequisites: program director approval, MATH 1315; pre- or corequisites: BIO 2210/2292, ENG 1101, humanities elective, PHYS 1510/1592; Corequisite: DMS 1070, DMS 1012/1072, DMS 1075, HLTH 1001)*

Presents general information about the profession, credentialing, work environments and relationship to other health care professionals. Medical ethics, pertinent legal issues/principles, professional scopes of practice, trends in health care systems. Infection control, universal precaution procedures, pertinent patient care procedures, principles of psychological support, emergency conditions and procedures, first aid and resuscitation techniques are taught. Trends in health care systems, professional journals, conferences, lectures, in house education offerings, professional organizations and resources.

DMS 1012/1072 – Cross Sectional Anatomy 3*Previously DMS 104/104L (Pre- or corequisites: BIO 2210/2292, ENG 1101, humanities elective, PHYS 1510/1592; Corequisites: DMS 1010, 1070, 1075, HLTH 1001)*

Presents cross sectional anatomy and embryology. Correlation between cross-sectional anatomy and ultrasound, CT and MRI images. Presentation of cross-sectional structure, lab includes the use of models, simulations and scanning. (30 theory + 45 lab hours per term)

DMS 1070 – Medical Concepts 4*Previously DMS 102L (Pre- or corequisites: BIO 2210/2292, ENG 1101, humanities elective, PHYS 1510/1592; Corequisite: DMS 1010, 1012/1072, 1075)*

Provides information about medical terminology, sonographic/other non-invasive diagnostic vascular terminology, pertinent clinical signs, symptoms and laboratory tests, diagnostic testing protocols related to specific disease conditions. Patient interview and examination techniques, chart and referral evaluation, professional interaction skills are taught. Sonographic examinations of abdomen, superficial structures, non cardiac chest and the gravid and non gravid pelvis, utilizing real time equipment with both transabdominal and endocavitary transducers, Doppler and color Doppler display modes. The focus is on normal anatomic structure. (30 theory + 90 lab hours per term)

DMS 1075 – Intro to Sonographic Physics 2*Previously DMS 113L (Corequisites: DMS 1010, 1070, 1012/1072, HLTH 1001)*

Introduces the basic principles of acoustical physics, sound production propagation, hemodynamics and basic Doppler principles. Presents the basics of ultrasound instrument operation, transducer selection and control options. Lab provides the opportunity to apply theory principles in self-directed learning activities and group problem-solving to reinforce theoretical principles. (15 theory + 45 lab hours per term)

DMS 1096, 1196...1996 – Special Topics in Diagnostic Medical Sonography 1-6*(all courses ending in 96 are topics courses)**Previously DMS 296*

Explore various topics of interest in the field of sonography.

Course Subject Code/Course number – Course Name**Credit Hours****DMS 1503 – DMS Pathophysiology I** 3*Previously DMS 103 (Prerequisites: DMS 1010, 1070, 1012/1072; Pre- or corequisite: BIO 2310/2392; Corequisites: DMS 1510/1570, 1575)*

Presents pathophysiology of liver, biliary system, pancreas, urinary tract, adrenal glands, spleen, prevertebral vessels, peritoneal cavity, gastrointestinal tract and anterior abdominal wall. Abnormal conditions including iatrogenic, degenerative, inflammatory, traumatic, neoplastic, infectious, obstructive, congenital, metabolic, immunologic. Physiology includes normal and abnormal blood flow dynamics.

DMS 1510/1570 – General Sonography I 6*Previously DMS 120/120C (Prerequisites: DMS 1010, 1070, 1012/1072, HLTH 1001; Pre- or corequisite: BIO 2310/2392; Corequisites: DMS 1503, 1575)*

Presents sonographic examinations of liver, biliary system, pancreas, urinary tract, adrenal glands, spleen, prevertebral vessels, peritoneal cavity, gastrointestinal tract, non cardiac chest, neck, breast, scrotum, prostate, anterior abdominal wall, extremities, brain, spinal cord, pediatrics. Normal physiology, including pertinent laboratory data and alternative examination techniques. Measurement techniques and Doppler applications. (15 theory + 225 lab/clinical hours per term)

DMS 1575 – Sonographic Physics I 2*Previously DMS 130L (Prerequisites: DMS 1010, 1070, 1012/1072, 1075, HLTH 1001; Corequisites: DMS 1503, 1510/1570, 2075)*

Presents acoustical physics, sound production and propagation, interaction of sound and matter, instrument options, transducer selection, principles of ultrasound instruments and modes of operation, operator control options. This course also includes introduction to Doppler principles and operation. Lab allows students to apply principles to practice in case-based learning activities. (15 theory + 45 lab hours per term)

DMS 2003 – DMS Pathophysiology II 3*Previously DMS 203 (Prerequisites: DMS 1503, 1510/1570, 1575; Corequisites: DMS 2070/2080, 2075)*

Presents pathophysiology of the gravid and non-gravid pelvis. The focus is on abnormal conditions. Iatrogenic, degenerative, inflammatory, traumatic, neoplastic, infectious, obstructive, congenital, metabolic, immunologic conditions. Abnormal patterns in pregnancy.

DMS 2070/2080 – General Sonography II 7*Previously DMS 220/220C (Prerequisites: COMM 2221, DMS 1503, 1510/1570, 1503; Corequisites: DMS 2003, 2075)*

Presents sonographic examination of gravid and non-gravid pelvis utilizing real-time equipment with both trans-abdominal and endocavity transducers, Doppler and color Doppler display modes. The focus is on normal anatomic structures. Reproductive system, pelvic muscles, suspensory ligaments, peritoneal spaces, pelvic vasculature. Normal sonographic appearance of fetal and maternal structures including pertinent measurement techniques. Administrative procedures, quality control procedures, elements of a quality assurance program, records maintenance, personnel and fiscal management. (90 lab + 225 clinical hours per term)

DMS 2075 – Sonography Physics II 2*Previously DMS 230L (Prerequisites: DMS 1503, 1575, 1510/1570; Corequisites: DMS 2003, 2070/2080)*

Presents the physics and principles of Doppler techniques, Doppler methods of flow analysis, techniques for recording static and dynamic images, acoustical artifacts. Biologic effects in ultrasound, pertinent invitro and in-vivo studies. Recent developments in Sonography, research statistics and design. Lab includes use of ultrasound equipment and simulator to apply theory to practice. (15 theory + 45 lab hours per term)

DMS 2590 – General Sonography Internship 10*Previously DMS 260C (Prerequisites: DMS 2003, 2070/2080, 2075; Corequisite: DMS 2592)*

Provides supervised clinical experiences within a health care setting. (450 clinical hours per term)

Course Subject Code/Course number – Course Name	Credit Hours
DMS 2592 – Clinical Seminar <i>Previously DMS 270L (Prerequisites: DMS 2003, 2070/2080, 2075; Corequisite: DMS 2590)</i> Presents synopsis of normal anatomy and pathology of superficial structures and sonography of the pediatric patient. Provides weekly case study discussions and conferences. Review of program courses and preparation for National Registry examinations. (45 lab hours per term)	1
ECM – E-Commerce Courses (Business & Information Technology Division)	
ECM 1010 – Introduction to Internet Commerce <i>Previously ECM 176</i> Introduces e-commerce business models and payment systems. Internet operation and concepts including domain naming, ISP, ASP, FTP, e-mail, routing, bandwidth and security are presented. (5 weeks; 10 theory + 15 lab hours per term) <i>Distance Learning option available (see page 45).</i>	1
ECM 1096, 1196...1996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously ECM 296</i> Examines current topics in e-commerce.	1-3
ECM 1102 – Internet Customer Service <i>Previously ECM 102 (Pre- or corequisite: ECM 1010 or division approval)</i> Focuses on developing the students' understanding of the different approaches to create and maintain a satisfied and loyal customer community for modern businesses. Students are introduced to online customer service tools including e-mail, mailing lists, FAQs, autoresponders, online forms, forums and automated customer support tools. <i>Distance Learning option available (see page 45).</i>	3
ECM 1105 – Web Business <i>Previously ECM 105 (Pre- or corequisite: ECM 1010 or division approval)</i> Focuses on how an online business is set up, organized and operated. This is the foundation course for students interested in e-commerce and basic concepts for operating an online business are introduced. Topics include electronic payments, Web business models (auction, broker, advertising, catalog, etc.), security, privacy, order processing and store operations. <i>Distance Learning option available (see page 45).</i>	3
ECM 1140 – Web Catalogs <i>Previously ECM 140 (Prerequisites: ECM 1105 and 1010 and CIS 1711 and CIS 1180 or division approval)</i> Covers how to design and manage online catalogs. Topics include the integration of graphics, product descriptions, product selections and catalog management to create an online catalog. <i>Distance Learning option available (see page 45).</i>	3
ECM 1150 – Wireless Web <i>Previously ECM 150 (Prerequisites: ECM 1105 and 1010 and CIS 1711 and CIS 1181 or division approval)</i> Focuses on how to design and manage a website supporting user access by wireless devices such as Personal Digital Assistants (PDA) Topics will include Wireless Application Protocol (WAP), Handheld Device Markup Language (HDML), Wireless Markup Language (WML) and other industry trends.	3
ECM 1160 – Business Website Development <i>Previously ECM 160 (Prerequisites: ECM 1010 and CIS 1711 or 2340)</i> Uses Web design elements supported by HTML to create professional business websites that combine content, decoration and navigation to meet business sales, customer service and marketing goals for the website. Students are expected to be able to create and edit Web pages before entering the course. <i>Distance Learning option available (see page 45).</i>	3

Course Subject Code/Course number – Course Name	Credit Hours
ECM 2095 – Cooperative Education <i>Previously ECM 299 (Prerequisite: division approval)</i> Requires a minimum of 150 work hours at a business or training-related supervised workstation. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer.	4
ECM 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously ECM 296</i> Examines current topics in e-commerce.	1-3
ECM 2097 – Independent Study <i>Previously ECM 297 (Prerequisite: division approval)</i> Requires student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.	Variable
ECM 2098 – Internship <i>Previously ECM 298 (Prerequisite: division approval)</i> Requires a minimum of 150 work hours at a business or training-related supervised workstation. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Students are not paid for their work but are supervised jointly by CNM and the company.	4
ECM 2220 – Web Marketing <i>Previously ECM 220 (Pre- or corequisite: ECM 1010 or division approval)</i> Presents planning to create and market a website. Internet marketing topics such as registering with search engines, increasing traffic, segmenting and targeting markets, establishing an online presence, developing a marketing plan and reshaping business for the Web market are covered. <i>Distance Learning option available (see page 45).</i>	3
ECM 2225 – Web Shopping Carts <i>Previously ECM 223 (Prerequisites: ECM 1105 and 1010 or division approval)</i> Presents the methods for making electronic payments online. Students study shopping cart features and operation. Related topics also include credit cards, merchant accounts, personal accounts, digital wallets, micro payments and the use of digital signatures and encryption. <i>Distance Learning option available (see page 45).</i>	3
ECM 2235 – Legal Issues in E-Commerce <i>Previously ECM 226 (Prerequisites: ECM 1105 and 1010 or division approval)</i> Discusses current legal issues for businesses that use the Internet. This course is intended for the business owner or professional that needs to understand the concepts and current issues involved in e-commerce. Major legal issues such as taxation, intellectual property, privacy, copyrights, trademarks and jurisdiction are discussed. <i>Distance Learning option available (see page 45).</i>	3
ECM 2240 – Web Stores <i>Previously ECM 235 (Prerequisite: ECM 1105 or division approval)</i> Focuses on bringing together the techniques and applications for operating an online business. On the product side course will integrate product selection, product sourcing and order fulfillment for the online business. In the area of operations the course will discuss selecting the correct e-commerce applications and credit risk management. The course will also link these topics with marketing and customer service. <i>Distance Learning option available (see page 45).</i>	3

ECM 2260 – Business Website Design **2**
Previously ECM 278 (Prerequisites: ECM 1105 and 1140 and 1160 and 1010 and CIS 1711)
 Introduces the team approach to developing a business website. Students work in teams to develop a business website that combines Web graphics, secure payments and multiple-page management/publishing. The website is developed to integrate the marketing goals for the site and provide customer service. Data collection and website server logs will be used to measure site traffic. (15 theory + 45 lab hours per term)
Distance Learning option available (see page 45).

ECME – Early Childhood Multicultural Education Courses *(Communication, Humanities & Social Sciences)*

ECME 1104 – Child, Growth and Development **3**
Previously ECME 104 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)
 Presents growth, development and learning of young children, prenatal through age eight. Provides students with theoretical and practical knowledge of how young children grow, develop and learn as well as an understanding of the adult’s role in supporting these.
Distance Learning option available (see page 45).

ECME 1108 – Health, Safety and Nutrition **2**
Previously ECME 108 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)
 Provides information related to standards and practices that promote children’s physical and mental wellbeing, sound nutritional practices and maintenance of safe learning environments. Examines nutritional factors important to children’s total development.

ECME 1109 – Curriculum Development and Implementation I **3**
Previously ECME 109 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, Corequisite: ECME 1090)
 Focuses on developmentally appropriate content in early childhood programs. Curriculum development in all areas, birth through eight is emphasized.

ECME 1190 – Curriculum Development and Implementation Practicum I **2**
Previously ECME 109C (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)
 Provides opportunities for students to apply knowledge gained from Curriculum Development and Implementation I and develop skills in planning developmentally appropriate learning experiences for young children. (60 hours per term)

ECME 2201 – Introduction to Reading and Literacy Development **3**
Previously ECME 201 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)
 This class will explore the foundations in developing literate children from birth through age eight, through reading and writing processes.

ECME 2202 – Professionalism **2**
Previously ECME 202 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)
 Provides a broad-based orientation to the field of early care and education. Early childhood education history, philosophy, ethics and advocacy are introduced as well as exploration of basic early childhood systems. Professional responsibilities are examined.

ECME 2204 – Assessment of Children and Evaluation **3**
Previously ECME 204 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)
 Focuses on individual and family in terms of social and community diversity. Variances including disabilities, ethnicity, gender and social class are addressed.

ECME 2206 – Family and Community Collaboration I **3**
Previously ECME 206 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)
 Examines the involvement of families from diverse cultural and linguistic backgrounds in early childhood programs. Establishing collaborative relationships with parents and all involved in child’s life and strategies for communication are discussed.
Distance Learning option available (see page 45).

ECME 2212 – Curriculum Development and Implementation II **3**
Previously ECME 212 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, Corequisite: ECME 2290)
 Focuses on the learning environment and the implementation of curriculum allowing students to use their knowledge of content, developmentally appropriate practices and language and culture to design and implement experiences and learning for young children, birth through eight, including those with special needs. (60 hours per term)

ECME 2214 – Guiding Young Children **3**
Previously ECME 213 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)
 Explores various theories of child guidance and the practical application of each. Provides developmentally appropriate methods for guiding children and for facilitating positive social interactions.

ECME 2250 – Foundations of Early Childhood Education **3**
Previously ECME 250 (Prerequisites: Acceptance into the alternative licensure program)
 Introduces the historical, political, cultural and philosophical contexts of early childhood education. Traditional, current and innovative models and theories of early childhood education in all learning areas including mathematics and science will be surveyed. Students will explore current issues and future trends in society and education that directly impact contemporary early childhood programs. Students will examine their personal qualities in relation to the expectations of the field of early childhood education. A field experience of 10 hours in an approved early childhood educational setting is required as part of this course.

ECME 2252 – Teaching Young Children **3**
Previously ECME 252 (Prerequisites: Acceptance into the alternative licensure program)
 Focuses on the application of theories of teaching and guidance to apply in multicultural early childhood classrooms. Students will explore theoretical concepts and principles and identify ways to integrate these into the early childhood classroom through the use of developmentally appropriate methods and strategies in all areas including mathematics and science. A field experience of 10 hours in an approved early childhood educational setting is required as part of this course.

ECME 2254 – Developmentally Appropriate Early Childhood Multicultural Curriculum **3**
Previously ECME 254 (Prerequisite: Acceptance into alternative licensure program)
 Focuses on the design of curricula that integrate language arts, mathematics, science and expressive arts in a holistic framework that is developmentally and culturally appropriate. A field experience of 10 hours in an approved early childhood educational setting is required as part of this course.

ECME 2260 – Observation & Assessment of Young Children **3**
Previously ECME 260 (Prerequisites: Acceptance into the alternative licensure program)
 Investigates formal and informal methods of assessing student learning including observational techniques. Students will learn how to use information gathered through observation and assessment to plan and modify instruction in all areas including mathematics and science. A field experience of 10 hours in an approved early childhood educational setting is required as part of this course.

Course Subject Code/Course number – Course Name **Credit Hours**

ECME 2262 – Emergent Literacy: Theories and Principles of Multicultural Emergent Literacy **3**

Previously ECME 262 (Prerequisite: Acceptance into alternative licensure program)
 Explores the foundations of literacy and the reading process and acquire the theoretical knowledge needed to guide the literacy development of young children. Students will examine the principles of reading/language arts instruction, meeting New Mexico State standards, oral language, emergent literacy, vocabulary-concept development, constructing meaning, technology and literacy learning and written expression. A field experience of 10 hours in an approved early childhood educational setting is required as part of this course.

ECME 2264 – Emergent Literacy: Methods & Materials for Early Literacy Instruction **3**

Previously ECME 264 (Prerequisites: Acceptance into the alternative licensure program)
 Application of theoretical knowledge needed to guide the literacy development of young children. In addition, students will explore the developmental influences on early learning, examine the role of language in supporting literacy development students and identify methods and materials that support early literacy development. Students will explore research-based early literacy activities such as book reading, writing activities using invented spelling, storytelling as well as other activities that foster phonemic awareness, print concept, phonic skills, vocabulary development and comprehension. Literacy skills in the areas of mathematics and science will also be explored and discussed. A field experience of 10 hours in an approved early childhood educational setting is required as part of this course.

ECME 2290 – Curriculum Development and Implementation Practicum II **2**

Previously ECME 212C (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, Corequisite: ECME 2212)
 Provides student opportunity to apply knowledge gained from Curriculum Development and Implementation II and develops skills in planning learning environment and implementing curriculum in programs serving young children, birth through age eight, including those with special needs. (60 hours per term)

ECME 2390 – Early Childhood Classroom Field Experience **3**

Previously ECME 298L (Prerequisite: Acceptance into alternative licensure program and division approval)
 Provides advanced supervised fieldwork experience with particular emphasis on planning and implementing integrated programs. Students are required to meet competencies as defined by the NM Public Education Department through a minimum of 160 contact hours in an approved early childhood educational setting.

ECON – Economics Courses *(Communication, Humanities & Social Sciences Division)*

ECON 1101 – Introduction to Economics **3**

Previously ECON 101 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Introduces the theories, history and relationships of economics.

ECON 2200 – Macroeconomics **3**

Previously ECON 200 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent and MATH 0930)
 Surveys theories and problems of economic policy, including the contrast of the Classical and Keynesian models, money and banking, inflation, unemployment and economic growth.
Distance Learning option available (see page 45).

ECON 2201 – Microeconomics **3**

Previously ECON 201 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent and MATH 0930)
 Emphasizes laws of demand and supply and the workings of price systems in a free market. Applies basic economic theories to problems of production, monopoly, taxation, consumer welfare and the environment.
Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name **Credit Hours**

ECON 2096, 2196...2996 – Topics in Economics **3**

(all courses ending in 96 are topics courses)
Previously ECON 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Presents various topics. See **Schedule of Classes**.

EDT – Engineering Design Technology Courses *(Applied Technologies Division)*

EDT 1001 – Introduction to Engineering Technology **3**

Previously EDT 102
 Introduces modern engineering design technology. Students will practice measurements techniques using metrology instrumentation, dimensional analysis, unit conversions, research methods and reporting. Technical annotations and geometrics standards in modern industry will be presented. Safety and ethical issues will be discussed. (30 theory +45 lab hours per term)

EDT 1005 – Introduction to CAD **3**

Previously EDT 103
 Introduces elements of CAD using a design software package widely used by the industry. Students will obtain skills to generate, document, edit, dimension and plot 2-D technical drawings. (30 theory +45 lab hours per term)

EDT 1010 – Mechanical Design I **3**

Previously EDT 104 (Pre- or corequisite: EDT 1005)
 Introduces drafting techniques and engineering graphical standards used in preparation of technical drawings. Students will use conventional and CAD methods to produce component and/or assembly drawings. ANSI/ASME Standards will be emphasized. (30 theory +45 lab hours per term)

EDT 1015 – Intermediate CAD **3**

Previously EDT 105 (Prerequisites: EDT 1005 or permission of division)
 Allows the students to acquire more advanced CAD skills. Techniques for producing, viewing and editing 2-D and 3-D drawings will be presented. The course is geared toward mechanical design. (30 theory +45 lab hours per term)

EDT 1020 – Mechanical Design II **3**

Previously EDT 114 (Prerequisites: EDT 1005, EDT 1010)
 Allows students to advance their knowledge of view projections including auxiliary views and section views, tolerancing and dimensioning. Both 2-D and 3-D CAD tools will be used following each lecture to solve typical engineering design problems. (30 theory +45 lab hours per term)

EDT 1025 – Basic Electrical and Electronic Systems **3**

Previously EDT 116 (Prerequisites: EDT 1005)
 The course presents a basic overview of electrical and electronic theory and applications. Concepts include network analysis for several types of circuits such as DC, AC, filters and semiconductors. Communication and power distribution applications are discussed as well as digital logic and control circuits. Students will learn the symbolic representations of electrical and electronic components and devices and use CAD to draw diagrams of the types of circuits and applications discussed in class.” (30 theory +45 lab hours per term)

EDT 1030 – Materials and Manufacturing Processes **3**

Previously EDT 117
 Introduces modern manufacturing processes and materials. Students will obtain knowledge in process and material selection, process planning, cost analysis, quality control, Design for Manufacturing and Assembly (DFMA) principles and industrial safety. (30 theory +45 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours****EDT 2001 – Applied Mathematics in Mechanics****3***Previously EDT 201 (Pre- or corequisite: MATH 1410, Corequisite: EDT 1001 or permission of instructor)*

Focuses on the application of mathematics in technical problem solving. Geometric relationships among points, lines and planes will be established for mathematical modeling. Selected topics in statics and dynamics, basic linkages and transmission will also be discussed. (30 theory +45 lab hours per term)

EDT 2005 – Advanced CAD/Solid Modeling**3***Previously EDT 205 (Prerequisites: EDT 1015, EDT 1010)*

Uses state-of-the-art parametric solid modeling software to generate realistic designs of subcomponents and assemblies with volume, mass and motion attributes. Volume, surface and edge representation of internal and external features will also enable production of working drawings and documentation directly from 3-D solid models. (30 theory +45 lab hours per term)

EDT 2010 – Tooling Design**3***Previously EDT 206 (Prerequisites: EDT 1001, EDT 1010)*

Focuses on tooling design processes and procedures. Students will design gages, jigs, fixtures and dies while learning principles of effective tolerancing, locating and clamping methods. (30 theory +45 lab hours per term)

EDT 2015 – Mechanics of Materials**5***Previously EDT 210 (Pre- or corequisite: EDT 2001 or permission of division)*

Presents an analytical approach to the principles and physical concepts of statics and strength of materials. Relationships between external force distribution and internal response, stress and strain will be formulated. Mechanical properties of materials will be evaluated in the laboratory. (45 theory +75 lab hours per term)

EDT 2020 – Design of Machine Elements**3***Previously EDT 215 (Prerequisites: EDT 1001, EDT 1030, Pre- or corequisite: EDT 1020)*

Produces computer aided designs of various machine elements such as bearings, pulleys and belts, chains, gears, shafts, keys, couplings, clutches, brakes, supports, fixed and removable fasteners. (30 theory +45 lab hours per term)

EDT 2025 – System Design**3***Previously EDT 221 (Prerequisites: EDT 2020, EDT 1025, or permission of division)*

Allows students to design an electromechanical system, which reflects the know-how and learning experiences gained throughout the entire program. Fluids, pneumatics, piping, structural, welding and electrical/electronics drawing standards and related topics will be introduced. (30 theory +45 lab hours per term)

EDT 2030 – Geometric Dimensioning and Tolerancing (GDT)**3***Previously EDT 284 (Prerequisite: permission of program chair)*

Covers the latest standards for defining parts based on their function using ANSI/ASME Y14.5M symbols. Students will practice dimensioning and tolerancing of individual features of a part where the permissible variations relate to characteristics of form, profile, location, runout, orientation or interrelationships between features.

EDT 2095 – Cooperative Education**3***Previously EDT 299 (Prerequisite: permission of program chair)*

Provides the opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is not paid.

EDT 2096, 2196...2996 – Topics**1-5***(all courses ending in 96 are topics courses)**Previously EDT 296 (Prerequisite: permission of program chair)*

Offers topics based upon requests from community and available instructors.

Course Subject Code/Course number – Course Name**Credit Hours****EDT 2097 – Independent Study****2-5***Previously EDT 297 (Prerequisite: permission of program chair)*

Allows the student and instructor define a specific problem directly related to the program in the area of student's interest. The student develops and executes a solution using analytical and drafting techniques appropriate to the problem. An oral presentation may be required.

EDT 2098 – Internships**3***Previously EDT 298 (Prerequisite: permission of program chair)*

Provides the opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is not paid.

EDUC – Elementary Education Courses (Communication, Humanities & Social Sciences Division)**EDUC 1101 – Introduction to Teaching in Elementary and Secondary Education****3***Previously EDUC 101 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, ENG 0950 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent)*

Introduces students to the professional world of teaching. It will provide knowledge about various issues and challenges that are important in teachers' everyday lives. This course empowers the student's knowledge about teaching's professionalism, integrating career development, evaluation, relationships with supervisors, peers, students, parents and the community. The course will reflect on reform in education, including standards, accountability and testing of teachers and students and compliment the areas of teaching diversity, ethics, multiculturalism, learning needs and many other teaching strategies to be considered in the classroom environment.

EDUC 2096, 2196...2996 – Topics**1-5***(all courses ending in 96 are topics courses)**Previously EDUC 296***EDUC 2097 – Independent Studies****1-5***Previously EDUC 297 (Prerequisite: permission of director)*

Studies a specific problem while working with assigned instructor.

EDUC 2190 – Supervised Field Experience**3***Previously EDUC 298L (Prerequisites: Acceptance into the alternative licensure program)*

This class is an advanced supervised fieldwork experience with particular emphasis on planning and implementing integrated programs in all areas including mathematics and science. Students are required to meet competencies as defined by the NM Public Education Department through a minimum of 160 contact hours in an approved early childhood educational setting. Enrollment in this course requires an application process.

EDUC 2203 – Introduction to Classroom Management, Grades K – 5**3***Previously EDUC 203 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)*

Introduces students to practical classroom rules and procedures. Students will learn about classroom setup, cognitive learning styles, managing student behavior and working with diverse populations.

EDUC 2204 – Child Development for Teachers**3***Previously EDUC 204 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)*

Serves either as an introduction in the area of human development ages birth to 19, or as a resource for students requiring a basic orientation with a practical emphasis.

EDUC 2205 – Introduction to Classroom Management, Grades 6 – 12 3
Previously EDUC 205 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)

Introduces students to practical classroom environments and procedures in the secondary classroom. Students will learn about the classroom set-up, cognitive learning styles, managing student behavior and working with diverse populations. Various special topics in the field are offered as elective hours. See **Schedule of Classes**.

EDUC 2207 – Educational Psychology 3
Previously EDUC 207 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, ENG 0950 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent)

Introduces the basic principles of learning, including cognition, motivation and assessment. This course provides an important framework for thinking about learning and instruction in classrooms and how theories of learning are connected to classroom situations.

EDUC 2210 – Educational Assistant Assessment Portfolio Development 3
Previously EDUC 210

Provides an overview of how to develop a comprehensive professional portfolio inclusive of individual Educational Assistant's strengths and competence in education and philosophy, theory, ethics and standards. Professional experience will also be documented. (30 theory + 45 clinical hours per term)

EDUC 2250 – Foundations of Education 3
Previously EDUC 250 (Prerequisites: Acceptance into the alternative licensure program)

Introduction to the basics of the teaching profession, this course will survey the complexities of teaching and learning in a diverse, multicultural contemporary United States, societal expectations of teachers, social problems that impact students, history and philosophy of education, the role of school's in today's society, school governance and the legal and ethical issues in education. Students will begin to articulate their own philosophy of education. The foundations and contemporary challenges of teaching Mathematical and Science concepts are also discussed.

EDUC 2252 – Teaching & Learning Theory 3
Previously EDUC 252 (Prerequisites: EDUC 2250, Acceptance into the alternative licensure program)

In this course, students will review the social, emotional, physical and cognitive development of the child from birth through adolescence. Students will critically examine researched methods and theories enabling teachers to become effective practitioners who are able to individualize instruction in order to meet the individual and diverse needs of students; explore brain-based learning; multi-sensory instruction; developmentally appropriate practice, multiple intelligences; learning styles and mathematical and science concepts.

EDUC 2260 – Fundamentals of Reading Instruction 3
Previously EDUC 260 (Prerequisite: EDUC 2250, Acceptance into alternative licensure program)

Course focuses on the fundamentals of teaching reading, the nature of the reading process and factors affecting the reading process. The principles, methods, materials and strategies for effective reading instruction and best practices are also addressed.

EDUC 2262 – Methods and Materials for Reading Instruction 3
Previously EDUC 262 (Prerequisites: EDUC 2250, EDUC 2260 and Acceptance into alternative licensure program)

Focuses on the selection and use of materials and teaching strategies appropriate for students with specific learning characteristics. Research on current methodological trends in reading instruction will be examined and evaluated.

EDUC 2264 – Reading and Writing across the Curriculum in Secondary Education 3
Previously EDUC 264 (Prerequisite: EDUC 2250, Acceptance into alternative licensure program)

Provides an overview of literacy and language development and focuses on the development and implementation of an integrated curriculum approach that emphasizes the importance of reading and writing within the curriculum and across content areas. Students will explore and practice in the field

alternative reading assessments (i.e., miscue analysis, rubrics, checklists, anecdotal records, portfolios and reading logs/journals) Some field experience is required for this course.

EDUC 2265 – Computers in Schools 3
Previously EDUC 265 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer sentence skills score of 69 or equivalent)

Explores constructivist-learning theory as it applies to educational technology as a tool in the learning environment; and examines the impact of technology in relation to the changing role of the teacher. Course designed for different levels of computer literacy from beginner to advanced. *Distance Learning option available (see page 45).*

EDUC 2272 – The Adolescent Learner 3
Previously EDUC 272 (Prerequisite: Acceptance into alternative licensure program)

Course examines the cognitive, emotional, social, physical and moral development of adolescents and the educational implications of the developmental period of early adolescence. The focus is on applying what is known about this age group to models of effective teaching, learning and schooling. An emphasis is also placed on the role of teacher in promoting the healthy development of adolescents.

EDUC 2284 – Effective Teaching Methods and Strategies 3
Previously EDUC 293 and EDUC 294 (Prerequisite: EDUC 2250, Acceptance into alternative licensure program)

Students will develop classroom procedures, routines and structures that lead to increased student learning and motivation. Students will explore pedagogy, methods and materials that support best practices in teaching and learning.

EDUC 2285: Curriculum Development, Assessment and Evaluation 3
Previously EDUC 295 (Prerequisites: EDUC 2250, Acceptance into the alternative licensure program)

Prepares students to plan effective instruction and to design and analyze meaningful assessments based on student needs and on district and state standards. Students will explore the construction and utilization of teacher-constructed and standardized tests. Students learn to gather data, report and communicate assessment results to students, parents and administrators in a variety of ways in an effort to meet diverse student needs. Students will be familiarized with local district's testing programs and will develop valid evaluation tools to measure student outcomes in all areas including mathematics and science.

EDUC 2290 – Education Practicum 2
Previously EDUC 206C (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, ENG 0950 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent)

Provides an overview of the teacher's role, reflects on best practices and assists students in developing personal and professional growth in the teaching career. Provides classroom field experience to observe and learn teaching practices, expectations and experience teaching with a hands-on perspective. (60 hours per term)

ELEC – Electronics Courses *(Applied Technologies Division)*

ELEC 1001 – Electronics Fundamentals A 4
Previously ELEC 103A (Corequisite: ELEC 1010)

Covers the basic concepts of DC electronics with emphasis on Ohm's Law, Kirchhoff's Law, circuit analysis, component application and troubleshooting. Construct circuits from schematic diagrams and use multimeters in the lab. (30 theory hours + 90 lab hours per term)

ELEC 1005 – Electronics Fundamentals B 4
Previously ELEC 103B (Prerequisites: ELEC 1001, ELEC 1010)

Covers the basic concepts of AC electronics with emphasis on Ohm's Law, Kirchhoff's Law, circuit analysis and component application. Construct, analyze and troubleshoot AC circuits with multimeters, oscilloscopes and function generators in the lab. (30 theory hours + 90 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours**

ELEC 1010 – Electronics Mathematics 4
Previously ELEC 104 (Prerequisite: MATH 0940 or higher or Accuplacer Elementary Algebra score of 81 or equivalent math placement score)

Includes selected topics from algebra, geometry and trigonometry that support the technologies programs. Also includes metric conversions, simultaneous linear equations, complex numbers, the impedance triangle and exponential and logarithmic functions.

ELEC 1015 – Digital Circuits I 3
Previously ELEC 105A

Provides analysis and design of combinational logic circuits using Boolean algebra, Karnaugh maps and logic diagrams. Laboratory experiments emphasize practical application of the concepts taught. Student will design, wire, troubleshoot and demonstrate combinational logic circuits. Students will be introduced to J-K flip flops in this course. (30 theory hours + 45 lab hours per term)

ELEC 1020 – Digital Circuits II 3
Previously ELEC 105B (Prerequisite: ELEC 1015)

Provides analysis and design of sequential logic circuits using timing diagrams, state tables and next state analysis. Flip-flops, counters, shift registers, timers and microprocessor are studied and methods of fault analysis and troubleshooting techniques. Experiments emphasize practical application of concepts taught and require the student to wire, design, troubleshoot and demonstrate sequential logic circuits. An introduction to microprocessor fundamentals ends the course. (30 theory hours + 45 lab hours per term)

ELEC 1025 – Soldering Techniques 3
Previously ELEC 275L

Covers through hole and surface mount technology (SMT), including Ball Grid Array (BGA), using the latest high reliability techniques. Provides opportunity to achieve the IPC J-STD 001 hand soldering certification and the IPC 610-A soldering inspection certification. (30 theory hours + 45 lab hours per term)

ELEC 1030 – Soldering Recertification 2
(Prerequisite: ELEC 1025 or permission of the director)

This course provides recertification for IPC 610 D acceptability and IPC J-Std Rev. D, soldering requirements of electrical and electronic assemblies. A review of IPC 610 standards of acceptance of electronic assemblies, as well as a review of IPC J-STD-001 standards of through hole and surface mount technology (SMT) of soldered electrical and electronic assemblies is done to meet the needs of industry quality assurance. ROHS and WEEE compliance regulations are covered for certification also. (30 theory hours + 7.5 lab hours per 7.5 week term)

ELEC 1096, 1196...1996 – Topics 2-8
(all courses ending in 96 are topics courses)
Previously ELEC 296

The topics depend on the requests from the community.

ELEC 2001 – Semiconductor Devices 6
Previously ELEC 114L (Prerequisites: ELEC 1005)

Introduces semiconductor devices, diodes, transistors, op-amps and JFETS and their application in simple power supplies and amplifiers. Students construct, analyze and troubleshoot semiconductor circuits. (60 theory hours + 90 lab hours per term)

ELEC 2005 – Electromechanical Devices 6
Previously ELEC 118L (Prerequisites: ELEC 1005, ELEC 1020)

Presents theory and application of mechanical devices and their control circuits. Includes hydraulics, pneumatics, vacuum, AC and DC motors, stepper motors and servomechanisms. Students assemble, operate and troubleshoot small-scale electromechanical systems. (60 theory hours + 90 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours**

ELEC 2010 – Intro to Embedded Systems—Microcontrollers 4
Previously ELEC 203L (Prerequisites: ELEC 2005)

Focuses on programming an embedded system in a Windows environment. Programs written in Assembly Language are assembled to process instructions and data for controlling various I/O functions. Emphasis is given to a final I/O project involving input sensors (transducers), A/D converters, D/A converters and output devices (actuators). (30 theory hours + 90 lab hours per term)

ELEC 2015 – Analog Circuits 4
Previously ELEC 205L (Prerequisite: ELEC 2001)

Covers circuitry involved in an analog system. Introduces discrete transistor circuits and classes of operation. Presents signal generation and active filters using operational amplifiers. Reviews the fundamentals of modulation and demodulation. (30 theory hours + 90 lab hours per term)

ELEC 2020 – Upgrading and Repairing PCs 3
Previously ELEC 217

This course maps fully to CompTIA's new 2006 A+ Exam objectives. The course is designed to be a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer hardware. (30 theory hours + 45 lab hours per term)

ELEC 2025 – Advanced Upgrading and Repairing PC's 3
Previously ELEC 221 (Prerequisite: ELEC 2020)

This course maps fully to CompTIA's new 2006 A+ Exam objectives. The course is designed to be a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer software. (30 theory hours + 45 lab hours per term)

ELEC 2030 – Electronics Refresher 3
Previously ELEC 279 (Prerequisite: completion of an electronics program or equivalent or permission of the director)

Reviews electronics fundamentals, including basic components, semiconductors, op-amps, digital electronics and microprocessors.

ELEC 2095 – Cooperative Education 3
Previously ELEC 299 (Prerequisite: permission of the director)

Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is paid.

ELEC 2096, 2196...2996 – Topics 2-8
(all courses ending in 96 are topics courses)
Previously ELEC 296

The topics depend on the requests from the community.

ELEC 2097 – Independent Study 2-8
Previously ELEC 297 (Prerequisite: permission of director)

Allows the student to investigate and solve a problem. The student designs the solution using a combination of techniques.

ELEC 2098 – Internship 3
Previously ELEC 298 (Prerequisite: permission of the director)

Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is not paid.

ELEM – Elementary Education Courses (Communication, Humanities & Social Sciences Division)

ELEM 1128 – Directed Experience with Children for Auxiliary Personnel: Level I 2
Previously ELEM 128 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, Corequisites: ELEM 1189, 2000)

Provides classroom experience to adults working with children. Student has opportunity to develop skills in theory and practice accommodating the learning styles of children.

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
ELEM 1189 – The Paraprofessional in the Classroom <i>Previously ELEM 192 (Corequisites: ELEM 1128)</i> Provides the cognitive referents for classroom experiences. Enables the student to gain practical and theoretical knowledge.	2	ELTR 1205 – Blueprint Reading I <i>Previously ELTR 112 (Pre- or corequisite: ELTR 1005,1010 and 1092 or division approval)</i> Provides instruction in reading and interpreting blueprints and specifications. Emphasizes terminology, symbols, notations, scaling, dimensioning and basic blueprint drawing techniques.	3
ELEM 2200 – Directed Experience with Children for Auxiliary Personnel: Level II <i>Previously ELEM 200 (Corequisites: ELEM 1128)</i> Provides the sequel necessary to extend skills introduced in ELEM 1128 and the opportunity for students to initiate extensive development of activities, classroom management and teacher skills.	2	ELTR 1210 – Electrical Theory II <i>Previously ELTR 113 (Pre- or corequisite: ELTR 1205 or division approval)</i> Covers the application of the National Electrical Code, local codes and regulations for installation of branch circuits, services, feeders, temporary services and associated materials and equipment for residential and light commercial applications.	4
ELEM 2205 – Balanced Literacy <i>Previously ELEM 205 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, Recommended prerequisite: IT 0850)</i> An introduction to the elements of a balanced literacy. Course provides strategies to teach reading and writing in a balanced framework.	2	ELTR 1292 – Residential Wiring Lab <i>Previously ELTR 114L (Pre- or corequisites: ELTR 1205 and 1210 or division approval)</i> Covers safety, tools, materials, single pole switches, receptacles, overcurrent protection, three- and four-way switches, pilot switches, door chimes, dryer and range receptacles and swamp coolers, NEC requirements for light commercial applications. (112.5 lab hours per term)	3
ELEM 2233 – Language Arts Methods for Paraprofessionals <i>Previously ELEM 233 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent)</i> Introduces language arts methods appropriate for educational assistants working in an elementary school setting. Attention will be given to language acquisition, observation of children's language, planning language experiences for children and the role of the adult in children's language development.	3	ELTR 1392 – Residential Electrical Services <i>Previously ELTR 115L (Pre- or corequisites: ELTR 1205 and 1210 or division approval)</i> Presents the study and building of residential services, installation of circuit panels, cutting and threading rigid conduit, hand bending and installation of EMT conduit in adherence to the National Electrical Code. (112.5 lab hours per term)	3
ELEM 2261 – Mathematics Methods for Paraprofessionals <i>Previously ELEM 261(Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent)</i> Provides hands-on experience with materials appropriate for educational assistants in elementary school mathematics. Much attention will be given to diagnosing students' understanding so that proper activities can be assigned for problem solving as well as drill and practice.	3	ELTR 2005 – Electrical Theory III <i>Previously ELTR 201 (Prerequisites: ELTR 1205, 1210, 1292 and 1392 or division approval)</i> Introduces commercial/industrial aspects of electrical safety, tools, materials, power distribution systems, services, hazardous locations, intrusion/fire alarm systems in accordance with the National Electrical Code and blueprint reading.	4
ELTR – Electrical Trades Courses (Applied Technologies Division)			
ELTR 1005 – Electrical Theory I <i>Previously ELTR 101 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, or division approval; Pre- or corequisite: ELTR 1010)</i> Covers the basic concepts of DC and AC theory with emphasis on electron theory, units of electrical measurement, NEC terminology and selection of branch circuit conductors. <i>Distance Learning option available (see page 45).</i>	4	ELTR 2010 – Electrical Motor Control Theory <i>Previously ELTR 203 (Prerequisites: ELTR 1205,1210, 1292, 1392, or division approval)</i> Introduces students to the symbology and method of interpreting and drawing electromechanical motor control circuitry. NEMA standards are studied in detail.	3
ELTR 1010 – Electrical Math I <i>Previously ELTR 102 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, or division approval)</i> Applies basic arithmetic functions, electrical formulas, calculations of material and circuit load requirements, rules for series, parallel and combination circuits and mechanical work and power.	3	ELTR 2092 – Industrial Motor Control Lab <i>Previously ELTR 204L (Pre- or corequisite: ELTR 2010 or division approval)</i> Covers safety, electromechanical relay-type motor control, momentary push button switches, limit switches, proximity switches, pneumatic timers, forward/reverse starters, three-phase motors and National Electrical Code requirements. (112.5 lab hours per term)	3
ELTR 1092 – Electrical DC/AC Lab <i>Previously ELTR 103L (Pre- or corequisites: ELTR 1005 and 1010 or division approval)</i> Emphasis is placed on safety. Covers electrical circuitry, meters, power sources, conductors, insulators, reactive circuits and application of the National Electrical Code. (112.5 lab hours per term)	3	ELTR 2096, 2196...2996 – Special Topics (all courses ending in 96 are topics courses) <i>Previously ELTR 296</i> Provides advanced, in-depth study and research into methods and current technological equipment used in the electrical trades.	1-6
ELTR 1192 – AC Circuitry, Motors, Generators <i>Previously ELTR 104L (Pre- or corequisites: ELTR 1005, 1010 and 1092 or division approval)</i> Covers combination circuit analysis, RLC circuitry, DC/AC motors, generators, solid-state components, wiring methods for single pole and three-way switches and application of the National Electrical Code. Stresses safety. (112.5 lab hours per term)	3	ELTR 2192 – Industrial Power Distribution <i>Previously ELTR 205L (Pre- or corequisites: ELTR 2005 or division approval)</i> Covers safety, use of mechanical and hydraulic benders, use of power threaders, knock-out punches, hammer drills and powder actuated fasteners, cable installation, wire pulling and the application of the NEC. (112.5 lab hours per term)	3
		ELTR 2205 – Industrial Electrical Circuitry and Safety <i>Previously ELTR 211 (Prerequisites: ELTR 2005, 2010, 2092 and 2192 or department approval)</i> Emphasizes safety principles and standards used in the electrical field and techniques for electrical troubleshooting.	3

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Course Subject Code/Course number – Course Name	Credit Hours
ELTR 2210 – Programmable Logic Controller Theory <i>Previously ELTR 212 (Pre- or corequisites: ELTR 2092 or ELEC 1001&1005 and 1015&1020 or division approval)</i> Introduces the principles of operation of a programmable controller, the numbering systems used by controllers, logic fundamentals and basics of programming.	4
ELTR 2292 – PLC Installation and Operation <i>Previously ELTR 213L (Pre- or corequisites: ELTR 2092, 2210 or ELEC 1001 & 1005 and 1015 &1020 or division approval)</i> Covers installation and programming of programmable logic controllers in accordance with manufacturer's specifications and NEC requirements. Covers simulating fundamental industrial control processes with various input and output devices. (112.5 lab hours per term)	3
ELTR 2392 – PLC Systems Operation and Troubleshooting <i>Previously ELTR 214L (Pre- or corequisites: ELTR 2205 and 2210 or department approval)</i> Covers intricate industrial wiring, motor controls and motor troubleshooting, programmable controller timer, counter and sequence program operations and the troubleshooting techniques involved. (112.5 lab hours per term)	3
ELTR 2501 – Electrical Wiring Circuitry <i>Previously ELTR 170</i> Provides instruction in the interpretation, design and wiring of common switch, receptacle and related circuitry in accordance with the NEC and state and local codes.	2
ELTR 2505 – Conduit Hand Bending Fundamentals <i>Previously ELTR 171L</i> Provides instruction in the computation and placement of conduit hand benders to bend and install conduit systems in accordance with the NEC and state and local codes. (7.5 theory + 30 lab hours per term)	1
ELTR 2510 – Industrial Motor Control Circuitry <i>Previously ELTR 173</i> Presents the design, interpretation, drawing and installation of electromechanical relay type motor controls in accordance with the National Electrical Code.	2
ELTR 2515 – Industrial PC Motor Control <i>Previously ELTR 174L</i> Reviews with application the operation of programmable logic controllers, interpretation of PLC logic diagrams and the installation of programming of PLC systems in accordance with the National Electrical Code. (15 theory and 75 lab hours per term)	3
ELTR 2520 – Fiber Optical Cable Installation <i>Previously ELTR 175</i> Introduces the installation of fiber optical cable in various systems. Emphasizes proper installation and termination.	2
ELTR 2525 – Electrical Journeyman Preparation <i>Previously ELTR 176</i> Reviews the use and application of the National Electrical Code and the duties encountered by journeymen on typical job sites are reviewed in preparation for the New Mexico journeyman's electrical exam.	3
ELTR 2997 – Independent Study <i>Previously ELTR 297 (Prerequisite: division approval)</i> Focuses on a specific problem while working with an instructor.	Variable
ELTR 2999 – Electrical Trades Capstone Course <i>Previously ELTR 295 (Prerequisite: division approval)</i> Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term).	1

Course Subject Code/Course number – Course Name	Credit Hours
EMS – Emergency Medical Technician Courses (Health, Wellness & Public Safety Division)	
EMS 1005 – First Responder <i>Previously EMS 120 (Pre- or corequisites: RDG 0750)</i> Provides 48 hours of instruction in airway management, semiautomatic defibrillation, patient packaging, trauma management and patient assessment skills. Special skills also include training on hazardous materials response and CPR.	3
EMS 1010 – Basic Emergency Medical Technician Skills <i>Previously EMS 160L (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent; Pre- or Corequisite: HLTH 1001)</i> Provides the minimum level of training and certification for students wishing to pursue a course in emergency medical services. Students will be introduced to a variety of emergency skills including airway adjuncts, oxygen therapy, AED, splinting, drug administration and patient assessment. At the completion of the course students are eligible to take the State of New Mexico licensure examination. (60 theory + 90 lab hours per term)	6
EMS 1012 – EMS Drug/Calculations <i>(Prerequisite: High School Diploma or equivalent, Math 0930 or Accuplacer score of 72 or equivalent, Reading 0950 or Accuplacer score of 80, EMS 160L or EMT-B license; pre- or corequisites: BIO 1310 or 2310, EMS 1012; Corequisite EMS 1030)</i> This course presents students with dosage calculations methods for oral and parental medications, including intravenous therapy and pediatric dosages in the EMS environment. Focuses on those calculations used in an emergency situation in the field.	1
EMS 1030 – EMS Pharmacology <i>Previously EMS 162 (Prerequisite: High School Diploma or equivalent, Math 0930 or Accuplacer score of 72 or equivalent, Reading 0950 or Accuplacer score of 80, EMS 160L or EMT-B license; pre- or corequisites: BIO 1310 or 2310, EMS 1012)</i> Provides the understanding of how chemical agents act upon the body and the theoretical base for administering such agents in the emergency setting. Information covers drugs in current use in the EMS field including, pharmacokinetics, pharmacodynamics, therapeutic uses, adverse reactions, precautions and contraindications.	3
EMS 1070/1090 – Advanced Trauma <i>Previously EMS 163/163C (Prerequisite: EMS 1010 or EMT-B license)</i> Provides the EMT-Basic with the understanding of advanced trauma care and the methods of vehicle extrication. The student will be trained to evaluate and treat trauma patients including airway management and IV fluid resuscitation as well as practical application of vehicle extrication. The student will have clinical time outside of class in the emergency departments as well as with local EMS services. The student will receive certification in PHTLS and Vehicle extrication. (45 theory + 45 lab + 45 clinical hours per term)	5
EMS 1096, 1196...1996 – EMT Topics <i>Previously EMS 296</i> Explores various topics of interest in the field of emergency medical services.	Varies
EMS 1098 – Field Internship I <i>Previously EMS 298 (Corequisite: EMS 1570/1590, 1512, 1571/1590, 1515)</i> Prepares the paramedic student to utilize the knowledge obtained during the previous 12 weeks of the semester in the classroom and apply it to emergencies they may encounter in the EMS setting. The student will arrange three weeks of EMS field time through the clinical coordinator. (90 clinical hours per term)	2

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
EMS 1210/1292 – EMT Intermediate <i>Previously EMS 260T/260L (Prerequisites: Current proof of professional CPR and passing score of the intermediate pretest, RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, EMS 1010)</i> Builds on material presented in the EMT-Basic course. Special emphasis is placed on teaching advanced assessment skills. In addition the course will expand significantly the number of medications a student can administer in an emergency setting as well as learning how to start IVs. After completion, students are eligible to participate in clinical internship. (45 theory + 90 lab hours per term)	5	EMS 2005 – Behavioral Emergencies in EMS and Communication <i>Previously EMS 190 (Prerequisite: EMS 1098; Corequisite: EMS 1571/1690, 2070, 2072, 2172, 2198, 2292)</i> Prepares the paramedic student to recognize and assess the possible behavioral emergencies they may encounter on the streets. The student will learn how to effectively communicate with not only patients, but also their co-workers as well as fellow professionals in the health care field.	2
EMS 1290 – EMT Intermediate Clinical <i>Previously EMS 260C (Pre- or corequisite: EMT 1210/1292)</i> Provides practice of intermediate skills in both a clinical and ambulance setting. At the completion of the intermediate course and internship students are eligible to take either the State of New Mexico or National Intermediate licensure examination. (45 clinical hours per term)	1	EMS 2070 – Respiratory System <i>(Corequisites: EMS 1098, 1512, 1515, 1570/1590, 1571/1690)</i> Provides the paramedic student the skills to properly assess and treat a patient with various respiratory problems. The content will include anatomy and physiology from an EMS perspective. The student will learn to assess the patient with various respiratory complaints and properly treat them. They will learn the skill of intubations as well as other airway techniques. (15 theory + 45 lab)	2
EMS 1312/1392 – Emergency Department Technician <i>Previously EMS 270/270L (Prerequisite: division approval, Current NM or National EMT-B certificate or Intermediate License, current proof of professional CPR, RDG 0750 or Accuplacer Reading score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, Corequisite: EMS 1390)</i> Provides training to assist the staff of the emergency division in the care of critically ill and injured patients. Specifically, wound cleaning, suture, splints fractures, start I.V., place Foley and IG catheters, take vital signs and other critical skills. (45 theory + 45 lab hours per term)	4	EMS 2072 – Neurological System <i>(Corequisites: EMS 2005, 1571/1690, 2070, 2072, 2172, 2198, 2292)</i> Prepare the paramedic student to recognize, assess and properly treat patients with various neurological disease states. They will use pathophysiology principals to formulate a treatment plan for each neurovascular patient. (15 theory + 45 lab)	2
EMS 1390 – Emergency Division Technician Clinical <i>Previously EMS 270C (Corequisite: EMS 1312/1392)</i> Provides practice of the emergency division technician skills in the clinical setting. (90 clinical hours per term)	2	EMS 2090 – Respiratory/Neurology Clinical <i>(Corequisites: EMS 2005, 2070, 2072, 2172, 2292, 2198)</i> The students will have clinical time outside of class in local hospitals as well as local EMS Services focusing on respiratory and neurological conditions. (45 clinical)	1
EMS 1512 – Medical/Legal and Charting <i>Previously EMS 182 (Corequisites: EMS 1098, 1515, 1570/1590, 1571/1690, 2070)</i> Presents medical and legal dilemmas for the paramedic student and how they may avoid such problems by effective documentation on medical forms. The course will cover various medical-legal problems through lecture and case studies. The course will also review the aspects of good charting that can reduce the risk of legal litigation in EMS.	1	EMS 2172 – Environmental Emergencies <i>(Corequisites: EMS 2005, 2070, 2072, 2198)</i> Prepares the paramedic student to recognize and assess the different environmental emergencies they may encounter in their EMS career. The student will learn how to manage hazardous material events including those involving weapons of mass destruction. The student will also recognize, assess and properly treat patients in various environmental states. The student will receive certification in hazardous material Awareness. (30 theory + 45 lab hours per term)	3
EMS 1515 – EMS Endocrine and GI/GU Systems <i>Previously EMS 186 (Corequisite: EMS 1098, 1570/1590, 1512, 1571/1690, 2070)</i> To prepare the paramedic student to recognize, assess and properly treat patients with various endocrine, gastrointestinal, genitourinary disease states. They will use pathophysiology principles to formulate a treatment plan for each patient.	1	EMS 2198 – Field Internship II <i>Previously EMS 298A (Prerequisite: EMS 1098; Corequisite: EMS 2005)</i> Prepares the paramedic student to utilize the knowledge obtained during the previous 12 weeks of the semester in the classroom and apply it to emergencies they may encounter in the EMS setting. The student will arrange three weeks of EMS field time through the clinical coordinator. (90 clinical hours per term)	2
EMS 1570/1590 – Cardiovascular System <i>Previously EMS 180/180C (Prerequisite: EMS 1030, 1070/1090; Corequisite: EMS 1590, 1512, 1571/1590, 1515, 1098)</i> Prepares the paramedic student to recognize, assess and properly treat patients with various cardiac disease states. The student will use pathophysiology principals to formulate a treatment plan for each patient. The student will receive certification in Advance Cardiac Life Support (ACLS) (45 theory + 45 lab + 45 clinical hours per term)	5	EMS 2292 – Competency Finals <i>Previously EMS 295L (Prerequisite: EMS 1570/1590, 1512, 1571/1590, 1515, 1098; Corequisites: EMS 2005, 2198)</i> The final lab course is for the paramedic student to prepare for the State of New Mexico and National Registry paramedic exam. Successful completion of this course will allow the student to receive a paramedic completion certificate and take the paramedic exam. Knowledge and skills from the core curriculum courses will be incorporated into the review process to include skills testing, practice test review and scenario testing. (45 lab hours per term)	
EMS 1571/1690 Pediatric and Gynecology Emergencies <i>Previously EMS 184/184C (Corequisites: EMS 2005, 2070, 2072, 2172, 2198, 2292)</i> To prepare the paramedic student to recognize, assess and properly treat the neonatal and pediatric patients with various disease states and patients with various gynecological complaints including the pregnant patients. They will use pathophysiology principals to formulate a treatment plan for each patient. The student will have clinical time outside of class in the local hospitals as well. The student will receive certification in PEPP and PALS. (15 theory + 45 lab + 45 clinical hours per term)	3	ENG – English Courses (Division of Educational & Career Advancement)	
		ENG 0196, 0296...0996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously ENG 096</i> Presents various topics in Developmental English	1-3

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Course Subject Code/Course number – Course Name**Credit Hours****ENG 0550 – Basic Writing and Reading Skills** **3**

Previously ENG 098 (Prerequisite: Students enrolling in ENG 0550 should have placement test scores within the respective range of BOTH of the following tests: Accuplacer Reading 0 – 58 AND Accuplacer Sentence Skills 0 – 52.)

Focuses on basic reading and writing for practical use in school and life. Provides students the opportunity to practice reading strategies, improve their sentence and paragraph skills in organized pieces of writing, use computers for word processing and research, practice oral language skills and improve English usage and punctuation. (45 theory hours + 15 lab hours per term)

ENG 0592 – Workshop for Non-Native English Speakers **1**

Previously ENG 098W

Focuses on teaching ESL students concurrently enrolled in an English and/or reading course to recognize and correct grammatical errors commonly made in writing assignments by native speakers of a language other than English. Provides practice in speaking, listening and vocabulary development. (30 lab hours per term)

ENG 0750 – Practical Writing **3**

Previously ENG 099 (Prerequisite: ENG 0550 or Accuplacer Sentence Skills score of 53)

Focuses on writing tasks related to daily life, school and the workplace to achieve a variety of practical and academic goals. Presents English grammar, usage and punctuation in the context of the students' own writing. (45 theory hours + 15 lab hours per term)
Distance Learning option available (see page 45).

ENG 0792 – Workshop for Non-Native English Speakers **1**

Previously ENG 099W

Focuses on teaching ESL students concurrently enrolled in an English and/or reading course to recognize and correct grammatical errors commonly made in writing assignments by native speakers of a language other than English. Provides practice in speaking, listening and vocabulary development. (30 lab hours per term)

ENG 0950 – Essay Writing **3**

Previously ENG 100 (Prerequisite: ENG 0750 or Accuplacer Sentence Skills score of 69)

Prepares students for first-year college composition by providing practice of the rhetorical and grammatical skills necessary to write purposeful, reader-centered essays. Covers effective use of a writing process in out-of-class essays and in timed, in-class situations. Incorporates readings for discussion of ideas and for information to be used in students' writing. (45 theory hours + 15 lab hours per term)
Distance Learning option available (see page 45).

ENG 0992 – Workshop for Non-Native English Speakers **1**

Previously ENG 100W

Focuses on teaching ESL students concurrently enrolled in an English and/or reading course to recognize and correct grammatical errors commonly made in writing assignments by native speakers of a language other than English. Provides practice in speaking, listening and vocabulary development. (30 lab hours per term)

ENG – English Courses (Communication, Humanities & Social Sciences Division)**ENG 1101 – College Writing** **3**

Previously ENG 101 (Prerequisite: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent)

Emphasizes text-based essay composition, including critical reading, summary writing and synthesis.
Distance Learning option available (see page 45).

ENG 1102 – Analytic and Argumentative Writing **3**

Previously ENG 102 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent)

Emphasizes analytic and argumentative writing with readings and research in exposition and literature.
Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name**Credit Hours****ENG 1119 – Technical Communications** **3**

Previously ENG 119 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent)
Introduces study of written and verbal communication in business and industry.

ENG 1150 – Study of Literature **3**

Previously ENG 150 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

ENG 2096, 2196...2996 – Topics in Literature **3**

(all courses ending in 96 are topics courses)

Previously ENG 211 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

Introduces the academic study of literature. Presents various topics. See **Schedule of Classes**.

ENG 2206 – Popular Literature: Detective Novel **3**

Previously ENG 206D (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

Surveys detective fiction as a literary genre, examining its distinctive traits as they developed in Britain and America.

ENG 2207 – Popular Literature: Science Fiction **3**

Previously ENG 206F (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

Surveys the science fiction genre, examining its history, its dominant themes and ideas and its most important creators.

ENG 2208 – Popular Literature: Espionage Fiction **3**

Previously ENG 206S (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

Surveys the development in world literature of espionage fiction, a subgenre of the "thriller" whose popularity dates from the World War I era.

ENG 2209 – Popular Literature: Western **3**

Previously ENG 206W (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

Surveys the development of and conventions associated with western fiction, short stories and novels set in the American West and featuring themes common to the history, cultures and ethos of the West. The relationship between Western fiction and the Western film will be examined at length as well.

ENG 2210 – Film as Literature **3**

Previously ENG 210 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

Presents study of film as visual literature, surveying major trends in the history of film.

ENG 2213 – Film Genres: Comedy **3**

Previously ENG 213-D (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

Surveys the history of film comedy, from early silent films to more recent developments. The course examines the artistic, cultural and historical forces that created the genre.

ENG 2214 – Film Genres: Film Noir **3**

Previously ENG 213F (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)

Surveys the film style/genre known as film noir. The course investigates the cultural/stylistic origins of noir, its characteristic and conventional elements, its principal subject interests and narrative techniques and representative examples of noir's evolution in film history

Course Subject Code/Course number – Course Name	Credit Hours
ENG 2215 – Film Genres: Hitchcock/Kubrick <i>Previously ENG 213H (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Surveys Hitchcock's and Stanley Kubrick's films, focusing on their development as directors, their ideas about filmmaking and their influence on world cinema.	3
ENG 2216 – Film Genres: World Cinema <i>(Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Surveys the films from Africa, Latin America, the Middle East and Southeast Asia. The course will address topics of post-colonialism and national identity as well as film history and aesthetics in emerging national cinemas.	3
ENG 2219 – Technical Writing <i>Previously ENG 219 (Prerequisite: ENG 1102)</i> Emphasizes writing in industry, research laboratories, business and other professional settings. <i>Distance Learning option available (see page 45).</i>	3
ENG 2220 – Expository Writing <i>Previously ENG 220 (Prerequisite: ENG 1102)</i> Focuses on advanced composition, concentrating on critical reading of prose, writing expository and argumentative essays.	3
ENG 2221 – Creative Writing: Fiction <i>Previously ENG 221 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Introduces fiction writing as a creative process.	3
ENG 2222 – Creative Writing: Poetry <i>Previously ENG 222 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Introduces poetry writing as a creative process.	3
ENG 2240 – Traditional Grammar <i>Previously ENG 240 (Recommended prerequisite: C or better in ENG 1101)</i> Surveys traditional grammar, introducing linguistic terminology and methods for identifying and understanding parts of speech, parts of sentences and basic sentence patterns.	3
ENG 2250 – Analysis of Literature <i>Previously ENG 250 (Prerequisite: ENG 1102 or equivalent)</i> Emphasizes methods of literary analysis and critical writing applied to literary techniques, conventions and themes.	3
ENG 2251 – Introduction to Dramatic Literature <i>Previously ENG 251 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Introduces structure and nature of drama as a literary form: Greek, Renaissance, Enlightenment and Modern eras.	3
ENG 2252 – Introduction to Shakespeare <i>Previously ENG 252 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Introduces study of Shakespeare's work: sonnets, tragedies, comedies and histories. Fall only.	3
ENG 2262 – Survey of Earlier World Literature <i>Previously ENG 262 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Surveys poetry, fiction and drama from primarily non-English cultures: ca. 1500 B.C. – A.D. 1650.	3

Course Subject Code/Course number – Course Name	Credit Hours
ENG 2263 – Survey of Later World Literature <i>Previously ENG 263</i> Surveys poetry, fiction and drama from primarily non-English cultures: ca. 1650 to present. Spring only	3
ENG 2270 – Modern Literature <i>Previously ENG 270 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Surveys American and European literature of the 20th century.	3
ENG 2280 – Introduction to Professional Writing <i>Previously ENG 290 (Prerequisite: ENG 2219)</i> Presents concepts and practices for professional writing, including the study of technical writing, public information and public relations writing and freelance nonfiction writing.	3
ENG 2282 – Modern Latin American Literature <i>Previously ENG 282 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Emphasizes chronicles, diaries, drama, poetry, essays and fiction of Latin America from late 19th century to the present.	3
ENG 2284 – Survey of Earlier English Literature <i>Previously ENG 294 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Surveys British literature from Old English to 1798. Fall only.	3
ENG 2285 – Survey of Later English Literature <i>Previously ENG 295 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Surveys English literature from the late 18th century to the present. Spring only.	3
ENG 2287 – Earlier American Literature <i>Previously ENG 297 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Introduces short stories, poetry, drama and nonfiction from colonial U.S. to 1865.	3
ENG 2288 – Later American Literature <i>Previously ENG 298 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Continues study of American literature begun in ENG 2287. Focuses on short stories, poetry, drama, the novel and nonfiction from 1865 to the present.	3
ENG 2596, 2696...2996 – Topics in Language and Writing <i>(all courses ending in 96 are topics courses)</i> <i>Previously ENG 212 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)</i> Presents various topics. See Schedule of Classes .	3
ENGR – Engineering (Math, Science & Engineering Division)	
ENGR 1010 – Survey of Engineering Fields <i>Previously ENGR 101 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent and MATH 1310 or Accuplacer College Level Math score of 60 or equivalent.)</i> Introduces the engineering design process and exploration of careers in engineering.	1
ENGR 2810 – Engineering Statics <i>Previously ENGR 202 (Prerequisites: PHYS 1710/1792 and MATH 1715)</i> Introduces the following concepts: statics of particles and rigid bodies in two and three dimensions using vector algebra as an analytical tool, centroids, distributed loads, trusses, frames and friction.	3

ENGR 2910 – Circuit Analysis **4**

Previously ENGR 203 (Prerequisites: CSCI 1151; Pre- or corequisites: PHYS 1810/1892 and MATH 2910)

Through lecture and laboratory experience, this course introduces the following concepts: basic elements and sources, energy and power, Ohm's law and Kirchhoff's law, resistive networks, node and loop analysis, sinusoidal sources and complex representations and three phase circuits.

ENTR – Entrepreneurship Courses *(Business & Information Technology Division)*

ENTR 1101 – Introduction to Entrepreneurship **3**

Previously ENTR 104 (Prerequisite: RDG 0750 or ESL 0750 or Accuplacer Reading Score of 69 or equivalent)

Introduces students to the concept of entrepreneurship and to the fundamentals of the business process. Students study basic issues such as idea generation and evaluation, basic market identification, small business management, elements of a business plan, small business organization and financing. *Distance Learning option available (see page 45).*

ENTR 2101 – Entrepreneurship IA **3**

Previously ENTR 101A (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)

Focuses on new business design and development. Students study critical issues experienced by entrepreneurs while exploring and creating an effective model of their own. Emphasis is on customized market research and feasibility assessment. ENTR 2101 plus ENTR 2102 are equivalent to ENTR 2103. *Distance Learning option available (see page 45).*

ENTR 2102 – Entrepreneurship IB **3**

Previously ENTR 101B (Prerequisite: ENTR 2101)

Continues ENTR 2101. Students use the market research and feasibility assessment from ENTR 2101 to develop a complete business plan for their business. Emphasis is on writing the vision and mission statement, the company overview, the product/service strategy, the marketing plan, the financial plan and the executive summary. Entrepreneurship higher-level case studies are woven into the course content. ENTR 2101 plus ENTR 2102 are equivalent to ENTR 2103.

Distance Learning option available (see page 45).

ENTR 2103 – Entrepreneurship **6**

Previously ENTR 101 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)

Focuses on new business design and skill development. Students complete a market research and feasibility assessment and use this information to develop a complete business plan for their business. Emphasis is on business research and writing the vision and mission statement, the company overview, the product/service strategy, the marketing plan, the financial plan and the executive summary. Entrepreneurship higher-level case studies are woven into the course content. ENTR 2101 plus ENTR 2102 are equivalent to this course.

Distance Learning option available (see page 45).

ENTR 2104 – Entrepreneurship in a Global Setting **3**

Previously ENTR 102 (Prerequisite: RDG 0750 or ESL 0750 or Accuplacer Reading score of 69 or equivalent)

Focuses on providing an overview of entrepreneurship for the 21st century with an emphasis on entrepreneurship in a global setting. The contemporary world of entrepreneurship, the entrepreneurial perspective, the development of the entrepreneurial plan and entrepreneurial ventures are covered.

Distance Learning option available (see page 45).

ESH – Environmental Safety & Health Courses *(Health, Wellness & Public Safety Division)*

ESH 1009 – Environmental Technology I **3**

Previously EPT 111L (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)

Introduces environmental protection methods and their ecological basis. Covers all major areas of environmental concern including air, water, soils and food sanitation. *(30 theory + 37.5 lab hours per term)*

ESH 1010 Environmental Regulation & Compliance **3**

Previously EPT 211L (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)

Introduces the major federal and state environmental laws and regulations concerning air, water, soil, hazardous chemical and nuclear waste, site cleanup standards, accepted environmental practice and environmental ethics.

ESH 1095 – Cooperative Education **3**

Previously EPT 299 (Prerequisite: division approval)

Employs the student at an approved program-related work site and applies learned theory based on goals and objectives.

ESH 1096, 1196...1996 – Special Topics **1-6**

(all courses ending in 96 are topics courses)

Previously EPT 296 (Prerequisite: division approval)

Covers an in-depth study of problems and advanced techniques.

ESH 1570 – Water Quality Protection **3**

Previously EPT 173 (Prerequisites: ESH 1009, CHEM 1410/1492, math elective and computer elective, or division approval)

Presents water supply system operations, distribution systems and basic hydraulics and become familiar with water quality protection and treatment techniques including backflow prevention and cross connection control. *(15 theory + 75 lab hours per term)*

ESH 1571 – Environmental Instrumentation and Analysis **3**

Previously EPT 215 (Prerequisites: EPT 1009 and math elective or division approval)

Explores contemporary instrumentation and techniques in this hands-on introduction to the care and use of laboratory and field-portable instruments. Covers maintenance, calibration and operation of instruments and meters, along with EPA protocols. *(15 theory + 75 lab hours per term)*

ESH 1809 Workplace Adult First Aid and CPR **1**

Offers American Red Cross Workplace Training standard first aid and cardiopulmonary resuscitation certification. Also includes material sufficient to satisfy Red Cross contact hour training.

ESH 1811 Waste Site Refresher/DOT Chemical Release **1**

(Prerequisite: division approval department approval)

The course provides annual OSHA refresher training to hazardous waste workers and supervisors covered under 29 CFR 1910.120 (HAZWOPER) Recognition and control of hazards at a site are reviewed and competencies demonstrated with all personal protective equipment.

ESH 2002 – Food Resources and the Environment **3**

Previously EPT 176

Presents the impact of food resource choices on the quality of the environment and human health. Explores economic, ecological and social aspects of food resource production and consumption.

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
ESH 2006 Occupational Safety for Construction I <i>Previously EPT 120A</i> Introduces students to OSHA policies, procedures and standards, construction safety and health principles. The scope and application of the OSHA Construction Safety Standard will be addressed with emphasis on high hazard areas. Students successfully completing the course will receive a Division of Labor card acknowledging completion of the 10-hour awareness course for 29 CFR 1926. <i>Distance Learning option available (see page 45).</i>	1	ESH 2407 Air Quality Protection <i>Previously EPT 124 (Prerequisites: EPT 1009, EPT 2410, MATH 1210, or division approval)</i> Introduces students to the management and protection of the air quality. Topics include basic meteorology, pollution sources and human health impacts, regulations, permitting, air quality standards, ambient and emission monitoring techniques, pollution control methods, air dispersion models, calculation methods for estimating stack emissions, criteria and hazardous pollutants. <i>Distance Learning option available (see page 45).</i>	3
ESH 2008 – Basic Site Remediation Technology <i>Previously EPT 174</i> Emphasizes major remedial technologies for site cleanup under federal, state and local regulations. Presents physical, biological, chemical and thermal treatments in common use.	3	ESH 2408 – Introduction to Safety Management <i>Previously EPT 171</i> Presents behavioral and management techniques for safety in today’s demanding workplace. Topics include planning, budgeting, communications, motivation and people skills. <i>Distance Learning option available (see page 45).</i>	3
ESH 2009 Occupational Safety for Construction II <i>Previously EPT 120B</i> Introduces students to OSHA policies, procedures and standards, construction safety and health principles. The scope and application of the OSHA Construction Safety Standard will be addressed with emphasis on high hazard areas. Students successfully completing the course will receive a Division of Labor card acknowledging completion of the 30-hour awareness course for 29 CFR 1926.	2	ESH 2409 Water/Wastewater Math <i>Previously EPT 125</i> Presents methods to analyze and solve mathematical problems associated with water and waste water system operations, focusing on certification exam requirements	3
ESH 2011 Watershed Protection <i>Previously EPT 123 (Prerequisites: EPT 1009, EPT 2410, or division approval)</i> Introduces the management and protection of surface water resources with emphasis on the American Southwest. Topics include lake, riparian and wetland systems, monitoring water quality conditions, pollution sources, regulations and requirements, risk assessment in water quality standards, discharge types, stormwater control, balancing water quantity and beneficial uses. <i>Distance Learning option available (see page 45).</i>	3	ESH 2410 – Environmental Sampling and Analysis <i>Previously EPT 132</i> Introduces students to the fundamentals of environmental chemistry, this course focuses on chemical and instrumental analysis, sampling and preservation techniques in water, wastewater, soil, air and food testing. (15 theory + 75 lab hours per term)	3
ESH 2016 – Occupational Safety I <i>Previously EPT 214A</i> Introduces inspections, personal protective equipment, fire protection, hazardous materials, walking/working surfaces, electrical standards and bloodborne pathogens. An OSHA General Industry Outreach Program 10-hour certificate is awarded on successful completion. <i>Distance Learning option available (see page 45).</i>	1	ESH 2414 Radiation Protection I <i>Previously EPT 121 (Prerequisite: MATH 0930 or division approval)</i> Presents foundation topics including basic engineering calculations, nuclear terminology, basic nuclear physical properties and processes, massenergy conversions, sources of ionizing radiation and radioactive decay and radioactivity calculations. Lecture is supplemented with demonstration and hands-on activities.	4
ESH 2017 – Occupational Safety II <i>Previously EPT 214B</i> Covers lock-out/tag-out, material handling, hazardous communication (MSDS & labeling), machine guarding, welding/cutting/brazing, confined spaces, hearing conservation and general environmental controls. <i>Distance Learning option available (see page 45).</i>	1	ESH 2415 Radiation Protection II <i>Previously EPT 122 (Prerequisite: EPT 2414 or division approval)</i> Develops concepts introduced in EPT 2414 and presents topics in interactions of radiation with matter, biological effects of ionizing radiation, radiation protection standards, the ALARA philosophy, implementation of exposure controls and radiation detector theory. Lecture is supplemented with demonstration and hands-on activities.	4
ESH 2018 – Occupational Safety III <i>Previously EPT 214C</i> Introduces hazardous substances, respiratory standards, hazard analysis, record keeping and workers\ compensation. An OSHA General Industry Safety and Health Outreach Program 30-hour certificate will be awarded on successful completion of EPT 2016, 2017 and 2018. <i>Distance Learning option available (see page 45).</i>	1	ESH 2899 Environmental Safety and Health Capstone Course <i>(Recommended Prerequisites: ESH 1809; Prerequisites: division approval)</i> Covers safe work practices at hazardous waste sites. Procedures specified by OSHA in the 29CFR 1910.120 regulation concerning safety and health plans, site characterization and analysis, waste removal and remedial operations. Students must complete 40 contact hours of instruction to meet OSHA’s certification requirements in the training portion of 29 CFR 1910.120. Students will also learn how to prepare a professional port folio that demonstrates the core and technical competencies. (Taken during student’s last term) (15 theory + 37.5 lab hours per term)	2
ESH 2097 – Independent Study <i>Previously EPT 297 (Prerequisite: division approval)</i> Focuses on a specific problem and studied while working with an instructor.	Variable	ESOL – English for Speakers of Other Languages (Division of Educational and Career Advancement) <i>Note: Adult education classes are available for lower-level learners of English as a Second Language (ESL). See page 288 for more information.</i>	
ESH 2098—Internship <i>(Prerequisite: division approval)</i> Provide an opportunity for the students to work for one term in an appropriate environmental safety and health field. Position is not paid.	3	ESOL 0550 – ESOL for College Success <i>(Prerequisite: Completion of Adult Education ESL 070 and/or CASAS score of 236; Accuplacer Reading score of 0-58 and Accuplacer Sentence Skills score of 0-52)</i> An English course for speakers of other languages. Designed for students who are planning to work toward a degree or certificate. Focuses on helping students improve reading, writing, listening and speaking skills. Emphasis is on English used in college.	3

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Course Subject Code/Course number – Course Name**Credit Hours****ESOL 0096, 0196...0996 – ESOL Special Topics***(all courses ending in 96 are topics courses)**Previously ESL 096*

Presents various topics. See Schedule of Classes.

1-3**ESOL 1096, 1196...1996 – ESOL Special Topics***(all courses ending in 96 are topics courses)**Previously ESL 196*

Presents various topics. See Schedule of Classes.

1-3**ESOL 2096, 2196...2996 – ESOL Special Topics***(all courses ending in 96 are topics courses)**Previously ESL 296*

Presents various topics. See Schedule of Classes.

1-3**ETAP – Electrical Trades Apprenticeship** *(Applied Technologies Division)***ETAP 1115 – Electrical Trades Apprenticeship***Previously ETAP 198A (Prerequisite: current full-time employment in the electrical trades industry or division approval)*

Provides 75–105 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

5-7**ETAP 1125 – Electrical Trades Apprenticeship***Previously ETAP 198B (Prerequisite: current full-time employment in the electrical trades industry or division approval)*

Provides 75–105 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

5-7**ETAP 1215 – Electrical Trades Apprenticeship***Previously ETAP 198C (Prerequisite: current full-time employment in the electrical trades industry or division approval)*

Provides 75–105 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

5-7**ETAP 1225 – Electrical Trades Apprenticeship***Previously ETAP 198D (Prerequisite: current full-time employment in the electrical trades industry or division approval)*

Provides 75–105 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

5-7**ETAP 1315 – Electrical Trades Apprenticeship***Previously ETAP 198E (Prerequisite: current full-time employment in the electrical trades industry or division approval)*

Provides 75–105 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

5-7**ETAP 1325 – Electrical Trades Apprenticeship***Previously ETAP 198F (Prerequisite: current full-time employment in the electrical trades industry or division approval)*

Provides 75–105 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

5-7**ETAP 1415 – Electrical Trades Apprenticeship***Previously ETAP 198G (Prerequisite: current full-time employment in the electrical trades industry or division approval)*

Provides 75–105 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

5-7**Course Subject Code/Course number – Course Name****Credit Hours****ETAP 1425 – Electrical Trades Apprenticeship***Previously ETAP 1987H (Prerequisite: current full-time employment in the electrical trades industry or division approval)*

Provides 75–105 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

5-7**FILM – Film Technician Training Courses** *(Applied Technologies Division)***FILM 1010 – Film Technician Training I***(Prerequisite: division approval)*

Introduces students to the various crafts and skills of the “below the line” component of the motion picture industry via classroom instruction, job shadowing and hands on applications. A significant time investment of approximately 100 hours outside of class will be required to participate in this course. (45 theory + 255 lab hours per term) Course fee: \$490.

12**FILM 1020 – Film Technician Training II***(Prerequisite: FILM 1010)*

This second term course continues with the training initiated in the Film Technician Training I course. Students will begin to specialize in the film/studio crafts based on their demonstrated skills and interest. A significant time investment of approximately 100 hours outside of class will be required to participate in this course. (45 theory + 255 lab hours per term) Course fee: \$490.

12**FILM 2095 – Cooperative Education***Previously FILM 299 (Prerequisite: permission of director)*

Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is not paid.

1-12**FILM 2096, 2196...2996 – Special Topics***(all courses ending in 96 are topics courses)**Previously FILM 296 (Prerequisite: division approval)*

Explores specialized areas of the movie industry.

1-12**FILM 2097 – Independent Study***Previously FILM 297 (Prerequisite: permission of director)*

Allows the student and instructor to define a specific problem in the area of the student’s interest and directly related to the program. The student develops and executes a solution using analytical techniques appropriate to the problem. An oral presentation may be required.

1-12**FILM 2098 – Internship***Previously FILM 298 (Prerequisite: permission of director)*

Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is not paid.

1-12**FIN – Financial Services Courses** *(Business & Information Technology Division)***FIN 1010 – Financial Literacy Complete***Previously FIN 102*

Introduces students to the basics of money management and financial skills necessary to meet real-world challenges. The course is interactive and will cover concepts and decision making through illustrations and real-life problems. Topics covered include budgeting, managing your money, borrowing money and planning for the future. FIN 1011 plus FIN 1012 plus FIN 1013 are equivalent to this course.

3**FIN 1011 – Financial Literacy I***Previously FIN 102A*

Managing your money is the main topic. This course is interactive and will cover concepts and decision making about banks, checking accounts, creating personal budgets, savings accounts and record keeping.

1

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
FIN 1012 – Financial Literacy II <i>Previously FIN 102B</i> Borrowing money and establishing credit are topics of this course. Students will be introduced to credit reports, employment issues, taxes and deductions. The course is interactive and will cover concepts and decision making through illustrations and real-life problems.	1	FIN 2120 – Consumer Lending <i>Previously FIN 105 (Recommended prerequisite: FIN 1100)</i> Covers regulations governing credit practices, loan processing, cross selling and collections.	3
FIN 1013 – Financial Literacy III <i>Previously FIN 102C</i> Planning for the future, home buying, financial planning, saving and investing are the main topics of this course. The course is interactive and will cover concepts and decision making through illustrations and real-life financial issues.	1	FIN 2130 – Commercial Lending <i>Previously FIN 115 (Recommended prerequisite: FIN 1100)</i> Covers technical side of commercial lending and important human relations skills.	3
FIN 1096, 1196...1996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously FIN 296</i> Explores current topics in financial services.	1-3	FIN 2210 – Finance <i>Previously FIN 248 (Prerequisites: ACCT 1111 and 1112 and 1109; recommended prerequisite: ACCT 1210)</i> Presents an overview of the major concepts of finance focusing on the financial system and investments.	3
FIN 1100 – Principles of Banking <i>Previously FIN 101</i> Surveys major aspects of banking from the fundamentals of negotiable instruments to contemporary issues.	3	FIN 2510 – Analyzing Financial Statements <i>Previously FIN 107 (Prerequisite: ACCT 1111)</i> Introduces financial analysis and skills needed to assess a borrower's ability to repay loans.	3
FIN 1310 – Fundamentals of Risk Management and Insurance <i>Previously FIN 249</i> Explores the business and personal exposures to risk and the concepts and methods of minimizing and insuring against those risks.	3	FITT – Fitness Courses (<i>Health, Wellness & Public Safety Division</i>)	
FIN 1510 – Basics of Strategic Planning <i>Previously FIN 111</i> Focuses on budgeting and planning concepts on a personal level for eventual use in business situations. (5 weeks)	1	FITT 1010 – Foundations of Exercise Science <i>Previously FITT 209 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, BIO 1310/1392 or department approval)</i> Covers how the human body responds and adapts to exercise and physical training. Students will learn how to apply this information to design exercise programs. (30 theory + 37.5 lab hours per term) Fall only.	3
FIN 2095 – Cooperative Education <i>Previously FIN 299 (Prerequisites: ACCT 1112 and FIN 1100 and division approval)</i> Provides students the opportunity to work a minimum of 150 hours in a new job experience in banking or training-related supervised workstations. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer. The student and employer determine the weekly contact hours.	4	FITT 1071 – The Business of Personal Fitness Training <i>Previously FITT 211 (Prerequisite: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent)</i> Focuses on the business of personal training, including marketing services and programs, day-to-day operations, documentation, financial considerations, liability concerns and trends and issues in the health/fitness industry. (30 theory + 37.5 lab hours per term) Fall only.	3
FIN 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously FIN 296</i> Explores current topics in financial services.	1-3	FITT 1072 – Kinesiology <i>Previously FITT 277 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, Pre- or corequisite: FITT 1010)</i> Covers the physiological and kinesiological aspects of muscular fitness training. Special emphasis is placed on designing strength, endurance, hypertrophy and power resistance/weight training programs. (30 theory + 37.5 lab hours per term) Fall only.	3
FIN 2097 – Independent Study <i>Previously FIN 297 (Prerequisite: division approval)</i> Allows student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.	Variable	FITT 1092 – Cardio Kick Boxing Provides basic instruction in cardiovascular exercise utilizing non-contact kick boxing movements (punches, kicks, footwork, combinations, etc.). Taught at a beginning level for individuals who have never participated in a cardio kickboxing program. (45 lab hours per term)	1
FIN 2098 – Internship <i>Previously FIN 298 (Prerequisites: ACCT 1112 and FIN 1100 and division approval)</i> Provides students the opportunity to work a minimum of 150 hours in a new job experience in banking or training-related supervised workstations. Students are not paid for their work but are supervised jointly by CNM and the employer. The student and employer determine the weekly contact hours.	4	FITT 1093 – Weight Training for Women <i>Previously FITT 174</i> Introduces weight training designed for women and focuses on the use of free weights and machine exercises to develop muscle endurance, hypertrophy and muscular strength. (45 lab hours per term)	1
FIN 2110 – Bank Accounting <i>Previously FIN 109 (Recommended prerequisite: ACCT 1111)</i> Describes accounting and reporting system specifically for commercial banks in the context of their special reporting requirements. (5 weeks)	1	FITT 1095 – Cooperative Education <i>Previously FITT 299</i> Employs the student at an approved program-related work site and applies learned theory based on goals and objectives. (112.5 hours per term)	3
		FITT 1097 – Independent Study <i>Previously FITT 297</i> Focuses on a specific problem while working with an instructor.	Variable

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FITT 1098 – Fitness Technician Field Experience <i>Previously FITT 298 (Prerequisite: division approval)</i> Provides students with a supervised field experience in a fitness setting. (112.5 hours per term)	3
FITT 1192 – Body Sculpting <i>Previously FITT 151</i> Utilizes hand-held weights and exercise bands to tone, define, sculpt and strengthen major muscle groups in an aerobic setting. (45 lab hours per term)	1
FITT 1193 – Beginning Step Aerobics <i>Previously FITT 175</i> Introduces cardiorespiratory fitness, flexibility and body composition for individuals who have never participated in a step aerobics program. (45 lab hours per term)	1
FITT 1292 – Boxing Conditioning <i>Previously FITT 152</i> Presents highly intense, non-contact boxing activities covering basic boxing skills (stance and footwork, punches, combinations, etc.) as well as participation in general conditioning activities commonly performed by boxers. (45 lab hours per term)	1
FITT 1293 – Fall Prevention Training for Older Adults <i>Previously FITT 177 (Prerequisite: Physician release indicating student's ability to safely participate in moderate intensity physical activity is required)</i> Presents a highly structured activity based course to directly address the three sensory systems used for balance through a progressive, multi-faceted approach. In addition to individual assessments, students will develop strength, improve balance and learn strategies to help maintain independence with a renewed confidence for successful aging. (45 lab hours per term)	1
FITT 1392 – Candidate Physical Ability Test (CPAT) Preparation <i>Previously FITT 153</i> Covers highly intense activities that prepare individuals for the CPAT entrance test and the physical training portion of the firefighter academy. (45 lab hours per term)	1
FITT 1393 – Flexibility Training <i>Previously FITT 180</i> Increases and maintains joint range of motion as well as facilitates relaxation; includes abdominal training. (45 lab hours per term)	1
FITT 1492 – Step/Circuit Combo <i>Previously FITT 154</i> Uses a combination of step-aerobics and circuit resistance training with hand weights, resistance tubes and fit balls for individuals looking for a cross-training effect. No previous step experience is required. (45 lab hours per term)	1
FITT 1493 – Fit Ball Training <i>Previously FITT 181</i> Uses fit balls, exercise bands, medicine balls and hand weights to improve flexibility, coordination and extremity and core strength. (45 lab hours per term)	1
FITT 1503 – Sport Safety Training <i>Previously FITT 199</i> Covers the requirements for the sport safety training certification developed by the United States Olympic Committee and the American Red Cross (ARC). Upon successful completion of this course, the student will receive the Sport Safety certification from the ARC.	1

Course Subject Code/Course number – Course Name	Credit Hours
FITT 1570 – Applied Nutrition for Sport and Exercise <i>Previously FITT 225 (Prerequisites: FITT 1010 and ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent)</i> Provides basic understanding of the interrelationship among exercise, weight control and nutrition. Applications are made to dietary analysis, energy balance, fat loss and weight gain programs. (30 theory + 37.5 lab hours per term) Spring only.	3
FITT 1572 – Fitness Assessment and Exercise Prescription <i>Previously FITT 289 (Prerequisites: FITT 1010, 1072 and MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent)</i> Covers methods of assessing health status, cardiorespiratory and muscular fitness, flexibility and body composition in apparently healthy individuals and prescribing appropriate exercise programs. This is a capstone course for the certificate program. (30 theory + 37.5 lab hours per term) Spring only.	3
FITT 1575 – Exercise Prescription for Special Populations <i>Previously FITT 290 (Pre- or corequisite: FITT 1572)</i> Reviews the indications and contraindications for assessing and prescribing exercise programs for special populations (elderly, prepubescent children, pregnancy, low back pain, diabetes, spinal cord injury, etc.) (30 theory + 37.5 lab hours per term) Spring only.	3
FITT 1592 – Step Kick Combo <i>Previously FITT 155</i> Uses a combination of step-aerobics and cardio kickbox training for individuals looking for a crossstraining effect. No previous step experience is required. (45 lab hours per term)	1
FITT 1593 – Fundamentals of Fitness Yoga <i>Previously FITT 182</i> Introduces various techniques of fitness Yoga. Students are responsible for purchasing their own mats. (45 lab hours per term)	1
FITT 1692 – Beginning Country Western Dance <i>Previously FITT 160</i> Introduces dance basics including the Two-Step, Four-Count Swing, Waltz, Cotton-Eyed Joe, Line-Dance and Polka while learning how to lead and follow and dance with different partners. (45 lab hours per term)	1
FITT 1693 – Fundamentals of Pilates-Style Mat Training <i>Previously FITT 183</i> Teaches core strength and stabilization as well as improves joint range of motion and facilitate relaxation. Students are responsible for purchasing their own mats (45 lab hours per term)	1
FITT 1792 – Physical Fitness I <i>Previously FITT 170</i> Introduces assessment of muscular strength, muscular endurance, cardiorespiratory fitness, flexibility and body composition. Based on the assessments, the student designs and participates in a self-paced exercise program. (45 lab hours per term)	1
FITT 1793 – Pilates-Style Mat Training and Fitness Yoga Combo <i>Previously FITT 186</i> Introduction to the various techniques of Pilates-style mat training and fitness Yoga. Students are responsible for purchasing their own mat. (45 lab hours per term)	1

Course Subject Code/Course number – Course Name	Credit Hours
FITT 1892 – Fitness for Older Adults <i>Previously FITT 172 (Prerequisite: Physician release indicating student’s ability to safely participate in moderate intensity physical activity is required.)</i> Focuses on individualized, goal-oriented exercise programs for individuals 50 years of age and older based on assessment of muscular and cardiovascular fitness. Use machines, free weights and stretching activities to improve strength, endurance, range of motion, bone mass, balance and overall well-being. (45 lab hours per term)	1
FITT 1893 – Gentle Fitness Yoga <i>Previously FITT 187</i> Applying breathing and concentration, students will work on restoring/maintaining flexibility and strength. This class is ideal for those recovering from injury/illness, people with weight issues and mature person. Students are responsible for purchasing their own mat. (45 lab hours per term)	1
FITT 1992 – Circuit Training <i>Previously FITT 173</i> Covers structured strength training and aerobics to provide a total body workout within a single format. (45 lab hours per term)	1
FITT 1993 – Ultimate Frisbee <i>Previously FITT 190</i> Covers rules, techniques and tactics involved in playing Ultimate Frisbee while participating in various conditioning and skill-related drills and semi-competitive games. (45 lab hours per term)	1
FITT 2092 – Physical Fitness II <i>Previously FITT 171 (Prerequisite: FITT 1792)</i> Continuation of FITT 1792. (45 lab hours per term)	1
FITT 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously FITT 296 (Prerequisite: division approval)</i> Covers fitness problems and the advanced techniques that fitness professional’s use in responding to them.	1-6
FITT 2192 – Fitness for Older Adults II <i>Previously FITT 178 (Prerequisite: Physician release indicating student’s ability to safely participate in moderate intensity physical activity is required and FITT 1892.)</i> Continuation of FITT 1892 and is designed specifically for individuals 50 years of age and older. (45 lab hours per term)	1
FITT 2292 – Fitness Yoga <i>Previously FITT 184 (Prerequisite: FITT 1593)</i> Continuation of FITT 1593: Fundamentals of Fitness Yoga. Students are responsible for purchasing their own mat. (45 lab hours per term)	1
FITT 2392 – Pilates-Style Mat Training <i>Previously FITT 185 (Prerequisite: FITT 1693)</i> Continuation of FITT 1693: Fundamentals of Pilates-Style Mat Training. Students are responsible for purchasing their own mat. (45 lab hours per term)	1
FITT 2492 – Group Exercise Leadership Preparation <i>Previously FITT 201 (Prerequisite: Participation in 1000 level group exercise course)</i> Offers theoretical and practical skills and experience in guiding groups to safely participate in exercise classes. Prepare students for national certification exams in various fields of group exercise. (45 lab hours per term) Spring only.	1

Course Subject Code/Course number – Course Name	Credit Hours
FREN – French Courses (Communication, Humanities & Social Sciences Division)	
FREN 1101 – Beginning French I <i>Previously FREN 101</i> Introduces development of French language skills emphasizing listening, comprehension and speaking.	4
FREN 1102 – Beginning French II <i>Previously FREN 102 (Prerequisite: FREN 1101 or permission of instructor)</i> Continues course of study begun in FREN 1101.	4
FREN 2096, 2196...2996 – Topics in French <i>(all courses ending in 96 are topics courses)</i> <i>Previously FREN 296 (Prerequisite: varies)</i> Presents various topics. See Schedule of Classes .	3
FREN 2201 – Intermediate French <i>Previously FREN 201 (Prerequisite: FREN 1102 or permission of instructor)</i> Emphasizes enhancement of skills from FREN 1102 and further knowledge of the language and culture of France.	4
FREN 2202 – Intermediate French II <i>Previously FREN 202 (Prerequisite: FREN 2201 or permission of instructor)</i> Continues course of study begun in FREN 2201.	4
FS – Fire Science Courses (Health, Wellness & Public Safety Division)	
FS 1010 – Introduction to Fire Science <i>Previously FS 103 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Presents an overview of the fire service to include protection system ,history of the fire service, fire protection careers, employment requirements, fire service organizations, firefighting equipment and facilities and chemistry and behavior of fire. <i>Distance Learning option available (see page 45).</i>	3
FS 1096, 1196...1996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously FS 296(Prerequisite: division approval)</i> Presents current topics in fire protection and emergency services.	1-6
FS 1504 – Wild Land Firefighting <i>Previously FS 104 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Elementary Algebra Accuplacer score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval.)</i> Introduces wild land fire control practices and techniques, including suppression and prescribed burns based on fuels, terrain, weather and urban-wild land interface, as well as the use of hand and power tools. Successful completion confers S-130 and S-190, I-100, S-132 and Wild Land Structure Defense certifications.	3
FS 1512 – Building Construction <i>Previously FS 112 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Introduces building construction with emphasis on structural elements, construction materials, construction techniques, fire loading, fire resistance, fire spread and growth in buildings and fire division operations in various building types. Emphasis fire effects on building structural components. <i>Distance Learning option available (see page 45).</i>	3

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
FS 2001 – Fire Protection Systems <i>Previously FS 201 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Presents an in-depth study of fire protection system design and operation. Discusses a variety of fire suppression and detection systems.	3	FS 2416 – Command Strategy and Tactics I <i>Previously FS 224A (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment and extinguishing agents on the fire ground.	1
FS 2003 Hazardous Materials I <i>Previously FS 203A (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, RDG 0950 or Accuplacer score of 80 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, ENG 0950 or Accuplacer sentence skills score of 85 or division approval)</i> Covers recognition and identification of hazardous materials and defensive actions to prevent additional injuries and property and/or environmental damage. This course meets selected NFPA and OSHA requirements at the Hazardous Materials Awareness level. Students will receive a national IFSAC.	1	FS 2417 – Command Strategy and Tactics II <i>Previously FS 224B (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Includes structural fire fighting operations, urban search and rescue, aircraft emergencies and firefighter safety.	1
FS 2008 – Fire Protection Hydraulics and Water Supply <i>Previously FS 220 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.	3	FS 2418 – Command Strategy and Tactics III <i>Previously FS 224C (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent or division approval)</i> Covers specific incident management techniques including basic fireground operations involving high occupancy use and mass casualty incidents.	1
FS 2095 – Cooperative Education <i>Previously FS 299</i> Employs students at an approved program-related worksite and applies learned theory based upon goals/objectives of the Fire Science program.	3	FS 2422 – Fire Behavior and Combustion <i>Previously FS 222 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Explores the theories and fundamentals of how and why fires start, spread and how they are controlled.	3
FS 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously FS 296 (Prerequisite: division approval)</i> Presents current topics in fire protection and emergency services	1-6	FS 2805 Public Safety Response to Terrorism <i>Previously FS 205 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Provides instruction for first responders in fire service, emergency medicine, law enforcement and security and related fields who investigate, respond to and mitigate the effects of terrorist incidents to protect the public. Topics include terrorism concepts, weapons of mass destruction scenarios, emergency care, incident command and crime scene management and processing	3
FS 2098 – Fire Service Internship <i>Previously FS 298 (Prerequisite: division approval)</i> Provides opportunity for the student to work as a volunteer in an appropriate fire division. Position is not paid.	3	FS 2812 – Fire Investigation <i>Previously FS 212 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Focuses on investigative techniques to determine fire cause and origin for structural, vehicle, wildland and hazardous materials fires as well as explosions.	3
FS 2103 – Hazardous Materials II <i>Previously FS 203B (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, RDG 0950 or Accuplacer score of 80 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, or division approval)</i> (Note: Students are required to wear respiratory protection equipment and participate in simulated hazardous materials incidents. Students must complete a pulmonary function test and medical review at the student's expense. Documentation of the medical evaluation must be submitted prior to simulations.) Covers recognition and identification of hazardous materials and defensive actions to prevent additional injuries and property and/or environmental damage. This course meets selected NFPA and OSHA requirements at the Hazardous Materials Operations level. Students will receive a national IFSAC certification.	3	FS 2813 – Industrial Fire Protection <i>Previously FS 213 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Presents in-depth information regarding industrial loss control concepts focusing on industrial fire and safety hazards, hazardous materials, industrial fire brigades, fire division operations at industrial facilities and NFPP, ISFSI and OSHA fire brigade standards.	3
FS 2402 – Managing Community Fire Protection <i>Previously FS 202 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent or program director approval)</i> Covers legal aspects, program and personnel management, emergency management, EMS and rescue services, code administration, alternative delivery systems, training and trends in the fire service. certification. <i>Distance Learning option available (see page 45).</i>	3	FS 2814 – Facilities Inspection <i>Previously FS 214 (Prerequisites: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 0950 or Accuplacer Reading score of 80 or equivalent, or division approval)</i> Emphasizes inspections conforming to NFPA 101: Life Safety Code and applicable NFPA fire codes. Covers general and occupancy-specific requirements.	3

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
FS 2997 – Independent Study <i>Previously FS 297 (Prerequisite: division approval)</i> Focuses on a specific problem working with an instructor.	Variable	GIS 1010 – Remote Sensing <i>Previously GIS 207 (Pre- or corequisite: CM 2205, MATH 1410)</i> Introduces students to the basic concepts in remote sensing and explores the applications of current technology. Topics to be covered will include image analysis, the application and usage of various sensor devices, target interactions, interpretation of aerial photographs, the uses of quantitative satellite data, laser scanning aerial photographs and satellite data applications. (30 theory +45 lab hours per term)	3
FS 2999 – Fire Science Capstone Course <i>Previously FS 295(Prerequisite: division approval)</i> Preparation of a professional portfolio that demonstrates student’s mastery of technical and core competencies. (Taken during student’s last term)	1	GIS 2001 – Geographic Information Systems Software Applications I <i>Previously GIS 202 (Prerequisite: CP 1513)</i> Builds upon concepts introduced in GIS 110, covering vector and raster analysis procedures commonly utilized in Geographic Information Systems, including overlay, buffering, classification, network analysis and surface analysis. (30 theory +45 lab hours per term)	3
FSMG – Food Service Management Courses (Business & Information Technology Division) SEE CULN COURSES ON PAGE 323		GIS 2005 – Intro to 3-D Computer Visualization Techniques <i>Previously GIS 220L (Prerequisite: division permission)</i> Uses computer visualization software to give the student a broad base from which to create effective presentations strongly influenced by GIS applications. (30 theory +45 lab hours per term)	3
GEOG – Geography Courses (Communication, Humanities & Social Sciences Division)		GIS 2095 – Cooperative Education <i>Previously GIS 299 (Prerequisite: permission of program chair)</i> Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is paid.	3
GEOG 1101 – Physical Geography <i>Previously GEOG 101 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Introduces the physical elements of world geography through study of climate and weather, vegetation, soils, plate tectonics and the various landforms as well as the environmental cycles and distributions of these components with emphasis on their significance to humans.	3	GIS 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously GIS 296 (Prerequisite: permission of program chair)</i> Topics vary based on the requests from the community and available software, hardware and instructors.	1–6
GEOG 1102 – Human Geography <i>Previously GEOG 102 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Introduces the human elements of world geography, providing a systematic analysis of world population, religion, language, ethnicity, economic development, political units and resource issues.	3	GIS 2097 – Independent Study <i>Previously GIS 297 (Prerequisite: permission of program chair)</i> Allows the student and instructor to define a specific problem in the area of the student’s interest and directly related to the program. The student develops and executes a solution using analytical techniques appropriate to the problem. An oral presentation may be required.	1–6
GEOG 2096, 2196...2996 – Topics in Geography <i>(all courses ending in 96 are topics courses)</i> <i>Previously GEOG 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents various topics. See Schedule of Classes .	3	GIS 2098 – Internship <i>Previously GIS 298 (Prerequisite: permission of program chair)</i> Provides an opportunity for the student to work for one term on an intern basis in an appropriate training program. The position is not paid.	3
GEOG 2201 – World Regional Geography <i>Previously GEOG 201 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Combines elements of GEOG 1101 and 1102 to study the global inter-relationships of the physical environment and cultural characteristics, including ethnicity, population and development, on a regional basis.	3	GIS 2999 – Geographic Information Systems Software Applications II <i>Previously GIS 203 (Prerequisite: GIS 2001, programming language or permission of the program chair)</i> Applies knowledge gained from previous course to develop individualized projects of interest. Project development will encompass the full range of procedural approaches from planning, data acquisition, analysis, output and presentation. (15 theory +90 lab hours per term)	3
GEOG 2275 – Cartography <i>Previously GEOG 275 (Prerequisite: GEOG 1101 or 1102)</i> Covers the basic history of map-making and the various projections. Introduces basic concepts and techniques for the manipulation, analysis and graphic representation of spatial information. Includes processing, compilation and symbolization of spatial data and the application of related statistical techniques. Presents effective map layout and recent cartographic techniques.	3	GNHN – General Honors Courses (Communication, Humanities & Social Sciences Division)	
GIS – Geographic Information Systems Courses (Applied Technologies Division)		GNHN 1121 – General Honors: The Ancient Legacy <i>Previously GNHN 121A (Prerequisites: See page 42 for details; permission of instructor)</i> Introduces analysis of classic texts of the Greek, Hebrew, Roman and Christian traditions: ideas about virtue, knowledge, politics, religious faith and education.	3
GIS 1001 – Introduction to GIS Introduces concepts of Geographic Information Systems including applications, components, mapping, data acquisition and data capture. Laboratory component consists of exercises clearly demonstrating a number of typical uses for GIS software. Emphasis on understanding general concepts and theories that can be carried over to any number of existing GIS software packages. Global positioning system hardware and software also introduced. (30 contact hours theory and 45 hours contact lab)	3	GNHN 1122 – General Honors: The Modern Legacy <i>Previously GNHN 121M(Prerequisites: See page 42 for details; permission of instructor)</i> Introduces analysis of classic texts of Western culture from the Renaissance through the early 20th century: ideas about the individual, society, state, history, nature, progress and religion.	3
GIS 1005 – CAD for GIS/Surveying <i>Previously GIS 123 (Prerequisites: Pre- or corequisite: CM 2205)</i> Computer-aided drafting for civil engineering, surveying and land development to create and edit point data, parcel area computations and boundary information.	3		

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GNHN 2096, 2196...2996 – Topics in General Honors **3**
(all courses ending in 96 are topics courses)
 Previously GNHN 221 (Prerequisites: See page 42 for details; permission of instructor)
 Presents various topics. See **Schedule of Classes**

GTAP – General Trades Apprenticeship *(Applied Technologies Division)*

GTAP 1115 – General Trades Apprenticeship **5-7**
 Previously GTAP 198A (Prerequisite: current full-time employment in the general trades industry or division approval)
 Provides 75–105 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

GTAP 1125 – General Trades Apprenticeship **5-7**
 Previously GTAP 198B (Prerequisite: current full-time employment in the general trades industry or division approval)
 Provides 75–105 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

GTAP 1215 – General Trades Apprenticeship **5-7**
 Previously GTAP 198C (Prerequisite: current full-time employment in the general trades industry or division approval)
 Provides 75–105 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

GTAP 1225 – General Trades Apprenticeship **5-7**
 Previously GTAP 198D (Prerequisite: current full-time employment in the general trades industry or division approval)
 Provides 75–105 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

GTAP 1315 – General Trades Apprenticeship **5-7**
 Previously GTAP 198E (Prerequisite: current full-time employment in the general trades industry or division approval)
 Provides 75–105 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

GTAP 1325 – General Trades Apprenticeship **5-7**
 Previously GTAP 198F (Prerequisite: current full-time employment in the general trades industry or division approval)
 Provides 75–105 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

GTAP 1415 – General Trades Apprenticeship **5-7**
 Previously GTAP 198G (Prerequisite: current full-time employment in the general trades industry or division approval)
 Provides 75–105 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

GTAP 1425 – General Trades Apprenticeship **5-7**
 Previously GTAP 198H (Prerequisite: current full-time employment in the general trades industry or division approval)
 Provides 75–105 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

HIST – History Courses *(Communication, Humanities & Social Sciences Division)*

HIST 1101 – Western Civilization I **3**
 Previously HIST 101 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Emphasizes events, personalities, issues, rises and falls, covering ancient times through 1648.

HIST 1102 – Western Civilization II **3**
 Previously HIST 102 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Explores such topics as colonialism, the age of revolutions, expansionism and the Great Wars from 1648 to the present.

HIST 1161 – History of the United States I **3**
 Previously HIST 161 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Surveys economic, political, intellectual and social development of the U.S. from 1492 to 1877. Distance Learning option available (see page 45).

HIST 1162 – History of the United States II **3**
 Previously HIST 162 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Continues study begun in HIST 161, covering 1865 to the present. Distance Learning option available (see page 45).

HIST 2096, 2196...2996 – Topics in History **3**
(all courses ending in 96 are topics courses)
 Previously HIST 296 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Presents various topics. See **Schedule of Classes**.

HIST 2230 – Twentieth-Century Russia **3**
 Previously HIST 230 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Surveys Russian History from czarist absolutism through communist totalitarianism to the tentative introduction of a pluralist society.

HIST 2240 – Vietnam: War, Politics and Culture **3**
 Previously HIST 240 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Emphasizes causes of the war, military and political aspects, conduct and consequences of years of conflict in Vietnam: issues surrounding U.S. involvement in Vietnam and changes in the culture, institutions and political thought of the U.S. during and after the war.

HIST 2260 – History of New Mexico **3**
 Previously HIST 260 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Surveys New Mexico's history from 1500 to the present: contributions of and interactions among Native Americans, Hispanics, Anglos and others. Distance Learning option available (see page 45).

HIST 2270 – The American West **3**
 Previously HIST 270 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Explores the people, cultures, processes, ideas and environmental factors that shaped the history of the West. Examines topics and exploration, migration and immigration, land use and misuse, western violence and experiences of various ethnic groups of the region.

Course Subject Code/Course number – Course Name **Credit Hours**

HIST 2282 – Modern Latin American History **3**
Previously HIST 282 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110)
 Introduces Latin American history from the beginning of the revolutionary period in 1810 to the present.

HIT – Health Information Technology Courses *(Business & Information Technology Division)*

HIT 1010 – Introduction to Health Information Technology **1**
Previously HIT 101 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)
 Provides an overview of the Health Information Technology and Medical Coding programs and the health information profession as a career. Students are exposed to health care systems and organizations, accreditation associations, ethics, professionalism and confidentiality in the HIM field. A career in health information including job titles, salaries and future prospects are also covered.
Distance Learning option available (see page 45).

HIT 1020 – Medical Terminology and Anatomy **3**
Previously HIT 110 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)
 Covers the study of the language of medicine, focusing on prefixes, suffixes, word roots and their combining forms. Course includes word construction, spelling, usage, comprehension and pronunciation. Systems approach is used to present anatomy and physiology, symptomatology, pathology and diagnostic/ surgical procedures.
Distance Learning option available (see page 45).

HIT 1030 – Health Data Content and Structure **4**
Previously HIT 120 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent and ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent, Pre- or corequisite: HIT 1010 or division approval)
 Presents an overview of health care delivery and examines the role of various providers and disciplines throughout the continuum of health care services and the information system policies and procedures required by national health information initiatives. Emphasis is placed on the origin, use content and format of health records; storage and retrieval systems, numbering and filing systems, record retention procedures and the basic functions of the health information division such as abstracting, incomplete chart control and release of information, accreditation and licensure standards applicable to health records.
Distance Learning option available (see page 45).

HIT 1040 – Principles of Diseases **3**
Previously HIT 130 (Prerequisites: BIO 1310/1392 and HIT 1020 or division approval)
 Provides an introduction to the nature of disease and its effect on body systems. The focus is on disease processes affecting the human body via an integrated approach to specific disease entities. The course includes a review of normal functions of the appropriate body systems. Diseases are studied in relationship to their etiology, pathology, physical signs and symptoms, diagnostic procedures, complications, treatment modalities and prognosis.
Distance Learning option available (see page 45).

HIT 1050 – Pharmacology and Laboratory Procedures **2**
Previously HIT 160 (Prerequisites: BIO 1310/1392 and HIT 1020 or division approval)
 Provides students with an introduction to the principles of pharmacology and diagnostic testing procedures. Content includes drug terminology, abbreviations, drug effects, dosage, classifications and response to medications. Terminology associated with laboratory and diagnostic tests and their use in diagnosing and implications of resultant values are examined.

Course Subject Code/Course number – Course Name **Credit Hours**

HIT 1060 – Health Information Management Systems **3**
Previously HIT 140 (Prerequisites: IT 1010, CIS 1171 and 1181 and HIT 1030 or division approval)
 Provides an introduction to the use of information technology in the health care delivery system and different computer applications found in health information divisions. Emphasis is placed on the use of tools and techniques for the development of higher-level content in database processing, information and communication technologies, systems analysis and data quality/integrity. HIM-division specific applications are demonstrated and students have access to practice throughout the term. A database is used for the performance of HIPAA-related health care functions such as accounting of disclosure to provide students the opportunity to develop querying skills and the ability to create ad hoc reports. *(30 theory + 45 lab hours per term)*

HIT 1070 – Legal/Ethical Aspects of Health Information **3**
Previously HIT 150 (Prerequisites: HIT 1030 or division approval)
 Focuses on legal and regulatory requirements related to health information infrastructure, policies, rules and regulations for access and disclosure of medical information and patient confidentiality (HIPAA), release of information to authorized users, principles and organization of the judicial system and ethical standards of practice. Privacy issues and problems will be explored.
Distance Learning option available (see page 45).

HIT 1090 – Professional Practice Experience I **1**
Previously HIT 220 (Prerequisite: HIT 1030; Pre- or corequisites: HIT 1060 and 1070 and division approval)
 Requires a clinical experience in a health care facility medical record division. The experience will focus on the practice of skills related to the application of legal principles, the collection, storage and retention of health care data, record analysis and abstraction. Students will develop insight, understanding and skill in medical record procedures. Students currently employed in an acute care health information department may contact the program director regarding the process to waive part or all of the course. If the waiver is approved, the student may substitute an optional course approved by the program director. This is an unpaid work experience of a minimum of 40 hours.

HIT 1096, 1196...1996 – Topics **1-3**
(all courses ending in 96 are topics courses)
Previously HIT 296
 Explores current topics in Health Information Technology.

HIT 2010 – Classification of Diseases I (ICD – CM) **3**
Previously HIT 200 (Prerequisites: BIO 1310/1392 and HIT 1020 and 1030 and 1040 or division approval) (FOR MEDICAL CODING STUDENTS, Pre- or corequisites: HIT 1040 and 1050)
 Focuses on the principles, guidelines and conventions used in coding diagnoses and procedures using the International Classification of Diseases (ICD) Clinical Modifications (CM), Volumes 1, 2 and 3. Interpreting medical record information, choosing the required coding classification and assigning and sequencing codes correctly are emphasized. The concept of fraud and abuse is introduced. Medical records and case scenarios are used for hands-on application. *(30 theory + 45 lab hours per term)*

HIT 2020 – Classification of Diseases II **3**
Previously HIT 215 (Prerequisites: HIT 1030 and 1050 and 2010 or division approval)
 Focuses on intermediate ICD-CM coding applications, official coding and reporting guidelines, diagnostic/procedural groupings such as DRG and APC and other issues related to classification systems for maintaining specialized health information data. Procedures for resolving conflicting and ambiguous documentation and fraud and abuse are addressed. Interpreting medical record information, choosing the required coding classification and assigning and sequencing codes correctly continue to be emphasized. Medical records and case scenarios are used for hands-on application. Computerized classification systems will be used (3M encoder/QuadraMed encoder) *(30 theory + 45 lab hours per term)*

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Course Subject Code/Course number – Course Name**Credit Hours****HIT 2030 – CPT Coding****3***Previously HIT 210 (Prerequisites: HIT 2020 or division approval)*

Focuses on outpatient coding using CPT and HCPCS nomenclatures. Students translate descriptive procedures into a numeric code(s) using all sections of the CPT coding manual, application of HCPCS terminology and current regulations and established guidelines. Medical record documentation requirements, guidelines for different payer classes, correlation between coding and billing and fraud and abuse issues are discussed. Medical records and case scenarios are used for hands-on application. (30 theory + 45 lab hours per term)

HIT 2040 – Health Information Data Analysis**3***Previously HIT 240 (Prerequisites: IT 1010 and HIT 1030 and 1060 and 1090 or division approval; MATH 1210 recommended)*

Focuses on health care statistics and research and the practical application of health information concepts as they apply to health record systems and the health care industry. Institutional Review Board policies and processes, collection and retrieval and computation of hospital statistical data are covered as well as vital statistics and reportable diseases and conditions.

HIT 2050 – Health Information Supervision**3***Previously HIT 250 (Prerequisites: HIT 1030 and 1060 and 1090 or division approval)*

Focuses on the management and personnel skills necessary at the supervisory level. Basic management functions are presented using examples and situations specific to health information. Communication, motivation, budgeting, job analysis, recruitment, discipline, teamwork, committee representation and federal/state laws regarding personnel management are discussed and emphasized. Quality assessment and improvement standards and requirements of licensing, accrediting, fiscal and other regulatory agencies are presented. The use of quality improvement tools and techniques to improve division processes are emphasized. *Distance Learning option available (see page 45).*

HIT 2060 – Reimbursement Methodologies**2***Previously HIT 230A (Prerequisites: IT 1010 and HIT 1030 and 2010 or division approval)*

This course concentrates on current processes and support practices for health care reimbursement. Students are presented with the purpose of insurance and its benefits from a variety of government and third party payer sponsored health programs. Students analyze, apply and/or calculate DRGs, APCs, ASCs and RBRVS (prospective payment systems) This course will define and analyze the types of reimbursement methods, the concept of managed care, various payment systems, fee schedules, charge description master and fraud and abuse.

*Distance Learning option available (see page 45).***HIT 2070 – Coding Applications****2***Previously HIT 245 (Prerequisites: HIT 1030 and 2020 and 2030 and 2060 or division approval)*

Focuses on assisting the students in the development of coding skills and the application of those skills to different types of medical records. Students will code inpatient, emergency division, outpatient surgery and outpatient medical records. The process of interpreting medical record information, choosing the required coding classification and assigning and sequencing codes correctly will be addressed. The classroom will simulate the work environment. (15 theory + 45 lab hours per term)

HIT 2090 – Coding Professional Practice Experience I**2***Previously HIT 246 (Prerequisites: HIT 1030 and 2020 and 2030 and 2060 and division approval)*

Introduces the student to the clinical practice of medical record coding procedures. The students will observe professional and ethical behavior standards in a hospital, physician's office, or clinic or other health care setting. The student will correctly code medical records for reimbursement and practice appropriate security measures. This is an unpaid work experience of a minimum of 80 hours.

HIT 2096, 2196...2996 – Special Topics**1-3***(all courses ending in 96 are topics courses)**Previously HIT 296*

Explores current topics in Health Information Technology.

Course Subject Code/Course number – Course Name**Credit Hours****HIT 2097 – Independent Study****Variable***Previously HIT 297 (Prerequisite: division approval)*

Requires the student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.

HIT 2190 – Coding Professional Practice Experience II**2***Previously HIT 246A (Prerequisite: HIT 2090 and division approval)*

Builds on experiences attained in HIT 2090. This is an unpaid work experience of a minimum of 80 hours.

HIT 2290 – Professional Practice Experience II**2***Previously HIT 260 (Pre- or corequisites: HIT 2030 and 2060 and 2050 and division approval)*

Provides supervised clinical learning experience in a health care facility. Emphasis is on coding, qualitative analysis, quality assurance, utilization management and supervisory activities. Students will be assigned specific clinical projects to be completed at the site and will participate in management and administrative activities as permitted by the site supervisor. This is an unpaid work experience requiring a minimum of 80 hours.

HIT 2999 – Health Information Technology Seminar**1***Previously HIT 295 (Prerequisite: Candidate for graduation and division approval; Pre- or corequisite: HIT 2290)*

Focuses on reflection of clinical experiences, AHIMA exam preparation and current topics in health care.

HLTH – Health Courses (Division of Educational & Career Advancement)**HLTH 0850 – Introduction to Health Occupations****3***Previously HLTH 100*

Explores various medical careers and introduces medical terminology and selected body systems. Integrates concepts with the study of anatomy, physiology and patho-physiology. (45 theory hours + 15 lab hours per term)

HLTH – Health Courses (Health, Wellness & Public Safety Division)**HLTH 1001 – Clinical Preparation****1***Previously HLTH 102*

Designed to prepare Health, Wellness & Public Safety Division students for their clinical experience regardless of the health discipline they have chosen to study. The course will provide CPR, Blood Borne Pathogen, HIPPA, First Aid and OSHA certification. Program fee: Published in the **Schedule of Classes**.

HT – Hospitality and Tourism Courses (Business & Information Technology Division)**HT 1096, 1196...1996 – Topics****1-3***(all courses ending in 96 are topics courses)**Previously HT 296*

Covers current topics in hospitality and tourism.

HT 1101 – Introduction to Hospitality and Tourism Today**3***Previously HT 101 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)*

Presents organization and structure of hotels, restaurants and clubs, business ethics, franchising, management contracts, areas of management responsibility and examines the many facets of tourism.

HT 1102 – The Lodging and Food Service Industry**3***Previously HT 102 (Prerequisite: HT 1101, RDG 0750 or Accuplacer Reading score of 69 or equivalent)*

Presents the basics of the lodging and food service industry by tracing the industry's growth and development both nationally and internationally by reviewing the organization of hotel and food and beverage operations and by focusing on industry opportunities and future trends.

Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
HT 1104 – Tourism and the Hospitality Industry <i>Previously HT 104 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)</i> Focuses on how and why people travel, how travel acts to satisfy needs and wants and how marketing efforts can influence travel decisions.	3	HT 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously HT 296</i> Covers current topics in hospitality and tourism.	1-3
HT 1106 – Front Office Procedures <i>Previously HT 106 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)</i> Presents management concepts of front office functions and how front office activities affect other divisions. The computer is used throughout every phase of the guest cycle. <i>(45 theory + 15 lab hours per term)</i>	3	HT 2097 – Independent Study <i>(all courses ending in 97 are independent study courses)</i> <i>Previously HT 297 (Prerequisite: division approval)</i> Requires student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.	Variable
HT 1108 – Hospitality Supervision <i>Previously HT 108 (Prerequisite: HT 1101 or 1102 or division approval)</i> Focuses on managing people from a supervisor viewpoint, controlling labor costs, time management, increasing productivity and managing change. <i>Distance Learning option available (see page 45).</i>	3	HT 2098 – Internship <i>Previously HT 298 (Prerequisite: division approval)</i> Requires a minimum of 150 work hours at a business or training-related supervised workstation. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Students are not paid for their work but are supervised jointly by CNM and the company.	4
HT 1128 – Hotel/Motel Housekeeping Management <i>Previously HT 128 (Prerequisite: HT 1101 or 1102 or division approval)</i> Covers the systematic approach to managing housekeeping operations in the hospitality industry.	3	HT 2141 – Marketing of Hospitality Services <i>Previously HT 141 (Prerequisite: HT 1101 or 1102 or division approval)</i> Employs concepts to develop, implement and evaluate a marketing plan to identify and reach prospective customers using marketing tactics specific to hospitality services. <i>Distance Learning option available (see page 45).</i>	3
HT 1131 – Club Management <i>Previously HT 131 (Prerequisite: HT 1101 or 1102 or division approval)</i> Introduces club management. Topics include club boards of directors, service excellence, leadership, strategic management, club marketing, food and beverage operations, financial and computer systems.	3	HT 2144 – Hospitality Sales and Marketing <i>Previously HT 144 (Prerequisite: HT 1101 or 1102 or division approval)</i> Emphasizes marketing within the tourism and hospitality industry. Topics include target markets, marketing plans, advertising and promotion and identification of emerging trends in consumer preferences and tastes.	3
HT 1132 – Hotel/Motel Human Resources Management <i>Previously HT 132 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Presents a systematic approach to human resources management in the hospitality industry and analyzes contemporary issues, practices and trends within the hospitality industry. <i>Distance Learning option available (see page 45).</i>	3	HT 2200 – Financial Accounting for the Hospitality Industry <i>Previously HT 201 (Prerequisite: ACCT 1111 or OTEC 1112 or division approval)</i> Presents a complete review of the fundamentals of financial accounting as it relates to tourism and hospitality. Techniques include projections for revenues, expenses and net income, control of inventory and cash flow and analysis and interpretation of financial statements.	3
HT 1146 – Convention Management and Service <i>Previously HT 146 (Prerequisite: HT 1101 or 1102 or division approval)</i> Focuses on convention and group business markets. Marketing and sales strategies and techniques are presented.	3	HT 2205 – Hospitality Industry Computer Systems <i>Previously HT 206 (Prerequisites: IT 1010 and HT 1101 or 1102 or division approval)</i> Explores the high-technology skills required in the tourism and hospitality industry. Reservations systems, room management and guest accounting, property management systems interfaces, food and beverage applications and management of information systems are emphasized. <i>(45 theory + 15 lab hours per term)</i>	3
HT 1161 – Hotel/Motel Food and Beverage Management <i>Previously HT 161 (Prerequisite: HT 1101 or 1102 or division approval)</i> Covers the challenges and responsibilities involved in managing a food and beverage operation.	3	HT 2210 – Food and Beverage Controls <i>Previously HT 168 (Prerequisite: HT 1101 or 1102 or division approval)</i> Introduces the process of resource control to reduce costs in food and beverage operations. Maximizing revenue and profit levels, effective budgeting and staffing and satisfying the demand of guests are stressed.	3
HT 1164 – Food and Beverage Service <i>Previously HT 164 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Focuses on the management of food and beverage service outlets, cafeterias, coffee shops, room service, banquet areas, dining rooms and basic service principles with emphasis on the special needs of guests. <i>Distance Learning option available (see page 45).</i>	3	HT 2215 – Hospitality Purchasing Management <i>Previously HT 172 (Prerequisite: CULN 1102 or HT 1101 or 1102 or division approval)</i> Focuses on the development and implementation of an effective purchasing program involving issues such as supplier relations, supplier selection, negotiation and evaluation. <i>Distance Learning option available (see page 45).</i>	3
HT 1166 – Quality Sanitation Management <i>Previously HT 166 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)</i> Covers sanitation management and risk reduction techniques. Quality sanitation and cost-control techniques, compliance strategies and sanitation control points are emphasized.	3	HT 2221 – Hospitality Law <i>Previously HT 221 (Prerequisites: HT 1101 or 1102 and HT 1132 or division approval)</i> Focuses on the various legal considerations facing the tourism and hospitality industry. Topics include contractual obligations, torts, labor law, ADA and privacy issues.	3
HT 2095 – Cooperative Education <i>Previously HT 299 (Prerequisite: division approval)</i> Requires a minimum of 150 hours at a business or training-related supervised workstation. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer.	4		

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Course Subject Code/Course number – Course Name**Credit Hours****HT 2225 – Gaming Operations and Management** 3*Previously HT 253 (Prerequisite: HT 1101 or 1102 or division approval)*

Emphasizes the organizational structure of casinos and their personnel. Topics include gaming behavior, marketing, player rating, slot volatility, casino layout and table games management. The strategies and procedures that need to be used to protect the integrity of table games and the role of surveillance in the prevention and detection of scam artists and cheaters are examined.

HT 2228 – Gaming Controls 3*Previously HT 254 (Prerequisites: HT 1101 or 1102 or division approval)*

Examines the regulatory systems and functions of gaming regulators. Topics include conducting licensing and background investigations, criminal activity and law enforcement and procedures for audits.

HT 2230 – Hospitality Industry Training 3*Previously HT 136 (Prerequisite: HT 1101 or 1102 or division approval)*

Examines the roles of supervision and training for the tourism and hospitality industry and the development of competent staff. Various types of training and learning techniques are emphasized.

HT 2232 – Event Planning 3*(Prerequisite: HT 1101 or 1102 or division approval)*

An overview of event planning ranging from special events, festivals, meetings and weddings. Focus will be on design, planning and organization of events including marketing and volunteer management.

HT 2235 – Leadership and Management in the Hospitality Industry 3*Previously HT 124 (Prerequisite: HT 1101 or 1102 or division approval)*

Explores quality concepts and tools within the hospitality industry. High-performance team building, strategic career plans and managing organizational change are covered.

HT 2999 – Managerial Decisions in the Hospitality Industry 3*Previously HT 295 (Prerequisite: division approval)*

Focuses on communication, resourcefulness, professionalism, industry knowledge and decision making. Students will be encouraged to make managerial judgements based on case studies. Assessment is primarily based on the steps taken to reach decisions.

HUC – Health Unit Coordinator Courses *(Health, Wellness & Public Safety Division)***HUC 1010 – Health Unit Coordinator Theory and Lab** 8*Previously HUC 101L (Prerequisites: IT 0850 or program director approval, RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, Corequisite: HUC 1090)*

Includes medical abbreviations and terminology, simple anatomy and physiology, transcription of doctor's orders, computerized patient information systems, communication skills, ethical/legal behavior and the role of a health unit coordinator. (8 weeks; 75 theory + 135 lab hours per term)

HUC 1090 – Health Unit Coordinator Clinical Practice 3*Previously HUC 131C (Prerequisite: HLTH 1001; Corequisite: HUC 1010)*

Includes clinical experience in local hospitals and hospital out-patient clinics. (5 weeks; 135 clinical hours per term) Program fee: Published in the **Schedule of Classes**.

HUC 1096, 1196...1996 – Topics in Health Unit Coordinator 1-6*(all courses ending in 96 are topics courses)**Previously HUC 296*

Explore various topics of interest in the field of Health Unit Coordinating.

Course Subject Code/Course number – Course Name**Credit Hours****HUM – Humanities Courses** *(Communication, Humanities & Social Sciences Division)***HUM 1111 – Cultures and Civilization Ancient to Renaissance** 3*Previously HUM 111 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)*

Introduces history, art, literature, religion and ideas of early world civilizations: Egypt, Mesopotamia, India, China, Greece, Rome, Europe, Africa and pre-Columbian America.

HUM 1121 – Cultures and Civilization Renaissance to Present 3*Previously HUM 121 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)*

Continues course of study begun in HUM 1111: history, art, literature, music and ideas of world civilizations from the Renaissance to present.

HUM 2096, 2196...2996 – Topics in Humanities 3*(all courses ending in 96 are topics courses)**Previously HUM 247 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)*

Presents various topics. See **Schedule of Classes**.

IB – International Business Courses *(Business & Information Technology Division)***IB 1010 – Introduction to International Business** 3*Previously IB 101 (Prerequisite: RDG 0750 or ESL 0750 or Accuplacer Reading score of 69 or equivalent)*

Introduces international business and the globalization of the economy. The student will be introduced to objectives, opportunities and challenges facing those who engage in business in foreign countries. Foreign organizations, cultural dynamics, trade channels, the legal environment and political considerations are discussed.

*Distance Learning option available (see page 45).***IB 1096, 1196...1996 – Topics** 1-3*(all courses ending in 96 are topics courses)**Previously IB 296*

Concentrates on current topics in international business.

IB 2096, 2196...2996 – Topics 1-3*(all courses ending in 96 are topics courses)**Previously IB 296*

Concentrates on current topics in international business.

IB 2097 – Independent Study Variable*Previously IB 297 (Prerequisite: division approval)*

Requires student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.

IB 2101 – International Marketing 3*Previously IB 201 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)*

Introduces marketing in a globalized world economy. The student will be introduced to a framework for analyzing marketing opportunities in different cultures and nations using the marketing mix.

*Distance Learning option available (see page 45).***IB 2102 – International Management** 3*Previously IB 202 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)*

Focuses on developing a student's understanding and application of skills used in managing cross-cultural differences when conducting business with people of different cultures in a global setting.

Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name **Credit Hours**

IB 2210 – Alternative Sources of Financing **1**
Previously IB 203A (Prerequisite: IB 1010 or division approval)
 Focuses on alternative financing sources for micropreneurs. These sources are non-traditional community based lenders (non-bank lenders) Includes how to obtain short-term and long-term financing for start-up businesses.

IB 2211 – Financing an Import/Export Business **1**
Previously IB 203B (Prerequisite: IB 1010 or division approval)
 Focuses on how and where to obtain financing to operate an existing international business. Includes domestic and international financing sources, commercial banks and government guarantees, e.g. the Small Business Administration and how to obtain letters of credit.

IB 2215 – Basics of Importing **1**
Previously IB 205A (Prerequisite: IB 1010 or division approval)
 Focuses on importing terminology, importing inco terms (standard trade definitions), flow of importing documents, customs broker assistance with importing issues, importing quality control, currency, ethics and environment for importers, trade shows, trademark and property rights.

IB 2216 – Basics of Exporting **1**
Previously IB 205B (Prerequisite: IB 1010 or division approval)
 Focuses on exporting terminology, exporting inco terms (standard trade definitions), flow of exporting documents, customs broker assistance with exporting issues, exporting quality control, currency, ethics and environment for exporters, trade shows, trademark and property rights.

IMAP – Industrial Plant Maintenance Apprenticeship (Applied Technologies Division)

IMAP 1116 – Industrial Plant Maintenance Apprenticeship **5-7**
Previously 198A (Prerequisite: Current full-time employment in the industrial plant maintenance field or division approval)
 Provides 75–105 hours of classroom instruction covering safety; industrial rules, policies and regulations: maintaining equipment and preventive measures and troubleshooting.

IMAP 1126 – Industrial Plant Maintenance Apprenticeship **5-7**
Previously 198B (Prerequisite: Current full-time employment in the industrial plant maintenance field or division approval)
 Provides 75–105 hours of classroom instruction covering safety; industrial rules, policies and regulations: maintaining equipment and preventive measures and troubleshooting.

IMAP 1216 – Industrial Plant Maintenance Apprenticeship **5-7**
Previously 198C (Prerequisite: Current full-time employment in the industrial plant maintenance field or division approval)
 Provides 75–105 hours of classroom instruction covering safety; industrial rules, policies and regulations: maintaining equipment and preventive measures and troubleshooting.

IMAP 1226 – Industrial Plant Maintenance Apprenticeship **5-7**
Previously 198D (Prerequisite: Current full-time employment in the industrial plant maintenance field or division approval)
 Provides 75–105 hours of classroom instruction covering safety; industrial rules, policies and regulations: maintaining equipment and preventive measures and troubleshooting.

IMAP 1316 – Industrial Plant Maintenance Apprenticeship **5-7**
Previously 198E (Prerequisite: Current full-time employment in the industrial plant maintenance field or division approval)
 Provides 75–105 hours of classroom instruction covering safety; industrial rules, policies and regulations: maintaining equipment and preventive measures and troubleshooting.

Course Subject Code/Course number – Course Name **Credit Hours**

IMAP 1326 – Industrial Plant Maintenance Apprenticeship **5-7**
Previously 198F (Prerequisite: Current full-time employment in the industrial plant maintenance field or division approval)
 Provides 75–105 hours of classroom instruction covering safety; industrial rules, policies and regulations: maintaining equipment and preventive measures and troubleshooting.

IMAP 1416 – Industrial Plant Maintenance Apprenticeship **5-7**
Previously 198G (Prerequisite: Current full-time employment in the industrial plant maintenance field or division approval)
 Provides 75–105 hours of classroom instruction covering safety; industrial rules, policies and regulations: maintaining equipment and preventive measures and troubleshooting.

IMAP 1426 – Industrial Plant Maintenance Apprenticeship **5-7**
Previously 198H (Prerequisite: Current full-time employment in the industrial plant maintenance field or division approval)
 Provides 75–105 hours of classroom instruction covering safety; industrial rules, policies and regulations: maintaining equipment and preventive measures and troubleshooting.

IT – Information Systems Courses (Division of Educational & Career Advancement)

IT 0196, 0296...0996 – Special Topics **1-3**
(all courses ending in 96 are topics courses)
Previously IT 096
 Presents various topics in computer science.

IT 0450 – Beginning Computer Basics **1**
Previously IT 090
 Provides basic computer vocabulary, hands-on mouse skills and computer confidence for students with no computer experience.

IT 0530 – Introductory Internet **1**
Previously IT 094
 Provides opportunities to develop beginning internet skills. Students will learn how to use the Internet as a learning aid and research tool. Recommended for entry-level students.

IT 0540 – Introductory E-mail **1**
Previously IT 093
 Provides opportunities to develop beginning electronic mail skills. Students will learn how to use CNM PassPort as well as other e-mail systems. Recommended for entry-level students.

IT 0620 – Introductory Operating Systems **1**
Previously IT 092
 Provides opportunities to develop beginning operating system skills and file management. Students will learn how to use Microsoft Windows operating system environment and how to use programs like Microsoft Windows effectively. Recommended for entry-level students.

IT 0630 – Introductory Word Processing **1**
Previously IT 091
 Provides opportunities to develop beginning word processing skills. Students will learn how to use Microsoft Word to create a word processed document. Recommended for entry-level students.

IT 0650 – Computer Basics **2**
Previously IT 098 (Half term)
 Provides opportunities to develop beginning computer skills in a half term course. Includes common word processing tasks, internet and understanding computer system components. Introduces concepts used in many Adult & Developmental Education courses.

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Course Subject Code/Course number – Course Name **Credit Hours**

IT 0850 – Basic Keyboarding/Computer Skills **3**
Previously IT 100
 Emphasizes beginning keyboarding, computer concepts, internet skills and basic word processing. Recommended for entry-level students. (45 theory + 15 lab hours per term)

IT 0870 – Basic Keyboarding (Self-Paced) **2**
Previously IT 099
 Emphasizes beginning keyboarding using the touch method. Recommended for entry-level students.

IT 0920 – Software Topics **1**
Previously IT 095
 Students will participate in a collaborative classroom environment creating group projects using a variety of programs. This type of classroom allows students to gain skills in computer programs such as Microsoft Excel or PowerPoint while also developing the skills needed to be successful in the workplace.

IT – Information Systems Courses (Business & Information Technology Division)

IT 1010 – Introduction to Computers **3**
Previously IT 101 (Recommended prerequisite: 25 wpm keyboarding skill)
 Introduces fundamental computer literacy, which includes hardware and software topics, with lecture and hands-on instruction. Computer applications include operating systems, word processing, spreadsheets, databases and the basics of using networked computers (e.g., e-mail and the Internet).
Distance Learning option available (see page 45).

IT 1020 – Integrating Business and Technology **3**
Previously IT 102 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent and ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent or division approval)
 Introduces the process and methods of Enterprise Architecture in the operation of a business organization. Using the concept of a framework, students will learn to consider the design and operation of a business from different aspects, perspectives and disciplines. Case studies and real-life problems are used to study about technology in the context of business. Students will learn to develop a framework and strategy to make practical business decisions and learn to work together to successfully meet business goals.
Distance Learning option available (see page 45).

IWAP – Iron Worker Apprenticeship (Applied Technologies Division)

IWAP 1116 – Iron Worker Apprenticeship **5-7**
Previously IWAP 198A (Prerequisite: current full-time employment in the iron worker industry or division approval)
 Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation.

IWAP 1126 – Iron Worker Apprenticeship **5-7**
Previously IWAP 198B (Prerequisite: current full-time employment in the iron worker industry or division approval)
 Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation.

IWAP 1216 – Iron Worker Apprenticeship **5-7**
Previously IWAP 198C (Prerequisite: current full-time employment in the iron worker industry or division approval)
 Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation.

Course Subject Code/Course number – Course Name **Credit Hours**

IWAP 1226 – Iron Worker Apprenticeship **5-7**
Previously IWAP 198D (Prerequisite: current full-time employment in the iron worker industry or division approval)
 Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation.

IWAP 1316 – Iron Worker Apprenticeship **5-7**
Previously IWAP 198E (Prerequisite: current full-time employment in the iron worker industry or division approval)
 Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation.

IWAP 1326 – Iron Worker Apprenticeship **5-7**
Previously IWAP 198F (Prerequisite: current full-time employment in the iron worker industry or division approval)
 Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation.

IWAP 1416 – Iron Worker Apprenticeship **5-7**
(Prerequisite: current full-time employment in the iron worker industry or division approval)
 Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation.

IWAP 1426 – Iron Worker Apprenticeship **5-7**
(Prerequisite: current full-time employment in the iron worker industry or division approval)
 Provides 75–105 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation.

JOUR – Journalism Courses (Communication, Humanities & Social Sciences Division)

JOUR 1171 – Writing for the Media I **3**
Previously JOUR 171 (Prerequisite: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)
 Introduces methods and skills of journalism, emphasizing journalistic conventions, news gathering and newswriting for print and broadcast media.

JOUR 2096, 2196...2996 – Topics in Journalism **3**
(all courses ending in 96 are topics courses)
Previously JOUR 296 (Prerequisite: JOUR 1171, ENG 1101, or permission of instructor)
 Covers various topics related to the theory and practice of journalism.

JOUR 2271 – Writing for the Media II **3**
Previously JOUR 271 (Prerequisite: JOUR 1171 or permission of instructor)
 Emphasizes advanced skills and professional journalistic conventions, gathering and writing news for print and broadcast media, including a variety of types of stories and legal and ethical topics.

JOUR 2290 – Journalistic Practice **3**
Previously JOUR 298 (Prerequisite: JOUR 1171 and permission of instructor)
 Provides opportunities for internship in working with journalism professionals and for conducting independent research and developing journalistic skills. Open to anyone but targeted for students working in the mass media.

JUD – Judicial Studies Courses *(Business & Information Technology Division)*

JUD 1096, 1196...1996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously JUD 296 (Prerequisite: division approval)</i> Explores current topics in judicial studies.	1–3
JUD 1110 – Introduction to Judicial Studies <i>Previously JUD 101 (Recommend prerequisites: ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Introduces concepts about the New Mexico judiciaries. Includes tracking of a civil and criminal case in each court. Familiarizes the student with the definition and use of legal terms. <i>Distance Learning option available (see page 45).</i>	3
JUD 1120 – Introduction to Court Operations and Ethics <i>Previously JUD 102 (Recommend prerequisites: ENG 0750 or Accuplacer Sentence Skills score of 69 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent or division approval)</i> Introduces concepts such as ethical and specific court operation issues with an emphasis on ethics in the workplace. Presented jointly by Judicial Education Center and CNM faculty. <i>Distance Learning option available (see page 45).</i>	2
JUD 2095 – Cooperative Education <i>Previously JUD 299 (Prerequisite: division approval)</i> Requires students to work a minimum of 150 hours at court sites. The student is paid by the court and is jointly supervised by CNM and the employer.	4
JUD 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously JUD 296 (Prerequisite: division approval)</i> Explores current topics in judicial studies.	1-3
JUD 2097 – Independent Study <i>Previously JUD 297 (Prerequisite: division approval)</i> Explores a specific problem defined by student and instructor in the area of the student’s interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.	Variable
JUD 2098 – Internship <i>Previously JUD 298 (Prerequisite: division approval)</i> Requires students to work a minimum of 150 hours at court sites. CNM and the employer jointly supervise the student.	4
JUD 2110 – Principles of Court Management <i>(Prerequisites: JUD 1110 or division approval)</i> Introduces the basic functions of court management including budgeting, human relations, leadership and supervisory skills, case management, information management, facilities management and strategic planning. <i>Distance Learning option available (see page 45).</i>	3

LAND – Landscaping Courses *(Applied Technologies Division)*

LAND 1101 – Plant Science <i>Previously LAND 101 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Introduces the fundamental principles of horticulture. Covers plant nomenclature, plant classification, plant processes, propagation techniques, plant physiology, plant pathology and various uses of plant materials.	3
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LAND 1192 – Plant Science Lab <i>Previously LAND 101L</i> Introduces the fundamentals practices of horticulture. Covers plant collecting and identification, classification, growth and development, practical propagation and planting techniques. <i>(45 lab hours a term)</i>	1
LAND 1201 – Soil Science <i>Previously LAND 102 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Introduces the student to soils and their various classifications, function and analysis. Covers soils biology, root zone interactions, nutrient cycling and safety.	3
LAND 1292 – Soil Science Lab <i>Previously LAND 102L</i> Introduces the student to soil analysis techniques, practical nutrient management, basic field exercises, labs and field safety. <i>(45 lab hours a term)</i>	1
LAND 1301 – Landscape Irrigation <i>Previously LAND 103 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Presents principle and techniques of competent irrigation design with an emphasis on water conservation. Introduces component identification, basic hydraulics, hydrostatics, hydrodynamics and system design and safety.	3
LAND 1392 – Landscape Irrigation Lab <i>Previously LAND 103L</i> Introduces the student to the fundamentals of irrigation system assembly, maintenance and repair with an emphasis on water conservation and system auditing. <i>(45 lab hours a term)</i>	1
LAND 1401 – Integrated Pest Management <i>Previously LAND 104 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Covers the principles and techniques for proper and environmentally responsible IPM. Focuses on topics such as pest identification, pest physiology, pest management, laws and environmental regulations and safety.	3
LAND 1501 – Landscape Design <i>Previously LAND 105 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Presents the fundamental principles of landscape design such as purpose, color, balance, symmetry, functionality, plant selection, with an emphasis on water conservation and client involvement.	3
LAND 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously LAND 296</i> Covers problems and the advanced techniques that landscaping professionals use in responding to them.	1–6
LAND 2201 – Plant Selection Focuses on appropriate plant selection for various landscaping situations such as residential, commercial, xeric, aquatic, interiorscapes and other pertinent applications.	3
LAND 2205 – Landscape Irrigation Design II <i>(Prerequisite: LAND 1301 or permission of instructor)</i> This course will build on the fundamental hydraulic principles presented in LAND 103 and expands knowledge, skills and abilities to gain competencies in rotor systems, drip system and water auditing.	3
LAND 2210 – Water Features This class will introduce the student to all aspects of proper water feature installation techniques that range from still water bogs to water falls and larger ponds. <i>(45 theory hours + 30 lab hours per term)</i>	3

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LAND 2997 – Independent Study **Variable**
 Previously LAND 297 (Prerequisite: division approval)
 Focuses on a specific problem while working with an instructor.

LAND 2995 – Cooperative Education **3**
 Previously LAND 299 (Prerequisite: division approval)
 Employs the student at an approved program-related work site and applies learned theory based on goals and objectives.

LPNR – Licensed Practical Nurse Refresher Courses (Health, Wellness & Public Safety Division)

LPNR 2010 – Refresher Theory/Lab **7**
 Previously LPNR 155L
 Covers medical-surgical and specialty-nursing trends, procedures and pharmacology.
 (6 weeks; 94 theory + 10 lab hours per term) Program fee: Published in the **Schedule of Classes**.
 Distance Learning option available (see page 45).

LPNR 2090 – Refresher Clinical Experience (CR/NC) **2**
 Previously LPNR 165C (Prerequisite: must have had a valid LPN license, professional CPR certified;
 Pre- or corequisite: LPNR 2010)
 Includes medical-surgical clinical experiences, administration of medications and patient care. (90 contact hours)
 Distance Learning option available (see page 45).

MATH – Mathematics Courses (Division of Educational & Career Advancement)

MATH 0196, 0296...0996 – Special Topics **1-3**
 (all courses ending in 96 are topics courses)
 Previously MATH 096
 Presents various topics in developmental math.

MATH 0440 – Math Anxiety **1**
 Previously MATH 092
 Offers students a chance to gain understanding of math anxiety and develop techniques to modify behaviors through the use of group discussion, journal entries and math study skills.

MATH 0450 – Introduction to Calculators **1**
 Previously MATH 094
 Prepares students in MATH 0950 and below to use calculators use in classes and everyday life.

MATH 0550 – Basic Mathematics **3**
 Previously MATH 097 C or S (Prerequisite: Accuplacer Arithmetic score between 0 – 30 or equivalent)
 Reviews whole numbers and decimals. Presents fractions, ratio and proportion and percents. Introduces basic geometry and measurement concepts. This course is typically offered in two different formats. Collaborative is a traditional/lecture style class that incorporates lecture, individual and group work and individual and group projects. In the self-paced format, students work at their own pace to move through the material. Self-paced courses are open entry/open exit and are listed in the **Schedule of Classes** with the note (!) (45 theory hours + 15 lab hours per term)

MATH 0750 – Basic College Mathematics **3**
 Previously MATH 099 C, S, P (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent)
 Integrates topics from basic mathematics, geometry and algebra. Helps prepare students to enter programs in Business & Information Technology, Applied Technologies, Health Wellness & Public Safety or MATH 0930. This course is typically offered in three different formats. Collaborative is a traditional/lecture style class that incorporates lecture, individual and group work and individual and group projects. In the Self-Paced format, students work at their own pace to move through the material. Self-paced courses are open

Course Subject Code/Course number – Course Name **Credit Hours**

entry/open exit and are listed in the **Schedule of Classes** with the note (!) In the Project-Based format, students use projects to reinforce the objectives for the course. Students will work in groups on projects that cover each of the topics required for completion of the class. (45 theory hours + 15 lab hours per term) Distance Learning option available (see page 45).

MATH 0930 – Algebraic Problem Solving I **3**
 Previously MATH 100A C or S (Prerequisite: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent)
 Presents the first of a two-course series in elementary algebra. Includes signed numbers, solving linear equations, formulas and graphing. This course is typically offered in two different formats. Collaborative is a traditional/lecture style class that incorporates lecture, individual and group work and individual and group projects. In the Self-Paced format, students work at their own pace to move through the material. Self-paced courses are open entry/open exit and are listed in the **Schedule of Classes** with the note (!) Satisfies prerequisite for MATH 0940, MATH 1110 (MATH 0940 is recommended) and MATH 1210. (45 theory hours + 15 lab hours per term)
 Distance Learning option available (see page 45).

MATH 0940 – Algebraic Problem Solving II **3**
 Previously MATH 100B C or S (Prerequisite: MATH 0930 or equivalent)
 Presents the second of a two-course series in elementary algebra. Includes exponents and polynomials, factoring and quadratics. This course is typically offered in two different formats. Collaborative is a traditional/lecture style class that incorporates lecture, individual and group work and individual and group projects. In the self-paced format, students work at their own pace to move through the material. Self-paced courses are open entry/open exit and are listed in the **Schedule of Classes** with the note (!) Satisfies prerequisite for MATH 1310. (45 theory + 15 lab hours per term)
 Distance Learning option available (see page 45).

MATH 0950 – Algebraic Problem Solving **3**
 Previously MATH 100 (Prerequisite: appropriate placement by exam [Accuplacer Elementary Algebra score of 72] or equivalent)
 Covers same material as MATH 0930 and MATH 0940 at a faster pace. One-term course designed for students with demonstrated ability in basic algebra. Satisfies prerequisite for MATH 1110, 1210 and 1310. (45 theory hours + 15 lab hours per term)

MATH – Mathematics Courses (Math, Science & Engineering Division)

MATH 1110 – Mathematics for Elementary and Middle School Teachers I **3**
 Previously MATH 111 (Prerequisite: MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent)
 Introduces the intuitive and logical background of arithmetic, sets, arithmetic algorithms, bases, integer properties, number theory and problem solving.

MATH 1115 – Mathematics for Elementary and Middle School Teachers II **3**
 Previously MATH 112 (Prerequisite: MATH 1110)
 Continues course of study begun in MATH 1110, emphasizing properties of rational and irrational numbers, real numbers as fractions and decimals, intuitive geometry and measurement.

MATH 1210 – Methods of Problem Solving **4**
 Previously MATH 119 (Prerequisite: MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent)
 Presents strategies for solving mathematical problems relying heavily on data patterns; sequences, set theory, combinatorics, probability, descriptive statistics, linear and quadratic modeling.

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MATH 1310** – Intermediate Algebra	4	MATH 1710* – Calculus I	4
<i>Previously MATH 120 (Prerequisite: MATH 0940 or Accuplacer Elementary Algebra score of 81 or MATH 0950 or equivalent)</i>		<i>Previously MATH 162 (Prerequisites: MATH 1410 and 1415 or Accuplacer College Level Math score of 100 or equivalent)</i>	
Emphasizes linear equations and inequalities, polynomials, exponents, rational expressions and equations, radical expressions and equations, quadratic equations; introduction to graphing and functions.		Introduces derivatives and definite integrals using graphing calculators: differentiation, antidifferentiation, limits, extrema, curve sketching and applications.	
<i>Distance Learning option available (see page 45).</i>			
MATH 1315 – College Algebra	3	MATH 1715* – Calculus II	4
<i>Previously MATH 121(Prerequisite: MATH 1310 or Accuplacer College Math score of 60 or equivalent)</i>		<i>Previously MATH 163 (Prerequisite: MATH 1710)</i>	
Focuses on functions and their graphs; investigation of linear, quadratic, polynomial, rational, exponential and logarithmic functions.		Continues course of study begun in MATH 1710. Emphasizes use of graphing calculators to cover integration techniques, numerical integration, improper integrals, some differential equations, series and applications.	
<i>Distance Learning option available (see page 45).</i>			
MATH 1316 – College Algebra Workshop	1	MATH 2096, 2196...2996 – Topics in Mathematics	3
<i>Previously MATH 122 (Corequisite: MATH 1315 and permission of instructor)</i>		<i>(all courses ending in 96 are topics courses)</i>	
Provides opportunity to explore advanced topics and applications of college algebra through collaborative problem solving.		<i>Previously MATH 296 (Prerequisite: varies)</i>	
		Presents various topics. See Schedule of Classes .	
MATH 1320 – A Survey of Mathematics	3	MATH 2110 – Mathematics for Elementary and Middle School Teachers III	3
<i>Previously MATH 129 (Prerequisite: MATH 1210 or 1310 or Accuplacer College Level Math score of 60 or equivalent)</i>		<i>Previously MATH 215 (Prerequisite: MATH 1115)</i>	
Focuses on the creative nature of mathematics through problems, readings, discussions of topics such as set theory, logic, number theory, basic geometry and probability.		Continues course of study begun in MATH 1115. Presents topics from later elementary and middle school curricula: probability, descriptive statistics, algebra, coordinate geometry, logic and LOGO software.	
MATH 1330** – Introduction to Probability and Statistics	3	MATH 2710* – Calculus III	4
<i>Previously MATH 145 (Prerequisite: MATH 1210 or 1310 or Accuplacer College Level Math score of 60 or equivalent)</i>		<i>Previously MATH 264 (Prerequisite: MATH 1715)</i>	
Introduces basic concepts in probability and statistics—simple data analysis and descriptive statistics, probability and probability models, sampling and statistical inference—with applications from varied fields.		Continues course of study begun in MATH 1715, including multivariate and vector calculus: level curves and surfaces, partial derivatives, gradients, tangent planes, directional derivatives, multiple integrals, cylindrical and spherical coordinates, applications.	
MATH 1340 – Geometry for Design	3	MATH 2810 – Applied Linear Algebra	3
<i>Previously MATH 206 (Prerequisite: High-school Geometry, MATH 1310)</i>		<i>Previously MATH 280 (Prerequisite: Math 1715)</i>	
Presents the mathematical basis of geometric practices used in structural and decorative design.		Presents systems of linear equations and matrices. Introduction to vector spaces and linear transformations. Rank, determinants, eigenvalues and eigenvectors. Applications. Efficient computational and numerical methods are studied.	
Surveys the major historical approaches to geometric study: Euclidean, descriptive, transformational, combinatorial, ornamental. Aesthetic-technological connections in cultural context.		MATH 2910 – Applied Ordinary Differential Equations	3
MATH 1410* – Trigonometry	3	<i>Previously MATH 285 (Prerequisite: MATH 1715; recommended: MATH 2710)</i>	
<i>Previously MATH 123 (Prerequisite: MATH 1315 or 1415 or Accuplacer College Level Math score of 86 or equivalent)</i>		Includes the elementary theory of ordinary differential equations, numerical methods, phase plane analysis, introduction to transform methods.	
Emphasizes use of graphing calculators to study trigonometric and inverse trigonometric functions; radian and degree measure, basic trigonometric identities, polar coordinates, solving triangles and other applications.			
MATH 1415* – Advanced Algebra	4		
<i>Previously MATH 150 (Prerequisite: MATH 1315 or Accuplacer College Level Math score of 86 or equivalent)</i>			
Explores functions (particularly exponential and logarithmic), conics, sequences and series and systems of equations using graphing calculators.			
MATH 1460* – Elements of Calculus I	3		
<i>Previously MATH 180 (Prerequisite: MATH 1315 or 1415 or Accuplacer College Level Math score of 86 or equivalent)</i>			
Emphasizes use of graphing calculators to study limits, derivatives, applications to graphing, extrema, antiderivatives, definite integrals in business and biological applications.			
MATH 1465* – Elements of Calculus II	3		
<i>Previously MATH 181(Prerequisite: MATH 1460)</i>			
Continues course of study begun in MATH 1460. Presents intensive study of substitution, integration by parts, numerical integration; introduces multivariate calculus and some differential equations.			

* *Students are required to use a TI 83 or TI 84 graphing calculator in this class. Any other calculator must be approved by instructor.*
 ***Students may be required to use a TI 83 or TI 84 graphing calculator in this class.*

MATT – Machine Tool Technology Courses (Applied Technologies Division)

MATT 1001 – Metals Math I	2
<i>Previously MATT 101 (Prerequisites: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)</i>	
Presents whole numbers, fractions and decimals, shop geometry and algebra, formulas and equations and the Pythagorean theorem. Emphasizes is on developing problem solving skills.	
MATT 1005 – Metals Blueprint Reading I	2
<i>Previously MATT 102 (Prerequisites: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)</i>	
Covers the interpretation of basic manufacturing and fabrication drawings, terminology, orthographic projection, sectional views, dimensions, tolerances, symbols and drawing standards.	

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
MATT 1030 – Metals Math II <i>Previously MATT 111 (Prerequisite: MATT 1001 or division approval)</i> Provides basic shop algebra, formulas, geometry and triangulation. Covers calculation of areas, volumes, material requirements, angles, applied trigonometry and advanced shop math applications.	2	MATT 1592 – Intermediate Milling Machine Principles <i>Previously MATT 120L (Prerequisite: MATT 1192 or division approval)</i> Continues a review of basic milling principles and operations, training offers safety, climb and conventional milling methods, hole production, slotting, pocket milling, rotary table work and basic CNC milling set-up and operation. (75 lab hours per term)	2
MATT 1035 – Metals Blueprint Reading II <i>Previously MATT 113 (Prerequisite: MATT 1005 or division approval)</i> Continues a review of basic shop blueprint interpretation, provides interpretation of complex manufacturing and fabrication drawings including sectional views, tolerances and allowances, surface texture and assembly drawings.	2	MATT 1692 – Intermediate Supporting Machine Tool Principles <i>Previously MATT 121L (Prerequisite: MATT 1292 or division approval)</i> Presents concentrated training in safety, surface grinding, tool reconditioning, production support and advanced quality assurance methods. (75 lab hours per term)	2
MATT 1060 – Machine Tool Technology Skills <i>Previously MATT 173</i> Covers basic knowledge and upgrade skills in the machine tool industry including safety, hand tools, lathe, mill, bench work, measurement, blueprint reading and shop math. (15 theory + 75 lab hours per term)	3	MATT 1792 – Computer Numerical Control I <i>Previously MATT 122L (Prerequisites: MATT 1001 and 1005 or division approval)</i> Presents basic computer skills necessary to program, set up and operate CNC milling and turning centers. Covers CNC manuscript and tape preparation, program troubleshooting and editing, tooling and workholding and fundamentals of CNC operation. (75 lab hours per term)	2
MATT 1065 – Metallurgy <i>Previously MATT 202</i> Introduces the basic science of metals including structure, properties, alloying, weldability and testing of ferrous and non-ferrous metals with emphasis on machining performance and applications.	2	MATT 2005 – Machine Tool Technology CAD/CAM <i>Previously MATT 214 (Prerequisite: MATT 1792)</i> Presents computer-assisted drafting as applied in machine tool technology on hardware typically found in the machine shop with specific instruction offered in CADKEY software.	2
MATT 1092 – Basic Lathe Principles <i>Previously MATT 103L (Prerequisites: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Introduces basic engine lathe principles and operations. Includes safety, setup, speeds and feeds, workholding devices and tooling, facing, turning, chamfering, shouldering and tailstock operations. (75 lab hours per term)	2	MATT 2025 – Advanced Machine Tool Technology Skills <i>Previously MATT 174 (Prerequisite: MATT 1060 or division approval)</i> Provides advanced instruction in safety, lathe, mill, blueprint reading and shop math. (15 theory + 75 lab hours per term)	3
MATT 1192 – Basic Milling Machine Principles <i>Previously MATT 104L (Prerequisites: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Introduces basic milling machine principles and operations. Covers safety, basic setup, speeds and feeds, tooling, workholding devices, squaring, step milling, drilling, reaming and tapping. (75 lab hours per term)	2	MATT 2092 – Advanced Lathe Principles <i>Previously MATT 208L (Prerequisite: MATT 1492 or division approval)</i> Reviews carbide tooling applications, boring and threading. Covers safety, setup and use of soft jaws and advanced production and CNC turning techniques. (75 lab hours per term)	2
MATT 1292 – Basic Supporting Machine Tool Principles <i>Previously MATT 105L (Prerequisites: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Introduces drill press, bandsaw, pedestal grinder and handtool principles and operations. Covers safety, care and use of hand tools, layout, toolbit grinding and machine care and maintenance. (75 lab hours per term)	2	MATT 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously MATT 296 (Prerequisite: division approval)</i> Enables students to pursue studies in specialized areas. This class may also be taken as an independent or guided study, as a refresher course or to sharpen skills prior to employer exams.	1–6
MATT 1392 – Basic Measurement and Inspection <i>Previously MATT 108L (Prerequisites: MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Provides practical exercises in basic metal shop measurement and inspection techniques, including use of rules, calipers, micrometers, comparison instruments and inspection reports. (75 lab hours per term)	2	MATT 2097 – Independent Study <i>Previously MATT 297 (Prerequisite: division approval)</i> Focuses on a specific problem while working with an instructor.	Variable
MATT 1492 – Intermediate Lathe Principles <i>Previously MATT 117L (Prerequisite: MATT 1092 or division approval)</i> Reviews basic engine lathe principles and operations with training in safety, precision turning and facing, production turning, taper turning, carbide tooling applications, power cutoff, boring, single point threading and basic CNC turning set up and operation. (75 lab hours per term)	2	MATT 2192 – Advanced Milling Machine Principles <i>Previously MATT 216L (Prerequisite: MATT 1592 or division approval)</i> Reviews rotary table work and locational operations. Offers safety, carbide shell mills, complex milling set-ups and advanced production and CNC milling techniques. (75 lab hours per term)	2
		MATT 2292 – Advanced Supporting Machine Tool Principles <i>Previously MATT 217L (Prerequisite: MATT 1692 or division approval)</i> Covers production support, safety, advanced surface grinding set ups and operations, assembly techniques, production inspection techniques to ANSI standards and CNC set-up and operation for production applications. (75 lab hours per term)	2
		MATT 2392 – Computer Numerical Control II <i>Previously MATT 218L (Prerequisite: MATT 1792 or division approval)</i> Reviews programming, manuscript and tape preparation and editing. Presents various programming languages, subroutines and interactive graphic programming. (75 lab hours per term)	2

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
MATT 2999 – Machine Tool Technology Capstone Course <i>Previously MATT 295 (Prerequisite: division approval)</i> Preparation of a professional portfolio that demonstrates student’s mastery of technical and core competencies.	1	MLT 1010 – Introduction to Medical Laboratory Sciences <i>Previously MLT 101</i> Introduces the student to basic concepts used in the medical laboratory including the divisions of the lab, lab personnel, safety, basic statistics, quality control, medical terminology and lab instrumentation. <i>Distance Learning option available (see page 45).</i>	1
MEMS – Micro-Electro-Mechanical Systems Courses (Applied Technologies Division)			
MEMS 1001 – Introduction to MEMS <i>Previously MEMS 101</i> Covers the theory, construction methods, terminology and application of this emerging field. MEMS, micro-machines and nanotechnology covers devices and systems ranging from DMDs (Digital Mirror Devices) used in Internet and communications switching systems, nano-inductors used in RF systems to biomedical “lab on a chip” systems which draw samples, via nanopumps, to identify sample components via infrared spectroscopy. <i>[Previously offered as PC 210] (30 theory + 45 lab hours per term)</i>	3	MLT 1012 – Clinical Urinalysis <i>Previously MLT 102 (Pre- or Prerequisite: MLT 1010, 1092, 1007, 1014/1192,1290)</i> Introduces principles and procedures of physical, chemical and microscopic analysis of urine.	1
MEMS 2001 – MEMS Manufacturing Process <i>Previously MEMS 220 (Prerequisites: MEMS 1001, ELEC 1010 or permission of director)</i> Covers the various construction methods used to manufacture MEMS components and systems. Bulk micro-machining, surface micro-machining processes such as SUMMIT IV, MUMPS will be covered in detail.	5	MLT 1014 – Immunology <i>Previously MLT 114 (Prerequisite: BIO 1410/1492L or 121/121L, BIO 1310/1392 or BIO 2210/222 and BIO 2310/2392, BIO 2110/2192, ENG 1101 or ENG 1102, CHEM 1410/1492 or CHEM 1510/1592, CHEM 2210, MATH 1330 or higher except MATH 2110 or 2096, Humanities or Social Science elective; Pre- or corequisites: MLT 1010, 1007, 1014C, 1290)</i> Teaches the basics of the body’s immune response and introduction to diseases involving deficiencies in the immune system.	1
MEMS 2005 – MEMS Design I <i>Previously MEMS 221 (Prerequisites: MEMS 1001, MEMS 2001, or equivalent or permission of director)</i> Introduces MEMS design techniques and standards via MEMS CAD software. Students will design simple MEMS components using industrial and research MEMS software. <i>(30 theory + 45 lab hours per term)</i>	3	MLT 1090 – Clinical Experience Urinalysis Clinical experience performing basic urinalysis and special tests in an affiliated medical laboratory. <i>(45 clinical hours per term)</i> . Program fees: Published in the Schedule of Classes .	1
MEMS 2010 – MEMS Design II <i>Previously MEMS 223 (Prerequisites: MEMS 2005 or permission of director)</i> Introduces MEMS design techniques and standards via MEMS CAD software. Students will design MEMS components and systems using industrial MEMS CAD software. Students will also be introduced to MEMS analyst software. <i>(30 theory + 45 lab hours per term)</i>	3	MLT 1092 – Clinical Experience Urinalysis Clinical experience performing basic urinalysis and special tests in an affiliated medical laboratory. <i>(45 clinical hours per term)</i> . Program fees: Published in the Schedule of Classes .	1
MEMS 2015 – MEMS Manufacturing Technology Theory <i>Previously MEMS 225 (Prerequisites: SMT 2001/2002 or permission of director; Corequisite: MEMS 2092)</i> Introduces Micro Electro-Mechanical Systems manufacturing including the basics of MEMS materials and devices, MEMS systems, clean room technology and topics in wafer processing.	3	MLT 1096, 1196...1996 – Topics in Laboratory Medicine <i>(all courses ending in 96 are topics courses)</i> <i>Previously MLT 296 (Prerequisites: may vary)</i> Presents various topics in laboratory medicine.	1-4
MEMS 2092 – MEMS Manufacturing Technology Lab <i>Previously MEMS 226L (Prerequisites: SMT 2001/2002 or permission of director; Corequisite: MEMS 2015)</i> Provides lab course for MEMS 2015. Laboratory exercises conducted in a clean room. Students meet twice per week. <i>(90 lab hours per term)</i>	2	MLT 1192 – Clinical Immunology <i>Previously MLT 114C(Pre- or corequisites: MLT 1010, 1007, 1012, 1014, 1290)</i> Provides experience in serological testing on specimens from hospital patients using current methodologies. <i>(45 lab hours per term)</i>	1
MLT – Medical Lab Technician Courses (Health, Wellness & Public Safety Division)			
MLT 1007 – Clinical Success Seminar <i>Previously MLT 104 (Corequisite: MLT 1010 1014/1190, 1290)</i> Includes analysis of student learning needs for self and others and training in clinical setting. It prepares students to read complex medical information and procedure manuals. The emphasis is on preparation for clinical rotations in a medical laboratory including KeyTrain Teamwork & Career Skills Tutorials, the student/employee role in lab inspections and the employer’s perspective.	1	MLT 1290 – Clinical Experience Phlebotomy <i>Previously MLT 151C (Pre- or corequisites: MLT 1010, 1007, 1012, 1014/1190)</i> Introduces principles related to blood collection, experience in phlebotomy in a student lab and an affiliated medical laboratory. This is a credit/no credit course. <i>(135 clinical hours per term)</i>	3
		MLT 1510 – Clinical Hematology <i>Previously MLT 209 (Prerequisites: MLT 1007, 1014/1190, 1290; Pre- or corequisites: MLT 1592, 1692, 1511/1792)</i> Teaches normal and abnormal blood cell morphology and the principles of routine procedures in a hematology laboratory.	3
		MLT 1511 – Clinical Immunohematology <i>Previously MLT 211 (Prerequisite: MLT 1007, 1014/11090, 1290; Pre- or corequisite: MLT 1592, 1510/1692, 1792)</i> Examines the theory principles for determining blood group typing, antibody detection and identification, cross matching and component therapy.	2
		MLT 1592 – Clinical Coagulation <i>Previously MLT 103L (Prerequisites: MLT 1010, 1007, 1014/1190, 1290; Pre- or Corequisites: MLT 1510/1692, 1511/1792)</i> Presents basic coagulation concepts with practice performing the procedures. Also introduces advanced principles and procedures performed in the coagulation laboratory. <i>(45 lab hours per term)</i>	1

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MLT 1692 – Clinical Hematology Laboratory <i>Previously MLT 209L (Prerequisites: MLT 1007, 1014/1190, 1290; Pre- or corequisites: MLT 1592, 1510, 1511/1792)</i> Presents experiences for performing the basic procedures in a hematology laboratory including the identification and enumeration of blood cells. (90 lab hours per term)	2
MLT 1792 – Clinical Immunohematology Laboratory <i>Previously MLT 211L (Prerequisites: MLT 1007, 1012, 1014/1190, 1290; Pre- or corequisites: MLT 1592, 1510/1692, 1511)</i> Provides experience in clinical blood bank. Includes KeyTrain Observation Tutorial. (90 lab hours per term)	2
MLT 2010 – MLT Microbiology <i>Previously MLT 206 (Prerequisites: MLT 1591, 1510/1692, 1511/1792; Pre- or corequisites: MLT 2590, 2011/2092)</i> Presents clinical bacteriology, mycology and parasitology including macroscopic and microscopic identification of organisms, antibiotic susceptibility testing, life cycles and the pathology and etiology of various diseases. Virology is introduced.	3
MLT 2011 – Clinical Chemistry <i>Previously MLT 207 (Prerequisite: MLT 1592, 1510/1692, 1511/1792; Pre- or corequisites: MLT 2010/2590, 2092)</i> Presents the principles and methods used in testing for chemical components in blood and other body fluids including basic instrumentation.	3
MLT 2092 – Clinical Chemistry Laboratory <i>Previously MLT 201L (Prerequisite: MLT 1592, 1510/1692, 1511/1792; Pre- or corequisites: MLT 2010/2590, 2011)</i> Presents experiences for performing the basic procedures used in a clinical chemistry laboratory including basic chemistry instrumentation. Includes KeyTrain Locating Information Tutorial. (45 lab hours per term)	1
MLT 2096, 2196...2996 Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously MLT 296 (Prerequisite: may vary)</i> Presents various topics in laboratory medicine.	1-4
MLT 2590 – Clinical MLT Microbiology <i>Previously MLT 206C (Prerequisites: MLT, 1592, 1510/1692, 1511/1792; Pre- or corequisites: MLT 2010, 2011/2092)</i> Identifies the microorganisms of clinical significance from specimens obtained from patients. Students utilize current methodologies and identification techniques. (135 lab hours per term)	3
MLT 2890 – Clinical Experience 1 <i>Previously MLT 205C (Prerequisites: MLT 1592, 1007, 1014/1190, 1290, 2010/2590, 2011/2092, 1510/1692, 1511/1792)</i> Provides clinical practice in affiliated clinical laboratories with rotations through hematology/coagulation, microbiology, chemistry and Immunohematology divisions. This course has a Web-based component. This is a credit/no credit course. (12 weeks; 540 clinical hours per term) Program fee: Published in the Schedule of Classes .	12

Course Subject Code/Course number – Course Name	Credit Hours
MSL – Military Science & Leadership Courses (Army ROTC) <i>(Communication, Humanities & Social Sciences)</i> <i>Students may register at CNM for the University of New Mexico (UNM) Army Military Science and Leadership program. Uniforms and textbooks are provided. Because these courses are offered at the main campus of UNM, students should contact UNM before enrolling. For more information, contact: Army ROTC Military Science and Leadership (MSL) Erik Sevigny, Lt. Col., U.S. Army University of New Mexico Division of Military Science 1836 Lomas Blvd. NE, Albuquerque, NM 87131-0001 (505) 277-2250 Credits in Military Science and Leadership are currently NOT eligible to be applied to any associate degree or certificate at CNM.</i>	
MSL 1092 – Foundations of Officership Lab <i>Previously MSL 101L (Corequisite: MSL 1101)</i> Training on basic soldier skills and tasks, such as land navigation, basic rifle marksmanship and movement as a member of a fire team and rifle squad. Practical application of field craft and soldier skills in a tactical environment.	1
MSL 1101 – Foundations of Officership <i>Previously MSL 101</i> Introduction to competencies central to the responsibilities of a commissioned officer. Establishes a framework for understanding officership, leadership and Army values in addition to life skills such as personal fitness, time management and stress management.	1
MSL 1102 – Basic Leadership <i>Previously MSL 102</i> This course expands on the fundamentals introduced in MSL 1101 focusing on communication, leadership and goal setting. Course builds on the previous course exposing students to different methodologies of critical thinking and problem solving.	1
MSL 1292 – Basic Leadership Lab <i>Previously 102L (Corequisite: MSL 1102)</i> Continuation of MSL 1092	1
MSL 2092 – Individual Leadership Studies Lab <i>Previously MSL 201L (Corequisite: MSL 1101)</i> Builds on the topics covered in MSL 1092 and 1292. Further in depth training on basic soldier skills and tasks, such as land navigation, basic rifle marksmanship and movement as a member of a fire team and rifle squad. Practical application of field craft and soldier skills in a tactical environment.	1
MSL 2192 – Individual Leadership Studies Lab <i>Previously MSL 202L (Corequisite: MSL 2202)</i> Continuation of MSL 2092.	1
MSL 2201 – Individual Leadership Studies <i>Previously MSL 201</i> Explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework (trait and behavior theories). Students practice aspects of personal motivation and team building in the context of planning, executing, and assessing team exercises and participating in leadership labs. Focus in on continued development of the knowledge of leadership values and attributes through an understanding of Army rank, structure, and duties and basic aspects of land navigation and squad tactics. Case studies provide tangible context for learning the Soldier's Creed and Warrior Ethos as they apply in the contemporary operating environment (COE).	2

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
MSL 2202 – Leadership and Teamwork	2	MT 2095 – Cooperative Education	3
Examines the challenges of leading tactical teams in the complex contemporary operating environment (COE). The course highlights dimensions of terrain analysis, patrolling and operation orders. Further study of the theoretical basis of the Army leadership framework explores the dynamics of adaptive leadership in the context of military operations. The course provides a smooth transition into MSL 301. Cadets develop great self-awareness as they assess their own leadership styles and practice communication and team building skills. COE case studies give insight into the importance and practice of teamwork and tactics in real-world scenarios.		<i>Previously MT 299 (Prerequisites: permission of the director or associate dean)</i> Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. Position is not paid.	
MSL 2219 – Directed Studies	1-3	MT 2096, 2196...2996 – Topics	2-6
Explores the dimensions of creative and innovative tactical leadership strategies and styles by examining team dynamics and two historical leadership theories that form the basis of the Army leadership framework (trait and behavior theories). MSL 2219 further provides a smooth transition into MSL 301. Cadets develop greater self-awareness as they assess their own leadership styles and practice communication and team building skills.		<i>(all courses ending in 96 are topics courses)</i> <i>Previously MT 296 (Prerequisite: advanced manufacturing student)</i> The topics depend on the requests of the community.	
MSL 2220 – Military Fitness I	1-2	MT 2097 – Independent Study	2-6
<i>Previously MSL 229 (Corequisite: MSL 1101 or 2201)</i> Course is designed to teach students the principles of fitness, proper nutrition and a healthy lifestyle while exposing them to different methodologies of personal fitness.		<i>Previously MT 297 (Prerequisite: advanced manufacturing student)</i> Allows the student to investigate and solve a problem. The student designs the solution using a combination of manufacturing techniques.	
MSL 2221 – Military Fitness II	1-2	MT 2098 – Internship	3
<i>Previously MSL 230 (Corequisites: MSL 1102 or 2202)</i> Continuation of MSL 2220.		<i>Previously MT 298 (Prerequisite: permission of the director or associate dean)</i> Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. Position is not paid.	
MT – Manufacturing Technology Courses (Applied Technologies Division)			
MT 1001 – Manufacturing Concepts	4	MUS – Music Courses (Communication, Humanities & Social Sciences Division)	
<i>Previously MT 105 (Prerequisite: ENG 1101)</i> Develops teamwork skills and presents a variety of manufacturing concepts such as creative problem solving, project management, effective meetings, effective communication and theory of constraints. (45 theory + 45 lab hours per term)		MUS 1103 – Fundamentals of Music	4
MT 2001 – Applied Science	6	<i>Previously MUS 103 (Recommended: Experience with voice or instrument)</i> Introduces fundamentals of music: notation, scales, key signatures and intervals, with application to aural comprehension through singing intervals, scales, triads, dictating simple rhythmic and melodic patterns.	
<i>Previously MT 205 (Prerequisite: ELEC 1010)</i> Presents basic principles of chemistry and physics as they apply to high tech industries. Explores the application of topics such as work and energy, temperature and heat, chemical bonds and organic chemistry. (60 theory + 90 lab hours per term)		MUS 1139 – Early Music Appreciation	3
MT 2005 – Statistical Controls	3	<i>Previously MUS 139</i> Surveys basic musical elements and their development from early Greece to the Classical period. Non technical; required attendance at live musical performances.	
<i>Previously MT 281 (Prerequisite: MATH 0940 or higher, or Accuplacer Elementary Algebra score of 81 or equivalent)</i> Features the use of hardware and software as they apply to quality assurance. Study design of experiments, sampling techniques, SPC, control chart application and development and process reliability. (30 theory + 45 lab hours per term)		MUS 1140 – Modern Music Appreciation	3
MT 2010 – Materials Science I	3	<i>Previously MUS 140</i> Emphasizes study of symphonic music, chamber music and vocal literature from the Romantic period to the 20th century. Non technical; required attendance at live musical performances.	
<i>Previously MT 290 (Prerequisites: CHEM 1510/1592)</i> Presents an introduction to the science of materials. Topics include atomic bonding, crystal structure, crystal defects deformation and fracture. (30 theory + 45 lab hours per term)		MUS 1172 – Introduction to Jazz	3
MT 2015 – Materials Science II	3	<i>Previously MUS 172</i> Introduces jazz as a modern musical form and emphasizes its evolution during the 20th century.	
<i>Previously MT 291 (Prerequisites: MT 2010)</i> Continues the study of the science of materials. Topics include phase equilibrium, phase transformations and microstructures. Properties of metals, ceramics, glass, plastics and composites will be examined. (30 theory + 45 lab hours per term)		MUS 2096, 2196...2996 – Topics in Music	3
		<i>(all courses ending in 96 are topics courses)</i> <i>Previously MUS 296</i> Presents various topics. See Schedule of Classes .	
NA – Nursing Assistant Courses (Health, Wellness & Public Safety Division)			
		NA 1010 Nursing Assistant Theory/Foundations	9
		<i>(Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer English score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, Corequisite: NA 1092, 1090)</i> Provides nursing assistant theory for the care of residents/patients in health care agencies and homes. Course covers such topics as basic structure and normal functions of body systems and impact of aging. Nutrition, medical terminology, effective ways of communicating, geriatric issues, community resources, home care issues and a review of basic math and its application to the clinical setting are also covered.	

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

Course Subject Code/Course number – Course Name **Credit Hours**

NA 1090 Nursing Assistant Clinical Experience **3**
(Prerequisites: NA 1010, 1092)
 Supervised practice of basic patient care skills in the hospital, long-term care centers and home health care throughout the city. (135 hours of clinical practice)

NA 1092 Nursing Assistant Lab **3**
(Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer English score of 69 or equivalent, MATH 0750 or Accuplacer Arithmetic score of 57 or equivalent, Corequisite: 1010, 1090)
 In the campus laboratory, provides instruction and supervised practice with basic patient care skills which include vital signs, personal hygiene, transfer techniques, nutritional support and other methods to support activities of daily living. Applies nursing assistant theory to hands on skills, nutrition labs, math for nursing assistants, etc. (135 contact hours in lab)

NAHA – Nursing Home/Home Health Attendant Courses *(Health, Wellness & Public Safety Division)*

NAHA 1010 – Nursing Home/Home Health Attendant Theory/Lab **5**
Previously NAHA 102L (Corequisite: NAHA 1090)
 Includes basic patient care skills necessary to work in a nursing home or private home. Personal care, restorative care skills, vital signs and lifting are some of the skills taught in a lab setting. (50 theory + 50 lab hours per term) Program fee: Published in the **Schedule of Classes**.

NAHA 1090 – Nursing Home/Home Health Attendant Clinical **1**
Previously NAHA 102C (Corequisite: NAHA 1010)
 Provides the opportunity to practice supervised basic patient care skills in a long-term care setting. (50 clinical hours per term)

NAVS – Naval Science Studies Courses *(Communication, Humanities & Social Sciences Division)*

Students may register at CNM for the University of New Mexico Naval Science program. Uniforms and textbooks are provided. Because these courses are offered at the main campus of UNM, students should contact UNM before enrolling. For more information, contact: Naval Science Lucy Yebra The University of New Mexico Naval ROTC, Naval Science Bldg. 151 720 Yale Blvd. NE, Albuquerque, NM 87131 (505) 277-3744 Credits in Naval Sciences Studies are currently NOT eligible to be applied to any associate degree or certificate at CNM.

NAVS 1101 – Principles and Concepts of Naval Science **3**
Previously NAVS 101
 Introduces the naval service, customs, traditions, courtesies and naval officers' communities. Fall only.

NAVS 1105 – Naval Ship Systems I **3**
Previously NAVS 105
 Introduces naval engineering systems concepts and practices. Spring only.

NAVS 1192 – Naval Professional Laboratory **0**
Previously NAVS 010
 Offers drills and information for NROTC students. (30 hours each term) Fall, Spring only

NAVS 2201 – Naval Ship Systems II **3**
Previously NAVS 201
 Explores the principles of naval weapons systems. Fall only.

NAVS 2202 – Sea Power **3**
Previously NAVS 202
 Surveys US naval history from the American Revolution to the present. Fall only.

Course Subject Code/Course number – Course Name **Credit Hours**

NAVS 2203 – Navigation **3**
Previously NAVS 203
 Offers theory, principles and procedures of ship coastal and celestial navigation. Spring only.

NAVS 2204 – Naval Operations **3**
Previously NAVS 204
 Explores naval ship operations, tactical formations and dispositions; relative motion tactical plots and maneuvering boards are analyzed. Spring only.

NAVS 2231 – Evolution of Warfare **3**
Previously NAVS 231
 Surveys evolution of the basic principles and techniques of warfare throughout history. Fall only, even years.

NAVS 2241 – Leadership and Management **3**
Previously NAVS 241
 Explores the structure and principles of naval leadership and management. Fall only.

NAVS 2247 – Principles of Naval Leadership **3**
Previously NAVS 247
 Examines the structure and principles of naval leadership and management. Spring only.

NAVS 2251 – Amphibious Warfare **3**
Previously NAVS 251
 Explores the concepts, techniques and history of amphibious warfare. Fall only, odd years.

NS – Natural Science Courses *(Math, Science & Engineering Division)*

NS 1010 – Physical Science for Teachers **4**
Previously NS 261 (Prerequisites: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent)
 Introduces the science of geology, chemistry, physics and astronomy, with emphasis on the sciences processes, inquiry and the integration of technology. This course is activity based utilizing problems and issues based approach; various teaching methods are modeled and practiced by students. Some field trips may be required.

NS 1015 – Life Science for Teachers **4**
Previously NS 262 (Prerequisites: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent)
 Uses activities for the study of science topics including botany, cell biology, genetics, micro-biology and zoology with emphasis on science processes, inquiry and the integration of technology. Various teaching methods are modeled and practiced by students. Some field trips may be required.

NS 2010 – Environmental Science for Teachers **4**
Previously NS 263 (Prerequisites: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent and NS 1010 and NS 1015)
 Introduces major issues in environmental science with emphasis on science process, scientific investigations and field-based activities and the integration of technology. Course topics include current issues on population, healthy ecosystems and natural resources. Various teaching methods are modeled and practiced by students.

NURS – Nursing Courses *(Health, Wellness & Public Safety Division)*

NURS 1002 – Strategies for Nursing Effectiveness **2**
Previously NURS 112 (Pre- or Corequisite: NURS 1080)
 This survey course will reinforce the nursing theory, clinical and lifelong skills that nursing students develop throughout the nursing program. Supplemental skills will include critical thinking; critical reading; problem solving utilizing the nursing process and based on scientific rational; learning style preferences for personal and client teaching; clinical and life, organization and time management; note

Course Subject Code/Course number – Course Name	Credit Hours
taking; test-taking techniques; institutional and professional nursing informatics; and the development of professional nursing presentations (oral and written reports) At the conclusion of the course the nursing student will be able to establish a personal long-term plan for nursing educations.	
NURS 1007 – Dosage Calculations (CR/NC) <i>Previously NURS 115 (Prerequisites: HWPS Basic Math Test and program director approval)</i> Presents methods of dosage calculations for oral and parental medications, including intravenous therapy and pediatric dosages. <i>Distance Learning option available (see page 45).</i>	1
NURS 1080 – Introduction to Nursing <i>Previously NURS 120C (Prerequisites: program director approval, BIO 2210/2292, ENG 1101, NUTR 2110; pre- or corequisites: NURS 1007, BIO 2310/2392, PSY 1105)</i> Introduces the foundations of nursing with a focus on physical assessment and its function within the nursing process. Introduces common pathological conditions to begin the application of patient data into a caring framework. Clinical: Assessment and implementation of care for healthy and hospitalized clients to maintain and promote mental and physical health. (75 theory + 180 clinical hours per term) Program fee: Published in the Schedule of Classes .	9
NURS 1092 – Supplemental Lab (CR/NC) <i>Previously NURS 107L (Prerequisite: program director approval; Corequisite: NURS 1080)</i> Designed to provide nursing students the opportunity for additional practice of nursing skills in the campus laboratory before going into the clinical setting. (45 contact hours)	1
NURS 1096, 1196...1996 – Topics in Nursing <i>(all courses ending in 96 are topics courses)</i> <i>Previously NURS 296 (Prerequisites: may vary)</i> Presents various topics in nursing.	1-10
NURS 1580 – Nursing Care of the Adult Client <i>Previously NURS 160C (Prerequisites: BIO 2310/2392, NURS 1007, NURS 1080, PSY 1105, Pre- or corequisite: PHIL 2247, PSY 2220, NURS 2002)</i> Continues the care of clients with pathophysiological conditions using the nursing process. Emphasis on the development of communication techniques, critical thinking and clinical competence. Clinical: Experiences with medical, surgical and psychosocial and behavioral needs of clients in hospital settings. (75 theory + 180 clinical hours per term) Program fee: Published in the Schedule of Classes .	9
NURS 1592 – Supplemental Lab (CR/NC) <i>Previously NURS 109L (Prerequisite: program director approval; Corequisite: NURS 1580)</i> Designed to provide nursing students the opportunity for additional practice of nursing skills in the campus laboratory before going into the clinical setting. (45 contact hours)	1
NURS 2002 – Pharmacology in Nursing <i>Previously NURS 231 (Prerequisites: program director approval, BIO 2310/2392)</i> Introduces the concepts necessary for nursing judgment in the use of chemical agents and the theoretical base required to administer medications. Information covers drugs in current use, including pharmacokinetics, pharmacodynamics, therapeutic uses, adverse reactions, precautions and contraindications. <i>Distance Learning option available (see page 45).</i>	3
NURS 2070 – Concepts for Transition Students <i>Previously NURS 202C (ADN Students: prerequisites: ENG 1101, PSY 1105, BIO 2310/2392, NUTR 2110 and credit for NURS 1080 and NURS 1580. Pre- or corequisites: PSY 2220, NURS 1007, 2002; LPN Students: pre- or corequisites: ENG 1101, NUTR 2110, BIO 2310/2392, PSY 1105 2220, NURS 1007, 2002)</i> Introduces the conceptual framework of the nursing program and study of the nursing process. In-depth focus on assessment across the life span. Required for all applicants who seek advanced placement in the practical nurse or associate degree program. (15 theory + 45 clinical hours per term)	2

Course Subject Code/Course number – Course Name	Credit Hours
NURS 2080 Family Nursing Across the Lifespan <i>Previously NURS 185C (Prerequisites: Calculation Exam II with score of 90 percent or better; NURS 1580, NURS 2002, PSY 1105)</i> Prepares the practical nursing student to participate in the coordination of care for a specific group of clients, including pediatric, maternity and medical-surgical clients in appropriate care settings. (60 theory + 135 clinical hours per term) Program fee Published in the Schedule of Classes .	7
NURS 2096, 2196...2996 – Topics in Nursing <i>(all courses ending in 96 are topics courses)</i> <i>Previously NURS 296 (Prerequisites: may vary)</i> Presents various topics in nursing.	1-10
NURS 2515 – Manager of Care <i>Previously NURS 227 (Prerequisite: NURS 2580; Corequisite: NURS 2680)</i> Introduces management principles to prepare the ADN nurse to manage care of groups of clients. Clinical application in NURS 2680.	1
NURS 2580 – Family Nursing <i>Previously NURS 220C (Prerequisites: Calculation Exam II with score of 90 percent or better; NURS 1580, PSY 2220; Pre- or corequisite: NURS 2002, BIO 2110/2192)</i> Integrates the study of clients with complex pathological conditions. Introduces nursing care of the mother and neonate. Clinical: Experiences with medical, surgical, maternal, neonate and behavioral health clients in hospital and/or community based health care settings. (75 theory + 225 clinical hours per term) Program fee: Published in the Schedule of Classes .	10
NURS 2680 – Complex Health Problems <i>Previously NURS 260C (Prerequisites: Calculation Exam III with score of 90 percent or better; NURS 2580, NURS 2002; Corequisite: NURS 2515; Pre- or corequisite: arts & science elective)</i> Studies the impact of complex, multi-system health problems on individuals and families, including the pediatric client. Includes psychiatric disorders, cultural factors and practice issues. Clinical: Providing and managing care of clients across the lifespan. (60 theory + 225 clinical hours per term) Program fee: Published in the Schedule of Classes .	9
NUTR – Nutrition Courses (Math, Science & Engineering Division)	
NUTR 1010 – Personal and Practical Nutrition <i>Previously NUTR 120 (Pre- or corequisite: ENG 0950 or Accuplacer Sentence Skills score of 85 or equivalent)</i> Presents nutrition concepts from a practical viewpoint that can be applied to personal goals. Includes current and controversial topics: individual nutrient needs, alternative eating patterns, nutrition as part of disease prevention and applications of these principles in food preparation. Fulfills nutrition requirement for culinary arts but is not the required course for nursing or other health science majors. <i>Distance Learning option available (see page 45).</i>	3
NUTR 2096, 2196...2996 – Topics in Nutrition <i>(all courses ending in 96 are topics courses)</i> <i>Previously NUTR 293</i> Presents various topics. See Schedule of Classes .	3
NUTR 2110 – Human Nutrition <i>Previously NUTR 244 (Prerequisite: One of the following: BIO 1410/1492, CHEM 1410/1492, CHEM 1510/1592 or a passing score of 64 on the Biology Placement Exam)</i> Introduces nutrition as it affects normal body function and total health. Designed for health majors who will use this information in various professions. <i>Distance Learning option available (see page 45).</i>	3

OLIT – Online Instructor Course *(Executive Vice President for Academic Affairs)*

OLIT 1101 – Online Instructor Certification **3**
Previously OLIT 101 (Prerequisite: must be a faculty member or have permission of instructor)
 Prepares faculty to teach online. After completion of this course, faculty will be able to implement a basic WebCT course using available technologies.
Distance Learning option available (see page 45).

Otec – Office Technology Courses *(Business & Information Technology Division)*

Otec 1096, 1196...1996 – Topics **1–3**
(all courses ending in 96 are topics courses)
Previously OTEC 296
 Explores current topics in office technology.

Otec 1101 – Beginning Keyboarding **2**
Previously OTEC 101
 Develops keyboarding skill by touch method and develops speed and accuracy. A minimum average of 25 wpm on three five-minute timings is required. *(15 theory + 60 lab hours per term)*

Otec 1112 – Office Accounting Procedures **3**
Previously OTEC 112 (Recommended prerequisite: ACCT 1109)
 Focuses on complete bookkeeping cycle, financial statements and payroll. A practice set is completed in this course.

Otec 1143 – Word Processing **3**
Previously OTEC 143 (Recommended prerequisites: IT 1010 and OTEC 1192 or a minimum typing speed of 30 wpm on a five-minute timing or division approval)
 Presents basic and intermediate functions in MS Word for preparing business documents. *(30 theory + 45 lab hours per term)*
Distance Learning option available (see page 45).

Otec 1160 – Records Management **1**
Previously OTEC 160 (Recommended prerequisite or corequisite: IT 1010)
 Presents an introduction to the field of records management. Includes records management for manual and electronic systems. Practice activities for filing and retrieval of records are included. *(5 weeks)*
Distance Learning option available (see page 45).

Otec 1170 – Business Telephone Techniques **1**
Previously OTEC 170
 Applies tape recorded and role-playing activities to develop effective speaking, listening and questioning skills. Methods for handling incoming calls, customer orders, customer problems and complaints, outbound calls and sales are presented. *(5 weeks)*

Otec 1171 – Working with the Challenging Customer **1**
Previously OTEC 171
 Presents concepts to enhance student's ability to act effectively when working with the challenging customer for the purpose of promoting customer satisfaction. *(5 weeks)*

Otec 1173 – Time Management Skills **1**
Previously OTEC 173
 Presents principles and activities to aid the student in applying time management skills in a personal and professional environment. *(5 weeks)*
Distance Learning option available (see page 45).

Otec 1174 – Computers in the Medical Office **1**
Previously OTEC 174 (Recommended prerequisite: IT 1010)
 Introduces tasks performed in a medical office utilizing computerized software packages, including scheduling appointments, gathering and recording patient information, recording diagnoses and procedures, billing patients, filing insurance claims, recording payments and preparing reports. *(5 weeks; 10 theory + 15 lab hours per term)*

Otec 1190 – Work-Site Learning **1**
Previously OTEC 180
 Requires participation in an approved customer service setting to promote practical application of Call Center Operations core curriculum. Work-Site Learning is taken in student's final 5 weeks of the program; the student must acquire a minimum of 50 hours. *(5 weeks; 5 theory + 45 lab hours per term)*

Otec 1192 – Keyboard Skillbuilding **2**
Previously OTEC 102 (Prerequisite: OTEC 1101)
 Continues development of speed and accuracy. A minimum average speed of 30 wpm on three five-minute timings is required. *(75 lab hours per term)*
Distance Learning option available (see page 45).

Otec 1193 – Intermediate Keyboard Skillbuilding **2**
Previously OTEC 107 (Prerequisite: OTEC 1192 or 30 wpm typing speed on a five-minute timing)
 Focuses on building speed and accuracy. A minimum average speed of 40 wpm on three five-minute timings is required. *(75 lab hours per term)*
Distance Learning option available (see page 45).

Otec 2093 – Advanced Keyboard Skillbuilding **2**
Previously OTEC 205 (Prerequisite: OTEC 1193 or 40 wpm typing speed)
 Focuses on building speed and accuracy. A minimum average speed of 50 wpm on three five-minute timings is required. *(75 lab hours per term)*
Distance Learning option available (see page 45).

Otec 2095 – Cooperative Education **4**
Previously OTEC 299 (Prerequisite: division approval; recommended prerequisites: OTEC 1143, BA 1121, 40 wpm for Office Assistant program or 55 wpm for Office Technology program)
 Requires a minimum of 150 hours in a new office-related position. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer. The student and employer determine the weekly contact hours.

Otec 2096, 2196...2996 – Topics **1-3**
(all courses ending in 96 are topics courses)
Previously OTEC 296
 Explores current topics in office technology.

Otec 2097 – Independent Study **Variable**
Previously OTEC 297 (Prerequisite: division approval)
 Requires the student and instructor to define a specific problem in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. An oral presentation may be required.

Otec 2098 – Internship **4**
Previously OTEC 298 (Prerequisite: division approval; recommended prerequisites: OTEC 1143, BA 1121, 40 wpm for Office Assistant program or 50 wpm for Office Technology program)
 Requires a minimum of 150 hours at office-related supervised workstations. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Students are not paid for their work but are supervised jointly by CNM and the employer. The student and employer determine the weekly contact hours.

Course Subject Code/Course number – Course Name	Credit Hours
O TEC 2200 – Advanced Word Processing <i>Previously OTEC 200 (Prerequisite: OTEC 1143; recommended prerequisites: OTEC 1193 or 45 wpm on a five-minute timing and CIS 1170, 1171 and 1180)</i> Presents advanced applications for preparing business documents and document integration. (30 theory + 45 lab hours per term)	3
O TEC 2231 – Business English Applications <i>Previously OTEC 231 (Prerequisite: BA 1122 or division approval)</i> Requires student to compose, transcribe, analyze/edit business documents for correct grammar, punctuation, mechanics and language. Reference materials are used.	3
O TEC 2260 – Business Procedures <i>Previously OTEC 260 (Prerequisites: OTEC 1143, BA 1121; recommended prerequisites: OTEC 1193, BA 1122)</i> Covers office procedures, technology, records management, human relations, ethics, telecommunications and job portfolio.	3
O TEC 2270 – Medical Transcription <i>Previously OTEC 270 (Recommended prerequisites: HIT 1020 and OTEC 1193, or 50 wpm typing speed and OTEC 1143, BA 1121 and OTEC 2231)</i> Reinforces medical terminology and develops proficiency in transcribing medical reports, forms and other types of medical communications using correct format, grammar, punctuation, number, abbreviation, symbols and metric measurement rules. (30 theory + 45 lab hours per term) <i>Distance Learning option available (see page 45).</i>	3
PC – Process Control Courses (Applied Technologies Division)	
PC 2001 – Electromechanical System Troubleshooting <i>Previously PC 201 (Prerequisites: ELEC 2001 or 2005)</i> Uses electromechanical systems donated by local industries. Initially focuses on systematic analysis to locate problems. Apply troubleshooting techniques to a complete electronic system. Expose students to equipment schematics, maintenance procedures and practice preventive and corrective maintenance troubleshooting. (30 theory + 90 lab hours per term)	4
PC 2005 – CIM Theory and Applications and Mobile Robot Design <i>Previously PC 206 (Prerequisites: ELEC 1005, ELEC 1020)</i> Includes theory of computer integrated manufacturing (CIM), CIM systems used in industry and the programming and operation of such systems and micro-controllers. (30 theory + 45 lab hours per term)	3
PC 2010 – Robot Theory and Construction Applications <i>Previously PC 208 (Prerequisites: ELEC 1005, ELEC 1020)</i> Includes theory, operation and maintenance procedures of industrial robots along with DC motors and motor drive circuitry and communications technology. Class will also complete a project (utilizing an industrial robot system) designed and constructed by students. (30 theory + 45 lab hours per term)	3
PC 2015 – Power RF <i>Previously PC 211 (Prerequisite: ELEC 2001)</i> Presents RF energy and its applications in manufacturing industries. Includes plasma physics, RF applications, safety, RF generators, transmission lines and RF interference. (15 theory + 45 lab hours per term)	2
PC 2020 – Vacuum Systems <i>Previously PC 212L (Prerequisite: ELEC 2005)</i> Introduces vacuum technology and vacuum systems. Includes gas laws and properties, operation and applications of vacuum pumps, gauges and valves and systems leak detection. (15 theory + 45 lab hours per term)	2

Course Subject Code/Course number – Course Name	Credit Hours
PHIL – Philosophy Courses (Communication, Humanities & Social Sciences Division)	
PHIL 1102 – Ethics in Society <i>Previously PHIL 102 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Examines important ethical theories and contemporary moral issues. Such issues as war and violence, the death penalty, euthanasia, privacy, animal rights and world hunger are discussed. The course will assist students in critically examining their own views and those of others, past and present, on these issues.	3
PHIL 1110 – Introduction to Philosophical Thought <i>Previously PHIL 110 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: ENG 1101)</i> Surveys the philosophical issues addressed by great thinkers of the western tradition. Introduces questions about knowledge, reality, goodness, the idea of God, government and society and the self. <i>Distance Learning option available (see page 45).</i>	3
PHIL 1156 – Logic and Critical Thinking <i>Previously PHIL 156 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Introduces the tools of reason helpful in everyday decision making, skills for argument analysis and effective communication of ideas. Surveys informal fallacies and formal deductive systems. <i>Distance Learning option available (see page 45).</i>	3
PHIL 2096, 2196...2996 – Topics in Philosophy (all courses ending in 96 are topics courses) <i>Previously PHIL 241 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents various topics. See Schedule of Classes .	3
PHIL 2245 – Business Ethics <i>Previously PHIL 245B (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Provides a forum for discussion of the ethical and social problems affecting the business community. Differing views of economic justice will be examined. <i>Distance Learning option available (see page 45).</i>	3
PHIL 2246 – Environmental Ethics <i>Previously PHIL 245E (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Provides a forum for discussion of the ethical and social problems concerning the relationship between human activity (farming, industry, etc.) and the Earth's environment.	3
PHIL 2247 – Biomedical Ethics <i>Previously PHIL 245M (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Provides a forum for discussion of the ethical and social problems affecting the medical professional and the practice of medicine. <i>Distance Learning option available (see page 45).</i>	3
PHIL 2248 – Ethics of Technology <i>Previously PHIL 245T (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Provides a forum for discussion of the ethical and social problems arising from the uses of computers and technology.	3
PHIL 2250 – Philosophy of Education <i>Previously PHIL 250 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents critical examination of classical and contemporary educational theories and philosophical movements in education. Emphasizes the relationship of philosophical theory and educational practice.	3
PHIL 2257 – Formal Logic <i>Previously PHIL 257 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Introduces formal deductive logic: propositional logic, truth tables, argument forms and fallacies, predicate (symbolic) logic and method of proof.	3

PHLB – Phlebotomy Courses *(Health, Wellness & Public Safety Division)*

PHLB 1010 – Phlebotomy Theory <i>Previously PHLB 110 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, ENG 0950 or Accuplacer English score of 85 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, HLTH 0850; Corequisites: PHLB 1092, 1090)</i> Includes basic concepts in venipuncture and skin puncture procedures along with an overview of anatomy and physiology, medical terminology, quality assurance and medico-legal issues. (6 weeks)	4
PHLB 1090 – Clinical Phlebotomy <i>Previously PHLB 122C (Prerequisite: HLTH 1001; Corequisite: PHLB 1010 and 1092)</i> Provides opportunity for students to practice phlebotomy procedures on actual patients in area hospitals and clinics. (6 weeks; 150 clinical hours per term)	3
PHLB 1092 – Phlebotomy Lab <i>Previously PHLB 110L (Corequisites: PHLB 1010 and PHLB 1090)</i> Provides opportunity to practice phlebotomy skills and apply theory using artificial arms and human subjects. (6 weeks; 90 lab hours per term) Program fee: Published in the Schedule of Classes .	2
PHLB 1096, 1196...1996 – Special Topics in Phlebotomy <i>(all courses ending in 96 are topics courses)</i> <i>Previously PHLB 296</i> Explore various topics of interest in the field of Phlebotomy.	1-6

PHOT – Photonics Courses *(Applied Technologies Division)*

PHOT 1001 – Introduction to Photonics and Photonics Safety <i>Previously PHOT 101L (Prerequisite: MATH 0940 or Accuplacer Elementary Algebra score of 81 or equivalent)</i> Introduces fiber optics and light theory including the basics of laser safety and operation. This course presents the elements of fiber optics including: theory and operation of fiber optics, handling of fiber optics, integrated optics, wave-guide transmission and fiber optic components. Light propagation topics are introduced. Safety procedures concerning lasers and related equipment are presented in this course. [Previously offered as ELEC 111L] (45 theory + 45 lab hours per term)	4
PHOT 1010 – Fiber Optics <i>Previously PHOT 111L (Prerequisite: PHOT 1001)</i> Presents optical wave-guides and fibers as well as Fiber Optics Telecommunication. The course covers basic fiber optics components and active devices such detectors for fiber optic systems, isolators, attenuators, circulators, couplers, cables, connectors, switches, pump lasers, transmission systems and repeaters. (30 theory + 45 lab hours per term)	3
PHOT 2001 – Optics <i>Previously PHOT 201L (Prerequisite: PHOT 1001)</i> Presents basic geometrical (ray) and physical (wave) optics. The course covers the basics of the light reflection and refraction and the use of simple optical elements. It reviews light wave interference, diffraction and polarization; the use of thin film coatings on mirrors; laser beam divergence in the near and far field; and the operation of such devices as gratings and quarter-wave plates. It also covers wave length, dispersion and refractive index measurements and the concept of modulation transfer function. [Previously offered as LEOT 206L] (60 theory + 90 lab hours per term)	6
PHOT 2005 – Introduction to Laser Systems <i>Previously PHOT 207L (Prerequisite: ELEC 1005 and Pre- or corequisite PHOT 2001)</i> Introduces the theory and operation of solid-state and gas lasers and presents continuous wave and pulsed systems. The course covers laser power and energy measurements, power supplies, cooling systems and safe operation of class 4 lasers. Hands on operation and alignment are emphasized. [Previously offered as LEOT 205L] (15 theory + 135 lab hours per term)	4

PHOT 2010 – Advanced Fiber Optics **3**

Previously PHOT 211L (Prerequisite: PHOT 1010; Pre- or corequisite: ELEC 2001)
Introduces metrology of Fiber Optic systems. It also covers source of loss in fiber optics networks and components: insertion loss, return loss and polarization dependent loss. Current fiber optics systems are explored. (30 theory + 45 lab hours per term)

PHOT 2020 – Advanced Laser Systems With Applications **6**

Previously PHOT 217L (Prerequisites: PHOT 2005)
Covers the applications of laser Systems to industry. Include laboratory experiences such as calibration techniques, interferometry, Q-switching. The course requires the student to write a technical paper. [Previously offered as LEOT 217L] (60 theory + 90 lab hours per term)

PHOT 2025 – Photonics Projects **4**

Previously PHOT 225 (Prerequisites: PHOT 2020, PHOT 2010)
Introduces the student to creative photonics design by participation in small project groups. Each group will select a photonics problem to solve by using innovative optical circuitry and possibly the construction of a working model. (15 theory + 135 lab hours per term)

PHOT 2030 – Introduction to Biophotonics **3**

Previously PHOT 227L (Prerequisites: MATH 0940 or Accuplacer Elementary Algebra score of 81 or equivalent)
Presents DNA, cell proteins, cell structures, health physics, basics of light, electromagnetic spectrum, laser safety, geometric optics, wave optics, sensor fundamentals and light tissue interaction, including reflection, refraction, absorption and scattering. (30 theory + 45 lab hours per term)

PHOT 2035 – Biophotonics Applications **3**

Previously PHOT 228L (Prerequisites: PHOT 2030)
Focuses on present-day biophotonics applications. (30 theory + 45 hours per term)

PHOT 2095 – Cooperative Education **3**

Previously PHOT 299 (Prerequisite: permission of the director)
Provides the opportunity for the student to work on a cooperative basis in an appropriate training program. Position is paid.

PHOT 2096, 2196...2996 – Topics **1-6**

(all courses ending in 96 are topics courses)
Previously PHOT 296 (Prerequisite: advanced Photonics Technology student)
The topics depend on the requests from the community.

PHOT 2097 – Independent Study **1-6**

Previously PHOT 297 (Prerequisite: advanced Photonics Technology student)
Presents a problem to investigate and solve. The student designs the solution using a combination of techniques.

PHOT 2098 – Internship **3**

Previously PHOT 298 (Prerequisite: permission of the director)
Provides the opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is not paid.

PHYS – Physics Courses *(Math, Science & Engineering Division)*

PHYS 1010 – Introduction to Physics **3**

Previously PHYS 102 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended: MATH 0940 or Accuplacer Elementary Algebra score of 81 or equivalent)
Surveys basic concepts and phenomena of physics.

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
PHYS 1510 – Physics I <i>Previously PHYS 151 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent and MATH 1315, 1415 or 1460; Corequisite: PHYS 1592; recommended: working knowledge of trigonometry)</i> Introduces mechanics, sound and heat in non-calculus-based format. Satisfies pre-medical, pre-dental, pre-optometry and certain Technologies requirements.	4	PL 1110 – Introduction to Paralegal Studies <i>Previously PL 101 (Prerequisites: ENG 0950 or higher; RDG 0950 or higher; recommended prerequisite: IT 1010)</i> Introduces concepts such as the definition and role of the paralegal, ethical responsibilities, professionalism, the legal system, legal research and analysis, legal and office procedures, technology in the law and topics in substantive law. <i>Distance Learning option available (see page 45).</i>	3
PHYS 1592 – Physics I Laboratory <i>Previously PHYS 151L (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, Corequisite: PHYS 1510)</i> Emphasizes real-time experiments in mechanics, heat and sound. Introduces computer data collection and analysis. <i>(Previously offered as PHYS 153L) (45 lab hours per term)</i>	1	PL 1120 – American Law and Ethics <i>Previously PL 111 (Prerequisites: ENG 0950 or higher; RDG 0950 or higher; recommended prerequisite: IT 1010)</i> Covers concepts such as the origins, nature, history and structure of the American legal system and rules of professional conduct for lawyers and paralegals. <i>Distance Learning option available (see page 45).</i>	3
PHYS 1610 – Physics II <i>Previously PHYS 152 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent and PHYS 1510; Corequisite: PHYS 1692)</i> Focuses on electricity, magnetism and optics in non-calculus-based setting.	4	PL 1130 – Torts <i>Previously PL 123 (Prerequisites: PL 1110, PL 1120)</i> Covers concepts in tort law, concentrating on negligence, products liability, non-physical injuries and their remedies and defenses and an introduction to causes of action. <i>Distance Learning option available (see page 45).</i>	3
PHYS 1692 – Physics II Laboratory <i>Previously PHYS 152L (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, Corequisite: PHYS 1510)</i> Focuses on experiments in electricity, magnetism and optics. Includes some computer simulations and data collection. <i>(Previously offered as PHYS 154L.) (45 lab hours per term)</i>	1	PL 1140 – Legal Research and Writing I <i>Previously PL 124 (Prerequisites: CIS 1120, ENG 1101, PL 1110, PL 1120)</i> Covers concepts such as the principles and skills of writing case briefs and legal memoranda, with a focus on basic legal research sources and techniques, including Westlaw and other computer-assisted legal research. Significant time is spent at the UNM law library.	3
PHYS 1710 – General Physics I <i>Previously PHYS 160 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, pre- or corequisite: MATH 1710; Corequisite: PHYS 1792)</i> Introduces calculus-based study of mechanics and sound waves for science and engineering students.	4	PL 2095 – Cooperative Education <i>Previously PL 299 (Prerequisites: all courses in the first three terms and division approval)</i> Provides the opportunity to perform a minimum of 150 hours of paralegal assignments in a legal environment. The student is paid by the cooperating firm and is jointly supervised by CNM and the supervising attorney. The student will be required to meet additional course requirements as provided by the instructor.	4
PHYS 1792 – General Physics Lab I <i>Previously PHYS 160L (Corequisite: PHYS 1710)</i> Focuses on real-time experiments in mechanics and waves. Includes computer and data collection and analysis. <i>(45 lab hours per term)</i>	1	PL 2096, 2196...2996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously PL 296 (Prerequisite: division approval)</i> Explores current topics in the law.	3
PHYS 1810 – General Physics II <i>Previously PHYS 161 (Prerequisite: PHYS 1710; Pre- or corequisite: MATH 1715; Corequisite: PHYS 1892)</i> Emphasizes heat, electricity and magnetism for science and engineering students in calculus-based setting.	4	PL 2097 – Independent Study <i>Previously PL 297 (Prerequisite: division approval)</i> Explores a specific problem defined by student and instructor in the area of the student's interest and directly related to the program. Student develops and executes a solution using analytical techniques to the problem. A legal research paper or project is completed. An oral presentation may be required.	Variable
PHYS 1892 – General Physics Laboratory II <i>Previously PHYS 161L (Corequisite: PHYS 1810)</i> Focuses on experiments in electricity, magnetism, optics. <i>(45 lab hours per term)</i>	1	PL 2098 – Internship <i>Previously PL 298 (Prerequisites: all courses in the first three terms and division approval)</i> Provides the opportunity to perform a minimum of 150 hours of paralegal assignments in a legal environment. The student is jointly supervised by CNM and the supervising attorney and the student will be required to meet additional course requirements as provided by the instructor.	4
PHYS 2710 – General Physics III <i>Previously PHYS 262 (Prerequisite: PHYS 1810; Pre- or corequisite: MATH 2710)</i> Emphasizes optics and topics in modern physics for science and engineering students in calculus-based setting.	4	PL 2120 – Civil Litigation <i>Previously PL 203 (Prerequisites: CIS 1120, ENG 1102, PL 1130, PL 1140)</i> Covers concepts such as the process of civil litigation from initial client contact through post-trial procedures. Rules of civil procedure and rules of the various courts are covered. Students develop a forms and procedures notebook.	3
PL – Paralegal Studies Courses (Business & Information Technology Division)			
PL 1096, 1196...1996 – Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously PL 296 (Prerequisite: division approval)</i> Explores current topics in the law.	3		

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

Course Subject Code/Course number – Course Name	Credit Hours
PL 2130 – Criminal Litigation <i>Previously PL 206 (Prerequisites: CIS 1120, ENG 1102, PL 1130, PL 1140)</i> Covers concepts such as the process of criminal litigation from initial appearance through post-conviction proceedings. Students will draft documents associated with the prosecution or defense at various stages, review rules of criminal procedure of several courts and develop a forms and procedures notebook.	3
PL 2140 – Legal Research and Writing II <i>Previously PL 204 (Prerequisites: CIS 1120, ENG 1102, PL 1130, PL 1140)</i> Continues development of legal research, analysis and writing skills, with the focus on advanced legal research problems.	3
PL 2150 – Evidence <i>Previously PL 224 (Prerequisites: CIS 1120, ENG 1102, PL 1130, PL 1140; recommended corequisite: CJ 2515)</i> Examines how facts are proved in civil and criminal trials, with focus on rules of evidence in state and federal courts; emphasizes admissibility, relevance, credibility and authenticity of witness testimony, documents and other proof.	3
PL 2160 – Law Office Management <i>Previously PL 233 (Prerequisites: CIS 1120, ENG 1102, PL 1130, PL 1140)</i> Prepares students to coordinate and oversee the administrative functions of a small to medium firm. Includes ethics, law office systems, timekeeping, technology and personnel management.	3
PL 2220 – Wills, Probate and Estate Planning <i>Previously PL 221 (Prerequisites: PL 2120 or PL 2130, PL 2140, PL 2150, PL 2160)</i> Covers concepts such as the drafting of wills and trusts, administration of estates, formal and informal probate proceedings and estate tax returns. A review of the probate code and drafting projects are included. <i>Distance Learning option available (see page 45).</i>	3
PL 2230 – Computer-Aided Legal Research <i>Previously PL 231A (Prerequisites: CIS 1120, PL 1130, PL 1140)</i> Covers concepts such as research using the Internet, legal and non-legal databases including Westlaw and New Mexico One Source. (5 weeks; 10 theory + 15 lab hours per course)	1
PL 2233 – Computer Applications in Law Practice <i>Previously PL 231B (Prerequisites: CIS 1120, PL 1130, PL 1140)</i> Covers law-oriented concepts and applications using word processing, spreadsheets and data management programs. (5 weeks; 10 theory + 15 lab hours per course)	1
PL 2236 – Specialized Legal Software <i>Previously PL 231C (Prerequisites: CIS 1120, PL 1130, PL 1140)</i> Introduces students to various law-oriented software in the area of case management, time and billing, deposition digest and calendaring and docket control. (5 weeks; 10 theory + 15 lab hours per course)	1
PL 2415 – Business Organizations <i>Previously PL 102 (Prerequisites: PL 1140 or division approval)</i> Covers concepts such as the various types of business entities including sole proprietorships, partnerships, limited liability companies and corporations. Agency principles, regulatory requirements and business ethics are also included. <i>Distance Learning option available (see page 45).</i>	3
PL 2420 – Contract Law <i>Previously PL 201 (Prerequisites: PL 1140 or division approval)</i> Focuses on the law of contracts, rights and responsibilities, formation, consideration, enforceability, remedies and third parties, as well as case study and analysis. The student will draft a written contract.	3

Course Subject Code/Course number – Course Name	Credit Hours
PL 2425 – Domestic Relations <i>Previously PL 223 (Prerequisites: PL 1140 or division approval)</i> Focuses on legal issues in family relations with emphasis on local procedures in the domestic relations court and its satellites.	3
PL 2430 – Constitutional Law <i>Previously PL 225 (Prerequisites: PL 1140 or division approval)</i> Focuses on concepts such as civil rights and liberties under the Constitution, free speech, religious freedom, racial discrimination, group rights, privacy, political participation and various contemporary issues.	3
PL 2435 – Civil Litigation II <i>Previously PL 230 (Prerequisites: PL 2120, PL 2140, PL 2150)</i> Implements concepts learned in Civil Litigation through student participation in a hypothetical case and study, completing more sophisticated tasks in civil litigation, evidence rules, concepts and objections.	3
PL 2440 – Criminal Litigation II <i>Previously PL 243 (Prerequisites: PL 2130, PL 2140, PL 2150)</i> Implements concepts learned in Criminal Litigation through student participation in a hypothetical case and study, completing more sophisticated tasks in criminal litigation, evidence rules, concepts and objections.	3
PL 2445 – Personal Injury Law <i>Previously PL 232 (Prerequisites: PL 1130 and PL 1140 or division approval)</i> Focuses on the medical aspects and documentation of personal injuries in tort, workers' compensation and Social Security disability law.	3
PL 2450 – Administrative Law <i>Previously PL 234 (Prerequisites: PL 1140 or division approval)</i> Focuses on the policies, practices and procedures of governmental agencies and state and local administrations.	3
PL 2455 – Employment Law <i>Previously PL 236 (Prerequisites: PL 1140 or division approval)</i> Focuses on the history of discrimination law and current federal protections, the principle of equal treatment, litigation involving unequal treatment, seniority, sexual and racial harassment, pay equity, labor relations and remedies.	3
PL 2460 – Native American Law <i>Previously PL 242 (Prerequisites: PL 1140 or division approval)</i> Focuses on Native American law to prepare students to work in private law firms or other settings that specialize in Native American law or that practice in tribal courts or other tribunals, that consider interests of individuals as natives or Indian groups.	3
PL 2465 – Social Security Law <i>Previously PL 244 (Prerequisites: PL 1140 or division approval)</i> Focuses on representing clients through the Social Security administrative process, disability evaluation, procedural issues and regulations, federal law and medical terminology. (5 weeks)	1
PL 2470 – Bankruptcy Law <i>Previously PL 245 (Prerequisites: PL 1140 or division approval)</i> Focuses on bankruptcy practice, Bankruptcy Code and Rules of Bankruptcy Procedure. (5 weeks)	1

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
PL 2520 – Mediation <i>Previously PL 294 (Prerequisite: division approval)</i> Introduces fundamental skills involved in mediating disputes. Students find and cover the expenses of their own training programs. CNM supervision of the student's experience must be arranged between the student and an instructor, for a total of 45 hours under a written agreement provided by the Paralegal Studies office. Students may complete written assignments to fulfill some of the required hours at the discretion of the instructor. The student is jointly evaluated by the mediation trainer and the instructor or will be required to produce a certificate of completion of a recognized mediation training program. The course is offered subject to availability of trainers.	3	PLAP 1427 – Plumbing Apprenticeship <i>Previously PLAP 198H (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7
PL 2530 – Public Defender <i>Previously PL 295 (Prerequisite: division approval)</i> Requires students to work 135 hours in the local Public Defender's Office under the supervision of an attorney or attorney's designate and become familiar with all forms of case preparation for indigent criminal defendants. CNM supervision of the student's experience must be arranged between the student and an instructor under a written agreement provided by the Paralegal Studies office. The student is jointly evaluated by the Public Defender's Office and the instructor. The course is offered subject to availability of a supervising attorney or attorney's designate.	3	PLAP 1517 – Plumbing Apprenticeship <i>Previously PLAP 198I (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7
PLAP – Plumbing Apprenticeship <i>(Applied Technologies Division)</i>		PLAP 1527 – Plumbing Apprenticeship <i>Previously PLAP 198J (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7
PLAP 1117 – Plumbing Apprenticeship <i>Previously PLAP 198A (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7	PLMB – Plumbing Courses <i>(Applied Technologies Division)</i>	
PLAP 1127 – Plumbing Apprenticeship <i>Previously PLAP 198B (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7	PLMB 1105 – Plumbing & Safety Fundamentals <i>Previously PLMB 121 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval; Recommended prerequisite: RDG 0750 or a Reading Improvement Accuplacer score of 69)</i> Introduces the basic fundamentals of plumbing and emphasizes the importance of safety specific to the plumbing trades. (30 theory + 37.5 lab hours per term)	3
PLAP 1217 – Plumbing Apprenticeship <i>Previously PLAP 198C (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7	PLMB 1110 – Blueprint Reading <i>Previously PLMB 122</i> Explores interpretation of residential and commercial blueprints and isometric drawings. The students are taught the basics of sketching and design. (15 theory + 37.5 lab hours per term)	2
PLAP 1227 – Plumbing Apprenticeship <i>Previously PLAP 198D (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7	PLMB 1115 – Introduction to Gas Fitting and Pipe Laying <i>Previously PLMB 123 (Pre- or corequisites: PLMB 1105, 1110 or division approval)</i> Investigates design layout and installation of piping systems and the fundamentals of gas burning appliances. (15 theory + 37.5 lab hours per term)	2
PLAP 1317 – Plumbing Apprenticeship <i>Previously PLAP 198E (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7	PLMB 1120 – Drain, Waste and Vent I <i>Previously PLMB 124 (Pre- or corequisites: PLMB 1105, 1110 or division approval)</i> Emphasizes layout and design of drain and vent systems in residential buildings. (15 theory + 37.5 lab hours per term)	2
PLAP 1327 – Plumbing Apprenticeship <i>Previously PLAP 198F (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7	PLMB 1125 – Drain, Waste and Vent II <i>Previously PLMB 125 (Pre- or corequisites: PLMB 1105, 1120 or division approval)</i> Describes layout and design of drain and vent systems in commercial buildings. (15 theory + 37.5 lab hours per term.)	2
PLAP 1417 – Plumbing Apprenticeship <i>Previously PLAP 198G (Prerequisite: current full-time employment in the plumbing industry)</i> Provides 75–105 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation.	5-7	PLMB 1130 – Piping Systems <i>Previously PLMB 126 (Pre- or corequisites: PLMB 1105, 1115 or division approval)</i> Introduces layout and design of water piping systems as well as the installation of plumbing fixtures. (15 theory + 37.5 lab hours per term)	2
		PLMB 1205 – Backflow Prevention <i>Previously PLMB 131</i> Focuses on the requirements of installation, repair and testing of backflow prevention assemblies. The successful completion of this course will qualify the student for a City of Albuquerque Backflow Tester's certificate. (15 theory + 37.5 lab hours per term)	2
		PLMB 1210 – Commercial Plumbing <i>Previously PLMB 132</i> Presents the different aspects of the commercial plumbing industry. (15 theory + 37.5 lab hours per term)	2

Course Subject Code/Course number – Course Name**Credit Hours****PLMB 1215 – Plumbing Theory and Repair** 2

Previously PLMB 133 (Pre- or corequisites: PLMB 1125, 1130 or division approval)
 Focuses on maintenance and repair of plumbing fixtures and includes the scientific principals explaining why water supply and sewage systems work as well as mathematical principals of plumbing.
(15 theory + 37.5 lab hours per term)

PLMB 1220 – Plumbing Code Applications 3

Previously PLMB 134 (Pre- or corequisites: PLMB 1105, 1110 or division approval)
 Prepares student to take the hands-on and written portions of the Journeyman’s test in the state of New Mexico. *(30 theory + 37.5 lab hours per term)*

PLMB 1225 – Building Maintenance and Repair 2

Previously PLMB 135 (Pre- or corequisites: PLMB 1215 or division approval)
 Presents requirements for installation and repair of heating and cooling systems for commercial and residential applications. *(15 theory + 37.5 lab hours per term)*

PLMB 1230 – Hydronics & Plumbing Systems 2

Previously PLMB 136 (Pre- or corequisites: PLMB 1115, 1130 or division approval)
 Explores hydronic heating and the special problems of the manufactured housing industry and rural plumbing. *(15 theory + 37.5 lab hours per term)*

PLMB 1305 – Trades Math 1

Previously PLMB 170
 Includes basic arithmetic, whole numbers, fractions and decimals. Covers volumes, weight measurements and basic algebra as it applies to plumbing.

PLMB 1310 – Journeyman Preparation 3

Previously PLMB 171
 Introduces licensing requirements, rules and regulations and the Uniform Plumbing Code for persons interested in becoming journey level plumbers and natural gas fitters in New Mexico.

PLMB 2096, 2196...2996 – Special Topics 1-6

(all courses ending in 96 are topics courses)
Previously PLMB 296
 Enables students currently in the plumbing trades to pursue studies in specialized areas. This class also may be taken as an independent or guided study or as a refresher to sharpen skills prior to licensing.

PLMB 2997 – Independent Study Variable

Previously PLMB 297 (Prerequisite: division approval)
 Focuses on a specific problem while working with an instructor.

PLMB 2999 – Plumbing Capstone Course 1

Previously PLMB 295 (Prerequisite: division approval)
 Preparation of a professional portfolio that demonstrates student’s mastery of technical and core competencies. *(Taken during student’s last term).*

PM – Project Management Courses (Business & Information Technology Division)**PM 1096, 1196...1996 – Topics** 3

(all courses ending in 96 are topics courses)
Previously PM 296 (Prerequisite: division approval)
 Provides in-depth study of special topics in project management.

Course Subject Code/Course number – Course Name**Credit Hours****PM 1130 – Project Management Fundamentals** 3

Previously PM 130 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent and ENG 0950 or Accuplacer Sentence Skills score of 85 or higher or division approval)
 Provides an introduction to the field of project management in theory and practice, addresses the role of project managers in the current world of rapid change, increased competitive forces and increased expectations for the successful delivery of projects in organizations and exposes the student to “hard” and “soft” techniques of project management.
Distance Learning option available (see page 45).

PM 1150 – Effective Project Leadership 3

Previously PM 150 (Prerequisite: IT 1010 and PM 1130; co- or prerequisite CIS 2110 or division approval)
 Focuses on the competencies needed to apply project leadership to create a positive project environment. Students complete a project leadership assessment, explore various methods of leadership and how the methods interact to create the project dynamics and how to lead project resources to project success.
Distance Learning option available (see page 45).

PM 2095 – Cooperative Education 4

Previously PM 299 (Prerequisite: division approval)
 Provides the opportunity for students to apply program knowledge and skills at an approved work site and requires a minimum of 150 hours. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Student trainees are paid by the cooperating firm and supervised jointly by CNM and the employer.

PM 2096, 2196...2996 – Topics 1-6

(all courses ending in 96 are topics courses)
Previously PM 296 (Prerequisite: division approval)
 Provides in-depth study of special topics in project management.

PM 2097 – Independent Study 1-6

Previously PM 297 (Prerequisite: division approval)
 Allows the student and instructor to define a specific problem directly related to the program in the area of the student’s interest. The student develops and executes a solution using analytical techniques. Student presentations may be required.

PM 2098 – Internship 4

Previously PM 298 (Prerequisite: division approval)
 Provides the opportunity for student to apply program knowledge and skills at an approved work site and requires a minimum of 150 hours. If the student is currently employed in area of study, the 150 hours must involve a new learning experience. Students are not paid for their work but are supervised jointly by CNM and the company.

PM 2200 – Budget and Resource Management 3

Previously PM 200 (Prerequisite: IT 1010 and PM 1130 or division approval)
 Exposes the student to earned value method and resource allocation to establish a realistic project baseline. Strategies used to effectively monitor, measure and control cost and schedule are also addressed. Emphasis will be placed on applying effective methods for keeping the project budget and schedule on target, setting project standards and effective use of metrics to measure project success.
Distance Learning option available (see page 45).

PM 2210 – Contract Management 3

Previously PM 210 (Prerequisite: ENG 1101 or ENG 1119 and PM 1130 or division approval)
 Covers various forms of project contracts and legal documentation. Critical duties performed by contracting personnel and project managers during the negotiation and contract administration phase of the acquisition process are emphasized.
Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name **Credit Hours**

PM 2220 – Managing Multiple Projects **3**

Previously PM 220 (Prerequisite: PM 1130, 1150, 2200 and 2210 or division approval)
Highlights the important aspects for managing multiple projects that are dispersed across various geographical locations and effectively managing conflicting priorities and limited resources inherent to all projects. Various tools and techniques addressing these challenges, working effectively with multiple projects in geographically dispersed environments and managing culturally diverse teams will be presented.
Distance Learning option available (see page 45).

PM 2250 – Advanced Project Management **3**

Previously PM 250 (Prerequisite: PM 1130, 1150, 2200 and 2210, or division approval)
Emphasizes the various types of knowledge and skills that are required by an experienced project manager and how to deal with advanced problems in organization structure, behavior and leadership. Students create a project plan, prepare a project master schedule, develop a work breakdown structure, allocate various resources and assign labor amounts to a specific project. Program core competencies are also measured in this course.
Distance Learning option available (see page 45).

PN – Practical Nursing Courses *(Health, Wellness & Public Safety Division)*

FOR PRACTICAL NURSING COURSES PLEASE SEE (NURS) NURSING COURSES.

PRNS – Perioperative Nursing Courses *(Health, Wellness & Public Safety Division)*

PRNS 2010 – Perioperative Nurse Specialist Theory/Lab **8**

Previously PRNS 260L (Prerequisite: program director approval; Corequisite: PRNS 2090)
Presents philosophy of and skills required of RNs in the surgical environment, including preoperative, intraoperative and postoperative care. Skills are practiced in a campus operating room laboratory. (12 weeks; 90 theory + 90 lab hours per term) Program fee: Published in the **Schedule of Classes**.

PRNS 2090 – Perioperative Nurse Specialist Clinical Experience **6**

Previously PRNS 265C (Corequisite: PRNS 2010)
Applies new and previously learned concepts to perioperative nursing in hospital operating rooms. (12 weeks; 270 clinical hours per term)

PRNS 2096, 2196...2996 – Special Topics in Perioperative Nursing **1-6**

(all courses ending in 96 are topics courses)
Previously PRNS 296
Explore various topics of interest in the field of Perioperative Nursing.

PSCI – Political Science Courses *(Communication, Humanities & Social Sciences Division)*

PSCI 1110 – The Political World **3**

Previously PSCI 110
Introduces politics, emphasizing how people can understand their own political systems and those of others.

PSCI 2096, 2196...2996 – Topics in Political Science **3**

(all courses ending in 96 are topics courses)
Previously PSCI 296
Presents various topics. See **Schedule of Classes**.

PSCI 2200 – U.S. Politics **3**

Previously PSCI 200
Surveys American politics: theory of democracy and political institutions, governmental branches and their bureaucracies.
Distance Learning option available (see page 45).

Course Subject Code/Course number – Course Name **Credit Hours**

PSCI 2210 – State and Local Politics **3**

Previously PSCI 210
Analyzes state and local politics, using New Mexico and other states as examples. Fall, spring only.

PSCI 2220 – Comparative Government and Politics **3**

Previously PSCI 220
Compares the roles of public opinion, electoral systems, political parties, interest groups, governmental institutions and policy performance in European democracies, developing third-world nations and communist political systems.
Distance Learning option available (see page 45).

PSCI 2240 – International Politics **3**

Previously PSCI 240
Examines various significant factors in international politics: nationalism, ideology, deterrence, balance of power, international law and international conflict and collaboration.

PSCI 2260 – Political Ideas **3**

Previously PSCI 260
Surveys classical and contemporary political ideas and ideologies; introduces many of the enduring political issues, which are presented in descriptive, analytical and normative terms. Fall only.

PSY – Psychology Courses *(Communication, Humanities & Social Sciences Division)*

PSY 1105 – Introduction to Psychology **3**

Previously PSY 105 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
Introduces psychology as the scientific study of behavior and mental processes: methodology, psychobiology, learning, memory, personality, psychological disorders, therapy, personality and social psychology.
Distance Learning option available (see page 45).

PSY 1130 – Practical Psychology **3**

Previously PSY 130 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
Focuses on practical applications of psychological knowledge: stress and mood management, communication and relationships, developmental issues and mental health.

PSY 2096, 2196...2996 – Topics in Psychology **3**

(all courses ending in 96 are topics courses)
Previously PSY 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
Presents various topics. See **Schedule of Classes**.

PSY 2200 – Statistical Principles **3**

Previously PSY 200 (Prerequisite: PSY 1105; MATH 0940 or Accuplacer Elementary Algebra score of 81 or equivalent, Recommended prerequisite: MATH 1210 or 1310)
Introduces basic statistics principles for the description and interpretation of psychological data: frequency distributions, graphing, measures of central tendency, variability, regression, correlation, hypothesis testing and analysis of variance. Fall, spring only.

PSY 2220 – Developmental Psychology **3**

Previously PSY 220 (Prerequisite: PSY 1105)
Emphasizes physical, social, emotional and intellectual development across the life span, including professional research and applications.
Distance Learning option available (see page 45).

PSY 2231 – Human Sexuality **3**

Previously PSY 231 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: PSY 1105)
Surveys and analyzes physiological, cultural, social and individual factors that influence sexual behavior, sex roles and sex identity.

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PSY 2232 – Clinical Psychology <i>Previously PSY 232 (Prerequisite: PSY 1105)</i> Examines clinical psychology as a profession and research area: psychometrics and assessment, systems of prevention and therapy, forensic psychology, program evaluation, professional and ethical issues.	3
PSY 2233 – Psychology and Film <i>Previously PSY 233 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: PSY 1105)</i> Analyzes psychiatric disorders as portrayed in films, offering an opportunity to see realistic manifestations of “madness,” and cinema’s ability to reflect and to affect perceptions of mental illness and treatment.	3
PSY 2240 – Brain and Behavior <i>Previously PSY 240 (Prerequisite: PSY 1105 or BIO 1410/1492)</i> Surveys the role of the nervous system in the control of behavior and mental processes. Fall, spring only.	3
PSY 2260 – Psychology of Learning and Memory <i>Previously PSY 260 (Prerequisite: PSY 1105)</i> Introduces study of learning in the laboratory, ranging from simple processes such as conditioning to complex ones such as transfer, memory and concept formulation. Fall only.	3
PSY 2265 – Cognitive Psychology <i>Previously PSY 265 (Prerequisite: PSY 1105)</i> Presents theories and research on various mental processes: memory (encoding, storage and retrieval), attention, comprehension, categorization, reasoning, problem solving, language and motor skills. Spring only.	3
PSY 2271 – Social Psychology <i>Previously PSY 271 (Prerequisite: PSY 1105 or SOC 1101)</i> Emphasizes study of social interaction: communication, perception of the self and others, attitudes and leadership. Fall, spring only.	3
PSY 2289 – Death and Dying <i>Previously PSY 299 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Examines psychological, emotional and sociological aspects of death in American culture.	3

PT – Pharmacy Technician Courses (Health, Wellness & Public Safety Division)

PT 1003 – Pharmacy Calculations <i>Previously PT 116 (Prerequisite: CHEM 0950 or CHEM 1410/1492 or high school chemistry and director approval; Corequisites: PT 1010, 1015, 1092; Pre- or corequisite: IT 1010)</i> Provides skills in pharmaceutical calculations for oral, parenteral and IV preparations. <i>Distance Learning option available (see page 45).</i>	3
PT 1010 – Introduction to Pharmacy Technology <i>Previously PT 110 (Prerequisites: RDG 0750 or Accuplacer Reading score of 69 or equivalent, ENG 0750 or Accuplacer English score of 69 or equivalent, MATH 0930 or Accuplacer Elementary Algebra score of 72 or equivalent, CHEM 0950 or CHEM 1410/1492 or high school Chemistry and director approval; Corequisites: PT 1015, 1003, 1092; pre-or corequisites: HLTH 1001, IT 1010)</i> Provides a discussion of the pharmacy technician’s role, the history of pharmacy, state and federal laws, ethics, professional standards of practice, prescription preparation and institutional drug distribution systems. <i>Distance Learning option available (see page 45).</i>	3

Course Subject Code/Course number – Course Name**Credit Hours**

PT 1015 – Pharmacy Technician Anatomy and Physiology <i>Previously PT 115 (Prerequisite: CHEM 0950 or CHEM 1410/1492 or high school chemistry and director approval; Corequisites: PT 1015, 1003, 1092; Pre- or corequisite: IT 1010)</i> Provides an introduction to basic human anatomy and physiology, with emphasis on physiology as the foundation for pharmacology. <i>Distance Learning option available (see page 45).</i>	3
PT 1092 – Pharmacy Technician Lab I <i>Previously PT 111L (Prerequisites: CHEM 0950 or CHEM 1410/1492 and director approval; Corequisites: PT 1003, 1010, 1015; pre- or corequisites: IT 1010)</i> Focuses on the fundamentals of current pharmacy practice, including drug nomenclature, medical terminology and basic pharmacy skills. Lab includes practice in interpreting prescriptions, introduction to packaging and dispensing medications, extensive theory and experiential training in aseptic preparation of compounded sterile products including use of Laminar flow hood for media fill validation testing. (90 lab hours per term) <i>Distance Learning option available (see page 45).</i>	2
PT 1096, 1196...1996 – Special Topics in Pharmacy Technician <i>(all courses ending in 96 are topics courses)</i> <i>Previously PT 296</i> Explore various topics of interest in the field of Pharmacy Technology. <i>Distance Learning option available (see page 45).</i>	1-6
PT 1510 – Advanced Pharmacy Technology <i>Previously PT 120 (Prerequisites: PT 1010, 1003, 1015, 1092, CHEM 0950 or CHEM 1410/1492 or high school chemistry, IT 1010 and director approval; Corequisites: PT 1515, 1590, 1592; Pre- or corequisite: COMM 1130 or 2221)</i> Continues study of dosage forms and routes of administration begun in PT 1010; covers techniques for compounding of drug products; drug selection, packaging and stability; practical aspects of successful employment and customer service; and theory relating to parenteral products. Program fee: Published in the Schedule of Classes . <i>Distance Learning option available (see page 45).</i>	3
PT 1515 – Pharmacology for Pharmacy Technicians <i>Previously PT 125 (Prerequisite: IT 1010 and director approval; Corequisites: PT 1510, 1590, 1592; Pre- or corequisite: COMM 1130 or 2221)</i> Presents study of therapeutic drug categories, how drugs produce their effects and common side effects. <i>Distance Learning option available (see page 45).</i>	3
PT 1590 – Pharmacy Technician Practicum <i>Previously PT 122C (Prerequisite: program director approval, IT 1010 and director approval; Corequisites: PT 1510, 1515, 1592; Pre- or corequisite: COMM 1130 or 2221)</i> Provides the opportunity in institutional and community pharmacies for practical experience in applying what they have learned in classrooms and labs. (225 clinical hours per term) <i>Distance Learning option available (see page 45).</i>	5
PT 1592 – Pharmacy Technician Lab II <i>Previously PT 121L (Prerequisites: PT 1003, 1010, 1015, 1092, CHEM 0950 or CHEM 1410/1492 or high school chemistry, IT 1010 and director approval; Corequisites: PT 1510, 1515, 1590; Pre- or corequisite: COMM 1130 or 2221)</i> Provides further opportunity to develop skills in both non-sterile and sterile compounding of drug products, use of a laminar flow hood, reconstituting, compounding, packaging and labeling. Emphasis on preparation for the national Pharmacy Technician Certification Exam (PTCE) (90 lab hours per term) <i>Distance Learning option available (see page 45).</i>	2

RADT – Radiologic Technology Courses *(Health, Wellness & Public Safety Division)*

RADT 1003 – Introduction to Radiologic Technology	1
<i>Previously RADT 101 (Prerequisites: program director approval, ENG 1101, BIO 2210/2292; Corequisites: RADT 1070; Pre- or corequisites: BIO 2310/2392)</i>	
Introduces students to Radiologic Technology as a health science profession. Includes an introduction to the clinical setting, radiology and hospital organization, radiation protection and monitoring, ethical and legal issues of medical imaging, confidentiality, to include diversity and anti-discrimination issues in employment situations, professional organizations, professional development, accreditation and credentialing and computers in the workplace. Program fee: Published in the Schedule of Classes .	
RADT 1005 – Fundamentals of Radiography	3
<i>Previously RADT 102 (Corequisites: RADT 1003, 1070)</i>	
Presents the production of the radiographic image on film. The course will include exposure factors, the interaction of x-rays and matter, basic image receptor principles, image quality and basic physics of x-ray equipment. Consideration will be given to how processing and exposure variables affect the final radiograph. Film characteristics and adjuncts (screens, grids) will be explored. Technique formulation and exposure compensations will be studied and practiced.	
RADT 1070 – Radiographic Positioning I	3
<i>Previously RADT 103L (Corequisites: RADT 1003, 1005)</i>	
Presents the fundamentals of the radiographic terminology, anatomy and positioning used in routine radiographic procedures of the chest, abdomen, extremities, ribs, pelvic girdle and shoulder girdle. Other relative topics will include clinical histories, patient care, lifting and moving patients, improvisation, radiographic requisitions and reports, film critique, basic equipment and portable radiography. (30 theory + 45 lab hours per term)	
RADT 1090 – Clinical Radiography I	5
<i>Previously RADT 130C (Prerequisite: HLTH 1001; Corequisites: RADT 1003, 1005, 1070)</i>	
Introduces the clinical environment in a clinical facility. Development of basic competencies under direct supervision in selected procedures studied in the college classroom and laboratory (chest, abdomens, extremities) Observation and participation in office procedures, film filing, patient transport, darkroom and exposure rooms. Manipulation of radiographic equipment—collimator, table, tube, marking systems. Setting of exposure factors according to charts. Patient care will include transfer techniques and emphasize a concern for patient comfort. Film critique will be carried out regularly. (225 clinical hours per term) Program fee: Published in the Schedule of Classes .	
RADT 1096, 1196...1996 – Special Topics in Radiologic Technology	1-6
<i>(all courses ending in 96 are topics courses)</i>	
<i>Previously RADT 296</i>	
Explore various topics of interest in the field of Radiologic Technology.	
RADT 1503 – Patient Care in Radiography	2
<i>Previously RADT 106 (Pre- or corequisite: PSY 1105 or SOC 1101; Corequisites: RADT 1510, 1570, 1590)</i>	
Covers issues related to patient care including legal and professional responsibilities, patient rights, patient confidentiality, security, patient education, safety and comfort, infection control and prevention, patient monitoring, contrast media, pharmacology and parental drug administration.	
RADT 1510 – Radiobiology and Protection	3
<i>Previously RADT 110 (Corequisites: RADT 1503, 1570, 1590)</i>	
Presents biological effects of radiation exposure to human cells and tissues including genetic, somatic, short and long-term effects. Topics include radiation measurements, policies and protection measures for technologists, patients and others. Minimizing patient and personnel exposure, basic methods of protection, protective devices, units of measurement and sources of radiation exposure are covered.	

RADT 1570 – Radiographic Positioning II	3
<i>Previously RADT 104L (Prerequisite: RADT 1070; Corequisites: RADT 1503, 1510, 1590)</i>	
Continues course of study begun in RADT 1070 including procedures, projections, anatomy, oseology and arthrology of the vertebral column, skull and facial bones, sinuses and mastoids. Other topics will include foreign body localization and film critique. Surveys the common procedures of the gastrointestinal, urinary, respiratory, biliary and cardiovascular systems utilized to study the factors that govern and influence the production and recording of radiologic images. (30 theory + 45 lab hours per term)	
RADT 1590 – Clinical Radiography II	4
<i>Previously RADT 140C (Corequisites: RADT, 1503, 1510, 1570)</i>	
Continues course of study begun in RADT 1090 with a continued development of competencies under direct supervision and practice in basic procedures learned in positioning I and II. Independent performance in selected procedures, film processing and film critiques and assistance in a variety of patient care needs. (180 clinical hours per term) Program fee: Published in the Schedule of Classes .	
RADT 2005 – Introduction to Quality Assurance	2
<i>Previously RADT 207 (Prerequisites: RADT 1503, 1510, 1570, 1590; Corequisites: RADT 2010, 2092)</i>	
This course provides the student with an introduction to the evaluation of radiographic systems to assure consistency in the production of quality images. Components or radiography equipment and tests and procedures to evaluate these components are discussed.	
RADT 2010 – Radiographic Imaging I	3
<i>Previously RADT 202L (Prerequisite: RADT 1570; Pre- or corequisite: MATH 1210 or 1310)</i>	
Covers film and electronic imaging with related accessories. Employs radiographic film critique to emphasize the methods of diagnostic quality control. (30 theory + 45 lab hours per term)	
RADT 2090 – Clinical Radiography III	6
<i>Previously RADT 230C (Corequisites: 2005, 2010, 2092,)</i>	
Continues course of study begun in RADT 1590. A continued development of competencies under direct supervision and continuous practice of basic procedures learned in positioning I and II and Radiographic Imaging I. Independent and intermediate level of performance in selected procedures, film processing and film critiques. Assistance in a variety of patient care needs, safety issues, PACS and dye exposure. (270 clinical hours per term) Program fee: Published in the Schedule of Classes .	
RADT 2092 – Radiographic Film Critique Lab	1
<i>Previously RADT 205L (Corequisites: RADT 1503, 1510, 1570, 1590; Corequisite: RADT 2005, 2010)</i>	
Provides a clinical lab experience in clinical film critique to integrate clinical practice and classroom education. Evaluates technical error on radiographs and reviews strategies for avoiding future errors. (45 contact hours)	
RADT 2404 – Radiographic Imaging II	1
<i>Previously RADT 203 (Prerequisite: RADT 2010; Corequisites: RADT 2408, 2410, 2490)</i>	
Surveys the special procedures and special imaging modalities (ultrasound, mammography, nuclear medicine, oncology and surgical radiography) utilized to explore topics in imaging equipment and image processing.	
RADT 2408 – Radiographic Pathology	2
<i>Previously RADT 208 (Corequisites: 2404, 2410, 2490)</i>	
Continues course of study begun in RADT 2005. Surveys additional body systems and the relative pathologies affecting them. Radiographic imagine methods will be considered to demonstrate how to best demonstrate these pathologies.	
RADT 2410 – Radiographic Physics and Instrumentation	3
<i>Previously RADT 231 (Corequisites: RADT 2404, 2408, 2490)</i>	
A study of the physical principles of diagnostic radiography and computerized tomography and magnetic resonance imaging. Will also include Atomic Structure ECT.	

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RADT 2490 – Clinical Radiography IV **6**
Previously RADT 240C (Corequisites: RADT 2404, 2408, 2410)
 Continues course of study begun in RADT 2090 with indirect supervision, a continued development of competence and practice in basic positioning learned in Positioning I and II and Radiographic Imaging I and II. Independent/intermediate level of performance in selected procedures, film processing and film critiques. Assists in a variety of patient care activities. (180 clinical hours per term) Program fee: Published in the **Schedule of Classes**.

RADT 2810 – Radiologic Technology Seminar **2**
Previously RADT 280 (Prerequisite: RADT 2404, 2408, 2410, 2490; Corequisite: RADT 2890)
 A capstone experience for students preparing for employment as radiologic technologists. Will consider topics in leadership, clinical management, professional development, quality assurance, quality control, professional organizations and preparation for the national registry exam as well as current developments in the field. Program fee: Published in the **Schedule of Classes**.

RADT 2890 – Clinical Radiography V **8**
Previously RADT 250C (Prerequisite: RADT 2490; Corequisite: RADT 2810)
 Continues course of study begun in RADT 2490 with instruction and practice in a clinical facility under indirect/close supervision. Student will continue to develop competencies learned in Positioning I and II and Imaging I and II. Observation, involvement and assistance in special procedures and special imaging modalities. Review of radiographs, preparation for employment as radiologic technologists. (360 clinical hours) Program fee: Published in the **Schedule of Classes**.

RDG – Reading Courses (Division of Educational & Career Advancement)

RDG 0196, 0296...0996 – Special Topics **1-3**
(all courses ending in 96 are topics courses)
Previously RDG 096
 Presents various topics for reading instruction.

RDG 0750 – Reading Improvement **3**
Previously RDG 099 (Prerequisite: ENG 0550 or Accuplacer Reading score of 69 or equivalent)
 Introduces reading required for success in academic and career technical majors. Students work on improving reading skills and applying the reading process to a variety of reading tasks. (45 theory hours + 15 lab hours per term)

RDG 0950 – Reading and Critical Thinking **3**
Previously RDG 100 (Prerequisite: RDG 0750 or Accuplacer Reading score of 69 or equivalent)
 Focuses on reading required for success in college. Includes comprehension, problem solving, notetaking, summarizing and computer-assisted research skills. (45 theory hours + 15 lab hours per term)
Distance Learning option available (see page 45).

RLGN – Religion Courses (Communication, Humanities & Social Sciences Division)

RLGN 1107 – Living World Religions **3**
Previously RLGN 107 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Introduces the academic study of religion, focusing on major world religions: religions of antiquity, Hinduism, Buddhism, Taoism, Judaism, Christianity, Islam and religion in primal cultures.
Distance Learning option available (see page 45).

RLGN 2096, 2196...2996 – Topics in Religious Studies **3**
(all courses ending in 96 are topics courses)
Previously RLGN 247(Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Presents various topics. See **Schedule of Classes**.

Course Subject Code/Course number – Course Name **Credit Hours**

RLGN 2240 – Ancient Religions **3**
Previously RLGN 240 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Examines the religions of the ancient Middle East, Egypt, Greco-Roman, Germanic and Celtic worlds. Studying these religions provides students with an understanding of the origins of modern religions and spirituality.

RLGN 2263 – Eastern Religions **3**
Previously RLGN 263 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
 Provides an overview of the major religions of Asia, particularly the religions of India (Hinduism and Buddhism), Persia (Zoroastrianism), China (Confucianism and Taoism) and Japan (Shintoism and Zen Buddhism)

RNR – Nurse Refresher Courses (Health, Wellness & Public Safety Division)

RNR 2010 – Refresher Theory/Lab **7**
Previously RNR 255L
 Covers medical-surgical and specialty nursing, pharmacology and procedures. (6 weeks; 94 theory + 10 lab hours per term) Program fee: Published in the **Schedule of Classes**.
Distance Learning option available (see page 45).

RNR 2090 – Refresher Clinical Experience **2**
Previously RNR 265C (Prerequisite: must have had a valid RN license, professional CPR certification; Pre- or corequisite: RNR 2010)
 Provides medical-surgical clinical experiences including total patient care. This course is offered for credit/no credit. (5 weeks; 88 clinical hours per term)
Distance Learning option available (see page 45).

RT – Respiratory Therapy Courses (Health, Wellness & Public Safety Division)

RT 1010/1070 – Respiratory Therapy Principles and Practices I **4**
Previously RT 101/101L (Prerequisites: program director approval ENG 1101, HLTH 1001, MATH 1210; Corequisites: RT 1030, 1090)
 Introduces respiratory therapy as a health sciences profession. Includes cardiopulmonary assessment, medical gas administration, aerosol therapy, oxygen therapy, microbiology, infection control, equipment maintenance, incentive breathing exercises and chest physiotherapy. Students practice respiratory care procedures using state of the art equipment in the learning laboratory under simulated patient situations. (45 theory hours + 45 lab hours per term) Program fee: Published in the **Schedule of Classes**.

RT 1030 – Pharmacology of Respiratory Therapy **3**
Previously RT 133 (Corequisites: RT 1010/1070, 1090)
 Presents concepts and principles of pharmacologic agents used in cardiopulmonary care. Includes study of biologic interactions, dosage calculations, side effects, indications for medication, therapeutic, diagnostic procedures and ethical and legal issues.

RT 1090 – Clinical Experiences I **4**
Previously RT 121C (Corequisites: RT 1010/1070, 1030)
 Provides supervised clinical experiences in area hospitals and health care facilities related to concepts presented in RT 1010/1070. (180 clinical hours per term)

RT 1096, 1196...1996 – Special Topics in Respiratory Care **3-6**
(all courses ending in 96 are topics courses)
Previously RT 296 (Prerequisite: program director approval)
 Provides participation in supervised learning of advanced, specialized practices including cardiopulmonary diagnostics and specialized prenatal/pediatric or adult critical care.

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RT 1510/1570 – Respiratory Therapy Principles and Practices II <i>Previously RT 102/102L (Prerequisites: RT 1010/1070, 1030, 1090; Corequisites: RT 1590, Pre- or corequisite: BIO 2210/2292)</i> Emphasizes airway management, pulmonary function testing, arterial puncture and blood gas analysis. Includes administering and home care therapy. Students practice respiratory care procedures using state of the art equipment in the learning laboratory under simulated patient situations. (45 theory hours + 45 lab hours per term)	4	RT 2098 – Internship <i>Previously RT 298 (Prerequisite: AS RT Graduate and program director approval)</i> Allows graduates of the AS RT program to continue learning experiences in conjunction with the UNM Health Sciences Center. Graduates will participate in nationally funded research projects that explore diagnosis, treatment, education and research.	3-6
RT 1590 – Clinical Experiences II <i>Previously RT 122C (Corequisites: RT 1510/1570, 1540)</i> Provides supervised clinical experiences in area hospitals and health care facilities related to concepts presented in RT 1510/1570. (180 clinical hours per term)	4	RT 2410/2470 – Advanced Respiratory Therapy II <i>Previously RT 202/202L (Prerequisites: RT 2010/2070, 2090, 2040; Corequisites: RT 2490, 2440; Pre- or corequisite: BIO 2310/2392)</i> Presents cardiopulmonary assessment and diagnosis in advanced critical care including correlation of cardiopulmonary anatomy, physiology and pathophysiology with evaluation of cardiopulmonary function. Presents clinical assessment techniques in advanced critical care, cardiopulmonary anatomy and physiology, hemodynamic monitoring and advanced cardiac life support using state of the art equipment and computer simulation in the learning laboratory. (45 theory hours + 45 lab hours per term) Program fee: Published in the Schedule of Classes .	4
RT 1540 Cardiopulmonary Pathophysiology I <i>Previously RT 140 (Corequisites: RT 1510/1570, 1590)</i> Presents pathophysiology and management of patients with pulmonary diseases from the perspective of a physician including causes, signs and symptoms, pathophysiology, diagnosis, treatments and prognosis for patients with these problems. Specific topics include: basic concepts of COPD, preparing a case study, chest X-ray interpretation lung defense mechanisms, asthma, chest and lung malignancies, pneumonia, post-OP Complications and restrictive lung disease.	1	RT 2440 Cardiopulmonary Pathophysiology III <i>Previously RT 241 (Corequisites: RT 2410/2470, 2490)</i> Presents pathophysiology and management of patients with pulmonary diseases from the perspective of a physician including causes, signs and symptoms, pathophysiology, diagnosis, treatments and prognosis for patients with these problems. chest trauma, ACLS, pneumothorax, pulmonary vascular disease, corpulmonale, sepsis syndrome, ekg interpretation.	1
RT 1592 Supplemental Skills Lab <i>Previously RT 150 (Prerequisite: program director approval)</i> Provides first-year Respiratory Therapy students the opportunity for additional learning and practice of respiratory therapy skills in the campus laboratory.	1	RT 2490 – Advanced Clinical Experiences II <i>Previously RT 222C (Corequisite: RT 2410/2470, 2440)</i> Introduces skills for advanced respiratory care in adult critical care clinical settings with emphasis on problem-solving and decision-making skills. Experiences include cardiopulmonary function monitoring and maintaining life support systems. (180 clinical hours per term)	4
RT 2010/2070 – Advanced Respiratory Therapy I <i>Previously RT 201/201L (Prerequisites: RT, 1510/1570, 1540, 1590; Corequisites: RT 2040, 2090; Pre- or corequisite: PHIL 2247)</i> Presents basic concepts of adult critical care medicine including adult intensive care and pathophysiology of diseases, introduction to concepts of positive pressure ventilation and advanced airway care. Introduction to positive pressure mechanical ventilation equipment and procedures related to basic critical care medicine for adults using state of the art equipment and computer simulations in the learning laboratory. (45 theory hours + 45 lab hours per term)	4	RT 2810/2870 – Advanced Respiratory Therapy III <i>Previously RT 203/203L (Prerequisites: RT 2410/2470, 2440, 2490; Corequisites: RT 2840, 2890; Pre- or corequisite: BIO 2110/2192)</i> Presents concepts of critical care medicine for children and infants including theory of life support systems. Presents concepts of rehabilitative practice for patients with chronic cardiopulmonary diseases. Introduces strategies for successful completion of national board exams. Presents mechanical ventilation procedures related to critical care medicine for children and infants using state of the art equipment and computer simulations in the learning laboratory. (45 theory hours + 45 lab hours per term)	4
RT 2040 Cardiopulmonary Pathophysiology II <i>Previously RT 240 (Corequisites: RT 2010/2070, 2090)</i> Presents pathophysiology and management of patients with pulmonary diseases from the perspective of a physician including causes, signs and symptoms, pathophysiology, diagnosis, treatments and prognosis for patients with these problems. Specific topics include: adult ventilator monitoring assessment, sleep apnea, complications of mechanical ventilation and non-invasive ventilation.	1	RT 2840 Cardiopulmonary Pathophysiology IV <i>Previously RT 242 (Corequisites: RT 2810/2870, 2890)</i> Presents pathophysiology and management of patients with pulmonary diseases from the perspective of a physician including causes, signs and symptoms, pathophysiology, diagnosis, treatments and prognosis for patients with these problems. Specific topics include: IRDS/BPD, cystic fibrosis, CHF, CO poisoning, neuromuscular disease, trauma & burn, COPD, respiratory failure, ARDS.	1
RT 2090 – Advanced Clinical Experiences I <i>Previously RT 221C (Corequisite: RT 2010/2070, 2040)</i> Introduces skills for basic respiratory care in adult critical care settings with emphasis on problem solving and decision-making skills, patient evaluation skills and the evaluation of therapeutic care plans and initiating life support systems. (180 clinical hours per term)	4	RT 2890 – Advanced Clinical Experiences III <i>Previously RT 223C (Corequisite: RT 2810/2870, 2840)</i> Introduces skills for respiratory care in pediatric and neonatal critical care environments including initiation, monitoring and maintaining life support systems. Introduces clinical experiences with conducting pulmonary rehabilitation. Includes independent study project in an area of respiratory care and supervised mentorship experiences. (180 clinical hours per term) Program fee: Published in the Schedule of Classes .	4
RT 2092 Advanced Supplemental Skills Lab <i>Previously RT 250</i> Provides second-year Respiratory Therapy students the opportunity for additional learning and practice of respiratory therapy skills in the campus laboratory.	1		
RT 2097 – Independent Study <i>Previously RT 297 (Prerequisite: program director approval)</i> Provides opportunity for independent study in respiratory care such as preparation for licensing/credentialing exams.	1-6		

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SCSE – Sportscraft/Small Engine Courses *(Applied Technologies Division)*

SCSE 1070 – Small Engine Skills Improvement I **3**

Previously SCSE 170L
Covers the diagnosis and repair of small air-cooled engines, safety, engine identification, special tools, ignition, cooling, lubrication, engine rebuilding and fuel systems. (15 theory + 75 lab hours per term)

SCSE 1075 – Small Engine Skills Improvement II **3**

Previously SCSE 171L
Presents safe practices in the diagnosis and repair of power equipment, chain saw service and chain sharpening, blower and line trimmer service. (15 theory + 75 lab hours per term)

SMAP – Sheet Metal Apprenticeship *(Applied Technologies Division)*

SMAP 1115 – Sheet Metal Apprenticeship **5-7**

Previously SMAP 198A (Prerequisite: current full-time employment in the sheet metal industry or division approval)
Provides 75–105 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation layout, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SMAP 1125 – Sheet Metal Apprenticeship **5-7**

Previously known as SMAP 198B (Prerequisite: current full-time employment in the sheet metal industry or division approval)
Provides 75–105 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation layout, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SMAP 1215 – Sheet Metal Apprenticeship **5-7**

Previously SMAP 198C (Prerequisite: current full-time employment in the sheet metal industry or division approval)
Provides 75–105 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation layout, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SMAP 1225 – Sheet Metal Apprenticeship **5-7**

Previously SMAP 198D (Prerequisite: current full-time employment in the sheet metal industry or division approval)
Provides 75–105 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation layout, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SMAP 1315 – Sheet Metal Apprenticeship **5-7**

Previously SMAP 198E (Prerequisite: current full-time employment in the sheet metal industry or division approval)
Provides 75–105 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation layout, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SMAP 1325 – Sheet Metal Apprenticeship **5-7**

Previously SMAP 198F (Prerequisite: current full-time employment in the sheet metal industry or division approval)
Provides 75–105 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation layout, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SMAP 1415 – Sheet Metal Apprenticeship **5-7**

Previously SMAP 198G (Prerequisite: current full-time employment in the sheet metal industry or division approval)
Provides 75–105 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation layout, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SMAP 1425 – Sheet Metal Apprenticeship **5-7**

Previously SMAP 198H (Prerequisite: current full-time employment in the sheet metal industry or division approval)
Provides 75–105 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation layout, radial line layout, parallel line layout, blueprint reading and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SMT – Semiconductor Manufacturing Tech Courses *(Applied Technologies Division)*

SMT 2001 – Semiconductor Manufacturing Technology Theory **3**

Previously SMT 204 (Prerequisites: ELEC 1005, 1020; Corequisite: SMT 2002)
Introduces integrated circuit manufacturing, including the basics of semiconductor materials and devices, integrated circuits, clean room technology and topics in wafer processing. Laboratory exercises are conducted in a clean room.

SMT 2092 – Semiconductor Manufacturing Technology Lab **2**

Previously SMT 204L (Corequisite: SMT 2001)
Provides a lab course for SMT 204. Students meet twice per week. (90 lab hours per term)

SOC – Sociology Courses *(Communication, Humanities & Social Sciences Division)*

SOC 1101 – Introduction to Sociology **3**

Previously SOC 101 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
Introduces basic concepts and theories of contemporary sociology: culture, socialization, social groups, deviance, race and ethnicity, gender, age, family, medicine and religion.
Distance Learning option available (see page 45).

SOC 2096, 2196...2996 – Topics in Sociology **3**

(all courses ending in 96 are topics courses)
Previously SOC 296 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)
Presents various topics. See **Schedule of Classes**.

SOC 2205 – Crime, Public Policy and the Criminal Justice System **3**

(Recommended prerequisite: SOC 1101)
Discusses key criminological concepts, measurement of crime and delinquency, its distribution in society, victimization, public opinion, the criminal justice system, crime control strategies and policies.

SOC 2211 – Social Problems **3**

Previously SOC 211 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended: SOC 1101)
Analyzes from a sociological perspective a range of problems in contemporary U.S. society: racism and prejudice, crime and delinquency, mental disorders, family changes, poverty and substance abuse.
Distance Learning option available (see page 45).

SOC 2212 – Juvenile Delinquency **3**

Previously SOC 212 (Prerequisite: SOC 1101)
Emphasizes theories of juvenile delinquency, child abuse, the juvenile justice system, probation, treatment and corrections for juveniles.

Course Subject Code/Course number – Course Name **Credit Hours**

SOC 2213 – Deviant Behavior <i>Previously SOC 213 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended: SOC 1101)</i> Examines theories of deviance and behaviors such as rape, murder, theft, drug use, alcoholism, prostitution, mental disorders and suicide.	3
SOC 2214 – Sociology of Corrections <i>Previously SOC 214 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Introduces theory, practice and legal basis for investigation, treatment and supervision of offenders in custody, on probation or parole. Discusses history of penology and various penal philosophies.	3
SOC 2215 – Criminology <i>Previously SOC 215 (Prerequisite: SOC 1101)</i> Examines causes of crime based on sociological factors, the various faces of crime, the criminal past and present and criminology theory. <i>Distance Learning option available (see page 45).</i>	3
SOC 2216 – Ethnic and Minority Groups <i>Previously SOC 216 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: SOC 1101)</i> Examines relationships among majority and minority and ethnic groups: prejudice, discrimination, stereotyping, pluralism and social mobility.	3
SOC 2225 – Sociology of Family <i>Previously SOC 225 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Presents major theories of the family and the status of the modern family in an era of varied family forms.	3
SOC 2230 – Society and Personality <i>Previously SOC 230 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: SOC 1101 or PSY 1105)</i> Introduces topics in social psychology, such as personality theories, concepts of self, human relationships, small group dynamics and organizational theories.	3
SOC 2235 – Sociology of Gender <i>Previously SOC 235 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80 or equivalent, recommended prerequisite: SOC 1101 or PSY 1105)</i> Focuses on the nature and content of gender in the U.S.: theoretical viewpoints from the social sciences applied to issues of socialization, family, culture, media, education, work, politics and economics. Discusses the impact of gender differentiation on personality development and social interaction.	3
SOC 2280 – Social Science Research <i>Previously SOC 280 (Prerequisite: SOC 1101)</i> Introduces decision making processes and tools involved in social science research, including surveys, field research, experiments and use of existing sources.	3

SPAN – Spanish Courses (Communication, Humanities & Social Sciences Division)

SPAN 1101 – Beginning Spanish <i>Previously SPAN 101 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Introduces listening, speaking and grammatical skills for students with no previous exposure to Spanish. Includes an online workbook and lab manual. <i>Distance Learning option available (see page 45).</i>	4
SPAN 1102 – Beginning Spanish II <i>Previously SPAN 102 (Prerequisite: Span1101 or Spanish placement score of 51 or higher)</i> Continues course of study begun in Span 101: listening, speaking, grammatical skills. Includes an online workbook and lab manual. <i>Distance Learning option available (see page 45).</i>	4

Course Subject Code/Course number – Course Name **Credit Hours**

SPAN 1103 – Beginning Spanish I Conversation <i>Previously SPAN 103 (Pre- or corequisite: SPAN 1102 or permission of instructor)</i> Introduces basic conversational skills and practice speaking Spanish.	3
SPAN 1111 – Heritage Spanish Language <i>Previously SPAN 111 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent)</i> Designed for students who have been exposed to Spanish in the home and community environments, consider Spanish their heritage language and wish to expand their skills. Emphasizes speaking, reading and grammatical concepts.	4
SPAN 1112 – Heritage Spanish Language II <i>Previously SPAN 112 (Prerequisite: SPAN 1101 or 1111)</i> Continues skills acquisition begun in SPAN 1111. Emphasizes reading and writing with extension of study of grammatical concepts.	4
SPAN 2096, 2196...2996 – Topics in Spanish <i>(all courses ending in 96 are topics courses)</i> <i>Previously SPAN 296 (Prerequisite: varies)</i> Presents various topics. See Schedule of Classes	3
SPAN 2201 – Intermediate Spanish I <i>Previously SPAN 201 (Prerequisite: SPAN 1102 or Spanish Placement score of 71 or higher)</i> Continues course of study begun in Spanish 1101 and 1102. Emphasizes expansion of conversational, reading and writing skills. Includes an online workbook and lab manual.	3
SPAN 2202 – Intermediate Spanish II <i>Previously SPAN 202 (Prerequisite: SPAN 2201 or Spanish placement score of 81 or higher)</i> Reviews grammar with an emphasis on writing skills. Provides conversational activities to increase fluency.	3
SPAN 2203 – Intermediate Spanish II Conversation <i>Previously SPAN 203 (Pre- or corequisite: SPAN 2202 or permission of instructor)</i> Emphasizes skills in speaking Spanish.	3
SPAN 2275 – Accelerated Beginning Spanish <i>Previously SPAN 275 (Prerequisite: RDG 0950 or Accuplacer Reading score of 80 or equivalent, or permission of instructor)</i> Combines SPAN 1101 and 1102 in one term. Recommended for language enthusiasts or those who have had exposure to Spanish either in the home or from previous study.	4
SPAN 2276 – Accelerated Intermediate Spanish <i>Previously SPAN 276 (Prerequisite: SPAN 1102 or SPAN 2275 or permission of instructor)</i> Combines SPAN 2201 and 2202 in one term. Recommended for language enthusiasts or those who have had exposure to Spanish either in the home or from previous study.	3
SPAN 2277 – The Art and Skill of Translation <i>Previously SPAN 277 (Prerequisite: SPAN 2202 or equivalent, or permission of instructor)</i> Introduces the art and profession of translation with a focus on practical translation problems in Spanish. Texts from the areas of journalism, law, business and literature are translated from Spanish to English and from English to Spanish. Class conducted in Spanish.	3
SPAN 2280 – Introduction to Hispanic Literature <i>Previously SPAN 280 (Prerequisite: SPAN 2202 or SPAN 2276 or permission of instructor)</i> Presents selected readings from literature written in Spanish by Spanish and Spanish-American authors.	3

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SPED – Special Education Courses *(Communication, Humanities & Social Sciences Division)*

SPED 2201 – Education of the Exceptional Person 3

Previously SPED 201 (Prerequisites: RDG 0950 or Accuplacer Reading score of 69 or equivalent, ENG 0950 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 0930 of Accuplacer Elementary Algebra score of 76 or equivalent, Corequisite: SPED 2290)

Surveys the characteristics and educational needs of exceptional children, including definition, etiology, characteristics and various educational alternatives for each of the exceptionalities. *[Previously offered as CDV 206]*

SPED 2250: Exceptionalities & Placement 3

Previously SPED 250 (Prerequisites: Acceptance into the alternative licensure program)

Focuses on the meanings and concepts associated with learning disabilities and the divergent characteristics and needs of individuals with these disabilities and the implications of these in all learning areas including mathematics and science. Students will develop a through understanding of the different exceptionalities and the developmental stages of children to effectively design programs, placements and transitions. Special emphasis will be placed on identifying various service delivery models related to least restrictive environments. Field experience is required as part of this course.

SPED 2256 – Evaluation/Individual Education Plan and Documentation in Special Education 3

Previously SPED 256 (Prerequisite: Acceptance into alternative licensure program and Pre- or corequisite: SPED 2250)

Promotes an understanding of the screening, evaluation, eligibility and re-evaluation process of special needs students. Topics covered include standardization, administration and interpretation of criterion referenced, curriculum-based, authentic and informal assessments, observation and checklist/rating scale. Special emphasis is placed on instructional decision making, IEP documentation and record keeping and implementation. Field experience is required as part of this course.

SPED 2272 – Reading for Special Learners 3

Previously SPED 272 (Prerequisite: EDUC 2260, Acceptance into alternative licensure program and Pre- or corequisite: SPED 2250)

Provides an understanding of concepts and procedures for teaching reading to students with special needs. Emphasis will be placed on formal and informal reading assessment, effective reading practices, research-based reading programs, oral language development, decoding, strategies, phonemic awareness and vocabulary acquisition. Field experience is required as part of this course.

SPED 2290 – Introduction to Special Education 2

Previously SPED 204 (Prerequisites: RDG 0950 or Accuplacer Reading score of 69 or equivalent, ENG 0950 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 0930 of Accuplacer Elementary Algebra score of 76 or equivalent, Corequisite: SPED 2201)

Provides field experience and seminar in special education settings.

ST – Surgical Technology Courses *(Health, Wellness & Public Safety Division)*

ST 1010 – Beginning Surgical Technology I 3

Previously ST 110A (Prerequisites: COMM 2221, BIO 1410/1492, 1310/1392 or 2210/2292 and 2310/2392, HIT 1020; Corequisites: HLTH 1001, ST 1092)

Includes scope of practice, technologist role, medical ethics and medical terminology, basic principles of aseptic technique and anatomy and physiology applied to surgical procedures.

Distance Learning option available (see page 45).

ST 1092 – Surgical Technology Lab I 6

Previously ST 111L (Corequisites: HLTH 1001, ST 1010)

Provides opportunity to practice clinical skills and competencies developed in the classroom. Includes surgical technique (setting up the sterile field, scrubbing, gowning and gloving) and standards of practice. Infection prevention and control will be covered plus care of the surgical patient. *(270 lab hours per term)*

Program fee: Published in the **Schedule of Classes**.

Distance Learning option available (see page 45).

ST 1510 – Beginning Surgical Technology II 3

Previously ST 110B (Prerequisites: HLTH 1001, ST 1010, 1092; Corequisites: ST 1590, 1592)

Continues Surgical Technology Theory with a focus on an introduction to surgical procedures with a brief history, relevant anatomy and special considerations for general surgery, obstetrics and gynecological procedures, ophthalmic surgery, otorhinolaryngologic surgery, oral and maxillofacial surgery and plastic and reconstructive surgery.

Distance Learning option available (see page 45).

ST 1590 – Surgical Technology Clinical I 8

Previously ST 115C (Prerequisites: HLTH 1001, ST 1010, 1092; Corequisites: ST 1510, 1592)

Applies surgical procedure theory and skills in the clinical setting. *(360 clinical hours per term)* Program fee: Published in the **Schedule of Classes**.

Distance Learning option available (see page 45).

ST 1592 – Surgical Technology Lab II 2

Previously ST 113L (Prerequisites: HLTH 1001, ST 1010, 1092; Corequisites: ST 1510, 1590)

Continue to provide an opportunity to practice clinical skills and put into practice the special considerations for general surgery, obstetrics and gynecological procedures, ophthalmic surgery, otorhinolaryngologic surgery, oral and maxillofacial surgery and plastic and reconstructive surgery. *(90 lab hours per term)*

Distance Learning option available (see page 45).

ST 2010 – Surgical Technology III 3

Previously ST 121 (Prerequisites: ST 1510, 1590, 1592; Corequisites: ST 2090, 2092)

Continues Surgical Technology Theory with a focus on an introduction to surgical procedures with a brief history, relevant anatomy and special considerations for genitourinary procedures and surgery, orthopedic surgery, cardiothoracic surgery, peripheral vascular surgery and neurosurgery.

Distance Learning option available (see page 45).

ST 2090 – Surgical Technology Clinical II 8

Previously ST 124C (Prerequisite: program director approval; Corequisites: ST 2010, 2092)

Continues to apply surgical procedure theory and skills in the clinical setting with additional opportunities to include specialty areas such as labor and delivery and GI experience. *(360 clinical hours per term)*

Distance Learning option available (see page 45).

ST 2092 – Surgical Technology Lab III 2

Previously ST 125L (Corequisite: ST 2010, 2090)

Continue to provide an opportunity to practice clinical skills and put into practice the special considerations for genitourinary procedures and surgery, orthopedic surgery, cardiothoracic surgery, peripheral vascular surgery and neurosurgery. *(90 lab hours per term)* Program fee: Published in the **Schedule of Classes**.

Distance Learning option available (see page 45).

ST 2096, 2196...2996 – Special Topics in Surgical Technology 1-6

(all courses ending in 96 are topics courses)

Previously ST 296

Explore various topics of interest in the field of Surgical Technology.

Distance Learning option available (see page 45).

SUR – Surveying Courses *(Applied Technologies Division)*

SUR 1010 – Introduction to Photogrammetry 3
Previously SUR 185 (Prerequisite: CM 2205)
 Introduces the techniques and uses of photogrammetry in surveying and mapping. The geometry of stereo models.

SUR 1015 – Public Lands Survey System Boundaries 3
Previously SUR 192 (Prerequisite: CM 2205)
 Detailed study of the U.S. Public Land Survey System Instructions with special emphasis on New Mexico. Sectionalized land subdivision, corner restoration and field surveys.

SUR 1017 – Traffic Control & NSPS Survey Technician Certification prep 2
Previously SUR 195 (Pre- or corequisite: SUR 1015)
 Traffic control and safety procedures for surveying and field operations. As well as a review of the “common body of knowledge” that is covered in the Level 1 NSPS Survey Technician certification.

THEA – Theatre Courses *(Communication, Humanities & Social Sciences Division)*

THEA 1119 – Introduction to Technical Theatre 3
(Recommended Prerequisite: THEA 1122)
 Introduces students to hands-on training in all areas of technical play production; stagecraft (set and property construction, painting, lights, costumes, sound. Classes will be held at CNM’s partner theatre, The Vortex.

THEA 1120 – Beginning Acting 3
Previously THEA 120 (Recommended prerequisite: THEA 1122)
 Provides students with the fundamental physical, vocal and imaginative skills for acting and performing.

THEA 1121 – Beginning Acting II 3
Previously THEA 121 (Prerequisite: Beginning Acting 1120 or permission of the instructor)
 Continuation of THEA 1120 with emphasis on exploration of the text as the source for theatrical decisions and the effects of those decisions in performance.

THEA 1122 – Introduction to Theatre 3
Previously THEA 122 (Recommended: ENG 1101 or Accuplacer Sentence Skills score of 110 or equivalent)
 Introduces study of the history and role of theatre past and present: the nature of theatre art, theatre traditions from the Ancient Greeks to Epic Theatre and including elements that make up a production.

THEA 1290 – Theatre Practicum 1 1
(Corequisite: THEA 1119)
 Theatre Practicum is a community internship and complements the hands-on to Technical Theatre training by providing on-the-job technical play production experience. Students will complete a minimum of 45 contact hours in a community, professional, or educational theatre production in their areas of interest.

THEA 2096, 2196...2996 – Topics in Theatre 3
(all courses ending in 96 are topics courses)
Previously THEA 296(Prerequisite: RDG 0950 or equivalent)
 Presents various topics. See **Schedule of Classes**.

THEA 2222 – Acting for the Camera 3
Previously THEA 222 (Prerequisite: THEA 1120-Beginning Acting I or permission of instructor)
 Introduces students to techniques specific to performing for the camera while they continue to learn and practice performance skills that apply to acting for both the stage and screen.

THEA 2258 – Beginning Screenwriting: Short Form 3
Previously THEA 258 (Prerequisite: English 1101. Recommended prerequisite: THEA 1122)
 Provides the critical ingredients of great dramatic writing that are then adapted to a dramatic form manageable for the emerging screenwriter: the narrative short film.

TRDR – Truck Driving Courses *(Applied Technologies Division)*

TRDR 1101 – Basic Operational Theory 7
Previously TRDR 101 (Prerequisites: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)
 Covers the fundamentals of control systems, hours of service requirements, trip planning, public and employer relations, accident procedures, defensive driving techniques, written commercial driver’s licensing needs and state and federal regulations governing the professional truck driver. (4 weeks; 105 theory hours per term)
Distance Learning option available (see page 45).

TRDR 1292 – Class A Basic Operational Lab 4
Previously TRDR 102L (Prerequisites: TRDR 1101, CDL learner’s permit, DOT physical, DOT drug screen and DMV record)
 Covers on-the-driving-range vehicle inspection, basic control, shifting, backing, coupling and uncoupling, hazard perception, visual search, speed and space management, preventive maintenance and handling cargo. Students will receive a minimum of 20 hours behind-the-wheel driving time. (150 lab hours per term) Course fee: \$250

TRDR 1392 – Class A Advanced Operational Practices 2
Previously TRDR 103L (Prerequisites: TRDR 1101 and 1292)
 Presents skills needed to cope with hazards of the roadway environment. Course sessions are scheduled during the day, evening and night hours and include driving on mountain grades, urban and rural roads, interstates and docking facilities. Students will receive a minimum of 30 hours behind-the-wheel driving time. (75 lab hours per term) Course fee: \$300

TRDR 1492 – Class B Basic Operational Lab 2
(Prerequisites: TRDR 1101, Class B CDL learner’s permit, DOT physical, DOT Drug Screen and DMV record)
 Covers-on-the-driving-range vehicle inspection, basic control, shifting, backing, hazard perception, visual search, speed and space management, preventative maintenance and handling cargo. Students will receive a minimum of 10 hours behind-the-wheel driving time. Course fee: \$150 (90 lab hours per term)

TRDR 1592 – Class B Advanced Operating Practices 1
(Prerequisites: TRDR 1101 and TRDR 1492)
 Presents skills needed to cope with hazards of the roadway environment. Course sessions are scheduled during the day, evening and night hours and include driving on mountain grades, urban and rural roads, interstates and docking facilities. Students will receive a minimum of 15 hours behind-the-wheel driving time. Course fee: \$150 (45 lab hours per term)

TRDR 2096, 2196...2996 – Special Topics 1-6
(all courses ending in 96 are topics courses)
Previously TRDR 296
 Presents in-depth study of problems and the advanced techniques that experts in the trucking industry use to solve them.

TRDR 2097 – Independent Study Variable
Previously TRDR 297 (Prerequisite: division approval)
 Focuses on a specific problem while working with an instructor.

VICA – SkillsUSA/VICA Courses *(Applied Technologies Division)*

VICA 2174 – Professional Development	1
<i>Previously VICA 174</i>	
Emphasizes development of goals and commitments, personal awareness, time management, organization and communication.	
VICA 2175 – Leadership	1
<i>Previously VICA 175</i>	
Reviews committee work including agenda setting, parliamentary procedures, team building; participation in community service projects and improvement of communication skills.	
VICA 2176 – Career Planning	1
<i>Previously VICA 176</i>	
Introduces career information, report writing, conducting interviews, employment skills, communication improvement and interaction with business and industry.	
VICA 2178 – Civic Responsibility	1
<i>Previously VICA 178</i>	
Covers various community services in planning and carrying out a community project.	

VT – Veterinary Technology Courses *(Health, Wellness & Public Safety Division)*

VT 1004 – Veterinary Medical Terminology,	1
<i>Previously VT 107 (Prerequisites: RDG 0950 or Accuplacer Reading score of 80, ENG 0950 or Accuplacer Sentence Skills Score of 85, MATH 0930 or Accuplacer elementary Algebra Math Score of 72 or equivalent)</i>	
Introduces veterinary medical word parts and terminology, basic animal science terminology. Includes study of phylogenetic and taxonomic relationships of domestic, laboratory and exotic animals to other biologic kingdoms and humans.	
VT 1006 – Veterinary Office Skills	1
<i>Previously VT 105 (Prerequisites: ENG 1101, MATH 1210 or 1310 or 1315; Corequisites: VT 1008, 1004, 1010, 1070, 1092,)</i>	
Covers general office management information including basic bookkeeping and computer skills. This includes; telephone contacts, scheduling and prioritizing appointments, recognizing veterinary emergencies, effective client communication, crisis intervention and grief management, patient admission, history and discharge, maintaining records and filing various types of reports and documents.	
VT 1008 – Applied Mathematics for Veterinary Technicians,	1
<i>Previously VT 104 (Prerequisites: Eng 1101, Math 1210 or 1310 or 1315, HWPS Basic Math test; Corequisites: VT 1004, 1006, 1010, 1070, 1092,)</i>	
Introduces conversions between metric and household systems and common abbreviations used in preparing medications. Presents applications in disciplines such as calculating medication dosages, percentage of weight loss, oral medications, intravenous fluid therapy, solutions and dilutions.	
VT 1010 – Introduction to Veterinary Technology	2
<i>Previously VT 101A (Prerequisite: program director approval, RDG 0950 OR accuplacer reading score of 80, ENG 0950 or accuplacer sentence skills score of 85, MATH 0930 or accuplacer elementary algebra math score of 72; Corequisites: VT 1004, 1006, 1008, 1092, 1170)</i>	
Provides general overview of Veterinary Technology including ethics and professionalism. This course includes identifying breeds and introduces basic medical care techniques used for animals. There is also an emphasis on medical terminology.	

VT 1070 – Animal Comparative Anatomy & Physiology I	3
<i>Previously VT 103L (Prerequisites:: BIO 1510/1592; CHEM 1410/1492 or 1510/1592, ENG 1101, MATH 1210 or 1310 or 1315; Corequisites: VT 1004, 1006, 1008, 1010, 1092)</i>	
Comparative anatomy and physiology of canine, bovine, equine, feline species including circulatory, respiratory, digestive, muscular/skeletal, nervous, endocrine, exocrine, urogenital systems. Also includes a brief anatomy and physiology of avian & reptile species. Requires hands on laboratory experience including dissection. (30 theory + 45 lab hours per term) Program fee: Published in the Schedule of Classes .	
VT 1092, Introduction to Veterinary Technology Lab,	1
<i>Previously VT 102L (Prerequisites: ENG 1101, MATH 1210 or 1310 or 1315; Corequisites: , VT 1010, 1070, 1008, 1006, 1004)</i>	
Provides both on campus procedural laboratory time and field trips to various animal facilities, incorporating the theory from VT 1010 into hands on experience. (45 lab hours per term) Program fee: Published in the Schedule of Classes .	
VT 1192 – Supplemental Lab for Veterinary Technology	1
<i>(Prerequisites: program director approval)</i>	
Provides participation in supervised learning and review of basic, advanced and specialized practices, including topics in Anatomy and Physiology, Therapeutics, Clinical pathology. Allows students to review in preparation for VT exit examinations. (45 contact hours)	
VT 1210 – Animal Comparative Anatomy & Physiology II	3
<i>Previously VT 106L (Prerequisites: CHEM 1410/1492 or 1510/1592, PSY 1105, VT 1004, 1006, 1008, 1010, 1070, 1092; Corequisites: VT, 1272, 1274, 1292)</i>	
Continues study of comparative anatomy and physiology of canine, bovine, equine, feline species including circulatory, respiratory, digestive, muscular/skeletal, nervous, endocrine, exocrine, urogenital systems. Requires hands on laboratory experience including dissection. (30 theory + 45 lab hours per term)	
VT 1272 – Surgical Technology for Veterinary Technicians	2
<i>Previously VT 112L (Prerequisites: VT , 1004, 1006, 1008, 1010, 1070, 1092; Corequisites: VT 1210, 1274, 1292)</i>	
Introduces students to surgical procedures, instruments, suture materials, surgical supplies and surgical preps. Overview of anesthesia and emergencies, surgical emergencies and post surgical care. Includes clinical experience as circulating technician. (15 theory + 45 lab hours per term)	
VT 1274 – Radiology for Veterinary Technicians	2
<i>Previously VT 114L (Prerequisites: VT 1004, 1006, 1008, 1010, 1070, 1092; Corequisites: VT 1210, 1292, 1272)</i>	
Presents radiography basics including safety measures, x-ray generation, film, film storage, developing solutions and processing, tube rating and exposure charts, control factors, radiographic quality, positioning and contrast media. There will be field trips, demonstration and practice. (15 theory + 45 lab hours per term) Program fee: Published in the Schedule of Classes .	
VT 1292 – Veterinary Office Skills Lab	1
<i>Previously VT 108L (Prerequisites: VT 1004, 1006, 1010, 1070, 1092; Corequisites: VT 1210, 1272, 1274)</i>	
Continues the study of office procedures in a hands-on laboratory experience. Various aspects of facility management will be presented using traditional and electronic media to prepare the student to effectively contribute to the professional and efficient operation of a veterinary facility. Emphasis will be on veterinary computer software applications, veterinary online services, telephone skills and role-playing in client communication situations. (45 lab hours per term)	

Course Subject Code/Course number – Course Name	Credit Hours	Course Subject Code/Course number – Course Name	Credit Hours
VT 2010 – Clinical Pathology for Veterinary Technicians I <i>Previously VT 109L (Prerequisites: VT 1210, 1272, 1274, 1292; Corequisites: VT 2015, 2180)</i> Provides a clinical laboratory setting for students to learn the diagnostic techniques in parasitology, urinalysis, microbiology and cytology including proper collection, preparation and evaluation of specimens. (30 theory + 90 lab hours per term)	4	VT 2819 – Avian, Laboratory & Exotic Animal Therapeutics and Care <i>Previously VT 219 (Prerequisites: VT 2610, 2672, 2674, 2690; Corequisites: VT 2803, 2810, 2874, 2876)</i> Presents recognition & restraint of caged bird, reptiles, amphibians, ferrets, rabbits, & rodents. Includes basic animal procedures such as feeding, watering, breed identification, caging & aquarium care. Include basic care such as appropriate sites and routes medication administration to each species, collection sites for body tissues.	1
VT 2015 – Non-Infectious and Infectious Diseases for Veterinary Technicians <i>Previously VT 110 (Prerequisites: VT 1210, 1272, 1274, 1292; Corequisites: VT 2010, 2180)</i> Presents overview of common infectious diseases with a special emphasis on zoonotic diseases; isolation concerns; federal regulations, OSHA requirements, occupational safety, the CVTEA policy on safety and necropsy techniques.	3	VT 2874 – Applied Therapeutics and Care for Veterinary Technicians II <i>Previously VT 217L (Prerequisites: VT 2610, 2672, 2674, 2690; Corequisites: VT 2803, 2810, 2819, 2876)</i> Continues Applied Therapeutics and Care for Veterinary Technicians I. Includes instruction in animal behavior and surgical assisting. (30 theory + 45 lab hours per term)	3
VT 2180 – Veterinary Technology Clinical I <i>Previously VT 120C (Prerequisites: VT 1210, 1272, 1274, 1292; Corequisites: VT 2010, 2015)</i> Applies theory to practice at veterinary clinics performing hands-on duties including radiology, kennel maintenance, animal handling and restraint, pre and post surgical preparation and operating room etiquette, etc. (15 theory + 135 clinical hours per term) Program fee: Published in the Schedule of Classes .	4	VT 2876 – Dentistry for Veterinary Technicians <i>Previously VT 215L (Prerequisites: VT 2610, 2672, 2674, 2690; Corequisites: VT 2803, 2810, 2819, 2874)</i> Presents preventive care, charting, identification of normal tooth structure and number of teeth per domestic species, identification of common dental problems among species and breeds, proper dental prophylactic technique and dental radiography. (15 theory + 45 laboratory hours per term)	2
VT 2610 – Clinical Pathology for Veterinary Technicians II <i>Previously VT 207I (Prerequisites: VT 2010, 2015, 2180; Corequisites: VT 2672, 2674, 2690)</i> Identifies RBC, WBC, PCV, TP, platelets and blood parasites. Students learn how to perform staining techniques, heartworm tests and coagulation tests, how to perform serum analysis and how to use diagnostic in house lab kits (Parvo, Felv, etc) (30 theory + 90 lab hours per term)	4	WELD – Welding Courses (Applied Technologies Division)	
VT 2672 – Anesthesiology for Veterinary Technicians <i>Previously VT 203L (Prerequisites: VT 2010, 2015, 2180; Corequisites: VT 2610, 2674, 2690)</i> Studies anesthesia in large and small domestic animals, exotic and laboratory species. Includes preanesthetic evaluation, principles of fluid therapy related to anesthesia, dosage calculations, induction of anesthesia, patient monitoring and recovery. (30 theory + 45 lab hours per term)	3	WELD 1001 – Welding Math I <i>Previously WELD 102 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Presents basic arithmetic, fractions and decimals, shop geometry, surface and direct measurements and the metric systems.	2
VT 2674 – Applied Therapeutics and Care for Veterinary Technicians I <i>Previously VT 205L (Prerequisites: VT 2010, 2015, 2180; Corequisites: VT 2610, 2672, 2690)</i> Presents skills such as venipuncture, medication administration, IV therapy, bandaging and splinting, catheterization techniques, recumbent patient care and blood transfusions. (30 theory + 45 lab hours per term)	3	WELD 1005 – Welding Blueprint Reading I <i>Previously WELD 103 (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent, RDG 0750 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Covers detail and fabrication drawing interpretation, welding symbols and terminology as applied to the welding industry.	2
VT 2690 – Veterinary Technology Clinical II <i>Previously VT 210C (Prerequisites: VT 2010, 2015, 2180; Corequisites: VT 2610, 2672, 2674)</i> Applies theory to practice at clinics, performing hands-on duties that include: specimen collection, urinalysis, parasite evaluation, wound management, administration of medications, IV catheterization, veni-puncture and client education. (180 clinical hours per term) Program fee: Published in the Schedule of Classes .	4	WELD 1020 – Introduction to Metallurgy <i>Previously WELD 108</i> Introduces basic science of metals, including structure and welding processes for ferrous and non-ferrous metals. Covers principles of safety and human relations.	2
VT 2803 – Pharmacology for Veterinary Technicians <i>Previously VT 213 (Prerequisites: VT 2610, 2672, 2674, 2690; Corequisites: VT 2810, 2819, 2874, 2876)</i> Presents overview of veterinary pharmacology and therapeutics, drug categories and use of drugs, administration methods, pharmacokinetics, prescription labeling and dispensing procedures, calculations, controlled substances including record logs, inventory control and ethical issues relating to handling drugs.	3	WELD 1025 – Welding Blueprint Reading II <i>Previously WELD 112 (Prerequisite: WELD 1005 or division approval)</i> Provides instruction in commercial construction and fabrication drawing interpretation and covers detail and assembly drawings related to the welding field and the transferring of measurements from blueprints to a workpiece.	2
VT 2810 – Veterinary Technology Clinical III <i>Previously VT 220C (Prerequisites: VT 2610, 2672, 2674, 2690; Corequisites: VT 2803, 2819, 2874, 2876)</i> Applies theory to practice at veterinary clinics performing duties that including handling, therapeutics and care of laboratory and exotic animals, surgical assisting and hematological exams. (15 theory + 180 clinical hours per term) Program fee: Published in the Schedule of Classes .	5	WELD 1030 – Welding Math II <i>Previously WELD 113 (Prerequisite: WELD 1001 or division approval)</i> Provides instruction in area, perimeter and volumes of common structural shapes and common layout techniques supported with mathematical applications.	2
		WELD 1060 – Welding Skills <i>Previously WELD 170</i> Introduces safety practices, basic tools and equipment, operating procedures and applications of oxyacetylene and shielded metal arc welding (SMAW). (15 theory + 75 lab hours per term)	3
		WELD 1065 – Advanced Welding Skills <i>Previously WELD 171 (Prerequisite: WELD 1060 or division approval)</i> Introduces gas metal arc welding (GMAW) and gas tungsten arc welding (GTAW), basic math and blueprint reading. (15 theory + 75 lab hours per term)	3

Course Subject Code/Course number – Course Name	Credit Hours
WELD 1092 – Oxyacetylene Welding and Cutting <i>Previously WELD 104L (Prerequisite: MATH 0750 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Presents safety and use of oxyacetylene equipment. Provides training in thermal cutting torches, fusion welding, welding of alloys and general all position welding. (75 lab hours per term)	2
WELD 1192 – Introduction to SMAW <i>Previously WELD 106L (Prerequisite: MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> Covers topics in shielded metal-arc welding (SMAW) safety, basic fabrication and repair and customer relations. (75 lab hours per term)	2
WELD 1292 – Advanced SMAW <i>Previously WELD 114L (Pre- or corequisites: WELD 1192 or division approval)</i> Presents advanced instruction in shielded metal arc welding (SMAW) with a strong emphasis on safety, work ethics and shop procedures. (75 lab hours per term)	2
WELD 1392 – Introduction to SMAW Qualifications and Fabrication <i>Previously WELD 107L (Prerequisite: WELD 1292)</i> Provides instruction in safety and proper procedure for shielded metal arc welding (SMAW) using basic fabrication and repair problems for practical applications. (75 lab hours per term)	2
WELD 1492 – Introduction to GMAW and Fabrication Lab <i>Previously WELD 115L (Pre- or corequisite: WELD 1192 or division approval)</i> Covers gas metal arc welding (GMAW) safety techniques. Fabrication and repairs are assigned. Teamwork is stressed. (75 lab hours per term)	2
WELD 1592 – Introduction to GTAW and Fabrication Lab <i>Previously WELD 116L (Prerequisite: WELD 1192 or division approval)</i> Emphasizes application of safety and gas tungsten arc welding (GTAW) on carbon steel. Fabrication and repairs are stressed. Customer billing techniques are introduced. (75 lab hours per term)	2
WELD 1692 – Advanced GMAW and Fabrication <i>Previously WELD 206L (Prerequisite: WELD 1492 or division approval)</i> Focuses on instruction in advanced carbon steel gas metal arc welding (GMAW), fabrication/repair, problem solving and teamwork. (75 lab hours per term)	2
WELD 2001 – Advanced Blueprint Reading <i>Previously WELD 202 (Prerequisite: MATT 1035 or division approval)</i> Covers pipe layout and development, structural print reading and design and layout considerations related to fabrication, material and cost estimating.	2
WELD 2092 – Qualifications for GMAW <i>Previously WELD 117L (Pre- or corequisites: WELD 1292, 1492 and 1692 or division approval)</i> Provides simulated qualification procedures for gas metal arc welding (GMAW) welding in all positions. (75 lab hours per term)	2
WELD 2096, 2196...2996 – Special Topics <i>(all courses ending in 96 are topics courses)</i> <i>Previously WELD 296 (Prerequisite: division approval)</i> Enables students to pursue studies in specialized areas. This class may also be taken as an independent or guided study, as a refresher course or to sharpen skills prior to certification or recertification exams.	1–6
WELD 2097 – Independent Study <i>Previously WELD 297 (Prerequisite: division approval)</i> Focuses on a specific problem while working with an instructor.	Variable

Course Subject Code/Course number – Course Name	Credit Hours
WELD 2192 – Pipe Layout and Welding <i>Previously WELD 205L (Prerequisite: WELD 1292, 1692, or division approval)</i> Introduces basic pipe welding and layout, materials testing and industrial safety, as well as welding problems. (75 lab hours per term)	2
WELD 2292 – Advanced GTAW and Fabrication <i>Previously WELD 207L (Prerequisite: WELD 1592 or division approval)</i> Covers advanced aluminum and stainless steel gas tungsten arc welding (GTAW) and specialized fabrication/repair. Customer problems, teamwork, problem solving and work ethics are stressed. (75 lab hours per term)	2
WELD 2392 – Qualifications for GTAW <i>Previously WELD 208L (Prerequisite: WELD 1592 and 2292 or division approval)</i> Covers simulated qualification procedures for gas tungsten arc welding (GTAW), in all positions. (75 lab hours per term)	2
WELD 2492 – Project and Fabrication Lab <i>Previously WELD 209L (Prerequisite: WELD 1092, 1192, 1292, 1492, 1592, 2192, 1692, 2292, MATH 0550 or Accuplacer Arithmetic score of 31 or equivalent or division approval)</i> An all process welding fabrication class to include the use of, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, oxy acetylene and Plasma cutting. Students will utilize industrial fabrication and repair problems for assigned projects on advanced fabrication equipment. Course also includes training in welding safety and customer relations. (75 lab hours per term)	2
WELD 2999 – Welding Capstone Course <i>Previously WELD 295 (Prerequisite: division approval)</i> Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies.	1

Codes and Policies

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Codes and Policies

Student Code of Conduct: 2007-2009

Through its academic offerings and support services, CNM provides the opportunity for learning. Taking advantage of the opportunity is the student's responsibility.

The College gives equal consideration to all applicants for admission. The appropriate facilities and services of CNM shall be available to enrolled students. Any student in good standing with CNM has the right to register for and attend any class for which he or she has met the prerequisites and placement requirements.

Students are expected to be fully acquainted with all published policies and procedures of CNM and will be held responsible for compliance with them. In addition to this handout, policies are published in the CNM Catalog, in the Student Handbook, in some department handbooks, especially in the Health Occupations Department and in some course syllabi.

I. INTRODUCTION

A. Purpose – The freedom of individuals to inquire, study, evaluate and gain new understanding and maturity is essential and must be protected against suppression. Dissent plays a vital part in the role of the Institute. However, freedoms cannot be protected or exercised in a College that lacks order and stability. Students at all Central New Mexico Community College (CNM) campuses and learning centers have an obligation to uphold the laws of the larger community of which they are part.

The intent of this Code is to ensure that students at CNM neither lose their rights nor escape the responsibility of citizenship. While the activities covered by the laws of the larger community and those covered by CNM's rules may overlap, it is important to note that the community's laws and CNM's rules operate independently and that they do not substitute for each other. CNM may pursue enforcement of its own rules whether or not legal proceedings are under way or in prospect and may use information from third-party sources (such as law enforcement agencies and the courts) to determine whether the College's rules have been broken. Membership in the CNM community does not exempt anyone from local, state or federal laws, but rather imposes the additional obligation to abide by all of CNM's regulations. It is the personal responsibility of every member of the campus community not only to protect his/her own rights, but to respect the rights of others and to behave in a manner conducive to learning and/or living in an educational environment.

Just as individuals within the community have a responsibility to adhere to a code of prescribed behavior, the institution assumes the obligation of clearly codifying and fairly enforcing same. CNM upholds the belief that those who do not conform to established standards set forth in this Code of Conduct must be held accountable for their actions. Therefore, the purpose of the Code of Conduct is to inform the student body of the rules and regulations that are essential to the normal operation of CNM.

B. Definition of Student – For the purpose of application of this Code of Conduct, "student" means any person enrolled or taking a course at CNM, which includes all campuses and all other CNM instructional locations and any student organization recognized by CNM. Any person who is not officially enrolled, admitted to or registered with CNM for a particular term but who is, has been or intends to be a student is considered a student. Students who violate the Code of Conduct can expect prompt and deliberate adjudication, whether or not they choose to be present or remain at CNM. Furthermore, if a decision has been made within the disciplinary process which impacts a person who is not currently enrolled, he/she still remains subject to the determination upon

re-enrollment. Students are responsible for maintaining their current address with CNM. The address on record will be deemed the appropriate address for delivery of correspondence from the Office of Student Judicial Affairs.

C. Students' Rights and Responsibilities – By enrolling at CNM, a student accepts responsibility for compliance with all local, state and federal laws and with CNM's regulations while retaining the rights guaranteed under the Constitutions of the United States and the state of New Mexico. A student alleged to have engaged in any misconduct shall have the right of due process and appeal as delineated in this Code. The College expects all students to show respect for the rights of others and for authority, to protect private and public property, to carry out contractual obligations and to take responsibility for their own actions and the actions of their guests.

D. Student Organizations – A student organization and its officers and members may be held collectively and individually responsible when violations of this Code by those associated with the organization occur and when such violations are authorized, encouraged, directed, tolerated, supported by or committed on behalf of the organization. For purposes of the interpretation and administration of the Code of Conduct, the term "student" shall also mean "student organization."

II. ADMINISTRATION OF DISCIPLINE

The responsibility of administering the discipline system is delegated by the president of CNM to the Vice President for Student Services for non-academic discipline and to the Vice President for Academic Affairs for academic discipline. In turn, these officers may delegate authority to other groups or individuals for handling violations of the Student Code of Conduct. All non-academic Student Code activities shall be monitored by the Dean of Students to ensure fairness and consistency. All discipline sanctions imposed College-wide will be reported to the Dean of Students for record-keeping purposes.

The College attempts to handle discipline matters at the lowest possible level by recognizing a variety of hearing officers. Each hearing officer is a CNM official who is an administrator, faculty member or staff member. Hearing officers adjudicate cases when violations are alleged. The hearing officer is authorized to exercise active control over the proceedings in order to elicit relevant information, to avoid needless consumption of time and to prevent the harassment or intimidation of witnesses.

Disciplinary regulations at CNM are set forth in writing in order to give students general notice of prohibited conduct. These rules and regulations should be read broadly and are not designed to define prohibited conduct in exhaustive terms. It is recognized by CNM that students are adults and are expected to obey the law and take personal responsibility for their conduct. A student is therefore subject to two sources of authority: civil-criminal authority and CNM's authority.

Violation of any municipal ordinance, law or regulation of the State of New Mexico or law or regulation of the United States which may cause harm or endangerment to self or others or somehow compromises the educational mission of the College may result in disciplinary action. The College does not normally take disciplinary action for off-campus violations, but it retains the right to act in special cases. Disciplinary action imposed by CNM may precede and be in addition to, any penalty that might be imposed by an off-campus authority.

When charged with a violation, a student has the right to notice of the violation and an opportunity to be heard. For infractions where suspension, dismissal or expulsion may be imposed, a student will have additional rights as set forth in § IV.C.W, below.

Charged students may decide what and how much information they will provide during a

disciplinary conference or hearing. The procedures to be followed in matters of student misconduct are outlined in the following sections.

III. ACADEMIC DISHONESTY

Any student suspected of academic dishonesty will be subject to the investigative and disciplinary process outlined in the Academic Dishonesty Policy found on page 387 of the 2007-2009 CNM Catalog.

IV. NON-ACADEMIC MISCONDUCT: ALL STUDENTS

A. Person and/or Groups Involved in Non-academic Discipline Cases

- 1. Dean of Students** - The Dean of Students Office (or his/her designee such as the Director of Student Life and Discipline) will dispose of any non-academic misconduct violations referred by the Vice President for Student Services or other CNM officials and also has responsibility for maintaining all student records relating to student non-academic misconduct. Within this capacity, the Dean of Students (or designee) serves as a resource person for administrators, faculty, staff and students to promote consistency throughout the College community in adjudicating cases of student non-academic misconduct. The Dean of Students also can act as a hearing officer and may appoint other hearing officers.
- 2. Hearing Committee** - Either the Dean of Students or the Director of Student Life and Discipline may hear discipline issues or may refer the issue to a CNM Hearing Committee. The committee hears non-academic misconduct issues referred to it by the Dean of Students. Two administrative and/or faculty members and one student member are required for each Hearing Committee.
- 3. Vice President for Student Services** - The Vice President for Student Services will hear any appeals from decisions of the Dean of Students, the Director of Student Life and Discipline, or a Hearing Committee.

B. What Constitutes Non-Academic Misconduct

The following constitute violations for which students and student organizations are subject to disciplinary action. These are not designed to be all-inclusive, but offer examples of the types of prohibited conduct:

DISRUPTION VIOLATIONS

1. Participation in an unauthorized campus demonstration which disrupts the normal operations of CNM and infringes on the rights of other members of the CNM community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.
2. Unauthorized mass action, obstruction or disruption of classes or CNM events, removal or defacement of library or other CNM materials or properties, participation in commercially sponsored solicitation, behaviors that violate federal, state or local ordinances.
3. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other CNM activities, including its public-service function on or off campus, or other authorized non-CNM activities, when the act occurs on CNM premises.
4. Any intentional interference with or obstruction of any institutional activity, program, event or facilities, including the following: any unauthorized occupancy of institution or institutionally controlled facilities or blockage of access to or from such facilities; interference with the right of any institution member or other authorized person to gain

access to any institution or institutionally controlled activity, program, event or facilities; or any obstruction or delay of a campus security officer, fire fighter or any institution official in the performance of his or her duty.

Obstruction of the free flow of pedestrian or vehicular traffic on CNM premises or at CNM sponsored or supervised functions.

6. Any violation of federal, state or local law not otherwise prohibited herein, if such directly affects CNM's educational function.

PERSON VIOLATIONS

1. Actual or threatened physical injury to any person (including self) on CNM owned or controlled property or at a CNM sponsored or supervised function or conduct that endangers the health, safety or personal well being of a person.
2. Engaging in individual or group conduct that is violent (including sexual misconduct, attempted suicide or threats of either), abusive, indecent, unreasonably loud or similar disorderly conduct that infringes upon the privacy, rights or privileges of others or disturbs the peace or the orderly process of education on campus.
3. Hazing, defined as an act which endangers the mental or physical health or safety of a student or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in a group or organization.
4. Harassment or abuse directed toward individuals or groups may include at least the following forms: the use or threat of physical violence, coercion, intimidation and verbal harassment and abuse. Harassment and abuse may be discriminatory. Although all forms of harassment and abuse - both discriminatory and non-discriminatory - are equally prohibited, CNM's commitment to non-discrimination means that discriminatory harassment may be punished more severely than non-discriminatory forms of harassment.
5. Sexual abuse, including but not limited to sexual harassment, coercion and threats or use of force.
6. Any actual or threatened non-consensual sexual act.
7. Harassment or acts of insensitivity or intolerance toward individuals/groups, including groups defined by race, creed, national origin, disability, sexual orientation and veteran status.
8. Verbal or written abuse, which is likely to cause another person humiliation, stress, psychological harm or which is harassing in nature.
9. Public display of literature, films, pictures or other material that, depicts or describes sexual conduct in a patently offensive way and lacks serious literary, artistic, political or scientific value.

PROPERTY VIOLATIONS

1. Attempted or actual theft of and/or damage to property of CNM or property of a member of the CNM community or other personal or public property.
2. Any graffiti or other act of misuse, vandalism, malicious or unwarranted damage or destruction, defacing, disfiguring or unauthorized use of property belonging to the institution including, but not limited to, fire alarms, fire equipment, elevators, telephones, institution keys, library material and/or safety devices, walls, floors and ceilings.

Codes and Policies

FALSEHOODS/IDENTIFICATION VIOLATIONS

1. Forgery, counterfeiting, alterations or misuse of any CNM record, document or identification card.
2. Knowingly furnishing false information to CNM personnel or member of any hearing board acting in performance of their duties or the failure to provide CNM personnel with adequate information upon request.
3. Making a false report concerning a fire, bomb or other emergency.
4. Failure to possess at all times valid identification and/or failure to present ID to CNM officials upon proper request. Failure to comply with directions of CNM officials, faculty, staff or law enforcement officer acting in performance of their duties and/or failure to identify oneself to these persons when requested to do so.
5. Intentionally and falsely accusing a CNM employee or another student of a wrongdoing.

SAFETY VIOLATIONS

1. Unauthorized use, possession or storage of any weapon or explosive (including fireworks) on CNM premises or at CNM sponsored activities.
2. Tampering with fire extinguishers, fire alarm boxes or smoke or heat detectors anywhere on CNM property.
3. Creating a fire, safety or health hazard.
4. Ejecting any objects from windows, roofs or balconies of CNM buildings.
5. Students are not permitted on the roofs of CNM buildings.

COMPUTER VIOLATIONS

1. Unauthorized entry into or alteration of any CNM computer records or violation of the CNM Technology Use Policy.
2. Violation of the New Mexico Computer Crimes Act, including intentional and unauthorized access, alteration, damage, copying or destruction of any computer system or data.
3. Theft or abuse of computer time, including but not limited to:
 - a. Unauthorized entry into a file, to use, read or change the contents or for any other purpose.
 - b. Unauthorized transfer of a file.
 - c. Unauthorized use of another individual's identification and password.
 - d. Use of computing facilities to interfere with the work of another student, faculty member or CNM official.
 - e. Use of computing facilities to send obscene, abusive, or threatening messages.
 - f. Use of computing facilities to interfere with normal operation of the CNM computing system.

ENTRY/USE VIOLATIONS

1. Entry into or use of any building, facility, room or other CNM property/grounds without authorized approval. This also includes the unauthorized possession or use of CNM keys, lock combinations or other access codes.
2. Entering or attempting to enter any social event or other event without proper credentials for admission (e.g., ticket, identification card or invitation).
3. Unauthorized use of CNM telephones for long-distance calls.

LEGAL VIOLATIONS

1. Unlawful possession, use, distribution or sale of any narcotic or dangerous drug as defined by the statutes of the state of New Mexico.
2. Violation of federal, state or local law on CNM premises or at CNM sponsored or supervised activities.
3. Possession or consumption of alcoholic beverages in contradiction of state law and/or CNM policy.
4. The violation of local, state or federal criminal statutes shall be in violation of this code, whether or not such violation is prosecuted by public officials. CNM may refer such violations to appropriate law enforcement agents.
5. The use or possession of equipment, products or material used or intended for use in manufacturing, growing, using or distributing any drug or controlled substance.
6. Participation in illegal gambling activities on CNM owned or controlled property or at a function identified with CNM.
7. Embezzling, defrauding or procuring any money, goods or services under false pretenses.

FINANCIAL VIOLATIONS

1. Failure to make satisfactory settlement for any debts to CNM.
2. Issuing a check on campus knowing that it will not be honored when presented for payment.

GENERAL VIOLATIONS

1. Violation of published CNM policies, rules or regulations.
2. Soliciting or selling in violation of the solicitation policy.
3. Having an animal on campus in violation of CNM policy.
4. Dispersing litter in any form onto the grounds or facilities of the campus.
5. Unauthorized use of cell phones, pagers and other electronic equipment in classrooms and laboratories.
6. Unauthorized use of sirens, loudspeakers and other sound amplification equipment.
7. The use of roller blades, skateboards, or scooters on CNM property.
8. Smoking inside CNM buildings.
9. Parking bicycles outside of designated areas.
10. Drinking and eating in classrooms, laboratories and libraries.
11. Bringing children to classes, labs or other instructional activities or to judicial affairs hearings.

STUDENT DISCIPLINE VIOLATIONS

Abuse of the student disciplinary system, including but not limited to:

1. Failure to obey the summons of the Dean of Students, a disciplinary body, or other CNM official.
2. Falsification, distortion or misrepresentation of information before a hearing officer or committee.
3. Disruption or interference of the orderly conduct of a disciplinary proceeding.
4. Initiation of a disciplinary proceeding knowingly without cause.
5. Attempting to discourage an individual's proper participation in or use of the disciplinary

system.

6. Attempting to influence the impartiality of a member of a disciplinary body prior to and/or during the course of the disciplinary proceeding.
7. Harassment (verbal or physical) and/or intimidation of a member of a disciplinary body prior to, during and/or after a judicial proceeding.
8. Failure to comply with the sanction(s) imposed under the Student Code.
9. Influencing or attempting to influence another person to commit an abuse of the disciplinary system.

C. Non-academic Discipline Process

All alleged violations of non-academic rules and regulations contained herein will be referred to the Dean of Students' Office. Any alleged violation should be reported as soon as possible after the violation occurs. Upon violation of any of the provisions of this Code of Conduct during class or other CNM activity, CNM faculty and staff may remove the student from the class or other CNM activity for the remainder of that class/activity period and shall promptly notify the Dean of Students as to the action taken and the reason(s) therefore. Upon submission of the alleged violation to the Dean of Students' Office, the following procedures will apply.

1. For behavior for which a sanction other than suspension, dismissal or expulsion may be imposed, after referral to the Dean of Students or his/her representative and investigation by the Dean or representative (at his/her discretion), the Dean (or representative) will provide:

Oral or written notice of the charges against the student and

An opportunity for the student to admit or deny the allegations in conference with the Dean or his/her representative. If the student denies the allegations, the student is entitled to an explanation of the evidence against the student and will be given an opportunity in the conference to rebut the charges.

As a result of the investigation and conference with the student, any of the following actions may be taken:

The charges may be dismissed as unfounded or for lack of evidence;

The student may admit responsibility for violating the Code of Conduct and a sanction will be imposed; or

The Dean of Students or representative will deem the student responsible for Code of Conduct violations, based on a preponderance of the evidence and an appropriate sanction will be imposed.

2. For behavior for which suspension, dismissal or expulsion may be imposed, after referral to the Dean of Students and after any investigation by the Dean or his/her representative, the Dean or representative will establish a hearing date to occur as soon as practicable, or within ten (10) days of imposition of any interim suspension and will provide:
 - a. Written notice of the charges against the student;
 - b. Written notice of the date, time and place of hearing;
 - c. An opportunity for the student to personally participate in the hearing and to admit or deny the charges against the student.

If the student admits the charges, discipline will be imposed.
If the student denies the charges, the student will be entitled to:

 - i. An explanation of the evidence against the student;

- ii. The right to question witnesses in a manner determined by the Dean of Students or the Hearing Committee;
- iii. The right to examine, in advance of the hearing, documentation submitted relating to the charges;
- iv. The right to present a defense at the hearing;
 - The student may call his/her own witnesses and present relevant information or documentation;
 - The student may have legal counsel, or other advisor, present at the hearing, but such counsel or advisor may not participate in the hearing.
- v. A tape recording of the hearing shall be made. The tape recording is CNM property.
- d. As a result of the investigation and hearing, one of the following actions may be taken:
 - The charges may be dismissed as unfounded or for lack of evidence;
 - The student may admit responsibility for violating the Code of Conduct and appropriate sanctions may be imposed; or the Hearing Committee will deem the student responsible for Code of Conduct violations based upon a preponderance of the evidence and appropriate sanctions may be imposed.
- e. The student will be notified of the discipline imposed, either orally following the hearing or sent in writing within five (5) working days of the hearing.

D. Non-Academic Discipline Appeal Process

Students receiving a discipline decision from the Dean of Students or a Hearing Committee may request an appeal. Any such request must be made in writing to the Vice President of Student Services within three (3) working days after notification of the decision.

1. Contents of the Appeal Request.

The appeal request must include:

- a. The name of the individual/organization requesting the appeal;
- b. The disciplinary action being appealed and the date the disciplinary action took place;
- c. The grounds for the requested appeal. The appeal must be based on one or more of the following grounds:

Procedural or prejudicial error was committed. The specific errors alleged must be stated;

The facts upon which the decision was based included inaccurate information. The inaccurate information appealed from must be stated;

Specific information presented at the hearing/disciplinary conference is objectionable. The reason for the objection must be stated (i.e. why specific information should not have been considered);

Information not offered at the hearing/ disciplinary conference is now available. The reason why the information was not offered during the original hearing/disciplinary conference must be stated;

The sanction imposed is excessive or inappropriate. The reason for believing this must be stated.

Codes and Policies

2. Decision on Appeal:

Upon review of the appeal, the Vice President of Student Services, or his/her designee, may take any of the following actions:

Deny the appeal request.

Grant the appeal request and refer the matter to the Dean of Students for reopening of the hearing/conference to allow reconsideration of the original decision and/or the sanctions imposed. In the event of such referral, the Vice President of Student Services (or his/her designee) will provide a written rationale for the referral, in accordance with one or more of the grounds for appeal detailed above.

Except as required to explain the basis of new information, an appeal shall be limited to review of the tape recording of the most recent official hearing and supporting documents.

Any review of the sanction(s) in a non-academic discipline process may not result in more severe sanction(s) for the accused student/organization. On review, the sanction may remain as originally determined or may be reduced.

V. DISCIPLINARY ACTIONS AND SANCTIONS

A. Student Sanctions

The following list is not designed to be all-inclusive, but offers examples of the more severe sanctions that may be imposed upon an individual student for infraction of regulations.

1. Disciplinary Probation - This sanction is an official warning that the student's conduct is in violation of CNM regulations or local, state and/or federal laws. Students placed on disciplinary probation are deemed to be not in good standing with CNM. The duration of the probationary period and conditions imposed, shall be set by the Hearing Officer or Hearing Committee and shall be in proportion to the seriousness of the misconduct. Duration will be at least 30 days, but may be extended indefinitely. Depending on the circumstances and at the discretion of the hearing officer(s), additional stipulations may be enforced. These additional stipulations may be, but are not limited to, withholding of transcript or degree; suspension of rights and privileges; suspension of eligibility to participate in official extracurricular activities; restitution; and referral for counseling. During the probationary period, reported violations of the Code of Conduct or conditions of the probation will result in further sanctions which will be more severe than like sanctions for students not on probation. This action may include, but is not limited to, extension of the probationary period, the addition of other restrictions or conditions to the probationary agreement, suspension, dismissal, expulsion and notation on the student's transcript.

A student who has been placed on indefinite disciplinary probation may petition to have the probation lifted. This petition will not be acceptable if submitted sooner than one calendar year from the date the probation began. Students must petition through the Dean of Students Office. The Dean of Students or the CNM Discipline Committee reviews the petition and makes a recommendation to the Vice President for Student Services or designee, whose decision is final.

2. Disciplinary Suspension - Disciplinary suspension is the disenrollment of a student from CNM for a defined period of time. Most suspensions will last a minimum of one full term. However, the length of the suspension shall be at the discretion of the Hearing Committee. Students may reenter CNM at the conclusion of the suspension.

3. Dismissal - Dismissal is the disenrollment of a student for an indefinite period of time and includes a "minimum timeframe." In most cases the minimum timeframe is one year, which means the student may not petition to reenter CNM for at least one year. Extended minimum

timeframes may also be defined. The length of the dismissal shall be at the discretion of the Hearing Committee. Students seeking to reenter CNM after completion of the minimum timeframe may do so only by consent of the Vice President for Student Services. Requests for reentry must be submitted in writing.

4. Expulsion - Expulsion is the disenrollment of a student whereby the student is not eligible for readmission to CNM.

B. Interim Suspension

In certain circumstances, the Dean of Students or designee may impose; an immediate, short-term suspension pending further investigation and hearing. In such cases, the Dean or representative will establish a hearing date to occur as soon as practicable and in any event within ten (10) working days of imposition of any interim suspension.

1. Interim suspension may be imposed only 1) to protect the safety and well-being of members of the CNM community or preservation of CNM property; 2) to protect the student's own physical or emotional safety and well-being; or 3) if the student poses a definite threat of disruption to or interference with the normal operations of CNM.
2. During the interim suspension, the student shall be denied access to the campus (including classes) and/or all other CNM activities or privileges for which the student might otherwise be eligible, as the Dean of Students may determine to be appropriate.

C. Student Organization Sanctions

The following are possible sanctions that may be imposed upon a student organization for infraction of regulations:

1. Disciplinary Probation - This sanction is an official warning that the organization's conduct is in violation of CNM regulations or local, state and/or federal laws. Organizations placed on disciplinary probation are deemed to be not in good standing with CNM. The duration of the probationary period and conditions imposed shall be in proportion to the seriousness of the misconduct. Duration will be at least 30 days, but may be extended indefinitely. Depending on the circumstances and at the discretion of the Dean of Students, additional stipulations may be enforced. These additional stipulations may be, but are not limited to, suspension of rights and privileges, suspension of eligibility to participate in official extracurricular activities and restitution for damages.

During the probationary period, reported violations of the Code of Conduct or conditions of the probation will result in further sanctions which will be more severe than the sanctions for student organizations not on probation. These sanctions may include, but are not limited to, extension of the probationary period, the addition of other restrictions or conditions to the probationary agreement, or suspension or termination of CNM recognition/charter.

The organization may return to a status of good standing with CNM at the conclusion of the probationary period, assuming all conditions have been satisfied and upon gaining approval from the Dean of Students.

2. Suspension of CNM Charter or Recognition - This sanction may be imposed when the organization's conduct is in violation of CNM's regulations or local, state and/or federal laws. Pursuant to this sanction, the organization's charter or recognition with CNM, along with all privileges afforded a recognized student organization, is withdrawn for a specified period of time, pursuant to the procedure outlined in § IV.C, supra. Any suspension of charter or recognition imposed will last a minimum of one full calendar year. As with disciplinary probation, additional conditions may be attached and further disciplinary action may result if conditions are not met.

Reinstatement of any organization's charter/recognition can only be granted by the Vice President of Student Services after the period of suspension when all conditions of the suspension have been met.

3. **Termination of CNM Charter or Recognition** - This sanction may be imposed when the organization's conduct is deemed to be in violation of CNM's regulations or local, state and/or federal laws, pursuant to the procedures outlined in § IV.C, supra. This sanction will result in the immediate withdrawal of the organization's charter or recognition with CNM, along with all privileges afforded a chartered/recognized student organization. The organization will not be eligible for reinstatement of its charter or recognition for a minimum of five (5) years. Reinstatement of an organization's charter or recognition may only be granted by the Vice President for Student Services

VI. INTERPRETATION

Any question of interpretation regarding the Student Code of Conduct shall be referred to the Dean of Students or his/her designee for final determination.

VII. AMENDMENTS AND/OR REVISION TO THE CODE OF CONDUCT

Recommendations for changes related to the non-academic discipline process will be referred to the Dean of Students. The Dean of Students reviews the Code of Conduct as needed and recommends changes to the Vice President for Student Services.

VIII. STATEMENT OF LIMITATIONS

No student or student organization shall be subject to disciplinary procedures due to alleged violation of CNM's regulations unless procedures are initiated within one year from the time the alleged misconduct occurred or was made known to the Dean of Students, whichever occurs later. The one-year period of limitation, as referred here, will apply only while the student is enrolled at CNM. If the disciplinary procedures cannot be completed for reasons beyond the control of CNM, a time limitation will not be imposed.

The most recent version of the Student Code of Conduct can be found on the Dean of Students website at <http://www.cnm.edu/deanofstudents/>.

Academic Dishonesty Policy

I. INTRODUCTION

As a college of higher learning, CNM is concerned that all participants in the learning environment conduct themselves with a high level of academic honesty and integrity. It is expected that students will conduct themselves at all times in a manner that supports and affirms these fundamental values.

As much as it is the students' responsibility to conduct themselves according to accepted values of honesty and integrity, so too is it the institution's responsibility to provide a fair and equitable process for addressing behavior that falls outside of what has been defined as acceptable. Accordingly, this policy has been developed in order to have a fair and consistent process for dealing with issues of academic dishonesty should they arise. The policy identifies examples of behaviors or actions that might be classified as academic dishonesty and articulates the procedural steps that are followed should academic dishonesty be alleged.

II. DEFINITIONS

Academic Dishonesty – Academic Dishonesty is any behavior on the part of a student that results in that student's or any other students' giving or receiving unauthorized assistance in an academic exercise or receiving credit for work which is not their own. Such acts include, but are not limited to:

Cheating – Use of material, information, or study aids not permitted by the instructor during tests, quizzes, or other graded in-class activities. The prohibition, restriction, or permission regarding the use of such aides might be specifically stated in the test instructions (e.g., calculator use), but it need not be if their prohibition is a reasonable academic expectation for any such graded activity (e.g., use of a textbook, class notes, or a "cheat sheet" during a test). The cheating might be either premeditated (e.g., preparation and use of "cheat sheets," securing a copy of the test beforehand) or opportunistic (e.g., looking at another student's test paper).

Plagiarism – Use of another person's or of a group's words or ideas without clearly acknowledging the source of that information, resulting in their false representation as one's own individual work. More specifically, to avoid plagiarizing, a student or other writer must give credit when he/she uses:

- another person's idea, opinion, or theory
- any facts, statistics, graphs, drawings—any pieces of information—that are not common knowledge
- quotations of another person's actual spoken or written words
- paraphrases of another person's spoken or written words
- another person's data, solutions, or calculations without permission and/or recognition of the source, including the act of accessing another person's computerized files without authorization

Plagiarism may be either deliberate or unwitting; that is, it is the responsibility of a college student to know what constitutes plagiarism so that ignorance is not a legitimate defense against a charge of plagiarism.

Falsification/Fabrication - Intentional and unacknowledged invention or alteration of any data, incidents, quotations, or citations in an academic exercise.

Unauthorized Collaboration - Intentional sharing of information or working together in an academic exercise when such collaboration is not approved by the instructor.

Facilitating Academic Dishonesty - Intentionally or knowingly helping or attempting to help another to violate any provision of this policy on academic dishonesty.

Academic Sanction - Any penalty assessed by an instructor, possibly in consultation with the academic dean's office and/or the Dean of Students office, imposed solely in response to a student's academic misbehavior and including, but not limited to such actions as lowering a grade, assigning extra work, or imposing a re-test.

Disciplinary Sanction - Any sanction imposed by the Dean of Students office, which may be in addition to an Academic Sanction and may include disenrollment from a course, suspension from campus, expulsion from the college, or other administrative action.

(For more information regarding disciplinary sanctions, see the Student Code of Conduct on page 382 of this catalog.)

III. PROCEDURES

Initial Steps Taken By Instructor

If an instructor suspects a student has committed an act of academic dishonesty, the instructor should document what has occurred (e.g. what was observed or discovered that led to this belief) and must meet with the student. The goal of the meeting is twofold: (1) to inform the student of the allegation and review the evidence with the student; and (2) to provide the student with the opportunity to respond to the allegation by presenting his/her own evidence or by commenting on the allegation(s) and the evidence for it. The meeting with the student should occur as soon after the incident as possible (preferably, immediately after the class session in which the alleged incident occurred).

Academic Sanctions

Once the student has been given the opportunity to respond to the allegations, the instructor must determine whether academic dishonesty has occurred (based on a preponderance of the evidence—a more likely than not standard). If the instructor determines that academic dishonesty has occurred the instructor may either: 1) impose an academic sanction up to and including a “0” on the assignment or test; or 2) contact the Dean of Students to coordinate a more severe penalty for the offense (e.g. an “F” for the course, or removal from a program - in the case of limited entry programs such as exist in Health, Wellness and Public Safety occupations). At this point, the academic dean should be notified of the instructor’s attempt to seek a more severe penalty in coordination with the Dean of Students office.

In either case, the student must be notified by the instructor (either in person at the initial or subsequent meeting, over the phone, or by e-mail) regarding the instructor’s decision and the sanction that will be imposed.

Centralized Reporting

Once the decision making and sanctioning are complete, the incident must be documented and reported to the Dean of Students Office and to the appropriate academic division office using the Academic Dishonesty Incident Report Form (available in the academic divisions or in the Dean of Students office). The Dean of Students Office will be responsible for the following:

1. Generating an official CNM letter to the student summarizing what occurred in the academic dishonesty incident and what sanction was imposed as well as notifying the student regarding what additional actions will be taken (in the case of repeat offenders or those already on probation), or what further actions would be taken should another incident occur. In addition, the letter will provide information about the student’s right to appeal.
2. Maintaining a centralized record of the incident within the Dean of Students Office so that, if future incidents are reported, patterns of behavior can be identified and sanctioned more severely.

Non-Academic Disciplinary Sanctions

When the report is received by the Dean of Students Office, current records will be checked to determine whether: 1) the student has had any previous incidents of academic dishonesty; or 2) the student is on disciplinary probation for any other previous disciplinary incidents. If either of these conditions exists, the student will be called into the Dean of Students Office and will be subject to disciplinary sanctions in addition to the academic sanction imposed by the instructor (per the disciplinary procedures outlined in the Student Code of Conduct). The additional disciplinary sanctions that may be imposed include disenrollment from the course, suspension from campus, expulsion from the college and other administrative actions.

Appeal Processes

Appeal of an Academic Sanction

The student may appeal any academic dishonesty determination or sanction by putting the appeal request in writing and submitting it to the Dean of the appropriate academic division within one week after receipt of the Dean of Student’s notification letter. The appeal must include the following:

1. The name of the individual requesting the appeal.
2. The name of the instructor who imposed the academic sanction and the information regarding the course (course name, course number, section number).
3. Description of the sanction that was imposed.
4. The grounds for the appeal. These grounds may include, but are not limited to, the procedure that was followed, the factual basis for the determination and/or the severity of the sanction.

After reviewing the appeal, the academic Dean may take any of the following actions:

1. Deny the appeal request.
2. Grant the appeal request and refer the matter back to the instructor to amend the original decision or sanction.

When a decision has made regarding the appeal, the academic Dean will notify the Dean of Students regarding the outcome of the appeal.

Appeal of a Non-Academic Disciplinary Sanction

The student may appeal any disciplinary sanction per the guidelines found in the Student Code of Conduct under section IV, D, titled, “Non-Academic Discipline Appeal Process” (found on page 385 of this catalog).

Information Technology Use Policy (Condensed Version)

Note: Policies are subject to change. The information below is a condensed version of the complete Information Technology Use Policy. Please see cnm.edu for the complete and most current version of this policy and its administrative directives.

I. Purpose

- A. CNM promotes and provides Information Technology resources that enhance educational services and facilitate College operations. These resources are shared by students, faculty, staff and the public. All persons using these systems share the responsibility for seeing that they are used in an effective, efficient, ethical and lawful manner. The aim of this policy and its administrative directives, is to safeguard equipment, networks, data and software that are acquired and maintained with public funds as well as define the acceptable use of these resources.
- B. Users of CNM Information Technology resources or those who interface with CNM enterprise systems and networks are subject to this policy, in addition to local, state and federal laws relating to copyrights, security and other issues regarding electronic media. Any violation of this policy, the Employee Handbook, or the Student Handbook may result in the removal of access privileges and possible disciplinary action.
- C. This policy applies to all individuals and groups utilizing College-owned Information Technology resources, whether individually controlled or shared, stand-alone or networked. In addition, this policy applies to personally-owned resources brought to the College for work or classroom purposes that utilize CNM’s systems and networks.

II. Agreement

- A. All users of CNM's enterprise systems and networks must read and comply with the Information Technology Use Policy. By using any of these systems and networks, users accept the terms of this policy.
- B. Area directives may be established to further support appropriate information technology use to preserve CNM's systems and networks and better serve the community. Users agree to become familiar with and abide by all applicable directives.

III. Accounts

- A. Each individual is responsible for the use of their CNM account. It must not be used by others.
- B. Student accounts are kept active until the beginning of the next fall or spring term. At that time, if the user is no longer a registered student, the account is locked.
- C. Information contained in the account will be kept until the end of the term in which the account was locked and then either retained or deleted at the College's discretion.

IV. Rights

- A. CNM's information technology resources are owned and operated by CNM. These resources include systems, networks, software/licenses, facilities, accounts and information. CNM reserves all rights to these resources, including termination of service without notice should an individual violate the Information Technology Use Policy.
- B. CNM cannot protect individuals against the existence or receipt of material that may be offensive to them.

V. Privileges

- A. Access to CNM's systems and networks is a privilege granted to authorized users, not a right. Access privileges are offered to users so they have full use of the technology available for academic purposes. Access to any system or network may be denied, at any time, without notice as a protective measure to ensure CNM's system and network integrity or compliance with legal mandates.
- B. Users may not, under any circumstances, transfer or confer these access privileges to other individuals.

VI. Responsible Use

- A. Prudent and responsible use of Information Technology resources begins with common sense and includes respecting the rights and privacy of other users.
- B. The user agrees to follow proper computer etiquette when using CNM's information technology systems and networks.
- C. The user agrees to refrain from any activity that would be considered an Information Technology use violation as defined in this policy.

VII. Privacy

- A. CNM makes every reasonable effort to ensure the security of its systems and networks. While attempts have been made to ensure privacy of all accounts by assigning individual PINs and passwords, CNM offers no guarantee or representation that any account, electronic mail, or voice mail is private. Users should also note that CNM's systems are not guaranteed to be secure, nor are they connected to a secure network.

- B. CNM recognizes the privacy rights of individuals, as guaranteed by the Family Educational Rights and Privacy Act of 1974 (FERPA) and Governing Board Policy. In certain circumstances the USA Patriot Act of 2001 may supersede students' privacy rights under FERPA.
- C. By virtue of having a CNM network account, the user grants specific permission to CNM and CNM reserves the right to access all information stored on its systems.
- D. Before any routine maintenance inspection is performed on a user's account, they are notified in advance and in writing, where practical. In the case of emergency inspections, or a discipline situation, the user is notified within three business days following the inspection of the reason the inspection occurred.

VIII. Violations

- A. To maintain the integrity of CNM's Information Technology systems and networks it is necessary to identify common violations that can be addressed quickly to maintain effective technology use at CNM. Common violations are noted below and are identified as either minor or major. This list is not intended to be all inclusive.
 - B. Minor Violations
 - Failure to comply with unit, lab, division rules and guidelines.
 - Chat room use that is unrelated to CNM instruction or operations.
 - Use of internet games that are unrelated to CNM instruction or operations.
 - Bringing food or drink into a lab setting.
 - Use or installation of unauthorized software onto CNM-owned computers.
 - Activities that are not academic or class related that could impact network or system performance (i.e., streaming videos, internet radio...)
 - Abusing or misusing hardware, including but not limited to, keyboards, mice, etc.
 - C. Major Violations
 - Refusal to discontinue unacceptable activities identified as minor violations.
 - Unauthorized entry into (hacking) accounts or files for purposes of reading, using, transferring, or altering their contents, or for any other purpose.
 - Viewing, accessing, or transmitting images, text, websites, or other material that is intimidating, fraudulent, hostile, harassing or offensive on the basis of sex, race, color, religion, national origin or disability.
 - Sale, possession (in public) and/or exhibition of obscene material, is illegal and violates local, state and federal law as well as CNM policy.
 - Transmitting images, text, websites or other material that is threatening, harassing, malicious, defamatory, or in which the origination is deliberately misleading.
 - Accessing or transmitting child pornography.
 - Copyright infringement, software piracy, audio/video recording piracy. This is a violation of federal law in addition to violating CNM policy. (See the Copyright section of this document for more information).
 - Unauthorized use of CNM's Information Technology resources for commercial purposes.
 - Interfering with, degrading, or damaging the performance of any CNM voice or data network including crippling, bombing, or spamming.
 - Misappropriation of data, copyrighted materials, including computer software.

Codes and Policies

- Tapping of network transmissions, including wireless transmissions (e.g., running network analyzers without authorization from the Computer Information Technology department (CIT)).
- Sharing of passwords, acquiring another user's password, attempting to increase the level of access to which a user is authorized, or depriving other authorized users access to any CNM system or network.
- Use of knowledge of passwords, or of loopholes in systems, to damage resources, obtain extra resources, take resources from another user's account or file space, or otherwise make use of resources either on or off campus for which proper authorization has not been given.
- Publishing to the CNM website without appropriate approval.
- Performing any activity that is considered to be a threat to national security.
- Fraud, pyramid schemes, federal computer security violations.

IX. Copyright

- A. Any information, including but not limited to text, software, graphics, video, audio and photographs may not be copied into, from or by, placed on any CNM facility, system, or network, except in accordance with the license. Software may only be copied in order to make back-up copies, if so licensed. The number of copies and distribution of copies may not be done in such a way that the number of simultaneous users exceeds the total number of licensed copies unless otherwise stipulated in the purchase agreement.
- B. According to copyright law, a person who makes an unauthorized copy is potentially liable to the owner for actual damages, profits, court costs and attorney fees. In addition, in certain cases the user may be criminally prosecuted and subject to a fine and imprisonment.

X. Enforcement

- A. Upon receipt of a complaint or if a student user is suspected of violating this policy, all relevant information will be turned over to the Dean of Students Office for investigation and possible disciplinary action.
- B. As part of the investigation conducted by the Dean of Students Office, a user's account may be locked and/or inspected. Following the inspection, the user will be notified in writing within 3 (three) business days that an inspection has taken place.

Substance Abuse

CNM has committed its resources to creating an environment that fosters learning. Such an environment depends in part on the physical, emotional and social well-being of CNM students and staff. Abuse of alcohol and drugs impairs work and academic performance, poses a threat to the health and safety of the CNM community and undermines the learning environment. CNM is committed not only to maintaining a drug-free campus but also to helping students and staff solve drug- and alcohol-related problems.

CNM POLICY ON ILLEGAL DRUGS AND ALCOHOL

This policy covers all property and facilities owned, used, leased or controlled by CNM and any other site where CNM business is being conducted, including motor vehicles.

Controlled substances are defined in Schedules I through V of the Controlled Substances Act, 21 U.S.C. 812 and implementing regulations, 21 CFR 1308.11-08.15. Controlled substances include,

but are not limited to, marijuana, hashish, cocaine (including crack), amphetamines, heroin, PCP, hallucinogens, anabolic steroids, certain prescription drugs and certain controlled substance analogs. Possession, use, sale or trafficking of controlled substances and glues is prohibited and punishable as a crime.

Illegal uses of alcohol include, but are not limited to, serving, buying or drinking alcohol by a minor; assisting a minor or an intoxicated person to get alcohol; selling alcohol without a license and driving while under the influence. Possession of alcohol is prohibited on all CNM properties and in CNM vehicles.

This policy is not intended to supersede or negate any existing policies on substance abuse, student or employee discipline or any additional requirements imposed on CNM or its students, instructors or staff by federal or state law.

The unlawful manufacture, distribution, dispensing, possession or use of controlled substances or alcohol on CNM property or as part of any of its activities by any member of the CNM community is strictly prohibited. Being on campus or engaging in campus-related activities while under the influence of alcohol or controlled substances is also strictly prohibited.

As a condition of continued registration and enrollment, all students shall abide by this policy. Violation of this policy shall result in disciplinary action, up to and including expulsion.

Students and employees in the Truck Driving program are subject to random drug testing under federal law.

CNM's response to any violation of this policy may include, as a total or partial alternative to disciplinary action, a requirement that the employee or student participate satisfactorily in an approved substance-abuse treatment or rehabilitation program as a condition of continued employment or registration/enrollment. Any employee engaged in the performance of work under a federal contract or grant is required, as a condition of employment, to notify his/her supervisor within five days if he/she is convicted of a criminal drug statute violation occurring in the workplace. The supervisor shall notify the CNM administration. Failure of the employee to notify the supervisor shall be grounds for disciplinary action.

In recognition of the dangers of substance abuse in the workplace, CNM shall maintain alcohol and drug-free awareness programs to inform members of the campus community about issues and risks of substance abuse. Counseling and treatment referral resources are listed below.

LEGAL SANCTIONS AND HEALTH RISKS

Penalties for even the most minor violations of the New Mexico Liquor Control Act can include fines of up to \$300, confiscation of property and imprisonment for up to 7 (seven) months. More serious violations carry greater penalties, with larger fines and longer imprisonment.

Penalties for illegal drug use can include significant fines and imprisonment. Penalties for illegal sale of drugs are greater and may include property confiscation.

Alternative penalties for illegal drug and alcohol use may also include mandatory community service.

Violation of laws by a foreign national may result in deportation.

Driving or using machinery after drinking or using drugs creates the risk of injury or even death for the user and others. Penalties include criminal charges, up to and including homicide, as well as loss of the driver's license and impoundment of the vehicle.

In drug-related cases a court may permanently suspend eligibility for federal benefits, including student financial aid. Moreover, a criminal record can seriously hurt education and career opportunities.

Excessive alcohol consumption and abuse of illicit drugs can lead to certain types of cancer, pathological changes in the liver, brain, heart and muscle which can lead to disability and death, as well as addiction, birth defects, shortened life span, stomach ulcers, phlebitis, varicose veins and other health problems.

Alcohol and drugs are also factors in homicide, assaults, rapes, suicides and family and date violence.

Alcohol is significantly involved in all types of accidents: motor vehicle, home, industrial and recreational.

Unintended pregnancies and sexually transmitted diseases are often associated with alcohol and other drug abuse. Intravenous (IV) drug use is a high-risk factor for AIDS, which at present is a fatal disease.

Substance abuse negatively impacts on personal, work and academic relationships.

CAMPUS AND COMMUNITY RESOURCES

Any member of the CNM community who is concerned about a substance-abuse problem (their own or a colleague's) can receive free, confidential assistance at the Counseling Center. A clinical therapist is available to perform a primary assessment on a case-by-case basis.

CNM employees will be referred for assistance through the Employee Assistance Program. Students may receive counseling on campus or be referred to the most appropriate community agency.

Other community resources include:

AGORA, UNM Crisis Center (277-3013); Al-Anon Information Service (262-2177); Alcoholics Anonymous (266-1900); All Indian Pueblo Council; Alcoholism Program (884-3820 ext. 25); Narcotics Anonymous (260-9889); National Council on Alcoholism & Drug Dependence (256-8300); Rape Crisis Center (266-7711); UNM Center for Alcoholism, Substance Abuse and Addictions (CASAA) (768-0150); UNM Mental Health Center; Psychiatric Crisis Unit (272-2920 or 272-2800); Suicide Crisis-Emergency Telephone (247-1121); Vet Center Readjustment Counseling (766-5900)

Sexual Harassment

Sexual harassment constitutes an unacceptable and punishable offense at CNM.

Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, grade or other classroom experience;
- submission to or rejection of such conduct by an individual is used as the basis for employment or academic decisions affecting such individual; or
- such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile or offensive working or learning environment.

Sexual harassment is distinguished from voluntary sexual relationships by the introduction of the elements of coercion and threat. Sexual harassment can involve a supervisor or employee and a student, or an instructor and a student, or two students. The three most common factors in sexual harassment are:

- unwelcome or offensive behavior;
- one-sided versus mutual interest; and
- an offender in a position of authority over the victim.

Sexual harassment can be:

- as blatant as the offer of a promotion, a grade or other academic reward in return for sexual favors; or
- as subtle as constant efforts to change a professional or academic relationship into a personal and social one.

Sexual harassment can include (but is not limited to):

- persistent and offensive personal jokes and comments; or
- unwanted physical contact (touching, patting, bumping or pinching); or
- displaying sexually oriented pictures.

As a student, you can do a great deal on your own to prevent or stop sexual harassment. The signals or feedback you give to another person can be very important. You should examine your own behavior and the reactions you get from others. If you believe you are being sexually harassed:

- Say "no" and mean it. Make clear to the offender that the behavior is unacceptable to you.
- Speak directly. Say something like this: "I'd like to keep our relationship strictly academic (or professional)."
- Take action even if you are uncertain about whether sexual harassment is taking place.

WHERE TO GO FOR HELP

Students with questions or complaints about sexual harassment involving another student should contact the Dean of Students in the Main Campus Student Services Center, telephone (505) 224-4342. Sexual harassment matters concerning a student and a CNM employee should be brought to the Human Resources Department, A Building, Main Campus, (505) 224-4600.

Military Duty Policy

This Student Policy on Military Duty shall apply to currently enrolled students at CNM who are 1) serving on active duty in the military and who receive orders transferring them to a duty station outside of the CNM District or prohibiting their continued enrollment at CNM or 2) are members of the New Mexico National Guard and/or reserves and are called to active duty. In such cases, CNM will follow the procedures listed below upon representation of official military orders by the affected student.

1. A student withdrawing from CNM prior to 80 percent completion of a term of any length will be withdrawn from class with no grade or enrollment penalties imposed. A full refund of tuition will be processed.
 - To withdraw the student must submit a copy of their official military orders for deployment and the CNM Military Deployment Form. This form may be obtained in the Registration Office at any CNM location and online at cnm.edu.

Codes and Policies

- Once the Registration Office receives and processes the withdrawal form, the student then contacts the Cashiers Office at either the Main or Montoya campus regarding a full refund of tuition. Tuition is refunded according to the original method of payment.
2. A student withdrawing after completion of 80 percent of a term of any length may receive full credit for each course in which he/she is enrolled provided the instructor certifies a grade of C or better for the course at the date of formal withdrawal. A student with a grade lower than a C will be withdrawn with no grade or enrollment penalties imposed and a full refund will be processed. After 80 percent completion of a term, a student must choose either a grade assignment or a tuition refund.
 - The student must confirm their choice by submitting a copy of their official military orders for deployment and the CNM Military Deployment Form. This form may be obtained in the Registration Office at any CNM location and online at cnm.edu.
 - If the student chooses a final grade for each course, the Registration Office will notify each instructor of the student's deployment. The instructor will record a final grade as of the date the Registration Office receives notification or the date of deployment, whichever is sooner.
 3. A student scheduled to graduate, who has completed 80 percent of the work in courses in which he/she is enrolled for that term, may be certified for graduation provided these courses would complete his/her degree or certificate requirements and student will receive full credit for the courses.

Students with questions regarding this policy should contact the Registration Office at any CNM location or call (505) 224-3214.

Note: Annual military reserve training is not considered active duty and therefore, is ineligible for the CNM Military Duty Policy.

Admission Policy and Procedures

Individuals may be denied admission to the institution; enrollment in courses and/or programs; and participation in certain CNM sponsored activities if it is determined that such access is likely to pose a serious threat to the safety of the applicant and/or members of the CNM community. Such determination would be made on a case by case basis by a review board under the guidance of the Dean of Students.

The Dean of Students will convene a review committee to decide if a student should not be admitted or should be withdrawn from CNM, an academic program, a course, or a CNM sponsored activity if information is available which suggests such admission, enrollment or participation is likely to pose a serious threat to the safety of the applicant and/or members of the CNM community. This committee would be facilitated by the Dean of Students. A minimum of five (5) regular members must be in attendance for a decision to be made. The Review Committee will consist of eight (8) members as defined below:

- Director or Associate Director of Academic Advisement and Career Development**
- Director of Special Services**
- Director of Risk Management**
- Director or a Manager from Enrollment Services**
- Two Deans or Associate Deans named by the Executive Vice-President of Academic Affairs**
- Director or Manager from Security**
- Dean of Students**

The standard to be used by the review committee in making a determination: Would a reasonable person looking at the preponderance of information available to the committee determine that it is more likely than not that this person poses or will pose a serious threat to the safety of the CNM community? Review committee decisions will be made by a majority of the members present.

If the review committee decides to deny admission or to withdraw a student from a course, a program, a sanctioned activity, or from CNM, the Dean of Students will notify the student and the Director of Enrollment Services of the decision.

If a student or prospective student wants to appeal the decision of the committee, the process will be the same as in the Student Code of Conduct (See Appeal Process, page 385).

Rules Governing Classrooms/Labs

Children on Campus

Children (or other non-students) are not allowed to accompany adults to class or lab. All children who are under age 15 and are on CNM's campus, must be accompanied by an adult at all times.

Electronic Devices

When students are in class or a lab, cellular telephones, pagers and beepers must be turned off or switched to silent or vibration mode. Electronic entertainment devices are to be turned off and headphones removed.

Dress

Students are expected to dress appropriately on campus at all times.

Smoking

Smoking is NOT allowed at any time in any CNM building. If smoking outside a building, do not congregate on walkways or in front of doors, do not block access to buildings and please be courteous of the rights of non-smokers on campus.

Animals on Campus

ADA and CNM policy allows service animals accompanying persons with disabilities to be on CNM campuses. Service animals must be registered as such through the Security Office and must be on a leash at all times.

Pets (domestic animals kept for pleasure or companionship) are not permitted in CNM facilities.

For further information regarding animals on campus, please refer to the Service Animal Policy (in the employee handbook) at cnm.edu.

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Find your course.

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Glossary

Abbreviated Schedule: Classes begin at 10:30 a.m. Classes before that time are canceled. Information is given on the telephone hotline, (505) 224-4SNO and on local media.

Academic Year: A school year consisting of a fall, spring and summer term.

Accreditation: Formal recognition of an educational institution that maintains standards qualifying its graduates for further study or for professional practice. CNM is accredited to grant certificates and associate degrees by The Higher Learning Commission; individual programs are accredited or approved by professional organizations.

Accuplacer: Reading, Sentence Skills (English) and Math exams used to determine appropriate course placement for students.

Achievement Coach: Achievement coaches are staff in each of the academic divisions who assist and guide students toward achieving their educational goals by identifying resources and services that support students.

Adding Courses: Registering for courses (see Registration).

Admission: The process of applying and being accepted by CNM (as opposed to registering for a particular course).

Adult Basic Education: Free courses to prepare for the GED, or to improve the skills of English as a second language speakers, offered in the Division of Educational & Career Advancement.

Advisor: A CNM staff member who provides program information and checklists, handles credit transfer issues, assists students with setting and meeting academic goals and provides referrals to other departments.

Articulation Agreement: A list of community college courses which are equivalent to corresponding courses at four-year colleges and universities. In other words, a transfer school, such as UNM or NMSU, has agreed, in writing, that these courses will fulfill many or all of the lower-division requirements for a bachelor's degree.

Arts and Sciences Courses: Courses that support degree and certificate programs in the arts and sciences areas and are generally transferable to other degree-granting institutions as freshman and sophomore electives or requirements. At CNM, arts and sciences courses are numbered 101 and above with the following subject codes: ANTH, ARTH, ARTS, ASTR, BIO, CHEM, COMM, CST, ECON, ENG, FREN, GEOG, GNHN, HIST, HUM, JOUR, MATH, MUS, NUTR, PHIL, PHYS, PSCL, PSY, RLGN, SOC, SPAN, THEA .

Associate Degree (AA, AS, AAS): The formal name for a two-year degree, though it may take longer to obtain this degree. The associate degree requires a minimum of 60 credits, with at least 12 credits earned in residence at CNM.

Audit: A grade option/grade 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 requirement and does reflect competency in a course.

Career and Technical Courses: Courses that are the core of most certificate and degree programs at CNM and are designed to prepare students for entry-level jobs. At CNM, career and technical courses (previously called occupational courses) are courses numbered 101 and above with subject codes not listed as arts and sciences courses (see Arts and Sciences Courses).

Certificate: Awarded upon completion of a prescribed series of courses. A certificate indicates skill competency in many technical and career areas.

Challenge Exams: Used to establish credit for CNM courses.

College and Career Bound: A high school-aged student enrollment program in which eligible high school and home schooled students can enroll at CNM and earn college credit.

Community College: A postsecondary institution like CNM which offers adult education, college preparation and courses/programs (certificates and degrees) in technical and occupational fields of study as well as for transfer to four-year schools.

Concentration: An area of emphasis or specialty within a program of study (major).

Corequisite: A course which is either recommended or required to be taken in combination with another course. Often a lab is the corequisite for a lecture: CHEM 121/121L, for example. A student who drops one of a pair of corequisite courses must drop 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 CNM Catalog.

Course Load: The number of credit hours enrolled in each term.

Course Repeat Limit: The number of times a course may be repeated. At CNM, a student may only enroll in the same CNM course a maximum of three times without special approval from the Academic Advisement and Career Development department. Topics, problems, internship, cooperative education and physical fitness activity courses are exempt from the course repetition limit.

Credit Hour: A unit of measurement for courses. At CNM, each hour of credit in a lecture class requires a minimum of 750 minutes of instruction per term; each hour of credit in a laboratory class requires at least 1,500 minutes. For transfer purposes, one CNM credit hour generally equals one semester credit hour at other institutions.

Credit/No Credit: CR/NC, a grade option in some CNM courses, replacing the traditional letter grade.

CRN: Course reference number, assigned to each course in the Schedule of Classes and used in registering.

Developmental courses: Courses numbered below 0999, to prepare students to enter arts and sciences or career and technical programs.

Distance Learning: Course sections offered via the Internet, videotape, correspondence or television or in an electronic classroom. 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.

Drop-In: A high school-aged student enrollment program in which those, 16 or 17 years of age, who are no longer actively enrolled in high school and are released from compulsory education may enroll at CNM.

Dropping Courses: Removing your name from a course roll if you no longer wish to attend and will not receive a grade. Deadlines for dropping courses are printed in the Schedule of Classes. If you drop a course with a corequisite you must also drop the corequisite. Dropping courses may affect your financial aid.

Dual Credit: A high school-aged student enrollment program in which eligible high school students can enroll at CNM and earn both high school and college credit.

Elective: A program credit requirement that allows the student to choose from a list of approved courses or disciplines.

English as a Second Language (ESL): Courses for students who are non-native speakers of English.

Freshman: A student who has completed fewer than 30 credits at CNM.

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 Course: See Academic Course.

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.

Hybrid course: A hybrid 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 their own computers.

Learning Communities: Learning communities offer students integrated curricula that emphasize connections among students, faculty and disciplines.

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.

Non-Degree Student: A student who has not yet chosen a major or who does not wish to earn a certificate or degree.

Optional Courses: Courses identified as being related to a program that are not part of the program's graduation requirements. Optional courses provide students with additional and/or related skill development in their field of study and are not usually eligible for financial aid.

Part of Term: A period of time within a term in which courses are scheduled. Parts of terms can be one to 16 weeks in duration.

Part-time: A schedule of fewer than 12 credit hours per term

Permission to Enroll: The special approval, by an academic division, for a student to enter a restricted course and/or to waive a course pre- or corequisite.

PIN: A student's personal identification number used to access CNM's secure online registration system and STARS.

Prerequisite: A specific requirement that must be successfully completed before a student may enroll in a course.

Program: See major.

Program Director: Instructor who provides in-depth information about a certificate or degree program.

R: Thursday in the Schedule of Classes and online registration system.

Recommended Prerequisite: A course or other prerequisite which is strongly suggested for successful completion of a course but is not required (See prerequisite).

Registration: The process of signing up for courses, including paying tuition and fees.

Registration Fee: A processing fee assessed to each student for the term in which he/she is registering for classes.

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; a U denotes Sunday.

Schedule of Classes: A printed list of classes to be offered in the upcoming term, including CRN, day/time and location, with information about admission, payments and registration.

Short Session: See Part of Term.

Skill Set: A document issued by an academic division upon successful completion of a combination of approved courses that provide specific skills.

Snow Day: Under extreme weather conditions, CNM may close or operate under an abbreviated schedule, with classes beginning at 10:30 a.m. Information is announced on a telephone hotline, (505) 224-4SNO and on local media.

Sophomore: A student who has completed 30 or more credits at CNM.

STARS: CNM's Student Telephone Access Registration System.

Step Back: The special approval, by an academic division, for a student to move back to a lower-level course within a term.

Step Up: The special approval, by an academic division, for a student to advance to a higher-level course within a term.

Substitution: An approved exchange of courses and credit because the competencies and/or learning objectives of the substituting course are comparable, but not equivalent, to those of the required course.

Term: A portion of an academic year. CNM has three terms a year: fall (beginning in August or September), spring (January) and summer (May). The fall and spring terms last 16 weeks, the summer term lasts 12 weeks.

Topics Course: A course that is not a part of CNM's regular course offerings and may change each term. Topics courses complement CNM's regular course offerings in a subject area or program. They may emphasize subject matter or content introduced in other courses, content at a more advanced level or content that is not covered in other CNM courses.

Traditional Grade: Letter grade (A, B, C, D or F) used in calculating the grade point average and recommended for courses in the major and for courses to be transferred to another institution. For details on grade options, see page 35 of catalog.

Transcript: An official educational record of a student's enrollment at a college, showing courses attempted and completed, grades and grade point average and graduation.

Transfer Credits: Credits for courses taken at another institution and counted toward a CNM certificate or degree or taken at CNM and applied toward a degree at another institution.

Tuition: A charge for CNM courses based on course type, credit hours and the student's in-state tuition classification.

U: Denotes Sunday in the Schedule of Classes and online registration system; an S denotes Saturday.

Waiver: An approved exemption from a course because the competencies and/or learning objectives of the course have already been attained due to prior training, educational or work experience.

Withdrawal: Dropping all courses and ceasing to be a CNM student.

wpm: Words per minute (keyboarding).

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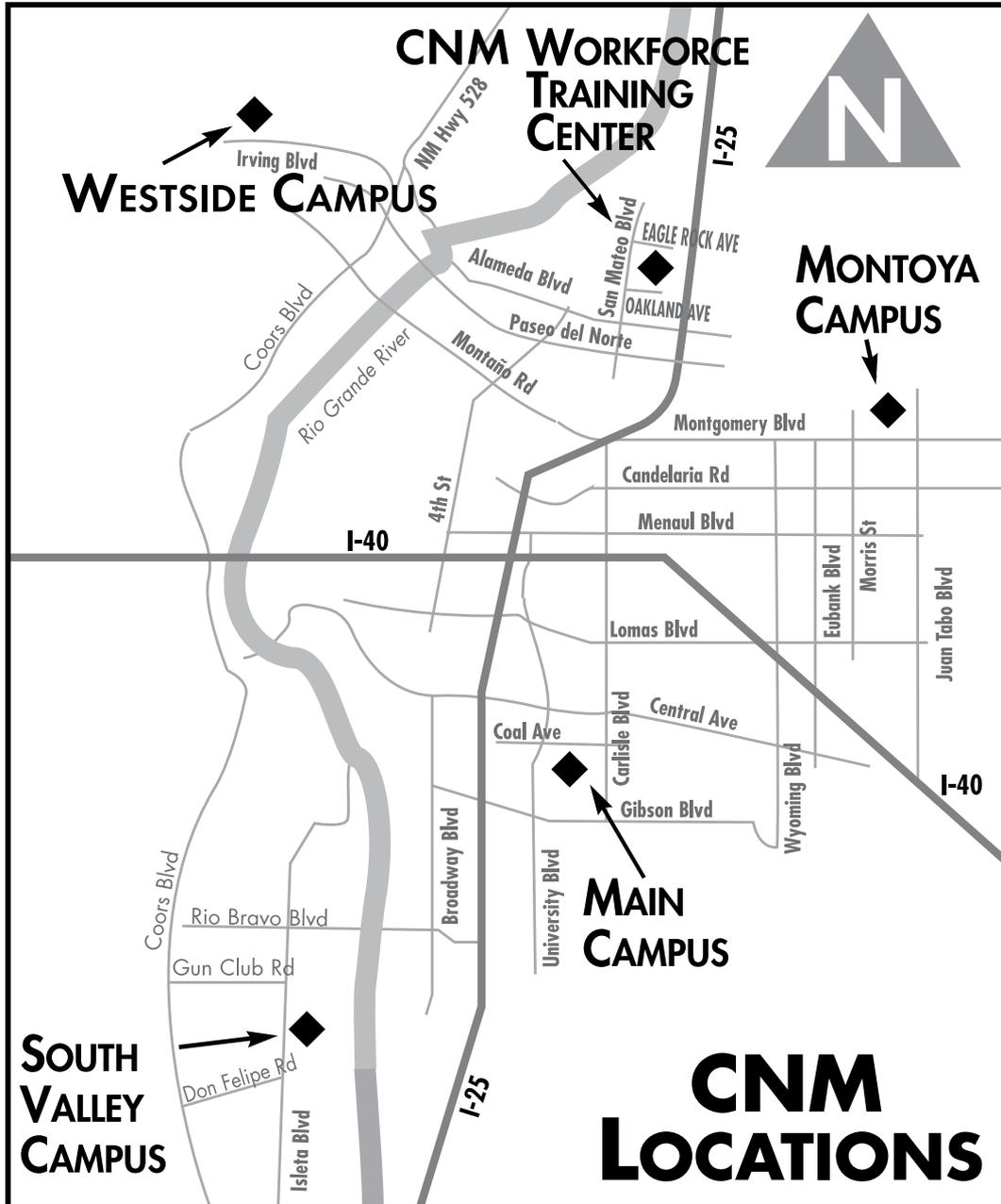
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Maps



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Joseph M. Montoya Campus

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South Valley Campus

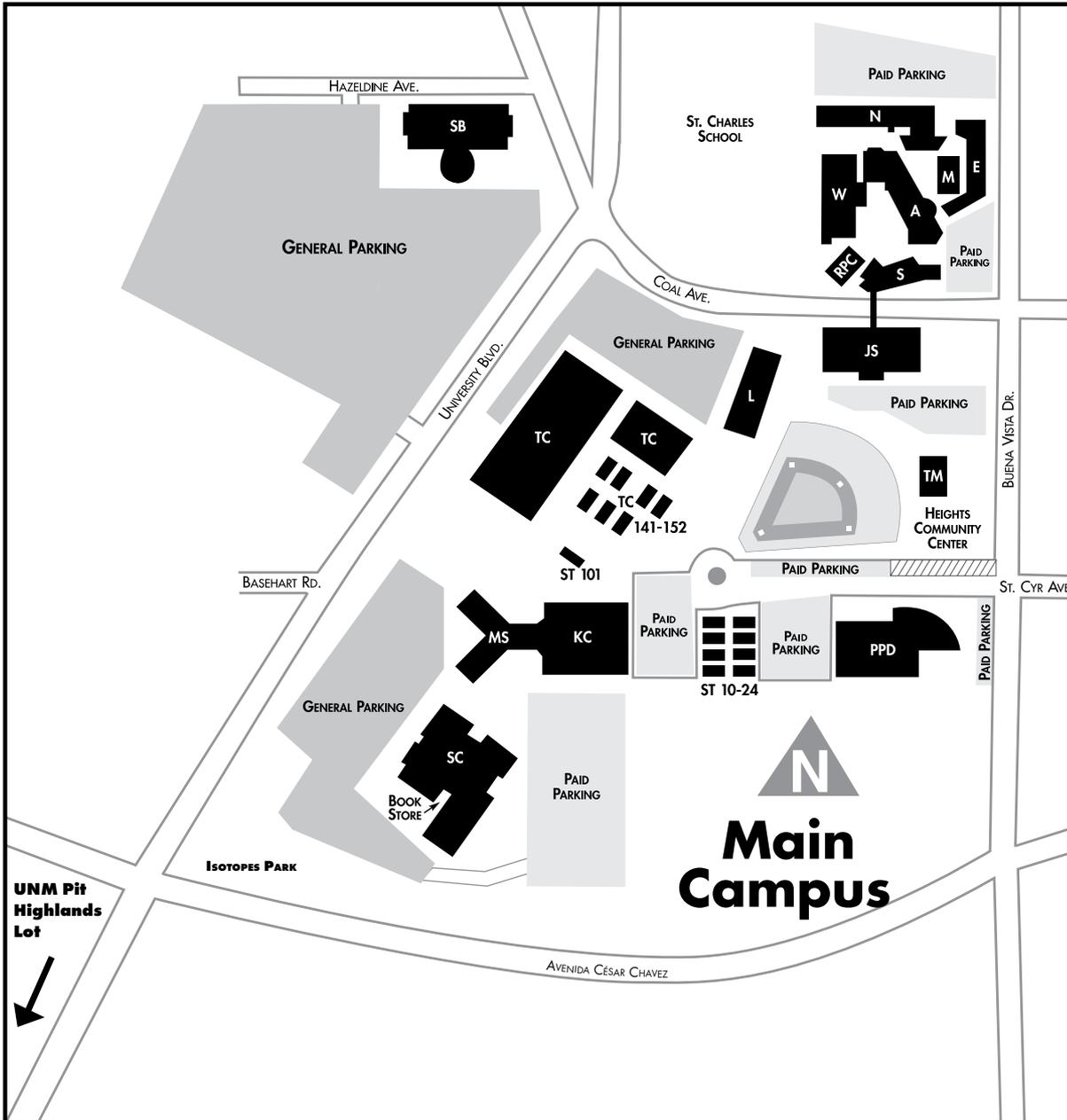
5816 Isleta SW
Albuquerque, NM 87105
(505) 224-5000

Westside Campus

10549 Universe Blvd., NW
Albuquerque, NM 87114
(505) 224-5301

CNM Workforce Training Center

5600 Eagle Rock Ave. NE
Albuquerque, NM 87113-1711
(505) 224-5200



Buildings Key

- A:** Administration Building
- E:** East Building
- JS:** Jeannette Stromberg Hall
- KC:** Ken Chappy Hall
- L:** (Science) Laboratory
- M:** Main Building
- MS:** Max Salazar Hall
- N:** North Building
- PPD:** Support Services/Physical Plant
- RPC:** Records & Property Control
- S:** South Building
- SB:** Smith Brasher Hall
- SC:** Student Services Center (ADMISSIONS)
- ST:** South Temporary Buildings
- TC:** Ted Chavez Hall
- TM:** Tres Manos Child Development Center
- W:** West Building

GETTING STARTED

ACCESSING CNM

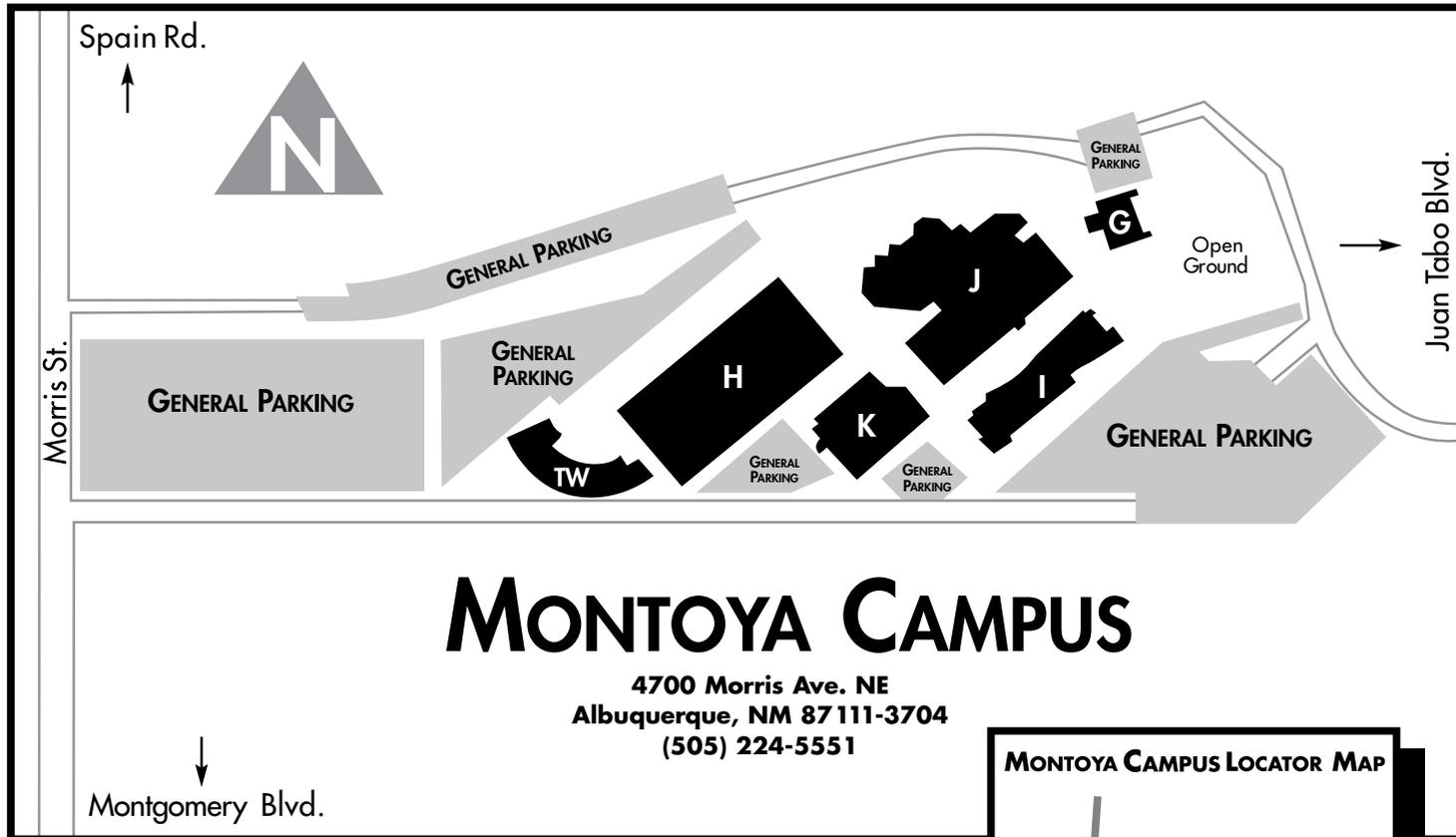
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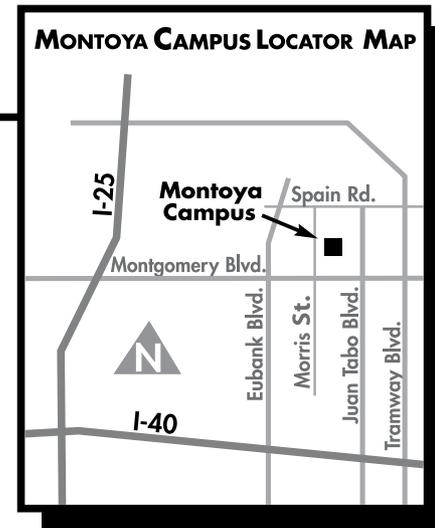
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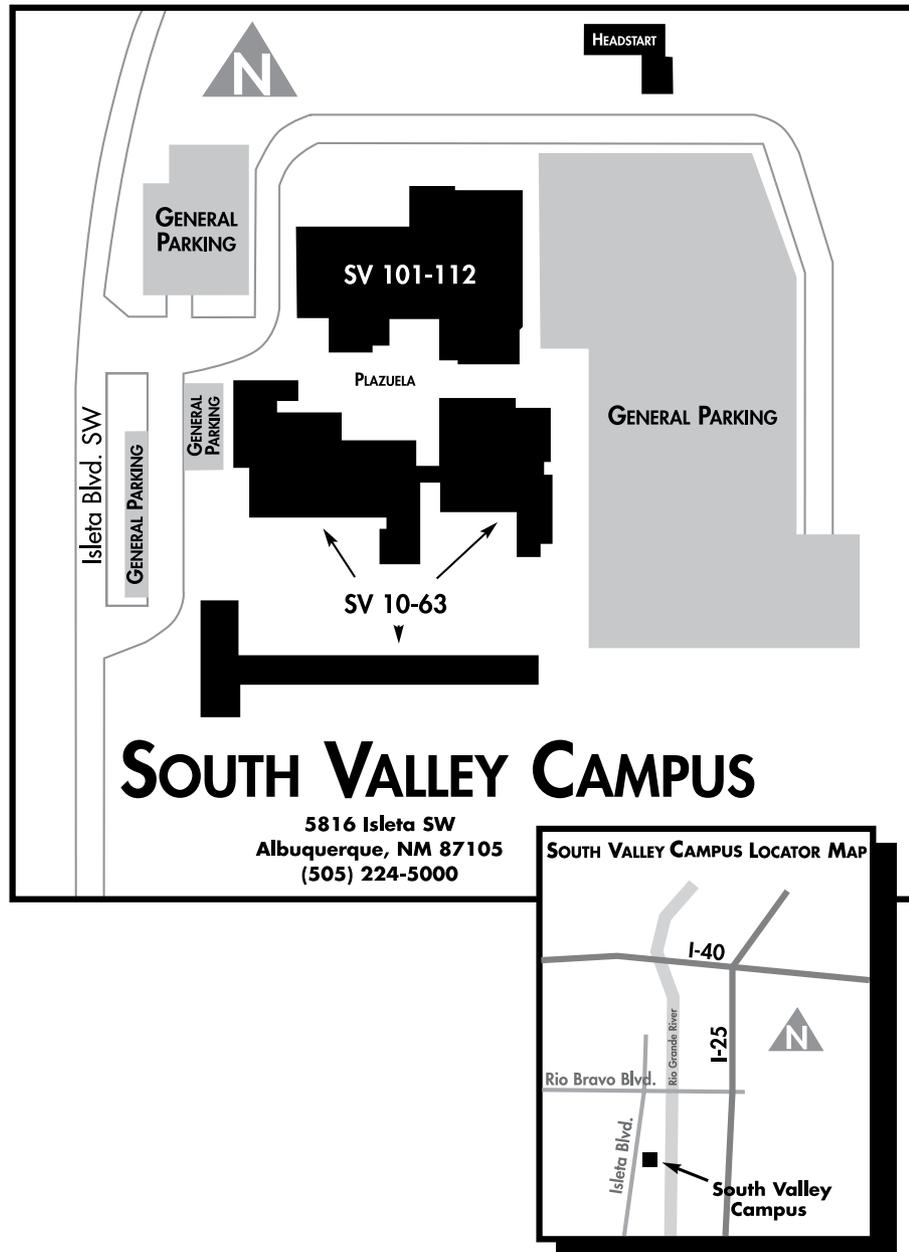
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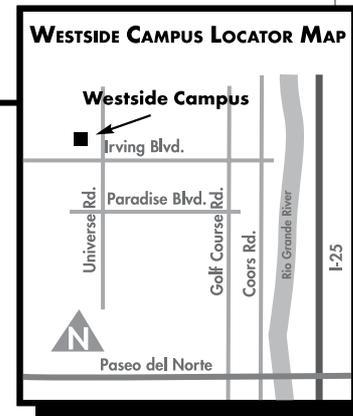
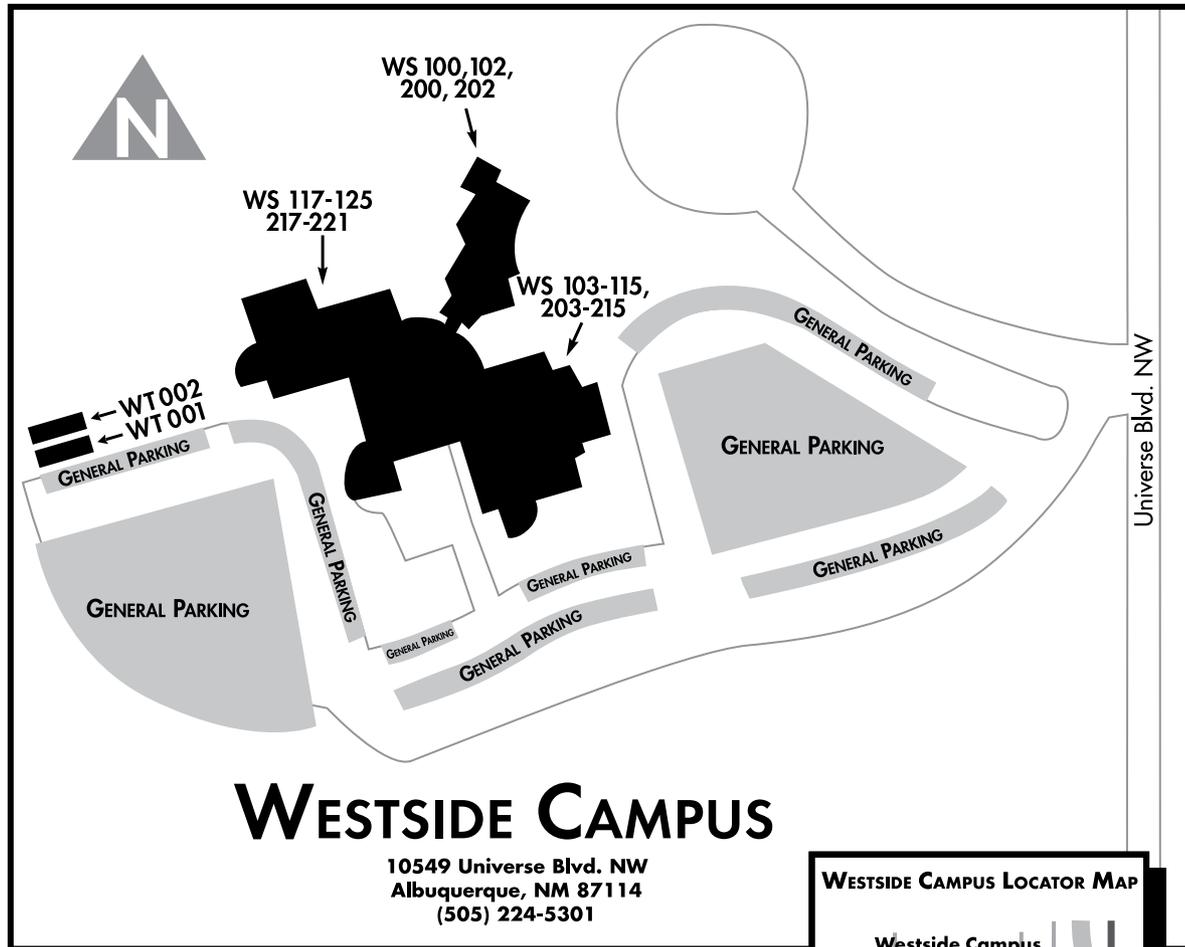
GLOSSARY, INDEX, MAPS



- G:** G Building (Maintenance)
- H:** H Building
- I:** I Building
- J:** J Building
- K:** K Building
- TW:** Tom Wiley Hall









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