

2006/2007 Catalog

July 2006 • Volume 41

Main Campus

Administration/Mailing Address

525 Buena Vista SE
(505) 224-3000

Student Services/Information

900 University SE
Albuquerque, NM 87106
(505) 224-3160

Joseph M. Montoya Campus

4700 Morris NE
Albuquerque, NM 87111-3704
(505) 224-5551

South Valley Campus

5816 Isleta SW
Albuquerque, NM 87105
(505) 224-5000

CNM Westside

10549 Universe NW
Albuquerque, NM 87114
(505) 224-5301

CNM Workforce Training Center

5600 Eagle Rock Avenue NE
Albuquerque, NM 87113-1711
(505) 224-5200

cnm.edu

CNM
Find your course.

GETTING
STARTED

ACCESSING
CNM

EDUCATIONAL
OPTIONS

PROGRAMS
OF STUDY

COURSE
DESCRIPTIONS

CODES AND
POLICIES

GLOSSARY,
INDEX, MAPS



CNM Governing Board

Richard Barr, *Chair*

Robert P. Matteucci, *Vice Chair*

Carmie Lynn Toulouse, *Secretary*

Jeff Armijo

Penelope S. Holbrook

Blair L. Kaufman

Janet W. Saiers

CNM Administration

Michael J. Glennon, *President*

John Walstrum, *Executive Vice President for Academic Affairs*

Phillip Bustos, *Vice President for Student Services*

Vacant, *Vice President for Administrative Services*

Kathie Winograd, *Vice President for Planning and Budget*

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**; the **Student Handbook & Planner**; 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, www.cnm.edu.

Produced by the CNM Public Information Office. Printed by Phillips Brothers Printing.

About the Cover

A special thanks to those involved with this publication is on page 384.

Table of Contents

| | |
|--|---|
| About CNM..... | 4 |
| Graduate Job Placement Data/Job Connection Center..... | 6 |
| Academic Calendar..... | 8 |

GETTING STARTED

| | |
|-----------------------|----|
| Admission..... | 10 |
| Registration..... | 16 |
| Tuition and Fees..... | 20 |
| Financial Aid..... | 21 |

ACCESSING CNM

Student Resources and Support

| | |
|---|----|
| Academic Advisement and Career Development..... | 24 |
| Achievement Coaches..... | 24 |
| Assessment Centers (Testing)..... | 24 |
| Computer Labs..... | 25 |
| Libraries..... | 25 |
| Special Services..... | 25 |
| TRIO Student Support Services..... | 26 |
| Tutoring Services..... | 26 |

| | |
|--------------------------|----|
| Campus Life | 28 |
|--------------------------|----|

| | |
|-------------------------|----|
| Graduation | 30 |
|-------------------------|----|

| | |
|--------------------------------|----|
| Academic Policies | 32 |
|--------------------------------|----|

| | |
|---|----|
| Overview of Student Codes and Policies | 36 |
|---|----|

Academic Divisions

| | |
|--|----|
| Applied Technologies..... | 38 |
| Business & Information Technology..... | 39 |
| Communication, Humanities & Social Sciences..... | 42 |
| Educational & Career Advancement..... | 43 |
| Health, Wellness & Public Safety..... | 45 |
| Math, Science & Engineering..... | 46 |

EDUCATIONAL OPTIONS

| | |
|---|----|
| College Success Experience Courses..... | 48 |
| Emeritus Academy..... | 48 |
| Experiential Learning..... | 48 |
| Learning Communities..... | 48 |
| Prior Learning Assessment..... | 48 |
| ROTC..... | 48 |
| Workforce Training..... | 48 |
| WorkKeys™..... | 49 |
| Distance Learning..... | 49 |
| Individualized Plan..... | 51 |

PROGRAMS OF STUDY

| | |
|---|----|
| List of Programs of Study (alphabetical)..... | 54 |
| Career Clusters..... | 58 |
| List of Programs of Study (by division and accrediting agencies)..... | 59 |
| About the Program of Study Pages..... | 60 |
| About the Suggested Course Sequence Charts..... | 61 |
| Programs of Study (alphabetical)..... | 62 |

COURSE DESCRIPTIONS

| | |
|--|-----|
| Non-Credit Courses..... | 268 |
| Credit Course Information..... | 269 |
| Credit Courses (alphabetical by subject code)..... | 270 |

CODES AND POLICIES

| | |
|--|-----|
| Student Code of Conduct..... | 358 |
| Academic Dishonesty Policy..... | 363 |
| Information Technology Use Policy..... | 364 |
| Substance Abuse Policy..... | 366 |
| Sexual Harassment..... | 367 |
| Military Duty..... | 367 |
| Admission Policy and Procedures..... | 368 |
| Rules Governing Classrooms and Labs..... | 368 |

GLOSSARY, INDEX AND MAPS

| | |
|---------------|-----|
| Glossary..... | 370 |
| Index..... | 372 |
| Maps..... | 378 |

About CNM

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

For 2006–07, credit programs at CNM include:

- certificates in 52 business, health, technologies and trades occupations as well as short-term career and technical courses;
- associate degrees in 48 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 49).

CNM is accredited to grant certificates and associate of applied science, associate of arts and associate of science degrees by The Higher Learning Commission (formerly North Central Association of Colleges and Schools).

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 the 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 Institute 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 assure 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 Institute also cooperates with other two- and four-year schools on course articulation and student transfer; currently, more than 160 programs transfer to 14 different institutions.



**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 (begins in August), spring (begins in January) and summer (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 Information Technology 101.

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 possess 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 group settings.

Exit Competencies

All programs of study at CNM have identified exit competencies that graduates will possess 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://planet.cnm.edu/instruction/index.htm>.

Together, the exit competencies and core competencies will ensure that CNM graduates possess the necessary knowledge, skills and behaviors to be competent and successful 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 Job Placement

Data for 2004-05

In addition to tracking the graduate job placement data shown in the charts on these pages, the Job Connection Center—provides a variety of job search services and support to CNM students and graduates, including

- on-line 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; and
- 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 Job Placement Data

For more information and/or explanation about the graduate job placement data on these pages, contact the Job Connection Center. For local, state and national occupational employment and wage rates, go to www.dol.state.nm.us/eds/index.html.

Please note that there are several programs of study in which the certificate wages are higher than the degree wages. In most of these cases, some individuals acquired both the certificate and degree, resulting in higher wages.

Note: Programs not listed have no graduates for this reporting cycle.

CONTACT INFORMATION

Main Campus: (505) 224-3060

| Program of Study | Total Graduates | Continuing Education | Percent Employed in Training-Related Job ¹ | Hourly Wage/Range ² |
|---|-----------------|----------------------|---|--------------------------------|
| Air Conditioning, Heating & Refrigeration, Certificate | 40 | 11 | 100% | 11.58 - 20.00 |
| Architectural/Engineering Drafting Technology, Certificate | 7 | 2 | 100% | 15.00 - 15.95 |
| Architectural/Engineering Drafting Technology, Degree | 10 | 2 | 100% | 13.00 - 15.95 |
| Automotive Technology, Certificate | 34 | 12 | 100% | 8.00 - 25.00 |
| Carpentry, Certificate | 10 | 6 | 100% | Not Reported |
| Construction Management Technology, Degree | 13 | 2 | 100% | 14.00 - 24.03 |
| Construction Technology, Degree | 12 | 1 | 100% | 15.00 |
| Diesel Equipment Technology, Certificate | 7 | 0 | 100% | 9.00 - 14.80 |
| Electrical Trades, Certificate | 43 | 16 | 100% | 8.00 - 18.00 |
| Electronics Engineering Technology, Degree <i>(program no longer offered)</i> | 9 | 2 | 86% | 16.90 - 23.00 |
| Electronics Technology, Certificate | 36 | 10 | 93% | 10.25 - 21.00 |
| Electronics Technology, Degree | 34 | 1 | 95% | 11.00 - 25.00 |
| Engineering Design Technology, Degree <i>(formerly Design Drafting Engineering Technology)</i> | 5 | 1 | 100% | 15.00 |
| Geographic Information Technology, Certificate | 5 | 4 | 100% | 11.00 |
| Geographic Information Technology, Degree | 1 | 0 | 100% | 14.42 |
| Landscaping, Certificate | 7 | 1 | 100% | Not Reported |
| Machine Tool Technology, Certificate | 24 | 9 | 100% | 10.00 - 16.00 |
| Manufacturing Technology, Certificate | 2 | 1 | 100% | 16.82 |
| Manufacturing Technology, Degree | 6 | 0 | 100% | 14.19 - 22.83 |
| Mechanical Technology, Degree | 11 | 0 | 100% | 10.22 - 20.00 |
| Metals Technology, Degree | 30 | 4 | 100% | 11.00 - 22.00 |
| Photonics Technology, Certificate | 8 | 2 | 80% | 14.13 - 21.77 |
| Photonics Technology, Degree | 15 | 4 | 80% | Not Reported |
| Plumbing, Certificate | 26 | 7 | 91% | 15.38 - 28.00 |
| Project Management, Degree | 1 | 0 | 100% | Not Reported |
| Residential Wiring, Certificate | 49 | 25 | 100% | 8.00 - 18.00 |
| Transportation Technology, Degree | 11 | 2 | 100% | 9.00 - 14.80 |
| Truck Driving, Certificate | 48 | 1 | 96% | 8.50 - 22.50 |
| Welding, Certificate | 31 | 13 | 100% | 11.00 - 20.00 |
| TOTAL APPLIED TECHNOLOGIES | 535 | 139 | 97% | N/A |
| Business & Information Technology | | | | |
| Accounting, Certificate | 26 | 6 | 94% | 8.00 - 17.00 |
| Accounting, Degree | 40 | 5 | 88% | 9.00 - 22.00 |
| Baking, Certificate | 38 | 20 | 100% | 13.50 - 14.00 |
| Bookkeeping, Certificate | 16 | 1 | 100% | 9.25 - 13.00 |

| | Total Graduates | Continuing Education | Percent Employed in Training-Related Job ¹ | Hourly Wage/Range ² |
|---|-----------------|----------------------|---|--------------------------------|
| Business Administration, Certificate | 16 | 5 | 100% | 15.38 - 19.63 |
| Business Administration, Degree | 44 | 6 | 100% | 10.00 - 19.63 |
| Business Graphics, Certificate | 3 | 0 | 100% | 16.12 |
| Business Graphics, Degree | 17 | 1 | 100% | 9.00 - 15.45 |
| Computer Information Systems, Certificate | 10 | 1 | 100% | 12.00 - 16.83 |
| Computer Information Systems, Degree | 32 | 4 | 89% | 12.00 - 18.00 |
| Computing Technology, Certificate | 8 | 2 | 50% | Not Reported |
| Computing Technology, Degree | 17 | 8 | 100% | 10.00 - 20.00 |
| Court Reporting, Certificate | 0 | 0 | N/A | N/A |
| Court Reporting, Degree (changed to certificate program) | 3 | 0 | 100% | Not Reported |
| Culinary Arts, Degree | 28 | 4 | 100% | 8.00 - 14.00 |
| E-Commerce, Certificate (program no longer offered) | 2 | 1 | N/A | N/A |
| E-Commerce, Degree (program no longer offered) | 4 | 1 | N/A | N/A |
| Financial Services, Certificate | 2 | 1 | N/A | N/A |
| Financial Services, Degree | 6 | 2 | 100% | 17.50 |
| Food Service Management, Certificate | 20 | 10 | 100% | 7.40 - 22.50 |
| Health Information Technology, Degree | 15 | 0 | 85% | 12.50 - 25.00 |
| Hospitality & Tourism, Certificate | 3 | 0 | 100% | 11.00 |
| Hospitality & Tourism, Degree | 4 | 0 | 100% | 11.56 |
| International Business, Certificate | 6 | 2 | 100% | 11.50 - 13.00 |
| Judicial Studies, Certificate | 12 | 3 | 83% | 12.07 - 12.32 |
| Medical Coding, Certificate | 14 | 4 | 100% | 15.38 - 25.00 |
| Medical Office Assistant, Certificate | 23 | 12 | 80% | 9.25 |
| Networking Technology, Certificate (program no longer offered) | 5 | 1 | 100% | 12.16 - 24.04 |
| Networking Technology, Degree (program no longer offered) | 16 | 5 | 100% | 9.00 - 17.30 |
| Office Administration, Certificate (program changed to Office Technology) | 12 | 0 | 100% | 11.00 - 17.45 |
| Office Administration, Degree (program changed to Office Technology) | 26 | 0 | 100% | 8.00 - 20.33 |
| Office Assistant, Certificate | 7 | 4 | 50% | Not Reported |
| Paralegal Studies, Degree (formerly Legal Assistant Studies) | 34 | 4 | 88% | 10.00 - 40.86 |
| Pre-Management, Degree | 75 | 44 | 81% | 10.00 - 23.00 |
| Professional Cooking, Certificate | 38 | 21 | 100% | 6.50 - 14.00 |
| Retail Management, Certificate (changed to skill set) | 2 | 1 | N/A | N/A |
| Stenotranscription, Certificate (changed to skill set) | 10 | 4 | 0% | N/A |
| Web Technology, Certificate | 4 | 2 | 100% | 9.00 - 20.00 |
| Web Technology, Degree | 5 | 0 | 67% | 9.00 - 20.00 |
| TOTAL BUSINESS & INFORMATION TECHNOLOGY | 643 | 185 | 93% | 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) | 2 | 1 | N/A | N/A |
| Child, Youth & Family Development, Degree | 17 | 1 | 90% | 8.00 - 14.42 |
| Elementary Education, Degree | 18 | 11 | 100% | 9.00 - 10.14 |
| TOTAL COMMUNICATION, HUMANITIES & SOCIAL SCIENCES | 37 | 13 | 93% | N/A |

Health, Wellness & Public Safety

| | Total Graduates | Continuing Education | Percent Employed in Training-Related Job ¹ | Hourly Wage/Range ² |
|---|-----------------|----------------------|---|--------------------------------|
| Biotechnology, Degree | 10 | 2 | 80% | 12.00 - 13.46 |
| Clinical Laboratory Assistant, Certificate | 11 | 0 | 71% | 9.18 - 9.97 |
| Cosmetology, Degree | 22 | 2 | 100% | 8.00 - 12.50 |
| Criminal Justice, Degree | 31 | 10 | 100% | 9.00 - 12.27 |
| Dental Assistant, Certificate | 10 | 2 | 100% | 11.00 - 15.50 |
| Diagnostic Medical Sonography, Degree | 12 | 0 | 100% | 21.00 - 31.94 |
| Environmental Safety & Health, Degree | 15 | 4 | 100% | 11.00 - 16.33 |
| Fire Science, Degree | 18 | 5 | 67% | 11.93 |
| Fitness Technician, Certificate | 11 | 1 | 88% | 8.00 - 54.00 |
| Health Unit Coordinator, Certificate | 46 | 10 | 100% | 9.00 - 12.00 |
| Medical Laboratory Technician, Degree | 9 | 0 | 100% | 13.30 - 18.00 |
| Nursing, Degree | 105 | 0 | 100% | 18.31 - 36.06 |
| Nursing Assistant, Certificate | 54 | 22 | 100% | 8.00 - 16.00 |
| Pharmacy Technician, Certificate | 13 | 4 | 75% | 8.00 - 9.00 |
| Phlebotomy, Certificate | 69 | 20 | 92% | 8.00 - 15.00 |
| Practical Nursing, Certificate | 39 | 15 | 94% | 12.55 - 21.00 |
| Radiologic Technology, Degree | 19 | 0 | 100% | 18.00 - 24.63 |
| Recreation & Leisure, Certificate (program no longer offered) | 3 | 1 | N/A | N/A |
| Recreation & Leisure, Degree (program no longer offered) | 4 | 2 | N/A | N/A |
| Respiratory Therapy, Degree | 18 | 0 | 100% | 16.87 - 24.74 |
| Surgical Technology, Certificate | 10 | 1 | 100% | 11.00 - 14.04 |
| TOTAL HEALTH, WELLNESS & PUBLIC SAFETY | 529 | 101 | 96% | N/A |

Mathematics, Science & Engineering

| | Total Graduates | Continuing Education | Percent Employed in Training-Related Job ¹ | Hourly Wage/Range ² |
|--|-----------------|----------------------|---|--------------------------------|
| Pre-Engineering, Degree (program changed to Engineering) | 17 | 6 | 83% | 11.34 - 17.00 |
| TOTAL MATHEMATICS, SCIENCE & ENGINEERING | 17 | 6 | 83% | N/A |

TOTALS

1761 444 95% 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. For local, state and national occupational employment and wage rates go to www.dol.state.nm.us/eds/index.html. New programs not listed have no graduates for this reporting cycle.

2006/2007 Academic Calendar



Fall Term 2006

| | |
|--|--------------------------------|
| First day of instruction..... | August 28 |
| Labor Day Holiday (no classes; offices closed)..... | September 4 |
| Last day to register Full term classes..... | September 5 |
| Short session classes..... | <i>See Schedule of Classes</i> |
| Midterm | October 17 |
| Last day to change grading options; last day to withdraw Full term classes..... | November 17 |
| Short session classes..... | <i>See Schedule of Classes</i> |
| Thanksgiving Holiday (no classes; offices closed)..... | November 23-26 |
| Last day of the term (may vary; consult division) | December 14 |
| Fall grades available on STARS and online | <i>See Schedule of Classes</i> |

Spring Term 2007

| | |
|--|--------------------------------|
| First day of instruction..... | January 8 |
| Martin Luther King, Jr. Day Holiday (no classes; offices closed)..... | January 15 |
| Last day to register Full term classes..... | January 16 |
| Short session classes..... | <i>See Schedule of Classes</i> |
| Presidents' Day Holiday (no classes; offices open) | February 19 |
| Midterm | March 1 |
| Last day to change grading options; last day to withdraw Full term classes..... | March 30 |
| Short session classes..... | <i>See Schedule of Classes</i> |
| Last day of the term (may vary; consult division) | April 26 |
| Graduation (tentative) | April 20 |
| Spring grades available on STARS and online | <i>See Schedule of Classes</i> |

Summer Term 2007

| | |
|--|--------------------------------|
| First day of instruction..... | May 14 |
| Memorial Day Holiday (no classes; offices closed)..... | May 28 |
| Last day to register Full term classes..... | May 21 |
| Short session classes..... | <i>See Schedule of Classes</i> |
| Midterm/graduation applications due..... | June 22 |
| Independence Day Holiday (no classes; offices closed)..... | July 4 |
| Last day to change grading options; last day to withdraw Full term classes..... | July 20 |
| Short session classes..... | <i>See Schedule of Classes</i> |
| Last day of the term (may vary; consult division) | August 4 |
| Summer grades available on STARS and online | <i>See Schedule of Classes</i> |

Getting Started

| Topic | Page |
|-----------------------|------|
| Admission..... | 10 |
| Registration | 16 |
| Tuition and Fees..... | 20 |
| Financial Aid | 21 |



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 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

- Submit admissions form (All students are assigned a CNM email account to access CNM PASSPORT, our Institute-wide communication system)
- Take the Accuplacer placement exams or provide official ACT or SAT scores
- Meet with an academic advisor
- Complete 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

Before Attending Classes

- Pay tuition and fees
- Obtain your student ID card
- Go to www.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 the following types of degree programs (see page 54 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 college'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 program descriptions).

The Admission Process

1. Submit Admissions Form

Admission Forms are available online (www.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 (www.cnm.edu) or visit the Financial Aid Office as soon as possible in the admission process. All students are assigned a CNM email account to access CNM PASSPORT, our Institute-wide communication system. For more information visit www.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 www.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 101 and RDG 100 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, available only at the Main Campus Assessment Center, is intended for students with significant prior experience in chemistry and biology. Passing the exam may allow a student to enroll in Biology 237/247L and/or Biology 239/239L without taking the Biology 123/124L and Chemistry 111/112L 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.

Spanish Placement Exam

The Spanish Placement Exam, available only at the Main and Montoya Campus Assessment Centers, 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 24) to discuss program selection and/or course placement.

4. Complete a New Student Orientation

Orientation includes information that will help students be successful at CNM and is required for all first-time college students. Orientation is available online at www.cnm.edu.

5. 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 www.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 a 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 101 and above.
- 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 100 and above
- 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 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 can also be found online at www.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 that is at least 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 5 | ART 101 ART 201,202 | 3 6 |
| Studio Art | | | |
| Drawing | 3 | ART 106 | 3 |
| 2-D Design | 3 | ART 121 | 3 |
| 3-D Design | 3 | ART 122 | 3 |
| Environmental Science | 3 | BIO 111/111L | 4 |
| Biology | 3 | BIO 123/124L | 4 |
| Chemistry | 3 | CHEM 121/121L, 122/122L | 8 |
| Computer Science A | 3 | CSCI 151 | 4 |
| Computer Science AB | 3 | CSCI 151,251 | 8 |
| Macroeconomics | 3 | ECON 200 | 3 |
| Microeconomics | 3 | ECON 201 | 3 |
| English Language & Composition | 3 | ENG 101,102 | 6 |
| English Literature & Composition | 3 | ENG 101, 1026 | |
| French Language | 3 | FREN 101, 102, 201, 202 | 16 |
| French Literature | 3 | FREN 101, 102, 201, 202 | 16 |
| German Language | 3 | LANGUAGE ELECTIVE | 6 |
| Human Geography | 3 | GEOG 102 | 3 |
| European History | 3 | HIST 102 | 3 |
| American History | 3 | HIST 161,162 | 6 |
| Latin: Vergil | 3 | LANGUAGE ELECTIVE | 6 |
| Latin: Literature | 3 | LANGUAGE ELECTIVE | 6 |
| Music Theory | 3 | MUS 103 | 4 |
| Calculus AB | 3 | MATH 162 | 4 |
| Calculus BC | 3 | MATH 162, 163 | 8 |
| Statistics | 3 | MATH 145 | 3 |
| Physics B | 3 | PHYS 151/151L, PHYS 152/152L | 10 |
| Physics C | | | |
| Mechanics | 3 | PHYS 160/160L | 5 |
| Electricity & Magnetism | 3 | PHYS 161/161L | 5 |
| American Government | 3 | PSCI 200 | 3 |
| Comparative Government | 3 | PSCI 220 | 3 |
| Psychology | 3 | PSY 105 | 3 |
| Spanish Language | 3 | SPAN 101, 102 201,202 | 14 |
| Spanish Literature | 3 | SPAN 280 | 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 110 | 3 |
| Chemistry | 47 | 50 | CHEM 121/121L, 122/122L | 8 |
| Macroeconomics | 44 | 50 | ECON 200 | 3 |
| Microeconomics | 41 | 50 | ECON 201 | 3 |
| Analyzing/Interpret Lit | 47 | 50 | ENG 150,250 | 6 |
| English Literature | 46 | 50 | ENG 294,295 | 6 |
| American Literature | 46 | 50 | ENG 297,298 | 6 |
| French Level 1 | 42 | 50 | FREN 101,102 | 8 |
| French Level 2 | 45 | 62 | FREN 101,102,201,202 | 16 |
| 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 161 | 3 |
| US History II | 46 | 50 | HIST 162 | 3 |
| Western Civilization I | 46 | 50 | HIST 101 | 3 |
| Western Civilization II | 47 | 50 | HIST 102 | 3 |
| Humanities | n/a | 50 | HUM 111,121 | 6 |
| Algebra-College | 46 | 50 | MATH 121 | 3 |
| Algebra-Trigonometry | 45 | 50 | MATH 150 | 4 |
| College Mathematics | n/a | 50 | MATH 129, 130 | 6 |
| Trigonometry | 50 | 50 | MATH 123 | 3 |
| Precalculus | n/a | 50 | MATH 150 | 4 |
| Calculus w/ Elementary Functions (objective and problem portions) | 41 | 50 | MATH 162 | 4 |
| American Government | 47 | 50 | PSCI 200 | 3 |
| Introductory Psychology | 47 | 50 | PSY 105 | 3 |
| Human Growth and Development | n/a | 50 | PSY 220 | 3 |
| Introductory Sociology | 47 | 50 | SOC 101 | 3 |
| College Spanish Level 1 | 45 | 50 | SPAN 101, 102 | 8 |
| College Spanish Level 2 | 50 | 66 | SPAN 101,102,201,202 | 14 |
| Business Exams | | | | |
| Principles of Accounting | 45 | 50 | ACCT 101, 102 | 9 |
| Principles of Management | 46 | 50 | BA 133 | 3 |
| Principles of Marketing | 50 | 50 | BA 222 | 3 |
| Introductory Business Law | 51 | 50 | BA 211 | 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.

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

Course Substitutions and Waivers

Course Substitutions: A course for which a student has already received credit may substitute for another course, 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 30)

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 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 30)

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 Composition 3–4 hours
- (b) College-Level Writing (a second course building on the above)..... 3 hours
- (c) Oral Communication..... 3 hours

Area II: Mathematics (select 3 credit hours)

- (a) College Algebra 3 hours
- (b) Calculus 3 hours
- (c) Other College-Level Mathematics 3 hours

Area III: Laboratory Science (select 8 credit hours)

- (a) General Biology, with laboratory 4–8 hours
- (b) General Chemistry, with laboratory..... 4–8 hours
- (c) General Physics, with laboratory 4–8 hours
- (d) Geology/Earth Science, with laboratory 4–8 hours
- (e) Astronomy, with laboratory 4–8 hours

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

- (a) Economics (macro- or micro-)..... 3 hours
- (b) Introductory Political Science..... 3 hours
- (c) Introductory Psychology 3 hours
- (d) Introductory Sociology 3 hours
- (e) Introductory Anthropology 3 hours

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

- (a) Introductory History Survey 3 hours
- (b) Introductory Philosophy 3 hours
- (c) Introductory Course in History, Theory, or Aesthetics of the Arts or Literature 3 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 web site (www.hed.state.nm.us).

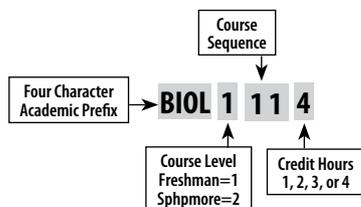
Transferable Courses Fulfilling the General Education Common Core

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 institution.

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. Students may also be able to access this list by going directly to www.hed.state.nm.us/colleges/matrix.asp.

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 & sciences course evaluations, complete a Re-Evaluation of Transfer Credit form, available at the Records Office, Admissions Offices or online at www.cnm.edu.
- For career & 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.

Other New Mexico Public Colleges and Universities

- Clovis Community College • Clovis, NM**
(505) 769-4747 • www.clovis.edu
- Crownpoint Institute of Technology • Crownpoint, NM**
(505) 786-4100 • www.cit.cc.nm.us
- Dine College • Shiprock Campus**
Shiprock, NM
(505) 368-3522
www.dinecollege.edu
- Crownpoint Campus**
Crownpoint, NM
(505) 786-7391
- Eastern New Mexico University • Portales, NM**
(505) 562-1011 • www.enmu.edu
- Institute of American Indian Arts • Santa Fe, NM**
(505) 424-2302 • www.iaiancad.org
- Luna Community College • Las Vegas, NM**
(800) 588-7232 • www.lvti.cc.nm.us
- Mesalands Community College • Tucumcari, NM**
(505) 461-4413 • www.mesalands.edu
- New Mexico Junior College • Hobbs, NM**
(800) 657-6260 • www.nmjc.edu
- New Mexico Military Institute • Roswell, NM**
(505) 622-6250 • www.nmmi.cc.nm.us
- New Mexico State University • Las Cruces, NM**
(505) 646-0111 • www.nmsu.edu
- New Mexico Institute of Mining and Technology • Socorro, NM**
(505) 835-5011 • www.nmt.edu
- New Mexico Highlands University • Las Vegas, NM**
(877) 850-9064 • www.nmhu.edu
- Northern New Mexico College • Espanola Campus**
Espanola, NM
(505) 747-2100
- El Rito Campus**
El Rito, NM
(505) 581-4115
www.nnmcc.edu
- San Juan College • Farmington, NM**
(505) 326-3311 • www.sanjuancollege.edu
- Santa Fe Community College, Santa Fe, NM**
(505) 428-1000 • www.sfccnm.edu
- Southwestern Indian Polytechnic Institute • Albuquerque, NM**
(800) 586-7474 • www.sipi.bia.edu
- University of New Mexico • Albuquerque, NM**
(800) 225-5866; (505) 277-0111 • www.unm.edu
- University of New Mexico - Valencia Branch • Los Lunas, NM**
(505) 925-8500 • www.unm.edu/~unmvc
- Western New Mexico University • Silver City, NM**
(505) 538-6106 • www.wnmu.edu

Registration



Students are required to register for each term they plan to attend. Registration and payment of fees must be made in accordance with the instructions published in the **Schedule of Classes**. Individuals may not participate or “sit in” on classes for which they are not enrolled.

The Registration Process

1. Receive information on registration.

To be eligible to register for classes students must be either currently enrolled or admitted for the term in which they will be registering. Registration begins approximately two months before the start of a term. Registration information is mailed 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 printed in the **Schedule of Classes**.

2. Obtain a Schedule of Classes.

The **Schedule of Classes** is published prior to each term and is available in the registration offices at all campuses, CNM libraries and online (www.cnm.edu). The **Schedule of Classes**, which lists courses, registration instructions and dates, is available approximately two weeks before the beginning of registration.

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), online (www.cnm.edu) and at all Registration Offices.

4. Register for classes.

Students register for classes through STARS at (505) 224-4893, CNM’s online registration system (www.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 24).
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 from the Academic Advisement and Career Development department and online at www.cnm.edu), through CNM's online registration system or prior to completing an application for graduation. (See Graduation: General Requirements, page 30.)

Adding Courses: Classes may be added according to the time frame listed below. Specific dates are printed in the **Schedule of Classes**.

- **Full term (15–16 week) classes** through the 6th day of that part of term/session
- **12–16 week classes**, through the 6th day of that part of term/session

- **6–11 week classes**, through the 4th day of that part of term/session
- **1–5 week classes**, through the 3rd day of the part of term/session
- **Classes scheduled for only one weekend** (Friday, Saturday and/or Sunday), through the first day of the part of term/session

Cancellation of Enrollment Before Term Begins: Students not able to attend CNM when planned but who have registered for classes, must cancel their registration at any registration office or 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

| <i>Required Prerequisite*</i> | <i>Ways to Meet Prerequisites</i> |
|-------------------------------|--|
| ENG 098 | <ul style="list-style-type: none"> • ENG 098 or above with CR or C or better • Accuplacer sentence skills score of 53-68 • ACT English score of 12-13 or SAT verbal/critical reading score of 260-280 |
| ENG 099 | <ul style="list-style-type: none"> • ENG 099 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 100 | <ul style="list-style-type: none"> • ENG 100 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 097 | <ul style="list-style-type: none"> • MATH 097 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 099 | <ul style="list-style-type: none"> • MATH 099 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 100A | <ul style="list-style-type: none"> • MATH 100A 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 100B | <ul style="list-style-type: none"> • MATH 100B 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 100 | <ul style="list-style-type: none"> • MATH 100, 100B 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 099 | <ul style="list-style-type: none"> • RDG 099 or 100 or arts & 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 100 | <ul style="list-style-type: none"> • RDG 100 or arts & 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 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 and 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 assistance. Topics, problems, internship, cooperative education and physical fitness activity courses are exempt from the course repetition limit (see Repeat Course Processing, page 33).

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

- **Full term (15–16 week) classes** through the 12th week of that part of term/session
- **12–14 week classes** through the 10th week of that part of term/session
- **6–11 week classes** through 75% (3/4) of that part of term/session
- **1–5 week classes** through 50% (1/2) of the part of term/session
- **Classes scheduled for only one weekend** (Friday, Saturday and/or Sunday), through the first day of the part of term/session

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 33). 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 and from the Academic

Advisement and Career Development 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 100 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 an academic advisor.



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 readmission.

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 birthdays.

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

- The spouses and dependents of persons who move to New Mexico to work full-time, practice a profession or conduct a business full-time (and who provide appropriate evidence) are not required to complete the 12-month residence requirement before applying for in-state tuition classification. They must, however, satisfy the other requirements of residency. Verification of Employment forms are available at Admissions offices and online at www.cnm.edu.

- Members of the armed forces stationed on active duty in New Mexico, their spouses and dependents are eligible for resident student rates. A certification form is required for all new and returning students. Forms are available at Admissions Offices and online at www.cnm.edu.
- Active participating members of the New Mexico National Guard, their spouses and dependents are eligible for resident student rates. A certification form is required for all new and returning students. Forms are available at Admissions Offices and online at www.cnm.edu.
- Non-citizens who are lawfully in the United States and have obtained permanent status from the Immigration and Naturalization Service or those who have applied for permanent status are eligible to apply for a resident tuition classification. Any non-citizens on other visas (student, diplomatic, visitor or visiting scholar visa, including spouses and dependents) are non-residents for tuition purposes.
- Persons, their spouses and dependents, who provide evidence of formal retirement, shall not be required to complete the 12-month duration requirement. They must, however, satisfy the other requirements of residency.
- An individual married to a legal resident of New Mexico who provides evidence of marriage shall not be required to complete the 12-month duration requirement but must satisfy all other requirements.
- All enrolled members of an Indian nation, tribe or pueblo wholly or partially in New Mexico, will be assessed in-state tuition rates.
- An individual who attended a New Mexico high school for at least one year and received a New Mexico high school diploma or New Mexico GED 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 www.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 requiring additional services; students do not pay it.

Tuition Rates for 2006-07

(subject to change without notice)

arts and sciences courses (courses numbered 101 and above with the following subject codes: ANTH, ART, ASTR, BIO, CHEM, COMM, CST, ECON, ENG, FREN, GEOG, GNHN, HIST, HUM, JOUR, MATH, MUS, NUTR, PHIL, PHYS, PSCI, PSY, RLG, SOC, SPAN, THEA) and AFAS, GNED, MSL, and NAVS courses

All other CNM courses not listed above

New Mexico Residents
In CNM-District

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

None

New Mexico Residents
Outside CNM-District

Full Time (12 to 18 credit hours): **\$598.80**

Part Time (1 to 11 credit hours) and more than 18 credit hours:
\$49.90 per credit hour

Full Time (12 to 18 credit hours): **\$102.00**

Part Time (1 to 11 credit hours) and more than 18 credit hours:
\$8.50 per credit hour

Non-New Mexico Residents

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

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 22 for information on estimated CNM student expenses.

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

Graduation 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 Occupations uniform fee is refundable if the student does not receive the uniform. Refund requests may be made at the Cashier's Office.

The mission of Financial Aid and Scholarship Services is to provide prompt, accurate and courteous financial aid assistance. Although 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 at all four CNM campuses and on the web.

Please refer to the CNM web site www.cnm.edu for the most recent information on financial aid. Applications for federal aid are available at all Student Services locations.

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 by calling (505) 224-3090 or visiting the FAO web site at www.cnm.edu.*
- 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, see page XIII of The Student Guide, published by the U.S. Department of Education and available at Main Campus.

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. Awards range between \$133 and \$4,050 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.

New Mexico Day Care Grant recipients must be enrolled at least half time, have day-care expenses and be residents of New Mexico.

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 \$2,625 per year as first year students and \$3,500 per year as second-year students. Independent students who meet unsubsidized loan eligibility requirements may borrow up to \$4,000 in additional funds.

Student Employment

Student employment is a financial aid program that provides students with an opportunity to earn money by working up to 20 hours per week. To qualify, students must be enrolled in at least six (6) credit hours, maintain satisfactory academic progress and have a complete financial aid file.

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 costs 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 & Scholarship Services Office at main campus. Some forms may be available at the Financial Aid & 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

State, institutional and federal scholarships, as well as amounts, deadlines and eligibility requirements vary from scholarship to scholarship. For more information, please visit the Financial Aid Office or visit www.cnm.edu.

Check Release

Financial aid checks are not disbursed until after the 21st day of the term. They are then released on Fridays only. 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 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. (See the **Schedule of Classes** for hours.) A valid picture ID must be presented to pick up a check. 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.

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 may require two scheduled disbursements within a given 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 the following programs of study: Engineering, Liberal Arts, Pre-Management, Elementary Education, Criminal Justice, Fine Arts, Construction Management Technology and Technology Management and Training.

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: Any class with a course number 100 or below is a developmental course. Students can receive federal student aid for up to 30 developmental credit hours only. 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, 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.

Financial Aid Authorization Form

Students who have been approved to receive financial aid may defer their tuition, fees and books against their approved aid by completing a Financial Aid Authorization Form. If your financial aid is canceled for any reason, you would be responsible for whatever costs you have charged. You may cancel this authorization at any time, but you would be responsible for paying for classes and books out of your own pocket.

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.

| ESTIMATED AVERAGE CNM STUDENT EXPENSES <small>* Resident tuition and fees are a weighted average of In-District and Out-of-District expenses.</small> | | | | | | |
|--|-------------------------------|-----------|-----------|-----------------------|-----------|-----------|
| | 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 | 4106 | 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.



Accessing CNM

| Topic | Page |
|---|------|
| Student Resources and Support | |
| Academic Advisement and Career Development | 24 |
| Achievement Coaches | 24 |
| Assessment Centers..... | 24 |
| Computer Labs | 25 |
| Libraries..... | 25 |
| Special Services | 26 |
| TRIO Student Support Services | 26 |
| Tutoring Services | 26 |
| Campus Life | 28 |
| Graduation | 30 |
| Academic Policies | 32 |
| Overview of Student Codes and Policies | 36 |
| Academic divisions | |
| Applied Technologies..... | 38 |
| Business & Information Technology | 39 |
| Communication, Humanities & Social Sciences..... | 42 |
| Educational & Career Advancement..... | 43 |
| Health, Wellness & Public Safety..... | 45 |
| Math, Science & Engineering..... | 46 |

Student Resources and Support

Academic Advisement and Career Development:

The Academic Advisement and Career Development department provides a variety of services to support the academic goals and career plans of each CNM student.

Advisors are available Monday through Friday to help students prepare for an enjoyable and successful academic experience at CNM. Students can stop by and see us on a walk-in basis, or set up an appointment to meet with us at their convenience.

Advisors provide assistance with any of the following:

- **Academic Planning:** Advisors provide assistance in selecting courses to ensure that students meet program requirements and register for courses they need.
- **College Policies & 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:** to a 4 year college or university? We can help with the details!

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

- Visit us real time online at: http://www.cnm.edu/depts/ssaOnline_Advisement.php. See the website for hours
- 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., Friday 8 a.m. to 5 p.m.

Career Resource Centers:

CNM Main & Montoya Campus Career Resource Centers, located next door to the Academic Advisement and Career Development department 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:** books, videos and on-line information for resume writing and job interviewing.
- **College Catalogs:** information about colleges throughout New Mexico and nationwide.

CONTACT ACADEMIC ADVISEMENT & CAREER DEVELOPMENT AT:

(505) 224-4321 for Main, Montoya & South Valley Campuses
(505) 224-5308 for CNM Westside

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 NE

Achievement Coaches

The Achievement Coaches are a diverse group who bring a talent bank of skills, knowledge and abilities to support student success and student retention at CNM. You will find achievement coaches in all academic divisions, as well as the TRiO Student Success Center.

CONTACT INFORMATION

Applied Technologies: (505) 224-3365 or (505) 224-3734
Business & Information Technologies: (505) 224-3870
Communication, Humanities & Social Sciences: (505) 224-3595
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 and in Admissions offices. 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 Healthcare Technician program entry exam; the Nursing Basic Math Test and Nursing Mobility Profile; the Spanish placement exam; typing tests; and distance learning exams.

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; 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 43).

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 www.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.
- 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 24.)

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, Jeannette Stromberg Hall, (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 4, (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 center, Ken Chappy Hall, Room 6, (505) 224-3989
Montoya Campus center, 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

Tutoring Services (continued)

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) 224-4714



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 36.

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 364 or www.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 campus 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 will find that having a CNM ID Card is essential to your success on campus. Many services on campus require the ID to access the service. In addition, 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 Program is designed to provide extensive training in leadership, hands-on opportunities to become a student leader in the Albuquerque community.

Students interested in becoming part of this program should apply in July/August 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 also may purchase parking permits for the University of New Mexico lot west of University Arena (“The Pit”). A free shuttle bus runs between the lot and CNM’s Main Campus. Permits are sold at the Cashier’s Office in the Student Services Center. 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 CNM Student Alliance (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

- 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. Unless the student's program has accreditation or licensing restrictions, 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 co-requisites 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 32).
 - ◆ Career and technical courses that are at least ten years old must have been officially validated by the academic division in which the course was offered.

Note: Courses numbered 100 and below 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 pages 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 and may cause the application to be denied.

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% 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 www.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 survey 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. Preference is given to those who apply by the tenth week of the term.

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

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 ten years old or older and
- 100 percent of the certificate coursework was completed within the past ten 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. In 2007, the graduation ceremony for students who complete programs in the summer and fall 2006 and spring 2007 terms is tentatively scheduled for April 20, 2007. Information about the graduation commencement ceremony is available at www.cnm.edu.



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: Courses numbered 1 through 100 are developmental or preparatory; 101 through 299 are intended for freshman and sophomore-level students.

Course Types:

arts and sciences courses: Courses numbered 101 and above with the following subject codes: ANTH, ART, 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 101 and above not listed as arts and sciences courses

developmental courses: Courses numbered 100 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.

Identification Cards: Each student enrolled at CNM is issued a student identification card. ID cards entitle students to a variety of services and privileges including checking out library books and using the Health Center, as well as student discounts within the community. (See page 28 for more information.)

Grades

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 www.cnm.edu. Grades will be mailed only to students who request them through STARS.

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 33).
- 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 101 | 3 | x | B (3 quality points) | = | 9 |
| ACCT 152 | 1 | x | C (2 quality points) | = | 2 |
| HIT 120 | 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's. 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 100 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.

Academic Policies

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.

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 www.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 www.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 100 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;
- parents or legal guardians of a dependent student under the age of 18, as defined in the Section 152 of the Internal Revenue Code;
- 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; and
- authorized recruiters of the U.S. Armed Forces, as required by 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. Request forms may be obtained in the Records Office and at www.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 www.cnm.edu. Address Change forms are available at any of these offices, online at www.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 www.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, online at www.cnm.edu and through CNM's online registration system. 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 www.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 www.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 Codes and Policies” beginning on page 358.

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 Institute 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 368 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 363 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 364 and at www.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 366) supports CNM’s commitment to maintaining a drug- and alcohol-free campus.

Sexual Harassment Policy

Sexual harassment is defined and the Institute’s intolerance for this behavior is explained on page 367. 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 367.

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

A Building • (505) 224-3711

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-practice laboratories 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 59 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.

Applied Technologies Full-Time Instructional Personnel

Vacant, dean

Steve Benavidez, associate dean; M.A.

Paula Fisher, associate dean; M.A.

Jeannie Baca, director, employer based programs

Michael Cranney, director, digital imaging & visualization; M.A.

Robert Hall, director, manufacturing & electronics technologies, Ph.D.

Tricia Miller, achievement coach; M.A.

Denise Gardner, business development manager; M.A.

Jon Anderson, air conditioning, heating and refrigeration instructor

Alain Archuleta, electrical trades instructor; B.S.

Earnest Arko, electrical trades instructor; B.A.

Kenneth Bauer, electrical trades instructor

Paul Baxter, truck driving instructor/co-program director; B.S.

Salvatore Benevegna, air conditioning, heating and refrigeration instructor/chair

Gordon Bennett, electronics instructor; J.D.

Joseph Black, electronics technology instructor; M.P.A., M.S.E.E.

John Bronisz, automotive instructor/chair; M.A.

Timothy Brown, electrical trades instructor; B.S.

Paul Brownlow, construction technology instructor; M.A.

Glen Bugge, automotive technology instructor; B.S.

Phillip Buss, aerospace technology instructor; B.A.

Phyllis Cece, registered architect, architectural/engineering drafting technology instructor; B.A.

James (Tom) Darling, instructor, M.A.

Charles Mark Davis, aerospace technology instructor, B.A.

Hadie Fotouhie, design drafting engineering technology instructor; M.S.

Vardis Gaus, truck driving instructor/co-program director; M.B.A.

Thomas George, construction management technology instructor

Joel Gellman, photonics technology instructor; B.S.

James Gore, automotive technology instructor; M.A.

Ronald Hackney, welding instructor/chair; B.S.

Gordon Hall, registered architect, architectural/engineering drafting technology instructor; M.Arch.

Kathryn Hamby, welding instructor; A.S.

Scott Henriksen, automotive technology instructor/curriculum chair; M.A.

Andrew Huertaz, aerospace technology instructor, A.A.S.

Raymond Isengard, electronics technology instructor

Peter Kalitsis, registered architect, architectural/engineering drafting technology instructor; B.A.

Darrell Leland, computing technology instructor; M.A.

Fabian Lopez, electronics technology instructor

Samuel E. Lovelette, electrical trades instructor; B.S.

David Miertschin, ARDR instructor

Calvin Motley, machine technology instructor; B.S.

Mark Nolan, electronics technology instructor; M.A.

Ricky Nutt, truck driving instructor

Antonio Olguin, plumbing instructor, B.S.

Pamela Olsen, achievement coach

Jeffrey Pickett, program director, aviation maintenance; M.A.

Mathias Pleil, manufacturing technology instructor; Ph.D.

Larry Quiggle, air conditioning, heating and refrigeration instructor/chair; A.A.S.

Michael Robitaille, electronics instructor; M.S.

David Ruff, construction management technology instructor; B.A.

Paul Trujillo, electronics technology instructor; B.S.

Srini Vasan, photonics technology instructor; Ph.D.

Ramon Vigil, electronics technology instructor; B.A.

Wesley Wesbrooks, electronics engineering technology instructor; B.A.

Michael White, electronics engineering technology instructor; M.S.

Wayne Woody, machine technology instructor; B.S.

Paul Zalesak, landscaping instructor

Business & Information Technology

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

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

www.cnm.edu/bit

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 courses; 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)
 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)
 E-Commerce (ECM) – This program is being discontinued and is not accepting new students beginning in the fall 2006 term.
 Entrepreneurship courses (ENTR)
 Health Information Technology (HIT)
 International Business (IB)
 Medical Coding (HIT)
 Project Management (PM)
 Real Estate 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)
 Computing Technology (CP)
 Information Technology (IT)
 Medical Office Assistant (OTEC)
 Office Assistant (OTEC)
 Office Technology (OTEC)
 Networking Technology (CP) – This program will be integrated into Computer Information Systems as the Network Administration concentration beginning in the fall 2006 term.
 Web Technology (CP)

Business & Information Technology classes may be scheduled during the day, evening and/or Saturday and Sunday at all Albuquerque CNM campuses or instructional sites, at arranged on-site locations and/or through online learning.

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, Computing Technology, Accounting, Business Administration and Hospitality and Tourism. Please see the associate dean in the area of study for current articulation information.

Business & Information Technology certificate or associate of applied science degree programs that have received national accreditation are (followed by the accrediting organization):

- Accounting (Association of Collegiate Business Schools and Programs - ACBSP)
- Business Administration (Association of Collegiate Business Schools and Programs - ACBSP)
- Business Graphics (Association of Collegiate Business Schools and Programs - ACBSP)
- Computer Information Systems (Association of Collegiate Business Schools and Programs - ACBSP)
- Court Reporting certificate (National Court Reporters Association - NCRA)
- Culinary Arts (American Culinary Federation (ACF) Accrediting Commission)
- E-Commerce (Association of Collegiate Business Schools and Programs - ACBSP)

Academic Divisions

- Financial Services (Association of Collegiate Business Schools and Programs - ACBSP)
- Health Information Technology (Commission on Accreditation for Health Informatics and Information Management Education - CAHIIM)
- Hospitality and Tourism (Association of Collegiate Business Schools and Programs - ACBSP)
- Office Technology (Association of Collegiate Business Schools and Programs - ACBSP)
- Paralegal Studies (American Bar Association - ABA and Association of Collegiate Business Schools and Programs - ACBSP)
- Pre-Management (Association of Collegiate Business Schools and Programs - ACBSP)

Accreditation by (1) The Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools and the (2) Association of Collegiate Business Schools and Programs (ACBSP) require that the Business & Information Technology programs identify student learning outcomes. All Business & Information Technology students are required to participate in student learning outcomes assessment.

Students working toward a degree, certificate, or skill set must earn a grade of C or better in all career and technical courses to meet Division graduation requirements.

Challenge examinations are available for many Business & Information Technology courses. Students wishing to challenge a course should contact the associate dean in their area of study.

The Albuquerque Small Business Development Center contact is Mr. Ray Garcia at 224-5250 or sbdc@cnm.edu. The South Valley Small Business Development Center contact is Mr. Steven Becerra at (505) 248-0132 or becerra@cnm.edu.

Business & Information Technology Full-Time Instructional Personnel

Lois Carlson, CPA, dean; Ph.D., M.B.A.

Susie Cutler, associate dean; M.A.

Paul Quan, associate dean; M.S.

Emil Radosevich, associate dean; M.B.A.

Don Adams, A+ certified professional, CIW, MOS certification (Access 2002), I-Net+ Certification, Network + certification, computer information systems/accounting instructor; M.S.

Dawn Addington, CPA (inactive), accounting instructor; M.Acc.

Henry A. Alaniz, business administration instructor; J.D., M.B.A.

Jennifer Albricht, paralegal studies instructor; J.D.

DiAne Archuleta, office technology instructor; M.B.A.

Cheryl Bartlett, CPA, accounting instructor; M.B.A.

Barbara Bates, CPA, accounting instructor; J.D., M.B.A.

David Beach, networking technology instructor; Ph.D.

David Bency, CPA (inactive), accounting instructor; B.B.A.

Mary Burt, computer information systems/office technology instructor; M.A.

Wallace Cates, computer information systems instructor; B.S.

Leigh Anne Chavez, paralegal studies instructor; J.D.

Hyekyung Clark, N+ certified professional, MCSA, computer information systems instructor; B.A.

Paul Clark, CIW, business administration instructor; M.S.

David Clauss, networking technology instructor; B.A.

Mary Curik, MOS certification (Word XP-Expert), computer information systems instructor; B.S.

Annette Duvall, computer information systems instructor; M.S.

Martin L. Epstein, CPA, accounting instructor; M.B.A.

Michael Felker, business administration instructor; M.B.A.

Linda Foster-Turpen, MOS Master certification for Office XP, computer information systems instructor; M.B.A.

Jean Gallegos, accounting instructor; M.B.A.

Hossein Giah, business administration instructor; M.B.A.

Patricia Gomez, CRI, court reporting instructor; A.A.S.

Terry Gonzales, computing technology instructor; M.A.

Fred Gordon, accounting instructor; M.A.

Marcella Green, MOS certification (PowerPoint XP), computer information systems instructor; M.A.

Sue Gunckel, CPA (inactive), accounting instructor; M.S.W.

Catherine Hain, MOS Master Certification for Office 2000, Office XP and Office 2003, computer information systems instructor; M.B.A.

James Hart, networking technology instructor; B.U.S.

Gerald Heater, A+ certified professional, N+ certified professional, MCSE, MCSA, computer information systems instructor; M.S.

Robert Hennigan, CCNA certification, networking technology instructor; B.B.A.

Susan Herrington, ACE certification Adobe Photoshop CS, MOS certification (Word XP-Core), computer information systems instructor; M.A.

Deborah Hester-Rael, CPA, accounting instructor; B.S., B.A.

Barbara Johnston, computing technology instructor; M.A., M.S.

Brenda Judd, Oracle Certified Professional – Applications Programmer, computing technology instructor; M.B.A.

Daniel Keays, CPA, accounting instructor; M.S.

Kerry Knoop, CFM, baking instructor; B.A.

Marilyn Konnick, MOS certification (Word 2003-Expert), office technology instructor; M.A.

Jackie Lamoureux, MOS Master certification for Office XP, MOS 2000 certification (Word Expert, Excel Expert, Access Comprehensive), computer information systems instructor; M.B.A.

Jet Lewis, RHIT, health information technology instructor; B.S.

Kenneth Lindemann, NRAEF Certified ServSafe Instructor, business administration instructor; M.B.A.

Marvin Lozano, international business instructor; M.S.

Paul Lucero, Senior Professional in Human Resources (SPHR), business administration instructor; M.B.A.

Dora Lujan, computing technology instructor, B.A.

Joyce Matthews, CPA, accounting instructor; M.A.

Marian Matthews, business administration instructor; J.D.

Elizabeth McGeehan, CFM, baking instructor; B.A.
Mechel McKinney, RHIA, health information technology program director; B.S.B.A.
Marian Meyer, MOS 2002 certification (Word, Excel, PowerPoint, Outlook Comprehensive), computer information systems instructor; M.A.
Earnestine Mitchell, computing technology instructor; B.A.
Chris Morosin, hospitality and tourism instructor; M.A.
Dai Nguyen, paralegal studies instructor; J.D.
Judith Olean, judicial studies instructor; J.D.
Stephen Parratto, computing technology instructor; M.S.
Diane Paul, office technology instructor; M.A.
Janice Potter, MOS certification (Word XP-Core), computer information systems instructor; Ph.D.
Robert Preble, hospitality and tourism instructor; M.B.A.
Jimmy Reed, computing technology instructor; B.S.
Virginia Rich, office technology instructor; M.Ed.
Carol Richmond, achievement coach; M.S.
Carol Rogers, CPA, accounting instructor; M.B.A.
Carmine Russo, CCC, CCE, CFM, culinary arts instructor; M.A.
Tracy Sampson, program coordinator; M.S.W.
Linda Shul, business administration instructor; M.B.A.
Anita Sterchi, office technology instructor; M.A.
Robert Stone, business administration instructor; J.D.
Judith Teak, MOS certification (Word 2000-Expert, Excel 2003-Expert, Access 2000-Core), office technology instructor; M.A.
Cathleen Tiefa, MOS certification (Word 2000-Core), Macromedia Flash MX certification, computer information systems instructor; M.A., M.F.A.
Anita Vaughn, MOS certification (Word 2000-Core), office technology instructor; M.P.A.
José Angel Vélez, computer information systems instructor; M.A.
Martin Waller, business development manager; M.B.A.
Gary Walters, computer science instructor; M.A.
Kim Wong, business administration instructor; J.D., M.S., M.B.A.
Joyce Woodard, CFM, professional cooking instructor; B.S.
Anna Wormald, office technology instructor; M.A.

GETTING
STARTED

ACCESSING
CNM

EDUCATIONAL
OPTIONS

PROGRAMS
OF STUDY

COURSE
DESCRIPTIONS

CODES AND
POLICIES

GLOSSARY,
INDEX, MAPS

Communication, Humanities & Social Sciences

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 and Children, Youth & Family Development (CYFD) with concentrations in Early Childhood Multicultural Education and Family Studies. All 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 48) before enrolling.

Communication, Humanities & Social Sciences Full-Time Instructional Personnel

Irving Berkowitz, dean; Ph.D.

Richard Borthwick, interim associate dean, M.F.A.

Zachary Shank, interim associate dean, M.A.

Eduardo Ybarra, assistant director of scheduling; B.S.

Michelle Renteria, achievement coach; M.A.

Stephen Andrews, history instructor/chair, M.A.

Jane Bardal, psychology instructor; Ph.D.

Joseph Boroughs, psychology instructor; Ph.D.

Teresa Brito-Asenap, child, youth and family development instructor; Ed.D.

Maria Luisa Chacon, Spanish instructor; M.A.

Gina R. Chance, sociology instructor; M.A.

Steve Cormier, history instructor; Ph.D.

Terry Daughtrey, anthropology instructor/chair; M.A.

Rose Day, English instructor; Ph.D.

Katherine Demitrakis, psychology instructor/chair; Ph.D.

John Diggelman, economics instructor; M.S.

Kaz Dziamka, English instructor; Ph.D.

Jeanne Elmhurst, communication studies instructor/chair; M.A.

Susan Erickson, theater instructor; M.F.A.

Cheryl Foote, history instructor; Ph.D.

Richard Fox, political science instructor/chair; M.A.

Ernest Garcia, art instructor; M.F.A.

Marjo Garlach, psychology instructor; M.A.

Gail Grosso, Spanish instructor; M.A.

Cynthia Hennecke, geography instructor/chair; M.A.

Michael Hillard, psychology instructor; Ph.D.

Sherry Holmen, communication studies instructor; M.A.

Patrick Houlihan, English/journalism instructor; Ph.D.

Hava Houshmand, humanities/religion instructor; Ph.D.

Kathryn Hovey, sociology instructor/chair, Ph.D.

Shepherd Jenks, anthropology instructor; Ph.D.

James Johnson, psychology instructor; M.A.

Jennifer Lynn Johnson, art instructor; M.F.A.

Mary Anne Lightfoot, English instructor; M.A.

Julie Mars, English instructor; M.A.

Stephen Mathewson, English instructor/chair; Ph.D.

Layne McAdoo, sociology instructor; Ph.D.

Shelly Metz, psychology instructor; Ph.D.

Joann Morgan, psychology instructor; Ph.D.

Barbara Muller, English instructor; M.A.

Heidi Murphy, communication studies instructor; M.A.

William Murrell, philosophy instructor; Ph.D.

Linda Oldham, English instructor; M.A.

Lisa M. Orick, communication studies instructor; Ph.D.

Linda Ortega, education program instructor; M.A.

Kate Parker, English instructor; Ph.D.

Alan Pope, English instructor; Ph.D.

Geri Rhodes, English instructor; Ph.D.

Tomas Ruiz-Fabrega, Spanish instructor/chair; Ph.D.

Andrew Russell, history instructor; M.A.

Jeff Salbato, philosophy instructor; M.A.

Jamie Searcy, English instructor; M.A.

Patricia Seitz, sociology instructor; Ph.D.

Zachary Shank, philosophy instructor, M.A.

Jerry Sherman, philosophy instructor/chair; Ph.D.

Leslie Nelson Shultis, music instructor; M.Mus.

Karen Sunde, English instructor, Ph.D.

J. Ross Thomas, economics instructor/chair; Ph.D.

Lucy Vigil, Spanish instructor; Ph.D.

LaVonne Wahl, communication studies instructor; Ph.D.

Kathleen Waymire, art instructor/chair; Ph.D.

Rebecca Zerger, English instructor, M.A.

Mary Jane Zimmerman, English instructor, Ph.D.

Educational & Career Advancement

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 non-credit and credit introductory and transfer-level courses and a variety of support programs. The division is comprised of four departments: Introductory English and English as a Second Language, Introductory Mathematics and Sciences, Reading and Career Exploration and General Studies and Academic Support.

A variety of Basic Skills (BSK) courses in three of the division's departments are designed for students without high school diplomas. These courses help students move from basic literacy through final preparation for the General Educational Development Test (GED). (See Adult Basic Education on this page.)

In English as a Second Language courses (ESL) in the Department of Introductory English and ESL, non-native speakers of English develop speaking, reading, writing and listening skills in English. Non-credit ESL courses, offered in the Adult Basic Education program (see this page) and credit courses are available.

DEVELOPMENTAL EDUCATION

Courses in the division are available to enhance the skills of students who need preparation for college-level studies. These developmental education courses, numbered 90 through 100, in mathematics (MATH), English (ENG), reading (RDG), biology (BIO) and chemistry (CHEM) are offered at several levels. Students are placed into English, mathematics and reading courses based on their scores on the college entrance examination. Many of the courses are offered in different teaching and learning methodologies; students may choose the ones which best fit their learning styles. Developmental education courses are graded credit (CR) or no credit (NC), not with traditional letter grades. 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. Eligible students may receive financial aid for up to 30 credit hours of developmental education courses. Students using veterans' benefits should check with VA certification advisors in the Financial Aid Office to determine if these courses are eligible for benefits.

In addition to developmental education reading courses, the Department of Reading and Career Exploration offers developmental education and transfer-level courses to enhance educational and career success. Students may explore career options and improve their research and study skills in College Success Experience courses (CSE). Introductory career courses are offered in accounting (ACCT 100) and health (HLTH 100). Students may also launch or enhance their computer skills in Information Technology courses (IT 100 and below).

A variety of services for students at the college are offered in the Department of General Studies and Academic Support. Students who bring experience gained from life or work outside of the academic setting may be interested in advancing their education through the General Education (GNED) Prior Learning Assessment Portfolio. Their learning may result in college credits which can be applied to requirements for graduation in a variety of majors. (See page 48.) The division also offers tutoring for students at the college through the Assistance Centers for Education (ACE), located on all campuses. (See page 26.) Additionally, learning support can be accessed through the Student Transitional Programs which provide Achievement Coaches and a number of activities to facilitate students' entrance into this division and others at the college.

The Educational & Career Advancement 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 as they progress in their educational and career pursuits.

ADULT BASIC EDUCATION

Non-Credit Skills Classes

Integrated within the Division of Educational and Career Advancement is the Adult Basic Education (ABE) Program which offers free instruction and textbooks 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 academic and GED Preparation (BSK) and job and life skills (JLS). These courses help students prepare for higher education, job advancement, or personal fulfillment. 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. Please contact 224-4282 for an ABE catalog.

Day and evening classes are available at a variety of locations, including all campuses. Unless otherwise noted in the ABE catalog and class schedule, classes are offered for the full term. Additional information on testing, registration and class locations is available at the following: 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). 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 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. No grades are given for ABE classes, but students may be given a certificate of completion by their instructors.

More information about Adult Basic Education can be found on page 66. Adult Basic Education course descriptions can be found on page 268.

GENERAL STUDIES

Two programs granting degrees in general studies are available.

Associate of Arts Degree in General Studies for Transfer

Associate of Applied Science Degree in Integrated Studies

See the Program of Studies listings. For further information about the General Studies Transfer Degree and the Integrated Studies Degree, contact the Division of Educational and Career Advancement at (505) 224-3939 or Academic Advisement and Career Development at (505) 224-4321.

Educational & Career Advancement Full-Time Instructional Personnel

Geraldine L. McBroom, dean; Ph.D.

R. Jane Bradley, associate dean; Ph.D.

Sydney Gunthorpe, associate dean; Ed.D.

LouAnne Lundgren-Webb, associate dean; M.A.

Suzanne Harris-Smith, director of instruction; B.A.

Academic Divisions

Janice Hart, director of instruction; M.A.
Linda Pope, director of instruction; M.A.
Stephen Sanchez, director, Student Transitional Programs; M.A., M.P.A.
Lis Turkheimer, director, Assistance Centers for Education; M.A.
Tracy D. Dace, achievement coach; MA
Ann Lynn Hall, achievement coach; BA
Kelly Klein, achievement coach; MA
Rhoda Strode, achievement coach; MS
Tim Allen, math instructor; B.S.
Roberta Ataman, reading, college success experience instructor; M.Ed.
Peggy Brock, math instructor; B.A.
Judy L. Brown, math, college success experience instructor; M.A.
Angelika S. Carroll, English instructor; M.A.
Kenneth Chavez, reading, college success experience instructor; M.A.
Marie Chávez, ESL instructor; M.A.
Amy Christensen, English instructor; M.A.
Linda Clay, math instructor; M.A.
Susan Cordova, science instructor; M.S.
Carol Culver, ESL instructor; M.A.
Amy Demi, computer science instructor; M.A.
Ilene Diamond, math, science instructor; M.A.
Darryl Domonkos, math, reading, college success experience instructor; M.C.P.
Martin J. Doviak, math, English instructor; M.A.
Shirley Ellison, reading, English, health instructor; M.A.
Gregory Everett, basic skills instructor; M.A.
M. Sue Fox, basic skills instructor; M.B.A.
Stephen Gallegos, reading, college success experience instructor; M.A.
Michael Gienger, basic skills instructor; M.A.
Katherine Green, English instructor; M.A.
Constance Gulick, English, college success experience instructor; M.A.
Jean Hafner, math, science instructor; B.S.
Jennifer Herrin, ESL instructor; M.A.
Teresa Hill, English, math instructor; B.A.
Gretta Hochstatter, math instructor; B.S.
William Johns, math, computer science instructor; M.A.
Larry Johnson, reading, math instructor; M.A.
Christopher Kerns, math instructor; M.A., M.B.A.
James B. Kimmons, math instructor; M.A.
Nancy King, English instructor; M.A.
Judy G. Kristl, math, reading instructor; B.S.
Don Lauser, basic skills, job/life skills instructor; M.A.

Gerald Leister, English instructor; Ed.D.
V. Lynne Lucero, ESL instructor; M.A.
Elizabeth C. Martinez, math, computer science, accounting instructor; M.A.
Elizabeth McDermott, reading, college success experience instructor; M.B.A.
Marcie Bernal McKenzie, ESL instructor; M.A.
Charles Miller, math instructor; B.S.
Elizabeth O'Neill, English instructor; M.A.
Maria C. Pacheco, math, science instructor; B.S.
Tom Pierce, English instructor; M.A.
Alexandra Piland, English instructor; B.A.
Robin Ramsey, reading, English instructor; M.A.
Mark Rudd, math instructor; B.A.
Juan M. Saavedra, math instructor; B.A.
Therese Samuel, ESL instructor; B.A.
Cindy Satriano, math instructor; B.A.
Sue Small, basic skills, job/life skills instructor; M.A.
Theresa Sullo, reading, college success experience instructor; M.A.
Donna Swanson, English, math instructor; B.A.
Andrew Tibble, reading, college success experience instructor; M.A.
Roy Turner, English instructor; M.A.
John Wright, English instructor; M.A.

Health, Wellness & Public Safety

Jeannette Stromberg Hall • (505) 224-4111

The Health, Wellness and Public Safety Division provides entry-level training and skill upgrading in a variety of healthcare, 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. Students may be required to have a physical exam, immunizations, routine drug screening and a criminal background check at their own expense. 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. Credit by examination (challenge) is available for selected courses. See program narratives for specific 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 and Public Safety Division career and technical courses only offered for CR/NC, a grade of CR must be earned.

Graduation Policy: Health, Wellness and 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 catalog will be accommodated. Contact the division at (505) 224-4111 for more information.

Student Handbooks: For specific policies and procedures regarding classroom expectations, clinical experiences, learning laboratories, standards of practice and professional codes of ethics, students should consult their program's student handbook.

Health, Wellness & Public Safety Full-Time Instructional Personnel

Jenna Johnson-Nale, dean; M.S.

Richard Gentile Jr., RRT, associate dean; M.Ed.

Patricia Stephens, RN, associate dean; M.S.N.

Elizabeth Alongi, RN, surgical program director; B.S.N.

Helen Asbury, RN, nursing instructor; M.S.N.

Katayoun Bahrami, RN, nursing instructor, M.S.N.

Darlene Blagg, RDMS, diagnostic medical sonographer program director; A.S.

John Blewett, RRT, RCP, respiratory therapy program director; B.U.S.

Barbara Burrows, achievement coach, M.A., M.Ed.

Saul Carrasco, RT, RDMS, clinical coordinator, diagnostic medical sonographer program; A.A.

Deborah Cassady, RN, nursing program director; M.S.N.

Karen Connors, RN, nursing instructor; M.S.N.

Kevin Daugherty, criminal justice program director; J.D.

Kevin Dooley, criminal justice instructor; B.S.

Patrick Dunworth, criminal justice instructor; B.S.

Diane Evans-Prior, RN, nursing instructor; M.S.N.

Charles Fatta, RRT, RCP, clinical coordinator, respiratory therapy program; M.B.A.

David Gordon, RRT, RCP, respiratory therapy instructor; M.A.

Susan Gould-Borroughs, RN, nursing instructor; M.S.N.

Evelyn Hamilton, RVT, clinical coordinator, veterinary technology; A.S.

Patricia Hamilton, RN, nursing instructor; M.S.N.

Regina Janke, RN, nursing instructor; M.S.N.

Francisca Jensen, RN, nursing instructor; M.S.N.

Liyen Jong, environmental safety and health program director, M.S.

Michael Kavanaugh, fire science program director; B.S.

Barry King, environmental safety and health instructor; M.S.

Monya Kmetz, MT (ASCP), medical laboratory technician program director; M.A.

Mary Kolesar, cosmetology instructor

Monica Lewis, clinical lab assistant and phlebotomy program director, B.S.

Patricia Loffin, RN, nursing instructor; M.S.N.

Lorraine Lowen, RN, nursing instructor; M.S.N.

Paulette McNeill, RN, nursing instructor; M.S.N.

Thomas J. Morris III, fitness technician program director; M.S.

Mary Moser-Gautreaux, RN, nursing instructor; M.S.N., Ed.D.

Delores Pederson, RN, nursing assistant instructor; M.S.N.

Leah Pulling, biotechnology program director, Ph.D.

Vicki Ratliff, cosmetology, program co-director, B.A.

Mary Rieb, RN, nursing instructor; M.S.N.

Jacqueline Robinson, CDA, clinical coordinator, dental assistant program; A.A.

Carol Ross, RN, nursing assistant instructor; B.S.N.

Marian Sawyier, RN, nursing instructor; M.S.N.

Douglas Scribner, CPhT, pharmacy technician program director; B.A.

Joel "JD" Sharick, EMT-P, RN, CCRN, emergency medical services; B.S.

Bonnie Snyder, veterinary technology program director; D.V.M., Ph.D.

Cy Stockhoff, EMT-P, emergency medical services program director; M.S.

Jon Stull, cosmetology program director

Melanie Upshaw, RDH, CDA, dental assistant program director; B.S.

June Vermillion, RN, health unit coordinator program director; B.S.N.

Paul "Jack" Wilder, radiologic technology program director; B.A.

Anita Willard, nursing instructor; M.S.N.

Garry Wolfe, recreation and leisure program director; M.A.

Math, Science & Engineering

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. 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.

Math, Science & Engineering Full-Time Instructional Personnel

Susan Murphy, dean; Ph.D.

Richard Calabro, associate dean; M.S.

Samantha Ortiz Schriver, achievement coach; Ph.D.

Eduardo Ybarra, assistant director of scheduling; B.S.

Corrie Andries, biology instructor; M.A.

Yugal Behl, mathematics instructor; Ph.D.

Karen Bentz, biology instructor; M.A.

Philip Carman, astronomy/physics instructor; M.A.

Paula Cochrane, nutrition instructor; M.A.

Sravanthi Cornell, chemistry instructor; Ph.D.

John Mark Danley, biology instructor; M.A.

Bill Epler, mathematics instructor; Ph.D.

Joseph Eridon, chemistry instructor; M.S.

Kateljne Flies, biology instructor; Ph.D.

Megan Florence, mathematics instructor; M.A.

Chris Gebel, mathematics instructor; M.A.

Steve Gunther, chemistry instructor; M.A.

Susan Johnson, biology instructor; M.S.

Maureen Kelly, mathematics instructor; M.A.

William Kuipers, biology instructor; Ph.D.

Judy Lalani, mathematics instructor; M.A.

Kevin Leith, mathematics instructor; M.S.

Jane Lyo, mathematics instructor; M.A.

Linda Martin, mathematics instructor; M.A.

Carol Ann Martinez, chemistry instructor; M.S.

Derek Martinez, mathematics instructor; Ph.D.

Mary Martinez, nutrition instructor; M.S.

Tamra Mason, mathematics instructor; Ph.D.

Douglas McDoniel, mathematics instructor; Ph.D.

Colleen McNamara, biology instructor; M.S., Ph.D.

Anne Michels, biology instructor; Ph.D.

Mark Morgan-Tracy, astronomy/physics instructor; Ph.D.

Deborah Muldavin, biology instructor; M.A.

Mary Odom, astronomy/physics instructor; M.A.

Umesh Pandey, astronomy/physics instructor; M.S.

George Pletsch, mathematics instructor; Ph.D.

Fred Ream, mathematics instructor; M.A.

Jim Rewalt, mathematics instructor; M.S.

Brian Sailer, biology instructor; Ph.D.

Kevin Seward, chemistry instructor; M.S.

Clarissa Sorensen, chemistry instructor; M.S.

Peter Steinbach, mathematics instructor; M.A.

Kelly Sullivan, biology instructor; M.A.

James Swan, biology instructor; M.S.

Dennis Vargo, mathematics instructor; M.A.

Shield Wallace, chemistry instructor; Ph.D.

Patricia Wilber, biology instructor; Ph.D.

Shawn Wright, biology instructor; M.S.



Educational Options

| Topic | Page |
|---|------|
| College Success Experience Courses..... | 48 |
| Emeritus Academy | 48 |
| Experiential Learning..... | 48 |
| Learning Communities..... | 48 |
| Prior Learning Assessment..... | 48 |
| ROTC..... | 48 |
| Workforce Training | 48 |
| WorkKeys®..... | 49 |
| Distance Learning | 49 |
| Individualized Plan..... | 51 |

Educational Options

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 301). These course are designed for the new college student.

CONTACT INFORMATION

Jane Bradley, associate dean, 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. Form 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

Prior Learning Assessment

Students can gain college-level knowledge and skills through life and work experiences outside of academic settings with CNM's Prior Learning Assessment Program. This portfolio course (**GNED 196 – Prior Learning Assessment Portfolio**) provides an opportunity for students to document their knowledge in the form of a portfolio and potentially earn college credit for learning outside of college. The documentation needed will vary from one course (and field of study) to another. Certification for some courses may include a hands-on demonstration of skill. Other citation examples include written reports, performances, artwork, certificates awarded, etc. Remember—credit will be awarded based on documented learning, not experience.

Once a student completes the portfolio—which includes a request for credit for specific CNM courses—the student will register for designated portfolio sections of those courses (after seeing an advisor) and submit the portfolio. The portfolio will be evaluated and a determination whether the student qualifies for credit will be made.

Note: Passing GNED 196 does not guarantee the awarding of any credits for prior learning. The granting of that credit will be determined through the separate enrollment and assessment of work in subsequent courses.

CONTACT INFORMATION

Jane Bradley, associate dean, Division of Educational & Career Advancement, jbradley@cnm.edu, (505) 224-3972.

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 273); Army ROTC (see page 334); Navy ROTC (see page 336).

Workforce Training

The CNM Workforce Training Center offers a wide range of short-term, noncredit courses and training programs to upgrade your skills and improve your career potential. The CNM Workforce Training Center also offers rapid-response customized training to meet your organization's specific needs as well as skills assessments, performance enhancement consulting and professional certification exam preparation and testing

CONTACT INFORMATION

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

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://essentialskills.cnm.edu>.

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 currently 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% of the course is spent in a face-to-face classroom setting and the remaining 50% of the course is spent in an online classroom environment. In addition, students should expect to put in an additional 4-6 hours weekly of study time. Hybrid courses require that students have access to a computer.

Who Is a Successful Distance Learning Student?

- Most successful distance learning students 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 appreciate the flexibility that distance learning courses offer and the freedom to schedule coursework at their convenience.
- A successful distance learning student must have access to a computer. He or she must be fairly competent with Microsoft Explorer or Netscape, e-mail and computers in order to concentrate on course content. Students have to frequently log onto the computer to read posted lectures notes, complete assignments, take online quizzes and participate in weekly online class discussions.
- Students need to ask questions whenever information is unclear. They need to 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.
- Students need to obtain all required course materials, be familiar with test dates, assignment due dates and all course requirements.



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 www.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: tvi.edu/depts/fass/index.php

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

CONTACT INFORMATION

Distance Learning Office, (505) 224-3317

<http://planet.cnm.edu/distancelearn>

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

USE THE CHART BELOW AND ON THE NEXT PAGE TO MAP A PLAN FOR YOUR EDUCATION.

PERSONAL INFORMATION

Name: _____ Date: _____

Catalog Year: _____ Anticipated Graduation Date: _____

Program: _____

Degree (concentration: _____) Certificate: _____

Skill Set: _____ Other: _____

CONTACTS

Counselor or Advisor: _____ Phone/E-mail: _____

Program Chair: _____ Phone/E-mail: _____

Dean/Associate Dean: _____ Phone/E-mail: _____

Other: _____ Phone/E-mail: _____

PREREQUISITES

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

TERM

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

TERM

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

TERM

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

| | |
|--------|--|
| COURSE | |
|--------|--|

Total Credit Hours: _____

Total Credit Hours: _____

Total Credit Hours: _____

Total Credit Hours: _____

Individualized Plan

Checklist – Have you...

- had your transcript evaluated? (see page 12)
- obtained substitution/waiver forms? (see page 14)
- met with an advisor or career and development specialist? (see page 24)
- checked on tutoring opportunities? (see page 26)
- declared a major? (see page 17)
- checked on scholarship opportunities? (see page 21)
- met with an achievement coach? (see page 24)
- checked on job opportunities? (see page 6)

If you are transferring to a four-year institution, contact Advisement and Counseling at (505) 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus) for information.

| TERM <input style="width: 100%;" type="text"/> |
|--|--|--|--|
| C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O |
| C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O |
| C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O |
| C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O |
| C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O | C O U R S E I N F O |

Total Credit Hours: _____

Total Credit Hours: _____

Total Credit Hours: _____

Total Credit Hours: _____

Programs of Study

| Topic | Page |
|---|------|
| List of Programs of Study (alphabetical) | 54 |
| Career Clusters..... | 58 |
| List of Programs of Study (by division and accrediting agencies)..... | 59 |
| About the Program of Study Pages | 60 |
| About the Suggested Course Sequence Charts..... | 61 |
| Programs of Study (alphabetical) | 62 |



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 58 lists programs by career cluster. Page 59 shows a listing of all degrees and certificates by academic division and accredited by outside agencies or organizations.

| Program of Study | Degree | Certificate | Skill Set | Page |
|---|--------|-------------|-----------|--------|
| Accounting | AAS | X | | 62 |
| Advanced Manufacturing (<i>concentration under Manufacturing Technology</i>) | | | | 196 |
| Advertising Assistant (<i>under Business Administration</i>) | | | X | 88 |
| Aerospace Technology | AAS | | | 67 |
| Air Conditioning, Heating & Refrigeration (<i>under Mechanical Technology</i>) | | X | | 69/200 |
| Airframe Maintenance Technician (<i>under Aviation Technology</i>) | | X | | 78 |
| Alternative Teacher Licensure Skill Sets in Early Childhood Multicultural Education, Elementary Education, Secondary Education, Special Education | | | X | 70 |
| Apprenticeships in Commercial Carpentry/Electrical Trades/General Trades/Iron Worker/Plumbing/Sheet Metal (<i>pending HED and FAA approval</i>) | | | | 72 |
| Animation (<i>concentration under Computing Technology</i>) | | | X | 111 |
| Architectural/Engineering Drafting Technology | AAS | X | | 73 |
| Art History (<i>concentration under Fine Arts</i>) | | | | 158 |
| Art Studio (<i>concentration under Fine Arts</i>) | | | | 159 |
| Automotive Service Fundamentals (<i>under Transportation Technology</i>) | | | | 260 |
| Automotive Technology (<i>under Transportation Technology</i>) | | X | | 75/258 |
| Aviation Technology | AAS | | | 76 |
| Aviation Maintenance Technician (<i>under Aviation Technology</i>) (<i>pending HED and FAA approval</i>) | AAS | | | 77 |
| Aviation Sheet Metal Assembler Technician (<i>under Aerospace Technology</i>) | | | X | 68 |
| Aviation Systems Installation Technician (<i>under Aerospace Technology</i>) | | | X | 68 |
| Baking (<i>see also Culinary Arts</i>) | | X | | 80 |
| Bilingual Education (<i>concentration under Elementary Education</i>) | | | | 141 |
| Biotechnology | AS | | | 82 |
| Bookkeeping | | X | | 84 |
| Business Administration Concentrations: E-Commerce, Entrepreneurship, International Business, Leadership Development, Management or Real Estate | AAS | X | | 86 |
| Business Applications Design (<i>under Computer Information Systems</i>) | | | X | 104 |
| Business Graphics | AAS | X | | 91 |
| Call Center Operations | | | X | 93 |

Listing of Programs of Study

| Program of Study | Degree | Certificate | Skill Set | Page |
|--|--------|-------------|-----------|---------|
| Carpentry (under Construction Technology) (see also Apprenticeships) | | X | | 94/117 |
| Certified Public Accountant (CPA) Preparation (under Accounting) | | | X | 64 |
| Child Development Associate (CDA) (under Child, Youth and Family Development) | | | X | 95 |
| Child, Youth and Family Development Concentrations: Early Childhood Multicultural Education, Family Studies | AA | | | 95 |
| Cisco Certified Network Associate (CCNA) (under Computer Information Systems) | | | X | 104 |
| Clinical Laboratory Assistant | | X | | 98 |
| Club Management (under Hospitality and Tourism) | | | X | 177 |
| Commercial Carpentry Apprenticeship | | | | 72 |
| Computer-Assisted Drafting (CAD) (under Architectural/Engineering Drafting) | | | X | 74 |
| Computer Information Systems Concentrations Digital Media, Network Administration, Software Systems and Applications, Systems Administration | AAS | X | | 99 |
| Computer Animation (concentration under Computing Technology) | | | | 111 |
| Computer Programming (concentration under Computing Technology) | | | | 112 |
| Computing Technology Concentrations: Computer Animation or Computer Programming | AAS | X | | 110 |
| Construction Estimator (under Construction Management Technology) | | | X | 114 |
| Construction Management Technology | AAS | | | 113 |
| Construction Scheduler (under Construction Management Technology) | | | X | 114 |
| Construction Technology Concentrations: Electrical or General Construction | AAS | | | 115 |
| Continuous Quality Improvement (under Business Administration) | | | X | 88 |
| Cosmetology | AAS | | | 118 |
| Court Reporting | | X | | 120 |
| Criminal Justice | AAS | | | 122 |
| Culinary Arts (certificates in Baking or Professional Cooking) | AAS | | | 124 |
| Database Management (under Computer Information Systems) | | | X | 105 |
| Dental Assisting | | X | | 126 |
| Diagnostic Medical Sonography | AS | | | 129 |
| Diesel Equipment Technology (under Transportation Technology) | | X | | 131/259 |

| Program of Study | Degree | Certificate | Skill Set | Page |
|---|--------|-------------|-----------|--------|
| Digital Media (concentration under Computer Information Systems) | | | | 100 |
| Digital Publishing (under Business Graphics) | | | X | 92 |
| Early Childhood Multicultural Education (concentration under Children, Youth and Family Development) | | | | 96 |
| E-Commerce (This program is being discontinued and is not accepting new students.) | AAS | X | | 132 |
| Electrical Trades (under Construction Technology) (see also Apprenticeship) | | X | | 72/134 |
| Electronic Engineering Technology (not accepting new students) | AAS | | | 135 |
| Electronics Technology Concentrations: General Electronics, Process Control | AAS | X | | 137 |
| Elementary Education Concentrations: Bilingual Education, Elementary Education, Special Education | AA | | | 140 |
| Elementary Education (concentration under Elementary Education) | | | | 142 |
| Emergency Medical Services | | | X | 144 |
| Emergency Medical Technician Paramedic | | X | | 145 |
| Engineering | AS | | | 147 |
| Engineering Design Technology | AAS | | | 149 |
| Entrepreneurship (under Business Administration) | | | X | 89 |
| Environmental Safety and Health | AAS | | | 151 |
| Environmental Safety and Compliance | | | X | 152 |
| Family Studies (concentration under Child, Youth and Family Development) | | | | 97 |
| Film Crew Technician | | X | | 153 |
| Financial Services | AAS | X | | 155 |
| Fine Arts Concentrations: Art History, Art Studio | AA | | | 157 |
| Fire Science | AAS | | | 160 |
| Fitness Technician | | X | | 162 |
| Food and Beverage (under Hospitality and Tourism) | | | X | 177 |
| Food and Beverage Management (concentration under Hospitality and Tourism) | | | | 176 |
| Food Service Management | | X | | 164 |
| Framing (under Construction Technology) | | | X | 117 |

Listings of Programs of Study

| Program of Study | Degree | Certificate | Skill Set | Page |
|---|--------|-------------|-----------|------|
| Gaming Operations and Casino Management (concentration under Hospitality and Tourism) | | | | 176 |
| General Business (under Business Administration) | | | X | 89 |
| General Construction (concentration under Construction Technology) | | | | 117 |
| General Electronics (concentration under Electronics Technology) | | | | 138 |
| General Studies Transfer (pending HED approval) | AA | X | | 166 |
| General Trades Apprenticeship | | | | 72 |
| Geographic Information Technology | AAS | X | | 168 |
| Geomatics Technology | | | X | 170 |
| Graphics Design (under Computer Information Systems) | | | X | 105 |
| Health Information Technology | AAS | | | 172 |
| Health Unit Coordinator | | | X | 174 |
| Hospitality and Tourism Concentrations: Food and Beverage Management, Gaming Operations and Casino Management, Hospitality Operations and Hotel Management | AAS | X | | 175 |
| Hospitality Operations and Hotel Management (concentration under Hospitality and Tourism) | | | | 176 |
| Human Resources (under Hospitality and Tourism) | | | X | 178 |
| Human Resources Assistant (under Business Administration) | | | X | 89 |
| Industrial Plant Maintenance Apprenticeship | | | | 72 |
| Information Security (under Computer Information Systems) | | | X | 105 |
| Information Technology Careers | | | | 179 |
| Integrated Studies | AAS | | | 180 |
| International Business | | | X | 182 |
| International Business Fundamentals (under International Business) | | | X | 184 |
| International E-Commerce (under International Business) | | | X | 184 |
| International Entrepreneurship (under International Business) | | | X | 185 |
| International Finance (under International Business) | | | X | 185 |
| Iron Worker Apprenticeship | | | | 72 |
| IRS Enrolled Agent Preparation (under Accounting) | | | X | 64 |
| Judicial Studies | | X | | 186 |

| Program of Study | Degree | Certificate | Skill Set | Page |
|---|--------|-------------|-----------|---------|
| Judicial Studies Fundamentals (under Judicial Studies) | | | X | 187 |
| Landscaping | | X | | 188 |
| Leadership Development (under Business Administration) | | | X | 90 |
| Legal Office Technology (concentration under Office Technology) | | | | 220/226 |
| Liberal Arts | AA | | | 190 |
| Licensed Practical Nurse Refresher | | | X | 193 |
| Machine Tool Technology (under Metals Technology) | | X | | 194/209 |
| Management (concentration under Business Administration) | | | | 87 |
| Manicure/Pedicure | | | X | 119 |
| Manufacturing Technology Concentrations: Advanced Manufacturing, MEMS Designer, | AAS | X | | 195 |
| Marketing and Sales (under Hospitality and Tourism) | | | X | 178 |
| Mechanical Technology Concentrations: Air Conditioning, Heating and Refrigeration, Plumbing | AAS | | | 199 |
| Medical Coding | | X | | 202 |
| Medical Laboratory Technician | AS | | | 204 |
| Medical Office Assistant | | X | | 206 |
| MEMS Designer (concentration under Manufacturing Technology) | | | | 197 |
| MEMS/SMT Technician (concentration under Manufacturing Technology) | | | | 198 |
| Metals Technology | AAS | | | 208 |
| Microsoft Certified Systems Admin. (MCSA) (under Computer Information Systems) | | | X | 106 |
| Microsoft Certified Systems Engineer (MCSE) (under Computer Information Systems) | | | X | 106 |
| Microsoft Office Specialist (MOS) Certification Preps (under Computer Information Systems) | | | X | 106 |
| Microsoft Software Support (under Computer Information Systems) | | | X | 107 |
| Multimedia Development (under Computer Information Systems) | | | X | 107 |
| Network Administration (concentration under Computer Information Systems) | | | | 101 |
| Networking Technology (This program is being discontinued and is not accepting new students. The courses will be integrated into the Computer Information Systems program with a concentration in Network Administration.) | AAS | X | | 211 |
| Nursing | AS | | | 213 |

Listing of Programs of Study

| Program of Study | Degree | Certificate | Skill Set | Page |
|--|--------|-------------|-----------|---------------|
| Nursing Assistant | | X | | 217 |
| Nursing Home/Home Health Attendant | | | X | 218 |
| Office Administration <i>(This program is being discontinued and is not accepting new students. See Office Technology program.)</i> | AAS | X | | 219 |
| Office Assistant | | X | | 222 |
| Office Technology Concentrations: Legal and Office Technology | AAS | X | | 221/224 |
| Paralegal Studies | AAS | | | 228 |
| Payroll Clerk <i>(under Accounting)</i> | | | X | 65 |
| Perioperative Nursing | | | X | 230 |
| Pharmacy Technician | | X | | 231 |
| Phlebotomy | | X | | 233 |
| Photonics Technology | AAS | X | | 234 |
| Plumbing <i>(under Mechanical Technology)</i> <i>also see Apprenticeship</i> | | X | | 201/236 72 |
| Powerplant Maintenance Technician <i>(under Aviation Technology)</i> <i>(pending HED and FAA approval)</i> | | X | | 79 |
| Practical Nursing <i>(under Nursing)</i> | | X | | 216 |
| Pre-Management | AA | | | 237 |
| Pre-Professional Writing <i>(under Liberal Arts)</i> <i>Process Control (concentration under Electronics Technology)</i> | | | X | 192 139 |
| Professional Cooking <i>(see also Culinary Arts)</i> | | X | | 239 |
| Professional Pilot and Flight Instruction <i>(under Aerospace Technology)</i> | | X | | 68 |
| Project Management | AAS | | | 241 |
| Radiation Protection Technologist | | | X | 152 |
| Radiologic Technology | AS | | | 243 |
| Real Estate | | | X | 245 |
| Records Clerk <i>(under Office Technology)</i> | | | X | 227 |
| Recreation and Leisure <i>(This program is being discontinued and is not accepting new students)</i> | AAS | X | | 247 |

| Program of Study | Degree | Certificate | Skill Set | Page |
|--|--------|-------------|-----------|---------|
| Red Hat Certified Technician (RHCT) <i>(under Computer Information Systems)</i> | | | X | 108 |
| Registered Nurse Refresher | | | X | 249 |
| Residential Drafting <i>(under Architectural/Engineering Drafting)</i> | | | X | 74 |
| Residential Superintendent <i>(under Construction Management Technology)</i> | | | X | 114 |
| Residential Wiring <i>(under Construction Technology)</i> | | X | | 116/250 |
| Respiratory Therapy | AS | | | 251 |
| Retail/Wholesale Management <i>(under Business Administration)</i> | | | X | 90 |
| Rooms Division <i>(under Hospitality and Tourism)</i> | | | X | 178 |
| Sales Associate <i>(under Business Administration)</i> | | | X | 90 |
| Sheet Metal Apprenticeship | | | | 72 |
| Software Systems and Applications <i>(concentration under Computer Information Systems)</i> | | | | 102 |
| Spanish Fundamentals for International Business <i>(under International Business)</i> | | | X | 185 |
| Special Education <i>(concentration under Elementary Education)</i> | | | | 143 |
| Stenotranscription <i>(under Court Reporting)</i> | | | X | 121 |
| Surgical Technology | | X | | 253 |
| Systems Administration <i>(concentration under Computer Information Systems)</i> | | | | 103 |
| Tax Preparer for Individuals <i>(under Accounting)</i> | | | X | 65 |
| Technology Management and Training | AA | | | 255 |
| Transportation Technology Concentrations: Automotive Technology, Diesel Equipment Technology | AAS | | | 257 |
| Truck Driving | | X | | 260 |
| Veterinary Technology | AAS | | | 262 |
| Water and Wastewater Operator | | | X | 152 |
| Web Graphics Specialist <i>(under Computer Information Systems)</i> | | | X | 108 |
| Website Development <i>(under Computer Information Systems)</i> | | | X | 109 |
| Web Technology | AAS | X | | 264 |
| Welding <i>(under Metals Technology)</i> | | X | | 210/266 |
| Word Processing <i>(under Office Technology)</i> | | | X | 227 |

Listings of Programs of Study

Career Clusters

CNM has developed a number of career “clusters.” The following listing categorizes our degree and certificate programs as well as our skill sets in the following clusters (information for each can be found using the table on the previous pages):

Advanced Manufacturing

Electronics Technology; Engineering Design Technology; Manufacturing Technology (General Manufacturing, MEMS [Micro Electro Mechanical Systems/micro machines]) Design, MEMS Fabrication, Semiconductor Manufacturing); Metals Technology (Machine Tool Technology, Welding); Photonics

Business/Professional Services

Business Administration (Concentrations: E-Commerce, Entrepreneurship, International Business, Leadership Development, Management or Real Estate. Skill Sets: Advertising Assistant, Continuous Quality Improvement, Entrepreneurship, General Business, Human Resource Assistant, Leadership Development, Retail/Wholesale Management and Sales Associate); Call Center Operations; Cosmetology; E-Commerce (This program is being discontinued and is not accepting new students.); Health Information Technology; International Business (Skill Sets: International Business Fundamentals, International E-Commerce, International Entrepreneurship, International Finance and Spanish Fundamentals for International Business); Medical Coding; Medical Office Assistant; Office Assistant; Office Technology (Concentrations: Legal and Office Technology. Skill Sets: Records Clerk and Word Processing); Project Management

Construction

Air Conditioning, Heating and Refrigeration; Architectural/Engineering Drafting Technology; Carpentry; Computer-Assisted Drafting; Construction Management Technology (Residential Superintendent, Construction Estimator); Construction Technology (General Construction, Electrical); Electrical Trades; Environmental Health & Safety; Landscaping; Mechanical Technology (Air Conditioning, Heating and Refrigeration, Plumbing); Residential Drafting; Residential Wiring

Financial Services

Accounting (Skill Sets: Certified Public Accountant (CPA) Preparation, Internal Revenue Service Enrolled Agent Preparation, Payroll Clerk and Tax Preparer for Individuals); Bookkeeping; Financial Services; Pre-Management; Technology Management and Training

Health Sciences/Human Development

Nursing-Related

Critical Care Nurse Internship; Health Unit Coordinator; Healthcare Technician; Nursing; Nursing Assistant; Nursing Home/Home Health Attendant; Practical Nursing; Perioperative Registered Nurse; Registered Nurse Refresher

Allied Health Sciences

Biotechnology; Clinical Laboratory Assistant; Dental Assistant; Diagnostic Medical Sonography; Emergency Medical Technician; Medical Laboratory Technician; Pharmacy Technician; Phlebotomy; Radiologic Technology; Respiratory Therapy; Surgical Technology, Paramedic

Human Development

Children, Youth and Family Development; Elementary Education

Environmental/Fitness/Recreation

Environmental Health & Safety; Fitness Technician

Information Technology

Business Graphics (Skill Set: Digital Publishing); Computer Information Systems (Concentrations: Digital Media, Network Administration, Software Systems and Applications and Systems Administration. Skill Sets: Business Applications Design, Cisco Certified Network Associate (CCNA), Database Management, Graphics Specialist, Microsoft Certified Systems Administrator (MCSA), Microsoft Certified Systems Engineer (MCSE), Microsoft Office Specialist (MOS) Certification Prep (for Access, Excel, PowerPoint, Word), Microsoft Software Support, Red Hat Certified Technician (RHCT), Web Graphics Specialist and Web Site Development); Computer Technology (Concentrations: Computer Animation and Computer Programming); Networking Technology (This program is being discontinued and is not accepting new students. The courses will be integrated into the Computer Information Systems program with a concentration in Network Administration.); Web Technology

Legal Services Careers

Court Reporting (Skill Set: Stenotranscription); Criminal Justice; Judicial Studies (Skill Set: Judicial Studies Fundamentals); Paralegal Studies

Tourism and Hospitality Careers

Baking; Culinary Arts; Fitness Technician; Food Service Management; Hospitality and Tourism (Concentrations: Food and Beverage Management, Gaming Operations and Casino Management, Hospitality Operations and Hotel Management. Skill Sets: Club Management, Food and Beverage, Human Resources, Marketing and Sales and Rooms Division); Professional Cooking; Recreation and Leisure (Natural Resources Recreation Management, Community Recreation, Therapeutic Recreation)

Transportation Technologies

Automotive Technology; Diesel Equipment Technology; Transportation Technology (Diesel Equipment Technology); Truck Driving

CNM 2006–07 Programs of Study

Applied Technologies

Air Conditioning, Heating & Refrigeration, certificate (under Mechanical Technology)
Accredited by the Partnership for Air Conditioning, Heating, Refrigeration Association (PAHRA)

Architectural Engineering Drafting Technology, certificate and AAS degree

Aerospace Technology, AAS degree

Airframe Maintenance Technician, certificate (under Aviation Technology)

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 (*Pending Governing Board Approval*)

Landscaping, certificate

Landscaping, degree (*Pending Governing Board and HED Approval*)

Machine Tool Technology, certificate (under Metals Technology)

Manufacturing Technology, certificate and AAS degree

Mechanical Technology, AAS degree

Metals Technology, 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)

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*

Baking, certificate (under Culinary Arts)

Bookkeeping, certificate

Business Administration, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs*

Business Graphics, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs*

Computer Information Systems, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs*

Computing Technology, certificate and AAS degree

Court Reporting, certificate, *Accredited by the National Court Reporters Association*

Culinary Arts, AAS degree, *Accredited by the American Culinary Federation (ACF)*

E-Commerce, certificate and AAS degree (*This program is being discontinued and is not accepting new students.*) *Accredited by the Association of Collegiate Business Schools and Programs*

Financial Services, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs*

Food Service Management, certificate

Health Information Technology, AAS degree, *Accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIM)*

Hospitality and Tourism, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs*

International Business, certificate

Judicial Studies, certificate

Medical Coding, certificate

Medical Office Assistant, certificate

Networking Technology, certificate and AAS degree (*This program is being discontinued and is not accepting new students. The courses will be integrated into the Computer Information Systems program with a concentration in Network Administration.*) *Accredited by the Cisco Certified Networking Academy*

Office Administration, certificate and AAS degree (*This program is being discontinued and is not accepting new students. See Office Technology program.*) *Accredited by the Association of Collegiate Business Schools and Programs*

Office Assistant, certificate

Office Technology, certificate and AAS degree, *Accredited by the Association of Collegiate Business Schools and Programs*

Paralegal Studies, AAS degree, *Approved by the American Bar Association, Accredited by the Association of Collegiate Business Schools and Programs*

Pre-Management, AA degree, *Accredited by the Association of Collegiate Business Schools and Programs*

Professional Cooking, certificate (under Culinary Arts)

Project Management, AAS

Technology Management and Training, AA degree

Web Technology, certificate and AAS degree

Communication, Humanities & Social Sciences

Child, Youth and Family Development, AA degree

Elementary Education, AA degree

Fine Arts, AA Degree

Liberal Arts, AA degree

Educational and Career Advancement

General Studies Transfer, AA degree

General Studies Transfer, certificate

Integrated Studies, AAS 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 (provisional)*

Diagnostic Medical Sonography, AS degree, *Accredited by the Commission on Accreditation of Allied Health Education Programs*

Emergency Medical Services Paramedic, 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, AS degree, *Accredited by the National League for Nursing Accrediting Commission and approved by the New Mexico Board of Nursing*

Nursing Assistant, certificate

Paramedic, 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 (*seeking Joint Review Committee for Education in Radiologic Technology accreditation*)

Recreation and Leisure, certificate and AAS degree (*This program is being discontinued and is not accepting new students.*)

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 (*seeking American Veterinary Medical Association accreditation*)

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 372 for specific names and coursework.)

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.)

Exit Competencies

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

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.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/instruction.htm>.

For prerequisites and a recommended course sequence, turn the page... ▶

Central New Mexico Community College • 2006/07 Catalog • www.cnm.edu

Page 59

Each **Program of Study** is accompanied by one or more charts 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.

Prerequisites

This column lists prerequisites required to enter the program. (Prerequisites are courses required to be completed before taking other coursework.) Prerequisites are also listed at the beginning of each course description (courses descriptions are listed alphabetically by subject code starting on page 268). Many prerequisites can be met with Accuplacer test scores. See page 11 for more information.

Credit Requirements

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

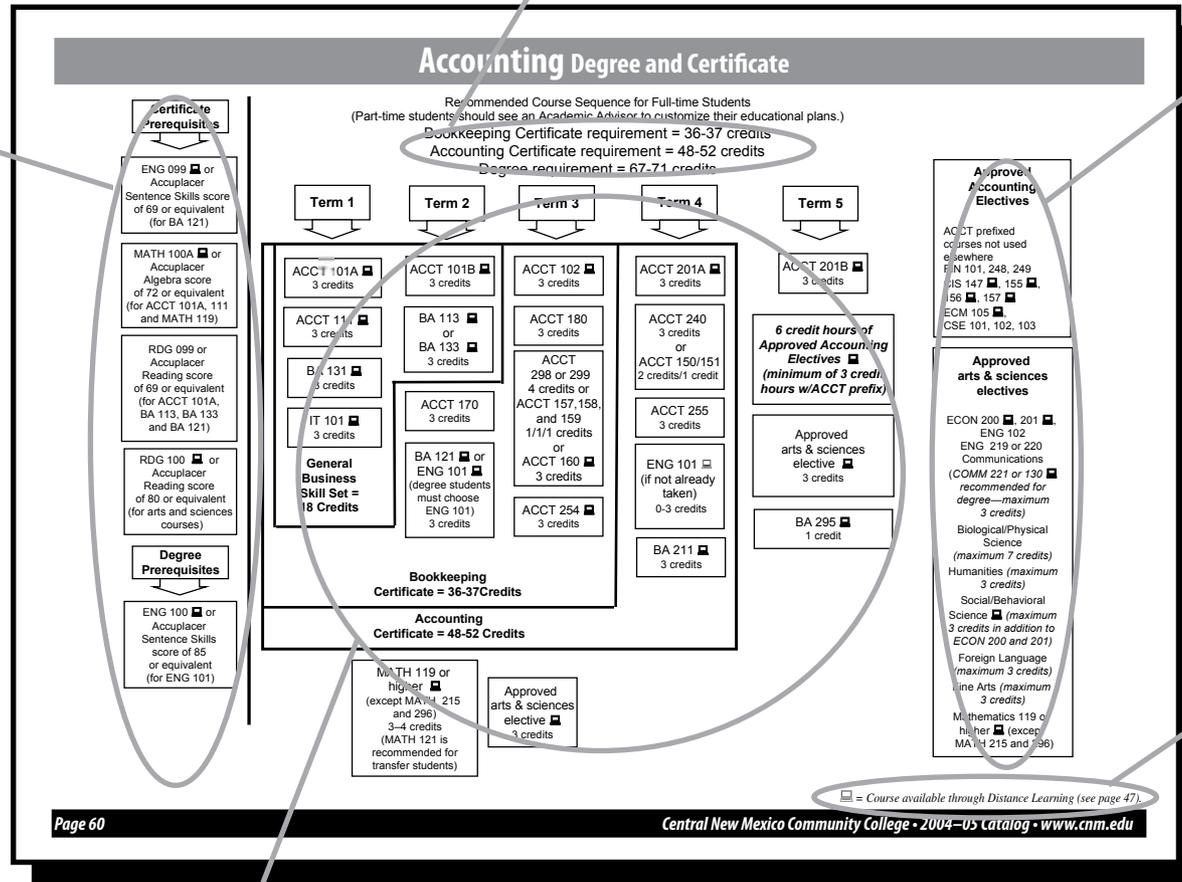
Electives or Optional Courses

To fulfill the requirements for a program, students often have a choice of electives. This area of the chart 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 49 for details). Eligible courses are indicated with a computer icon.



Recommended Course Sequence

The information in this area details the courses (by course subject code and number 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 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 2006–07 US Department of Labor Statistics Job Outlook Handbook, the job openings outlook, both full- and part-time, for persons with accounting education are expected to grow faster than average. Education in accounting often provides a competitive advantage to those seeking advancement into other aspects of business.

Special Requirements

None.

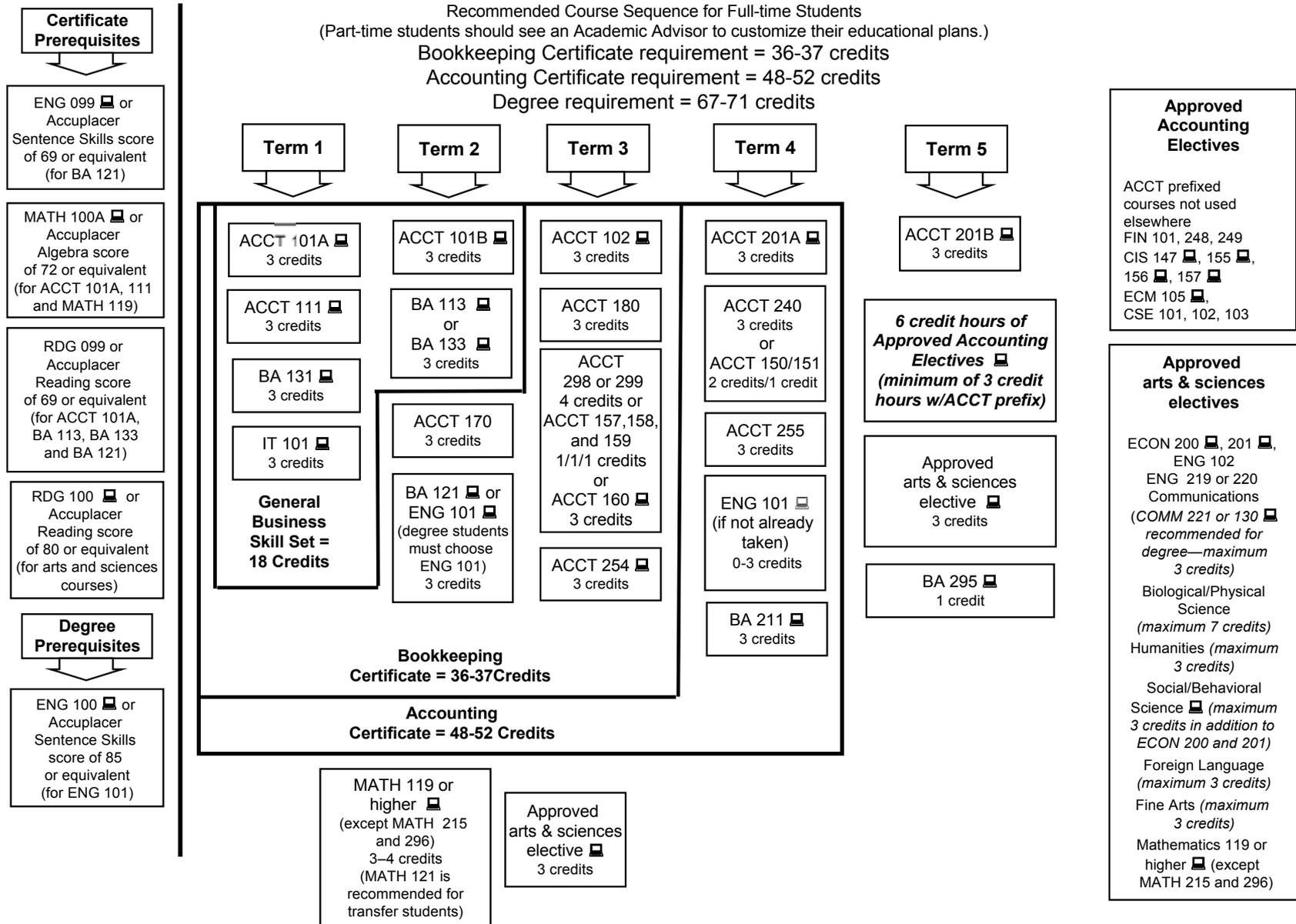
CONTACT INFORMATION

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



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

ACCOUNTING Degree and Certificate



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

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.

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 each fall 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.

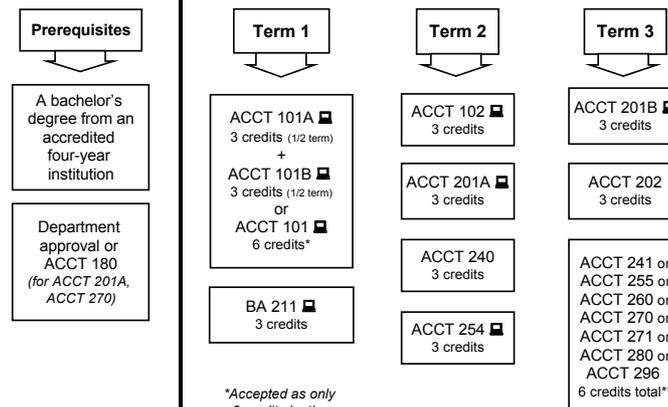
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

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.

CPA Prep Course Sequence Chart

Requirement = 33 credits



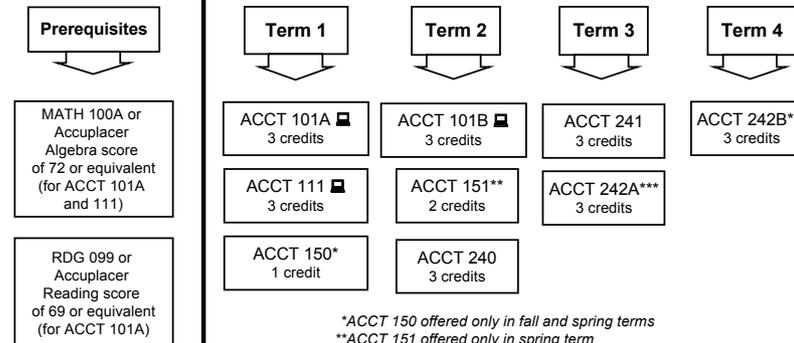
*Accepted as only 3 credits by the State Board of Accountancy

**Although only 6 credits are required, all listed courses are recommended for preparation for the CPA exam.

Current New Mexico requirements allow only 15 credit hours of distance learning classes to be used towards the 30 hour requirement

IRS Enrolled Agent Prep Course Sequence Chart

Requirement = 24 credits



*ACCT 150 offered only in fall and spring terms
 **ACCT 151 offered only in spring term
 ***ACCT 242A and 242B NOT offered in fall term. Spring and summer offerings are based upon demand.

Payroll Clerk (Skill Set) Payroll Clerk Course Sequence Chart

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.

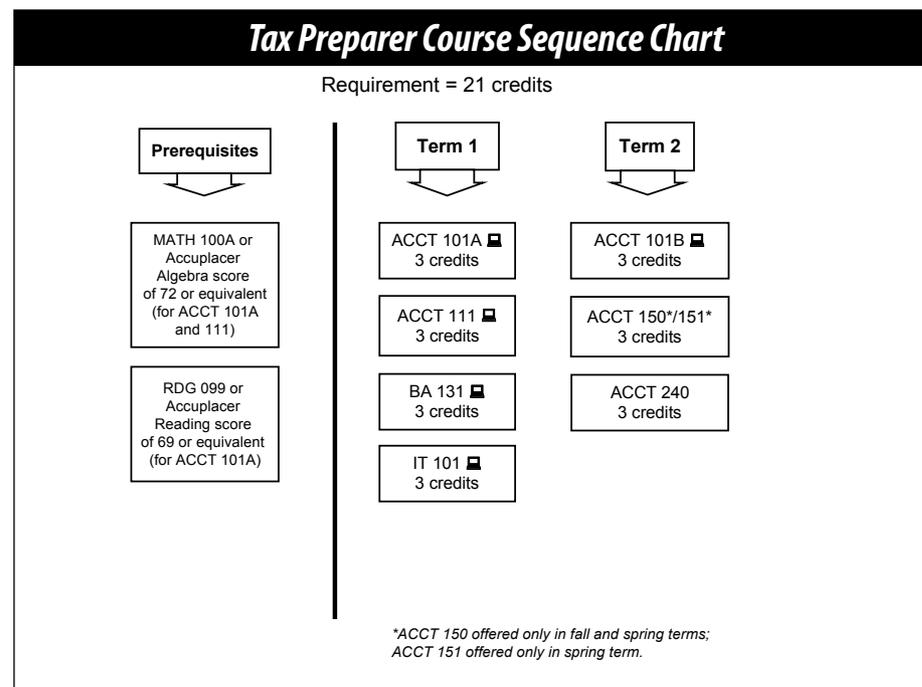
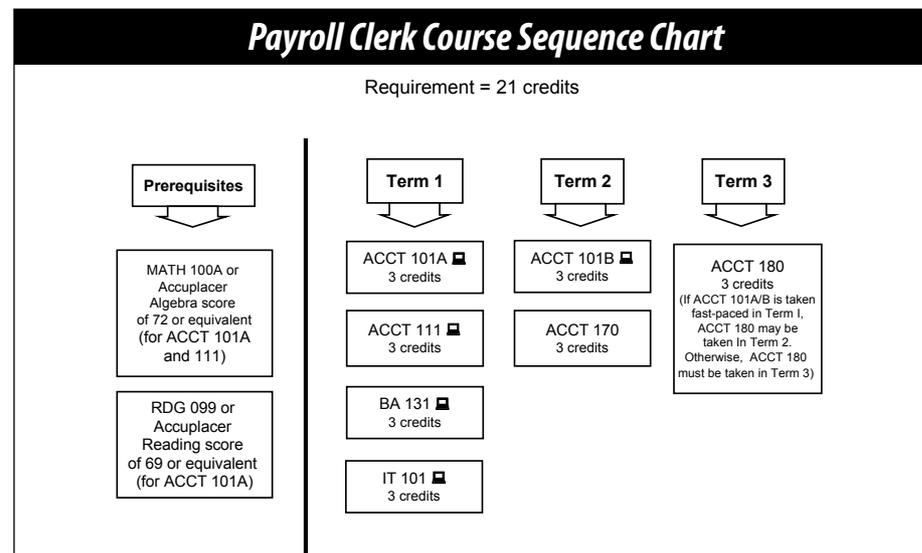
Tax Preparer for Individuals (Skill Set)

The Skill Set provides confirmation that the student has satisfactorily completed courses which 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.



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

ADULT BASIC EDUCATION COURSES

Division of Educational & Career Advancement

Description

Courses are offered in English as a Second Language (ESL), Basic Academic Skills/GED Preparation (BSK) and Job Life Skills (JLS). 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.

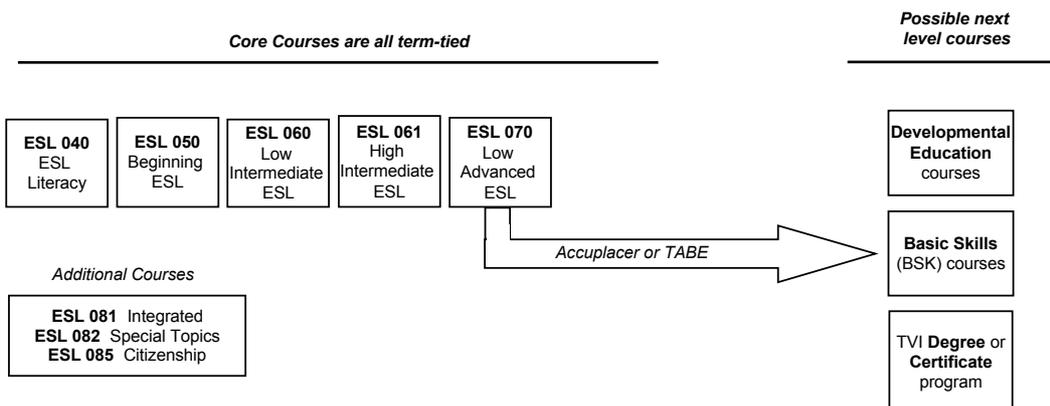
Adult Basic Education students receive most of the same services as other CNM students (for example, library access) but are not eligible for financial aid. Also, ABE students do not follow the procedures outlined in this catalog for admission and registration; they should contact the Division of Educational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

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

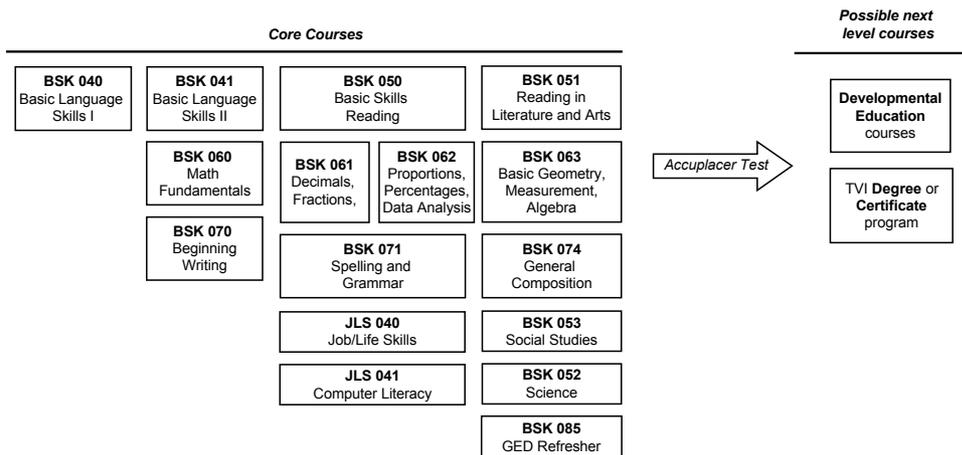
Course placement and order based on CASAS test results.



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.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

- **Associate of Applied Science Degree in Aerospace Technology (Concentration in Professional Pilot and Flight Instruction)**
- **Certificate in Professional Pilot and 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 277 (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.

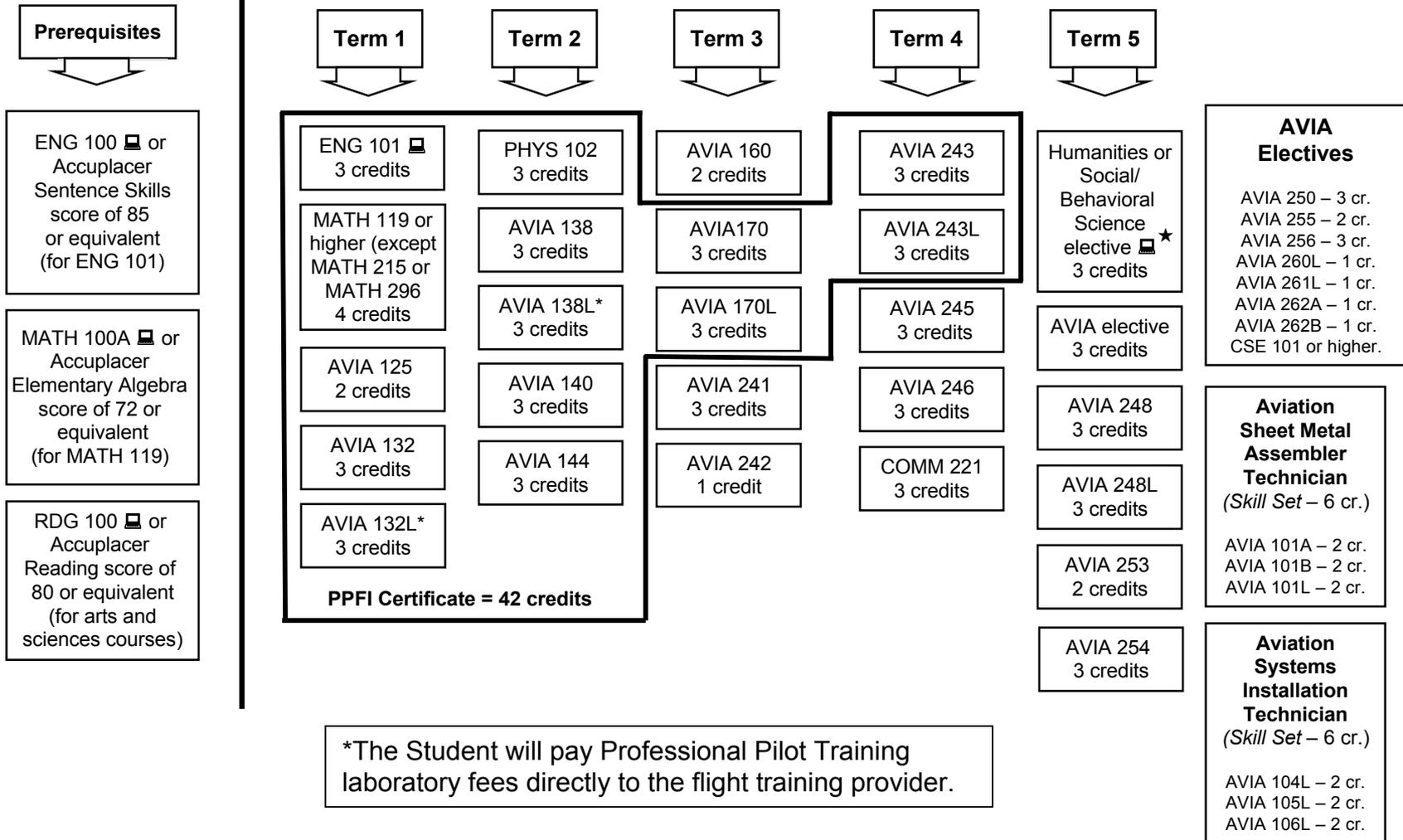


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

AEROSPACE TECHNOLOGY Professional Pilot & Flight Instruction Degree and Certificate

(Also Aviation Sheet Metal Assembler Technician Skill Set and Aviation Systems Installation Technician Skill Set)

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 42 credits
 Degree requirement = 73 credits



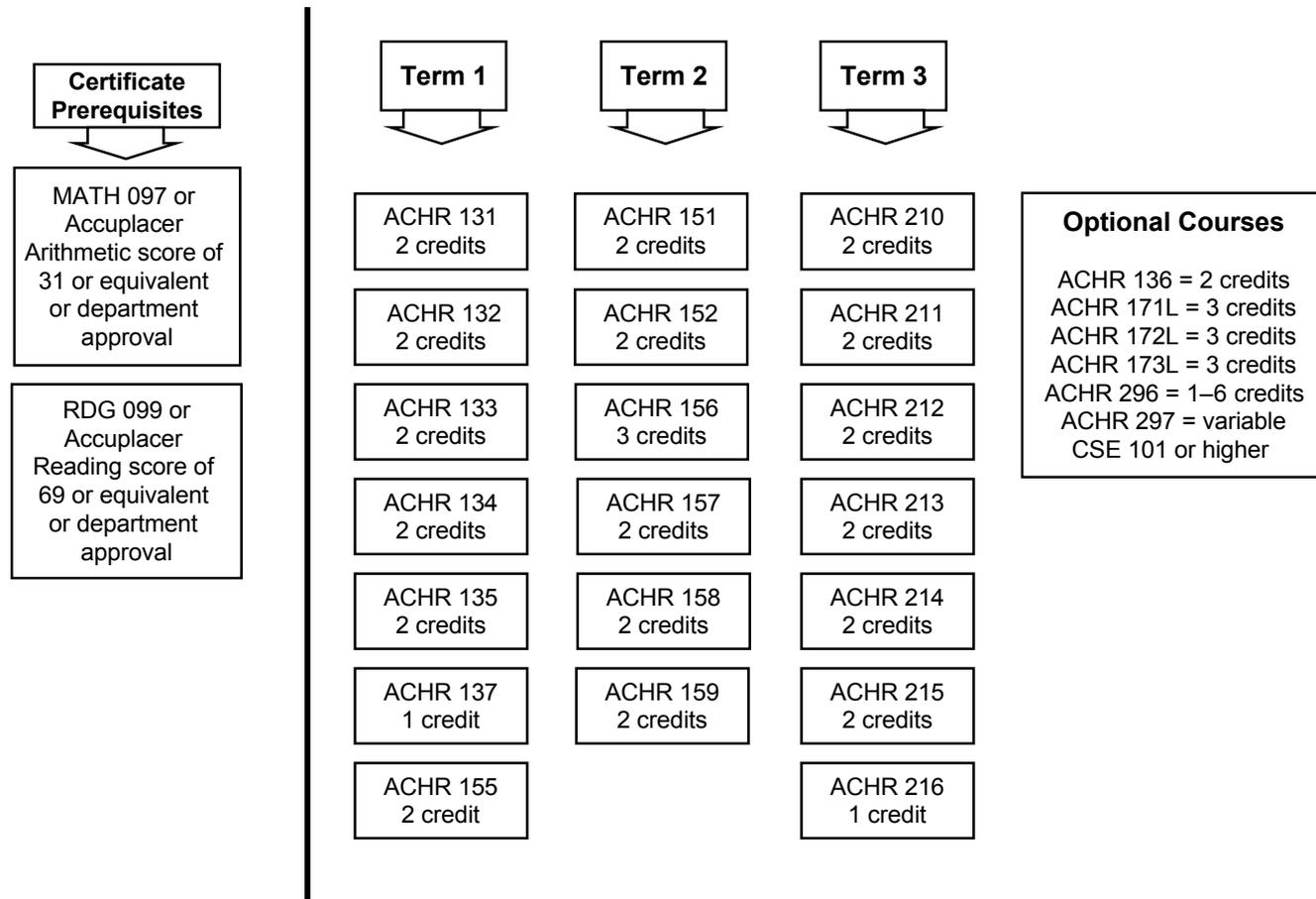
★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

AIR CONDITIONING, HEATING & REFRIGERATION Certificate (a.k.a. HVAC in Industry) Applied Technologies Division

For additional information about this certificate and how it fits within the Mechanical Technology Associate of Applied Science Degree see page 196.

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 39 credits



– Course available through Distance Learning (see page 49.)

ALTERNATIVE TEACHER LICENSURE Skill Sets

Communication, Humanities and Social Sciences Division

- **Early Childhood Multicultural Education Alternative Teacher Licensure Skill Set**
- **Elementary Education Alternative Teacher Licensure Skill Set**
- **Secondary Education Alternative Teacher Licensure Skill Set**
- **Special Education Alternative Teacher Licensure Skill Set**

Skill Set Description

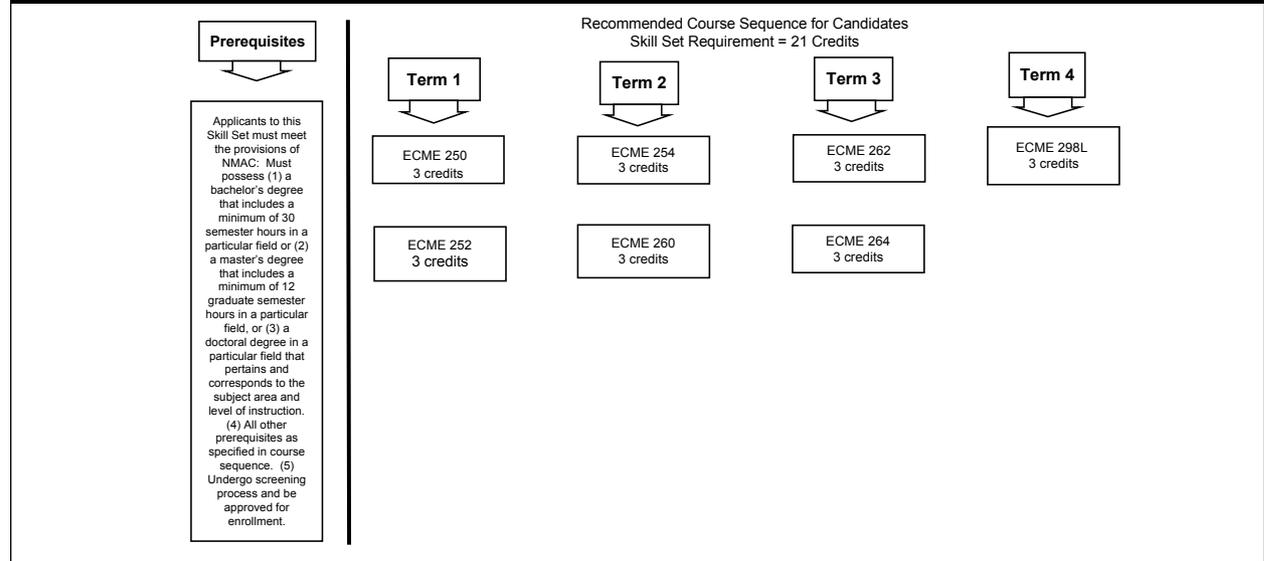
The Alternative Teacher Licensure Program provides an opportunity for students with a bachelor's degree to complete all of the regular education coursework requirements leading to teacher licensure in:

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

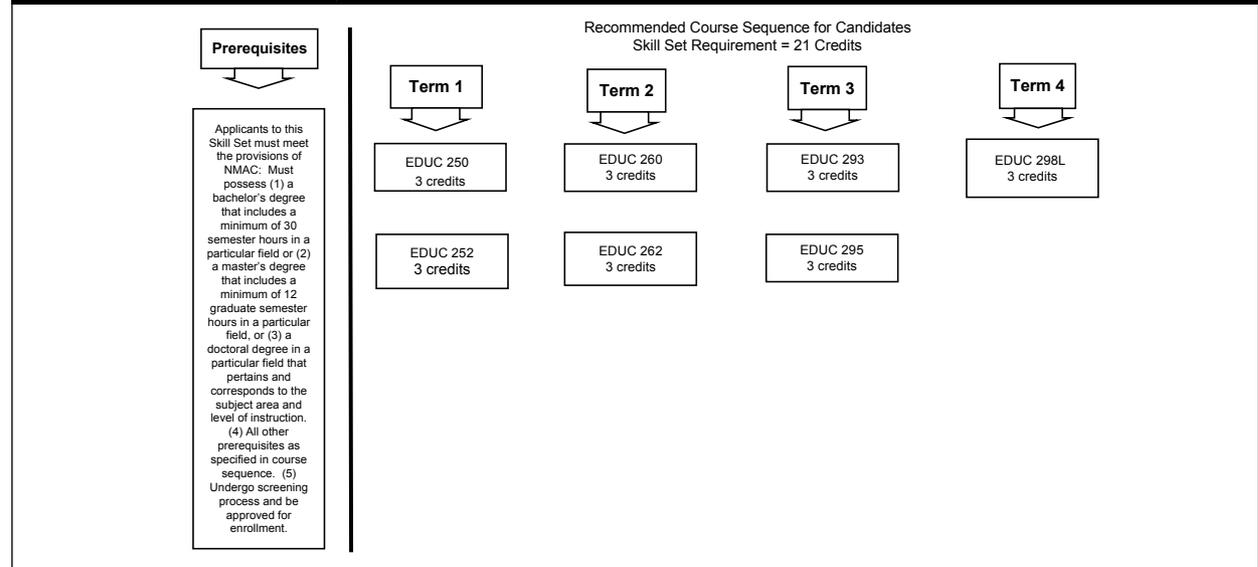
Career Advancement Opportunities

Students who complete the skill set will be eligible to take the teacher certification exam to become a licensure teacher in the state of New Mexico.

Early Childhood Multicultural Education Alternative Teacher Licensure Course Options



Elementary Education Alternative Teacher Licensure Course Options



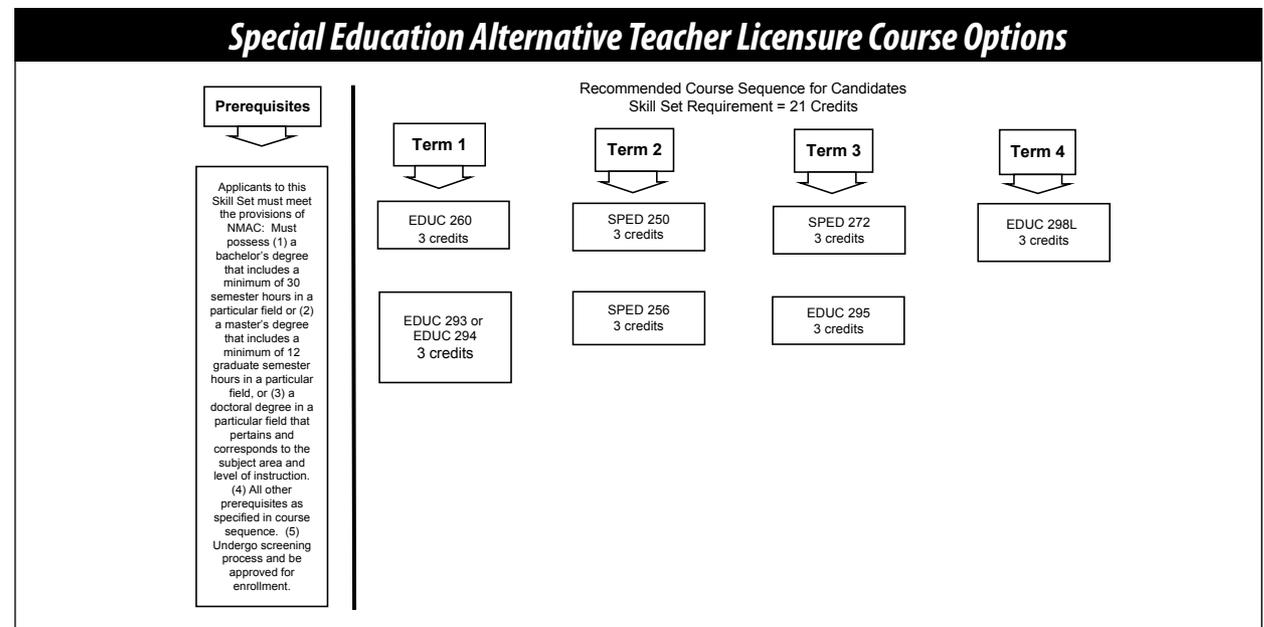
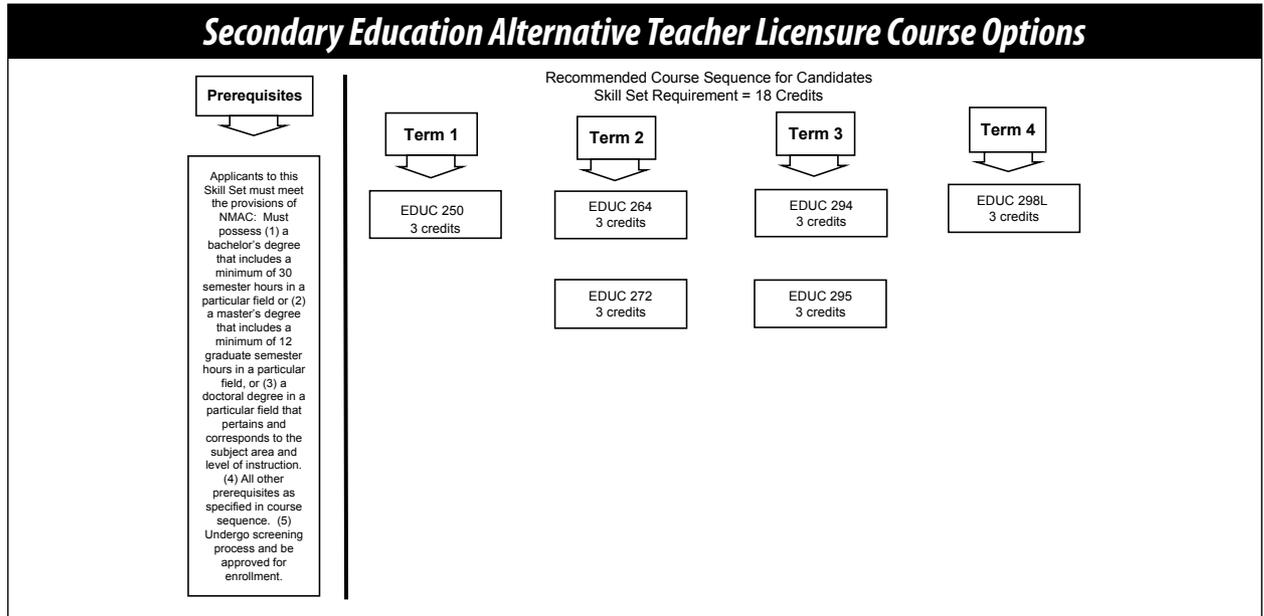
 – Course available through Distance Learning (see page 49.)

Special Requirements

Applicants to these skill sets must meet the provision of NMAC: 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. Applicants must also undergo a screening process and be approved for enrollment.

CONTACT INFORMATION

Skill set information is available from the Communication, Humanities, and Social Sciences Division office at (505) 224-3588 or the Academic Advisement and Career Development Center at (505) 224-4321.



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

APPRENTICESHIPS

Applied Technologies Division

Note: Students enrolled in apprenticeships may not qualify for financial aid or Veterans Administration benefits. Apprenticeship courses are taken in order starting with "A" (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 Inc. (ABC) and the Associated General Contractors of America (AGC) New Mexico Building Branch.

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 the Rio Grande chapter of 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 industry, is offered in conjunction with the local industry.

The program provides related classroom instruction. Students must purchase textbooks and instructional materials.

INDUSTRIAL PLANT MAINTENANCE APPRENTICESHIP

The Industrial Plant Maintenance Apprenticeship (course subject code: IMAP), for persons currently employed full-time in the 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. There is a CNM registration fee each term. 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 the Rio Grande chapter of ABC and the Joint Apprenticeships Training Committee (JATC) Plumbing and Pipefitters industry in New Mexico.

Students must purchase textbooks and instructional materials through the local ABC chapter or the JATC 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 Rio Grande chapter of ABC and the CNM Workforce Training Center.

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 the Applied Technologies Division Office at (505) 224-3711.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

ARCHITECTURAL/ENGINEERING DRAFTING TECHNOLOGY *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*

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.



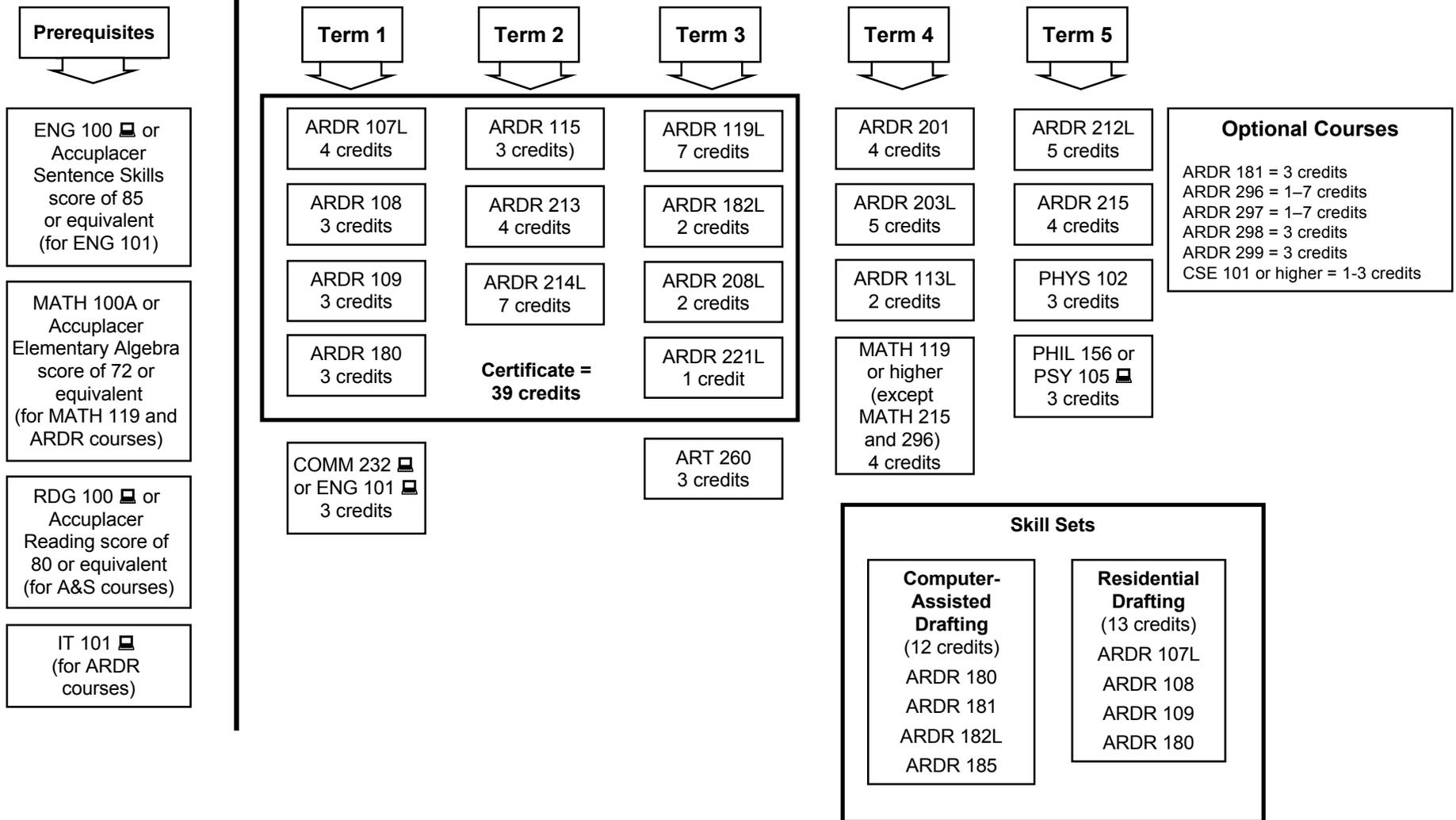
Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

ARCHITECTURAL/ENGINEERING DRAFTING TECHNOLOGY Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 39 credits

Degree requirement = 75 credits

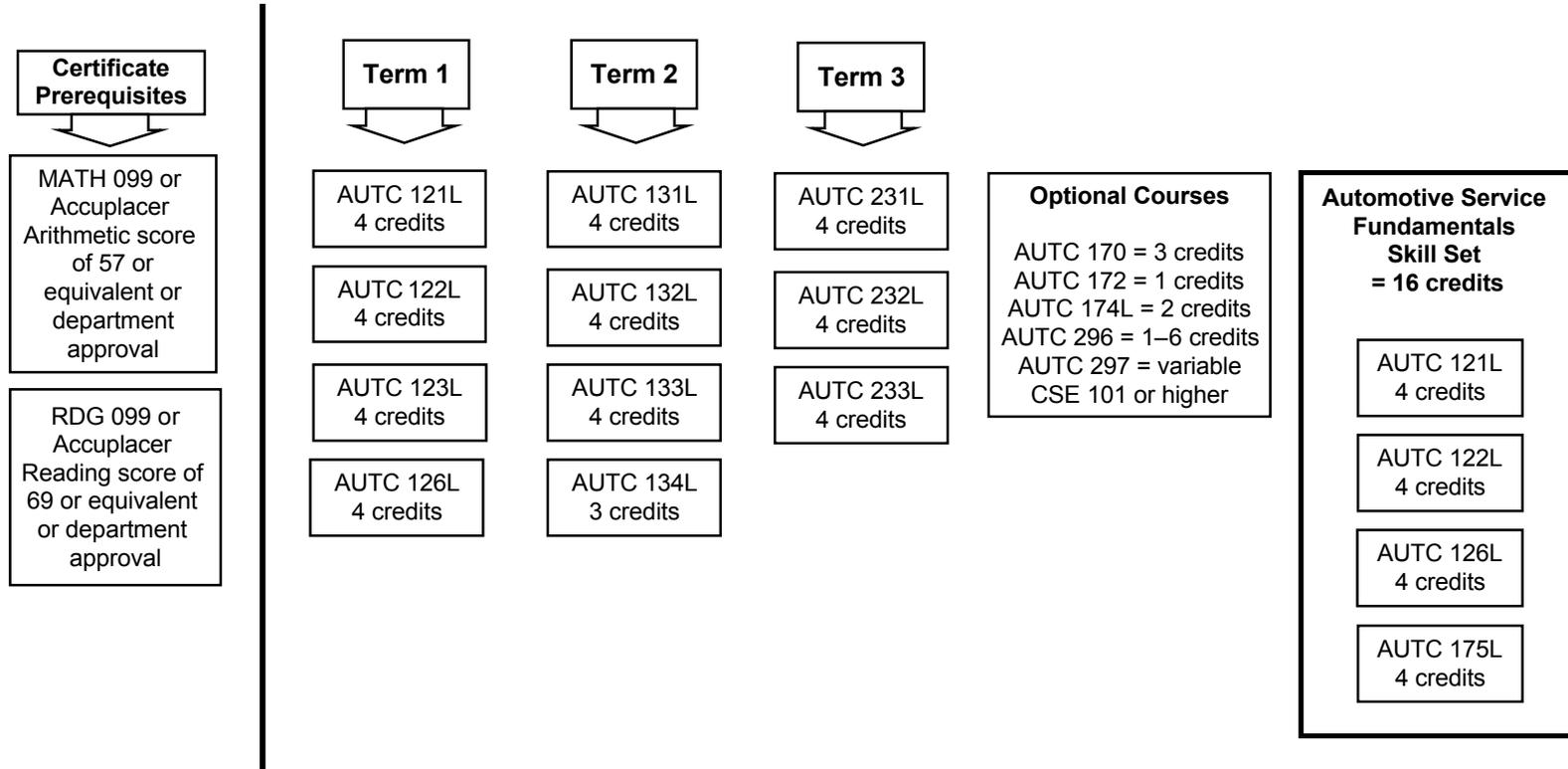


AUTOMOTIVE TECHNOLOGY Certificate

Applied Technologies Division

For additional information about this certificate and how it fits within the Transportation Technology Associate of Applied Science Degree see page 257.

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)
Certificate requirement = 43 credits



– Course available through Distance Learning (see page 49.)

- ***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.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

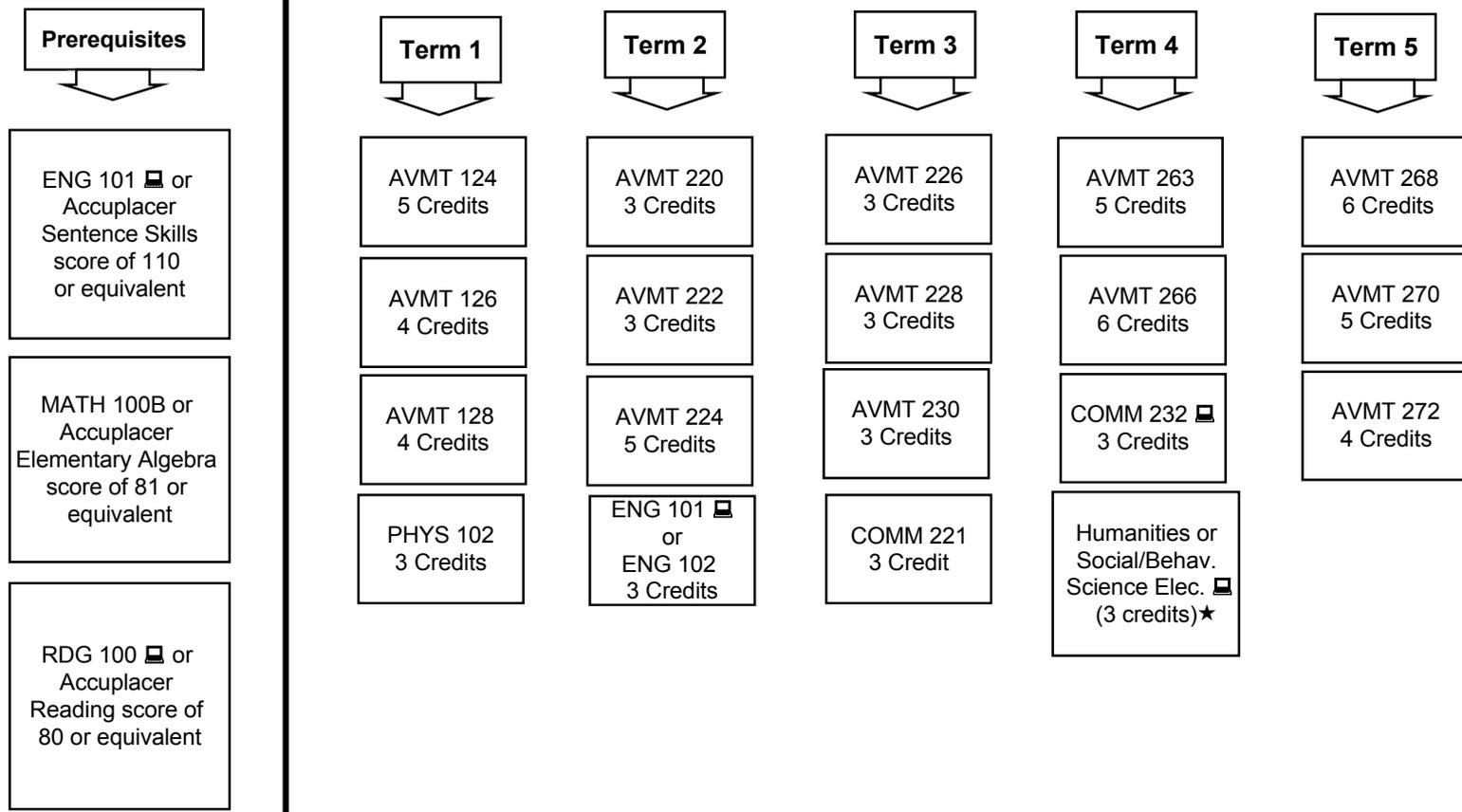
For prerequisites and a recommended course sequence, turn the page... ►

AVIATION TECHNOLOGY Aviation Maintenance Technician Degree

[PENDING NEW MEXICO DEPARTMENT OF HIGHER EDUCATION and FAA APPROVALS]

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize your educational plan.)

Degree Requirement = 74 Credits



★ See page 269 for courses in this category.

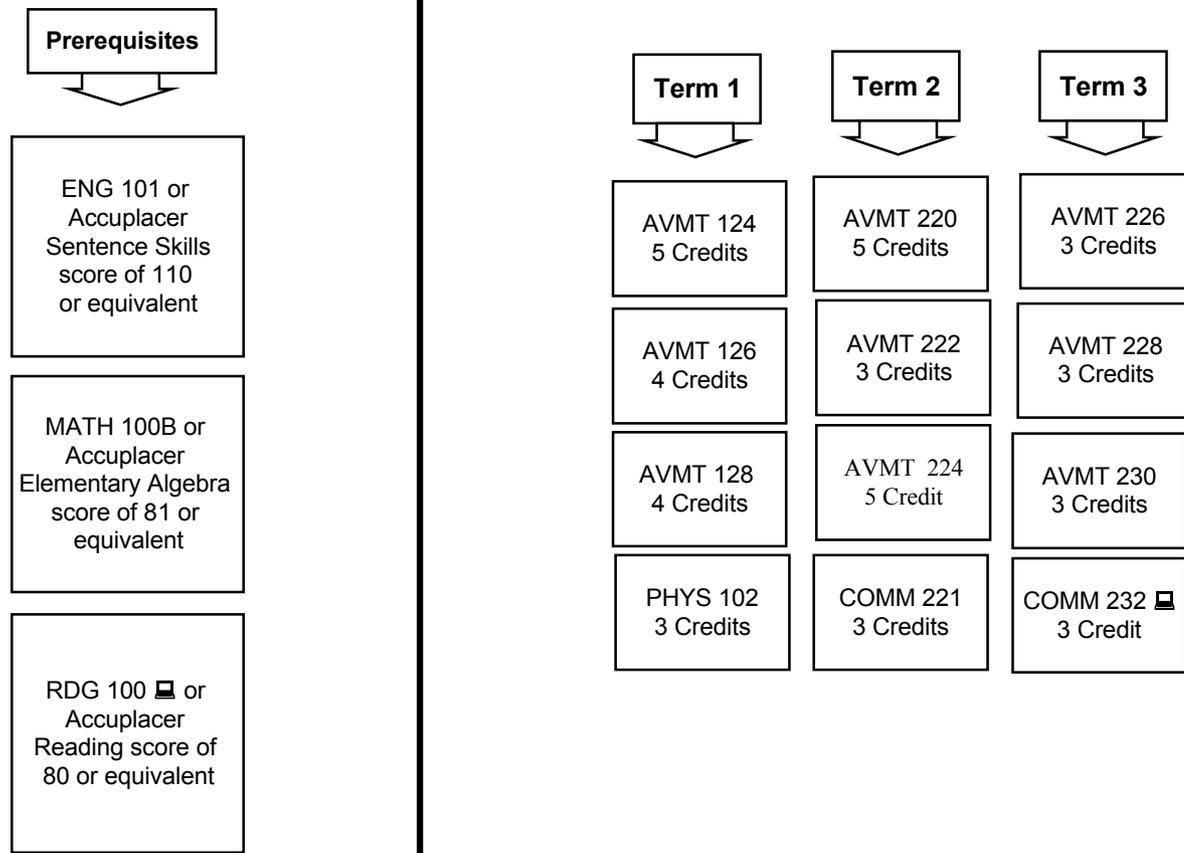
– Course available through Distance Learning (see page 49.)

AVIATION TECHNOLOGY Airframe Maintenance Technician/Part 147 Certificate

[PENDING NEW MEXICO DEPARTMENT OF HIGHER EDUCATION and FAA APPROVALS]

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize your educational plan.)

Certificate Requirement = 42 Credits

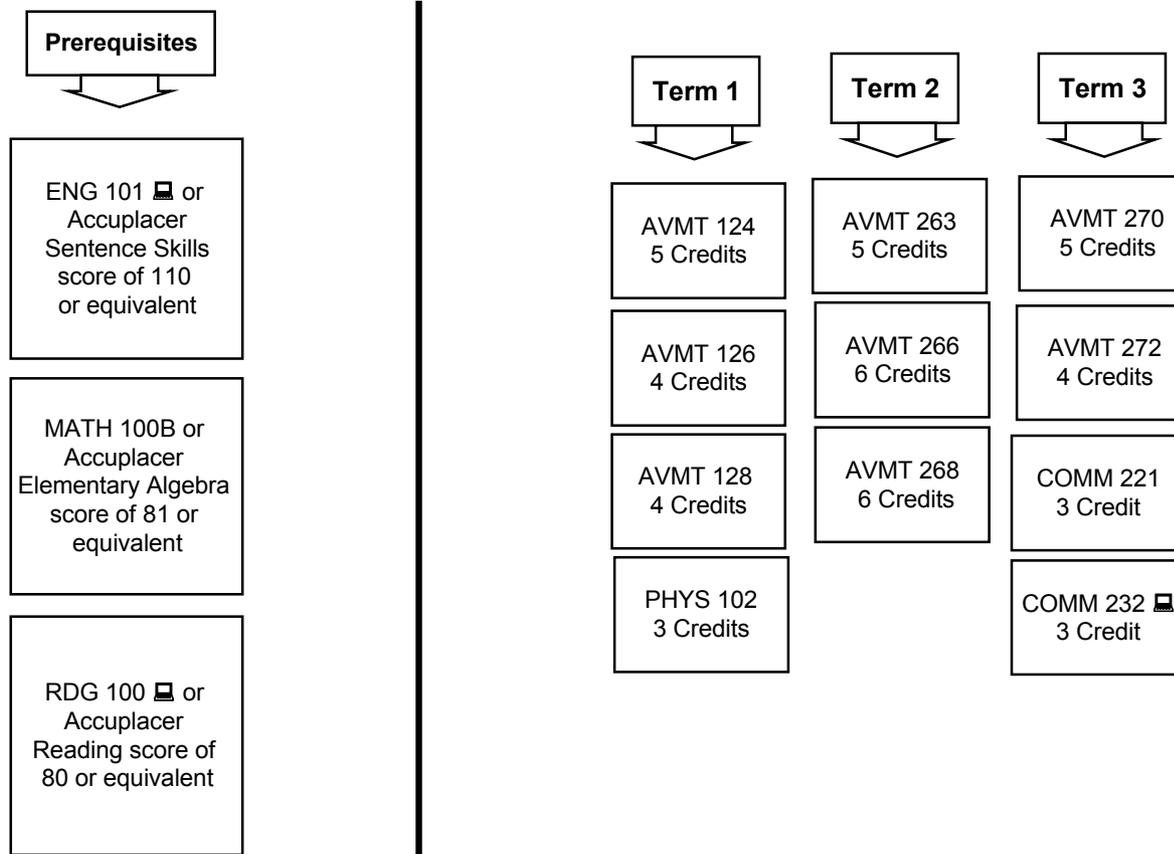


AVIATION TECHNOLOGY Powerplant Maintenance Technician/Part 147 Certificate

[PENDING NEW MEXICO DEPARTMENT OF HIGHER EDUCATION and FAA APPROVALS]

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize your educational plan.)

Certificate Requirement = 48 Credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *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 nationally accredited American Culinary Federation Associate of Applied Science Degree, also offered at CNM.

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 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 and should be able to lift 30 pounds. Students must be able to stand for the duration of laboratory classes.

CONTACT INFORMATION

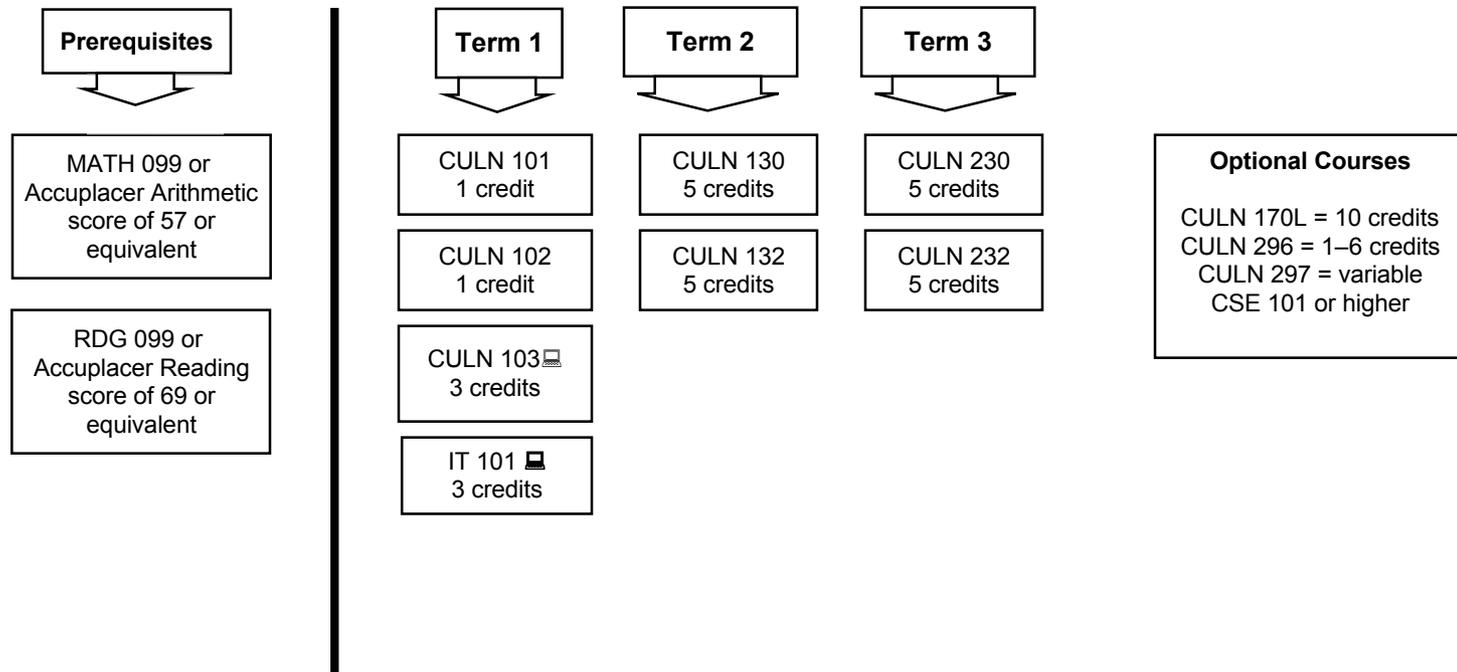
Information about these programs is available from the program director at (505) 224-3758, or from Academic Advisement and Career Development at (505) 224-4321.

BAKING Certificate

For additional information about this certificate and how it fits within the Culinary Arts Associate of Applied Science Degree see page 123.

Recommended Course Sequence for Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 28 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

• 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 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.

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.

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 department at (505) 224-4111 for more information.

CONTACT INFORMATION

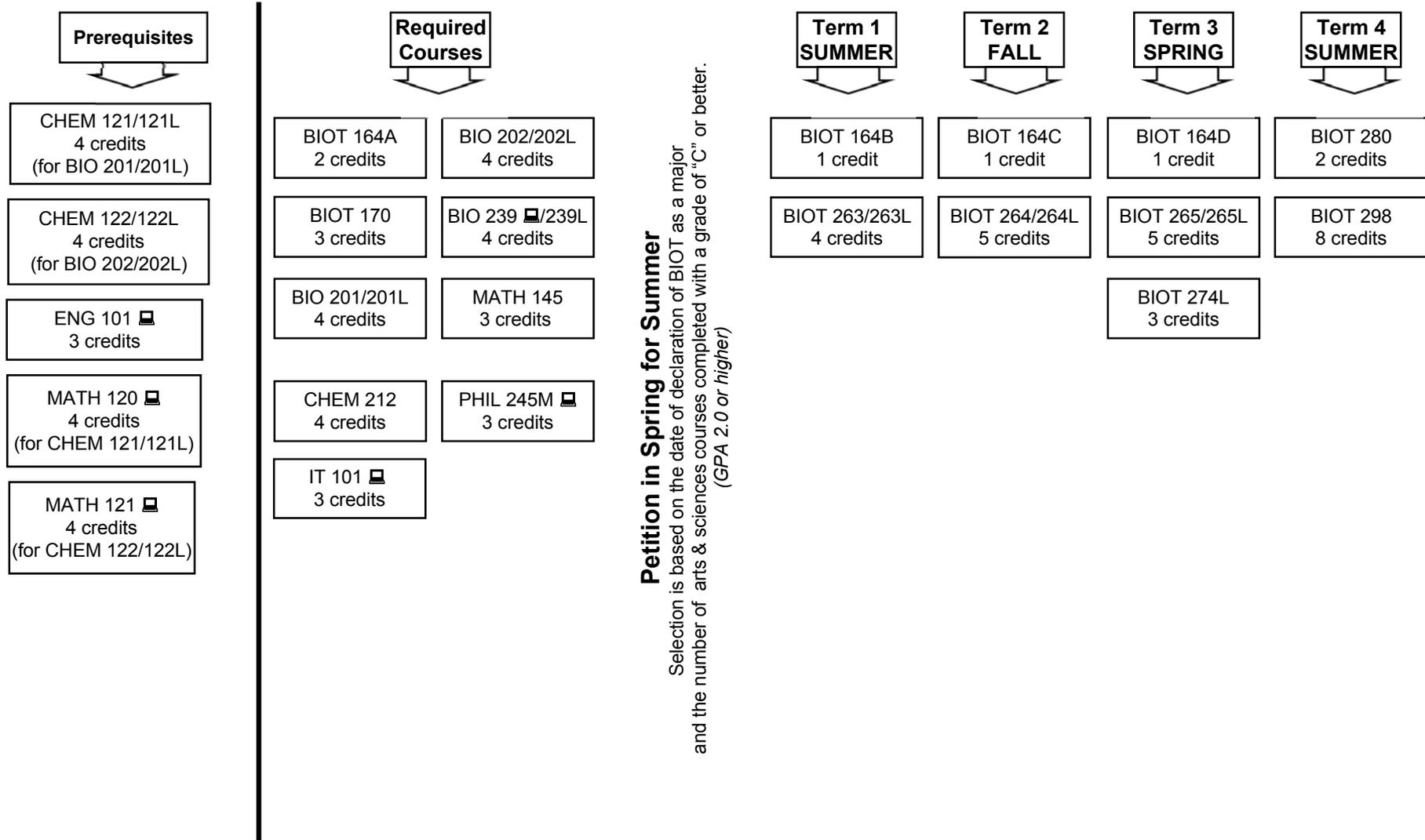
Program information is available from the program director, Leah Pulling, lpulling@cnm.edu, (505) 224-5032 and from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

BIOTECHNOLOGY Degree

Recommended Course Sequence for Full-time Students
Degree requirement = 60 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *Certificate in Bookkeeping*

Program Description

The Bookkeeping program provides basic accounting and computer 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 occupations programs.

Career and Advancement Opportunities

Many businesses, governmental and non-profit organizations employ accountants and/or bookkeepers. According to the 2003–04 U.S. Department of Labor Statistics Job Outlook Handbook, the job openings outlook, both full- and part-time, for persons with accounting education are “plentiful.” Students can take additional courses and receive a certificate or associate of applied science degree in Accounting. Education in accounting often provides a competitive advantage to those seeking advancement in all aspects of business.

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.

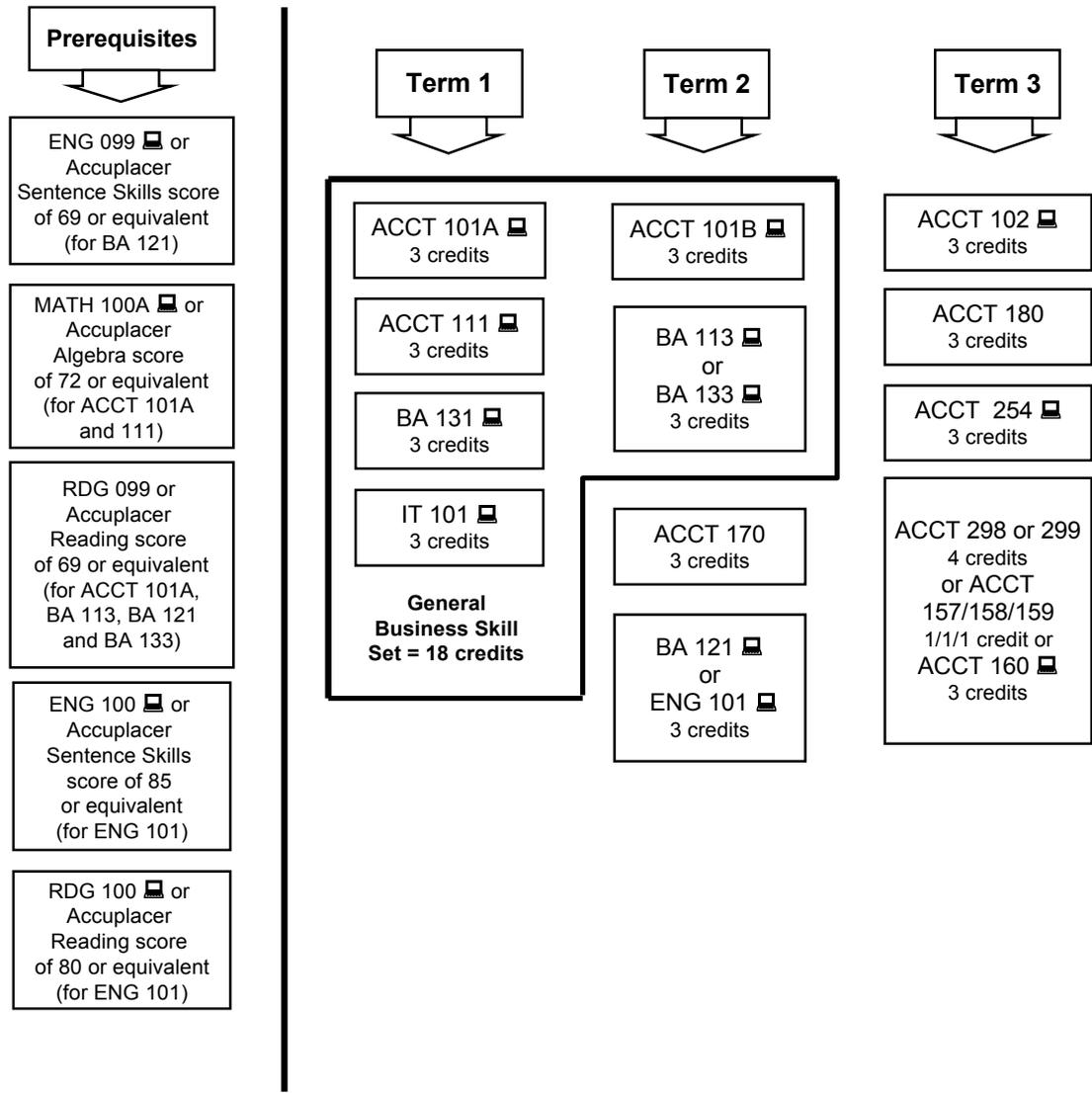
For prerequisites and a recommended course sequence, turn the page... ►



– Course available through Distance Learning (see page 49.)

BOOKKEEPING Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 36–37 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- **Associate of Applied Science Degree in Business Administration (concentrations in: E-Commerce, Entrepreneurship, International Business, Leadership Development, Management or Real Estate)**
- **Certificate in Business Administration**
- **Skill Sets in Advertising Assistant, Continuous Quality Improvement, Entrepreneurship, General Business, Human Resources Assistant, Leadership Development, Retail/Wholesale Management and Sales Associate**

Program Description

The Business Administration program is available to persons interested in learning the various aspects of the free enterprise system. 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.

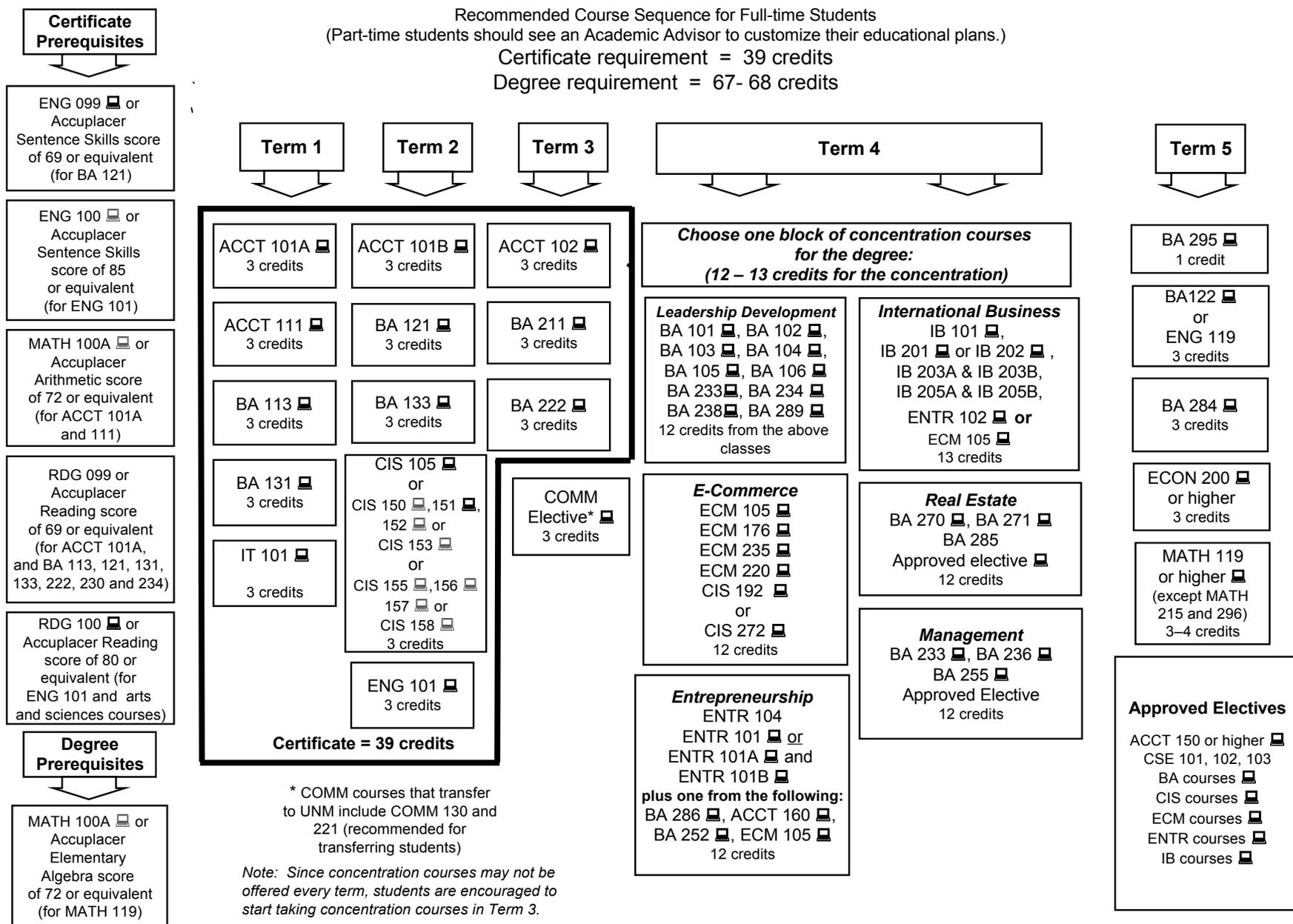


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

BUSINESS ADMINISTRATION Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 39 credits
Degree requirement = 67- 68 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

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.

Advertising Assistant (Skill Set)

The Advertising Assistant Skill Set is a series of courses for individuals who want to update or expand their skills in planning, designing, creating and executing a series of advertisements to communicate with a particular target audience. 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.

Continuous Quality Improvement (Skill Set)

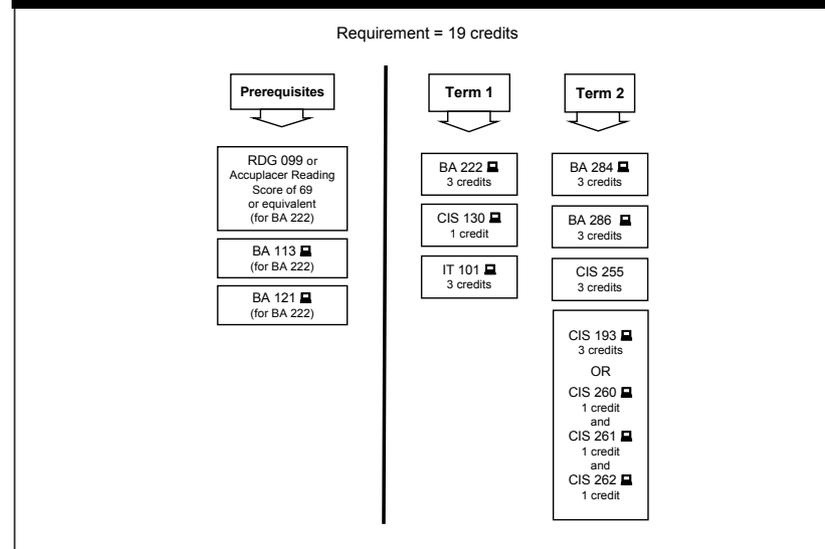
The Continuous Quality Improvement (CQI) Skill Set is a series of courses that focus on quality concepts, data gathering, quality tools, team building, action plans and strategies to implement quality leadership throughout an organization. Process improvement and organizational cultural change are covered 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.

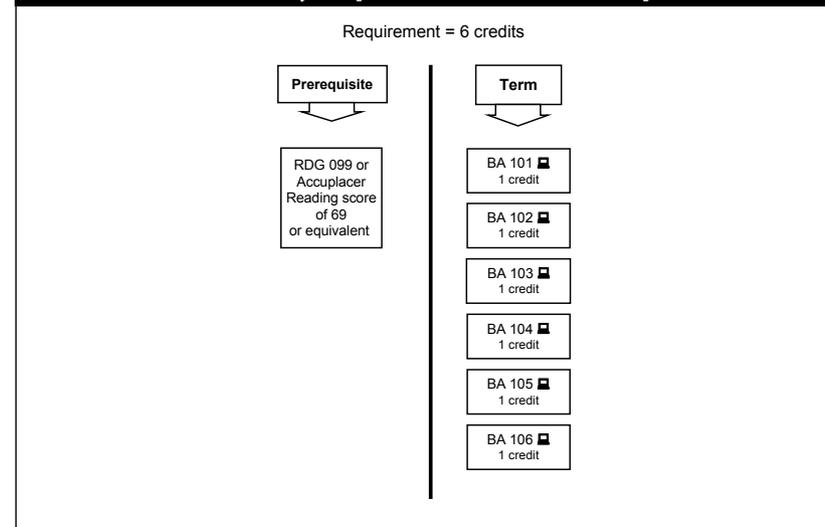
CONTACT INFORMATION

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.

Advertising Assistant Course Sequence Chart



Continuous Quality Improvement Course Sequence Chart



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 market 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.

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.

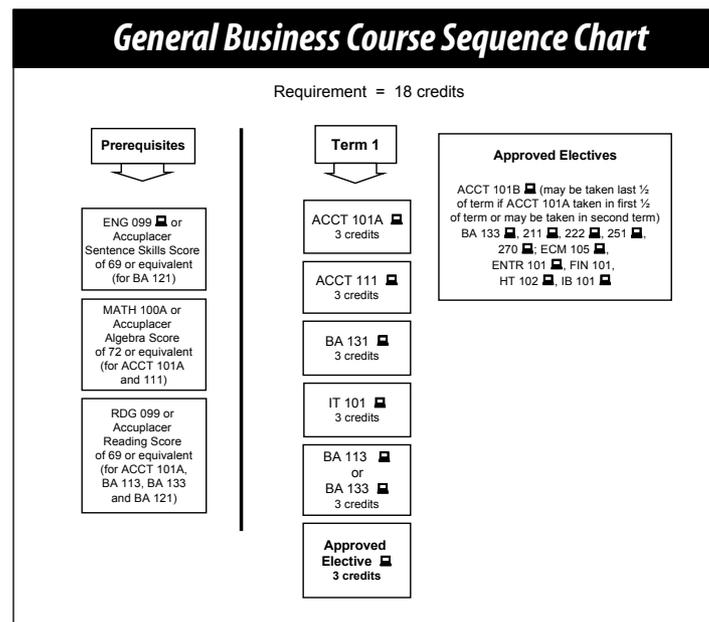
Human Resources Assistant (Skill Set)

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.

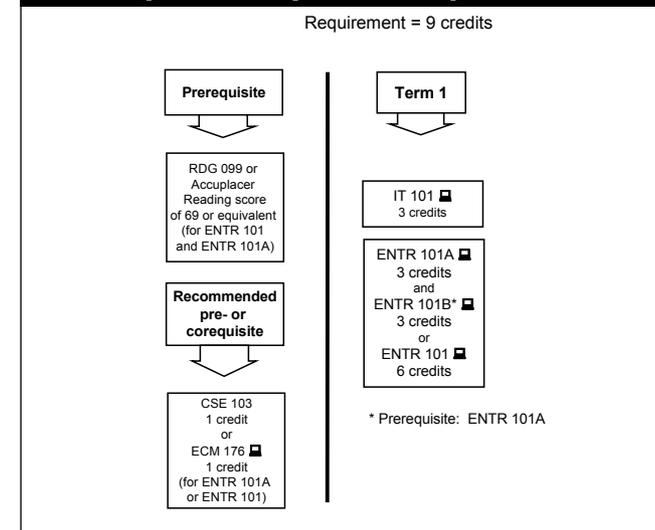
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

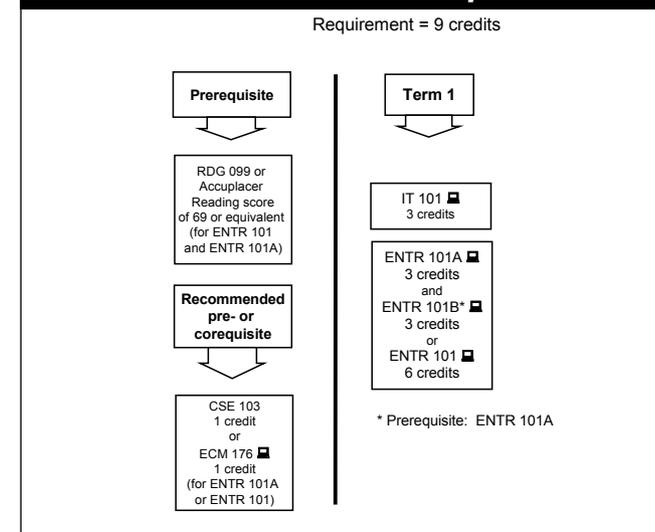
Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



Entrepreneurship Course Sequence Chart



Human Resources Assistant Sequence Chart



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

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, team work 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.

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.

Sales Associate (Skill Set)

The Sales Associate Skill Set is a series of courses for individuals who want to enhance their knowledge of customer service, marketing, advertising and personal selling techniques in the areas of closing the sale, prospecting, cold calling and overcoming objections. All of the courses included may also be applied to a certificate or an associate of applied science degree in Business Administration.

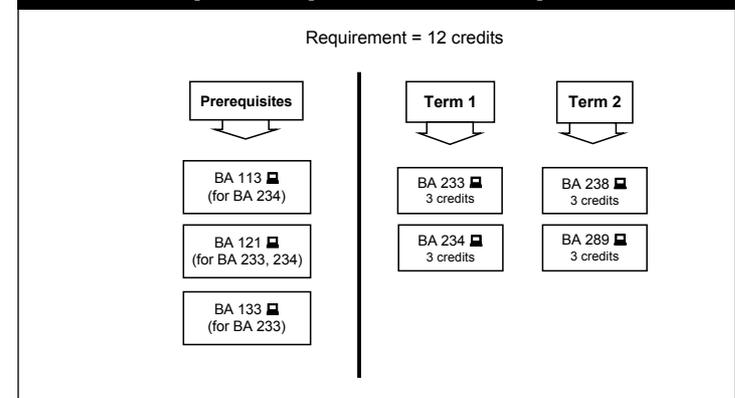
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

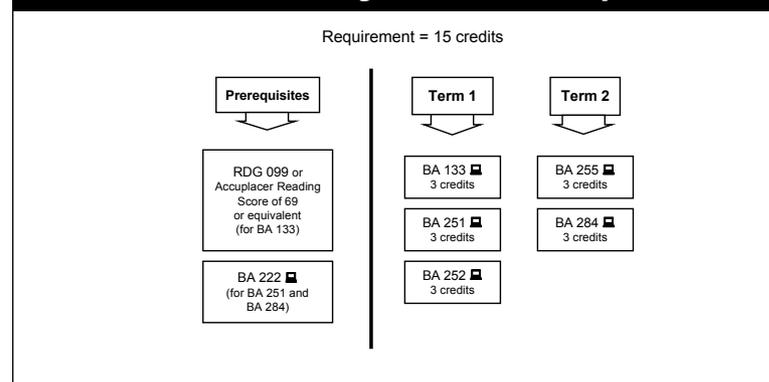
Information about these courses is available from the Business & Information Technology Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

★ See page 269 for courses in this category.

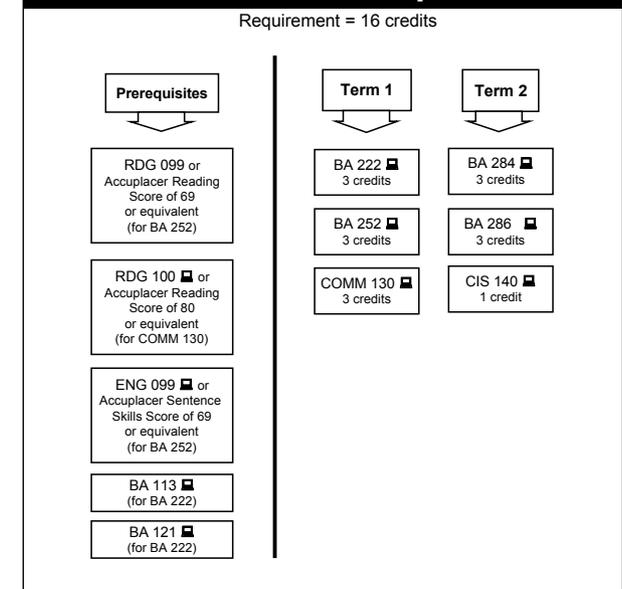
Leadership Development Course Sequence Chart



Retail/Wholesale Management Course Sequence Chart



Sales Associate Course Sequence Chart



– Course available through Distance Learning (see page 49.)

- *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 design documents 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. Graduate may become designers, advertisement creators, marketing technicians, web technicians, web designers and advertising technicians.

Special Requirements

None.

CONTACT INFORMATION

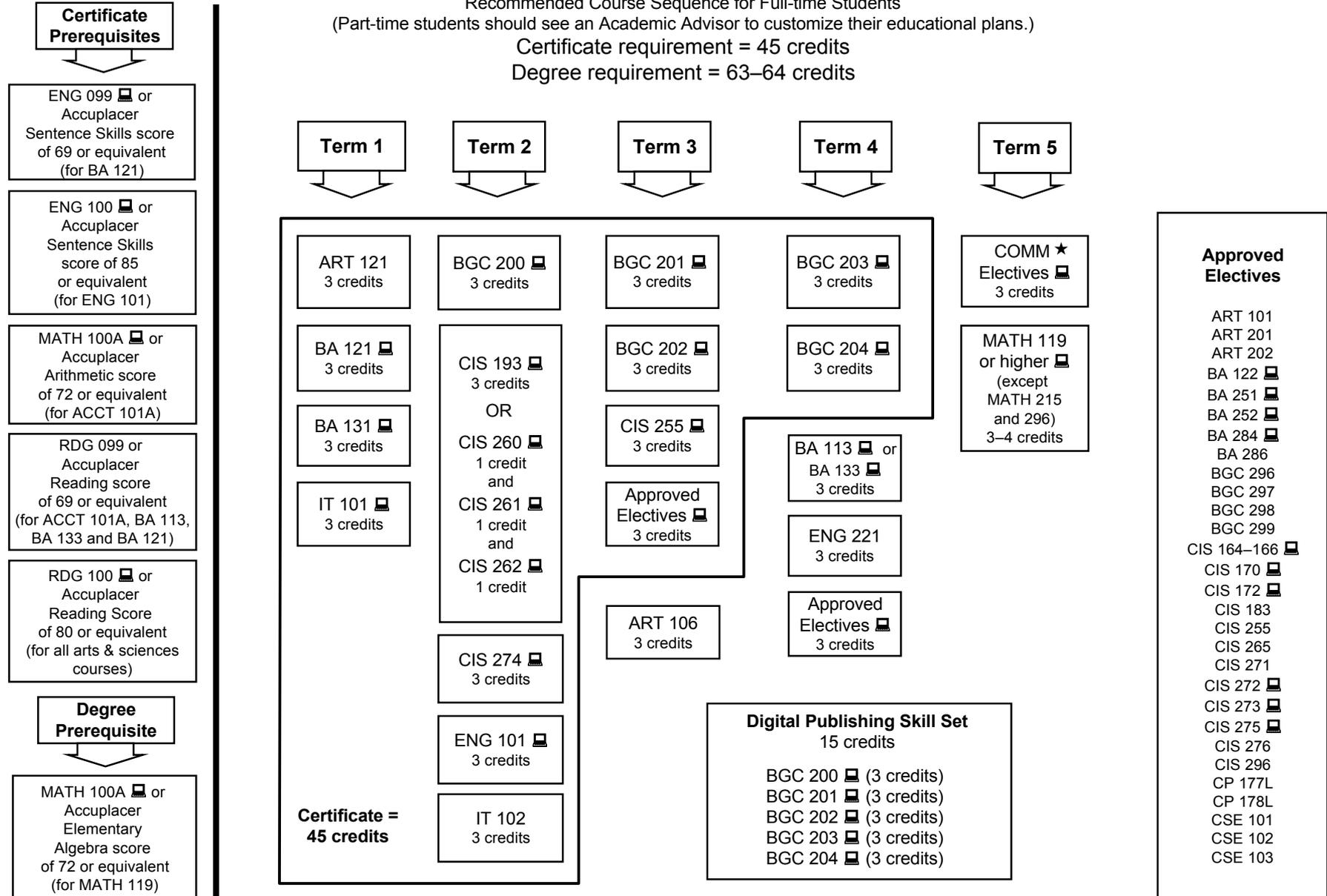
Program information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

BUSINESS GRAPHICS Degree and Certificate (Also Digital Publishing Skill Set)

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 45 credits
 Degree requirement = 63–64 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

CALL CENTER OPERATIONS Skill Set

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. Call center operations prepares students 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.

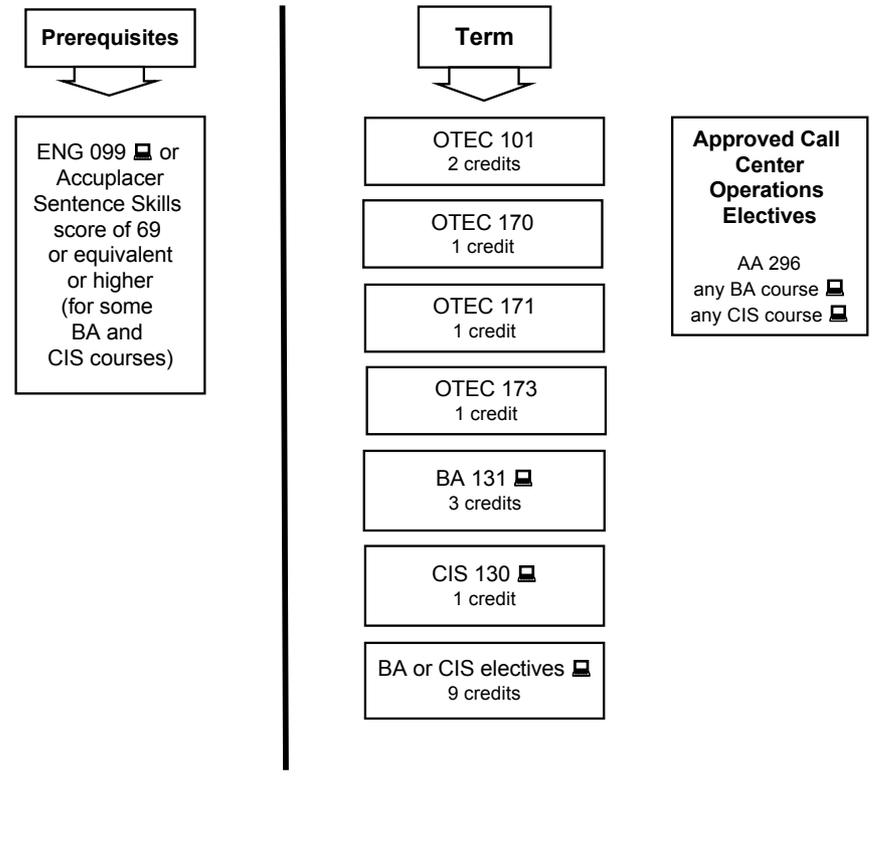
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

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.

Call Center Operations Course Sequence Chart

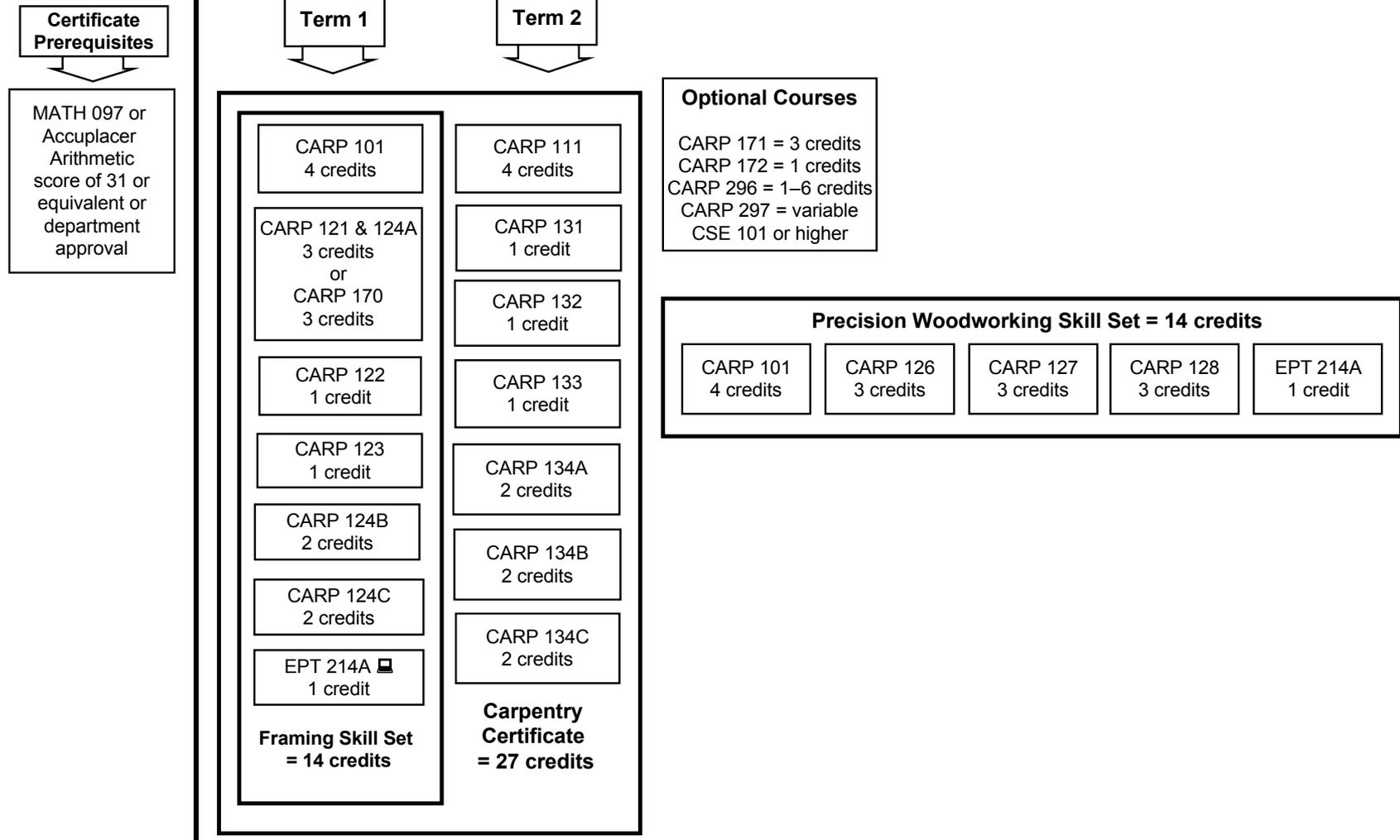
Requirement = 18 credits



CARPENTRY Certificate

For additional information about this certificate and how it fits within the Construction Technology Associate of Applied Science Degree see page 115.

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Skill Set requirement = 14 credits; Certificate requirement = 27 credits



CHILD, YOUTH & FAMILY DEVELOPMENT

Communication, Humanities & Social Sciences Division

- Associate of Arts Degree in Child, Youth and Family Development
(concentrations in Early Childhood Multicultural Education or Family Studies)
- Skill Set in Child Development Associate (CDA)

Program Description

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.

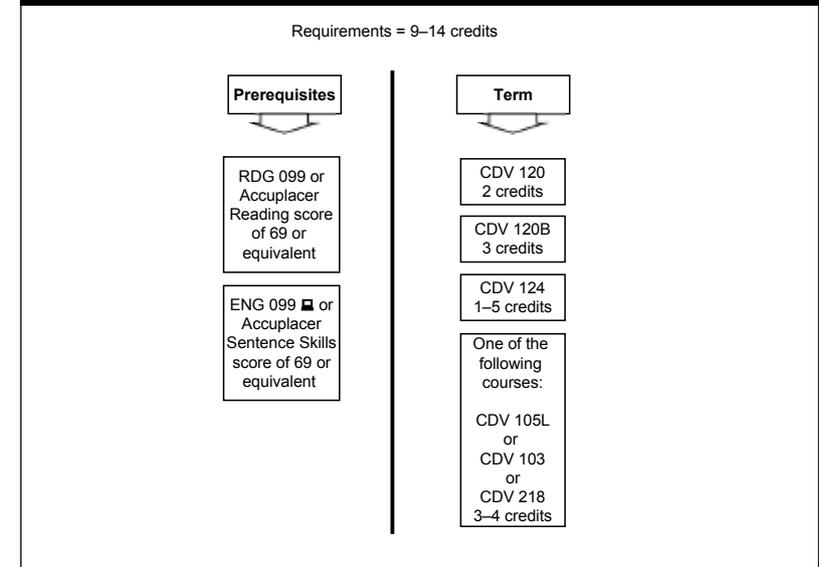
Special Requirements

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 graduation must be taken for a traditional grade of A, B or C. For courses offered only for credit/no credit, a grade of credit (CR) must be earned.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

Child Development Associate Course Sequence Chart



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.

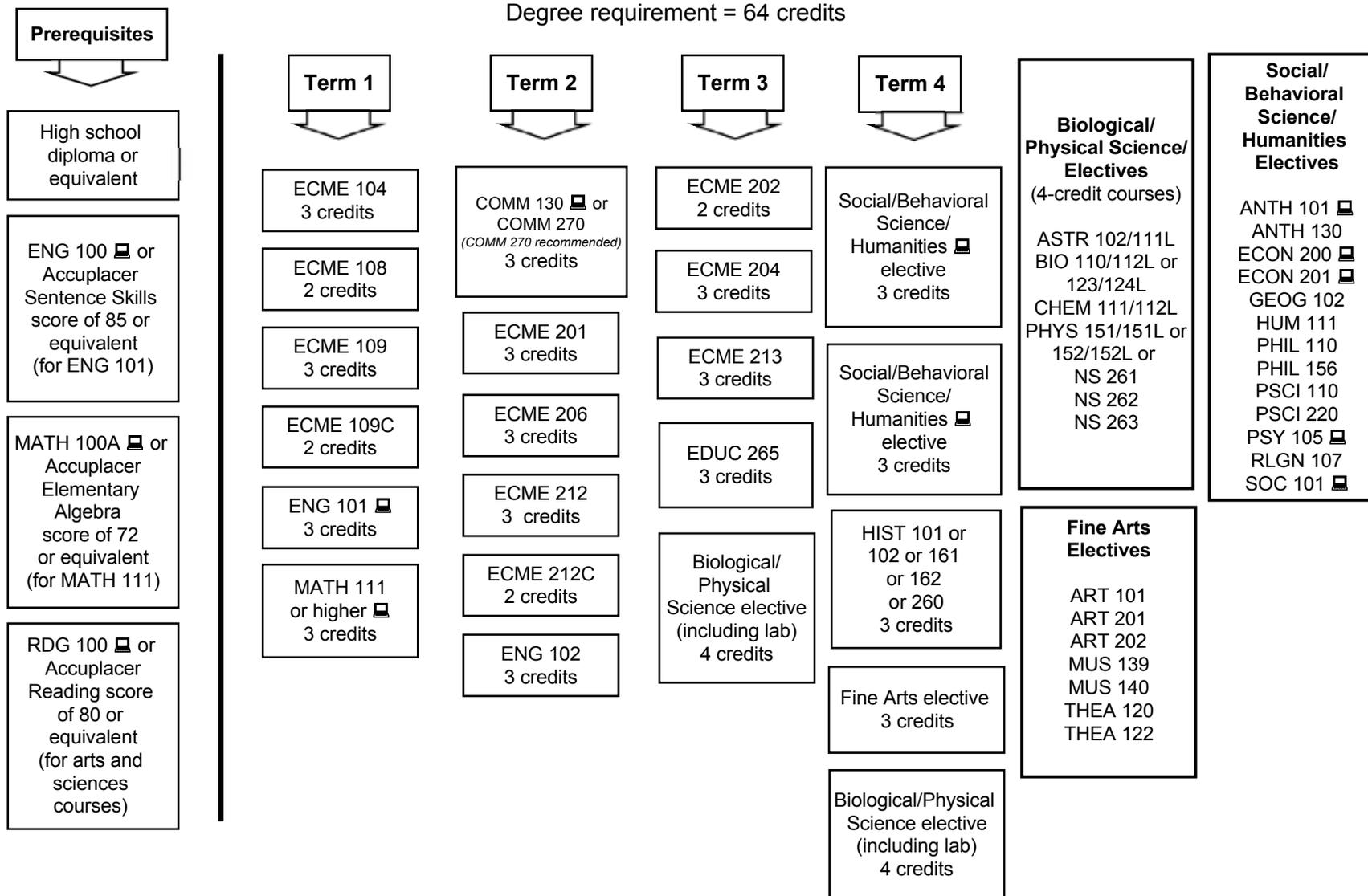
CONTACT INFORMATION

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.

For prerequisites and a recommended course sequence, turn the page... ▶

CHILD, YOUTH & FAMILY DEVELOPMENT (Early Childhood Multicultural Education Concentration) Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirement = 64 credits

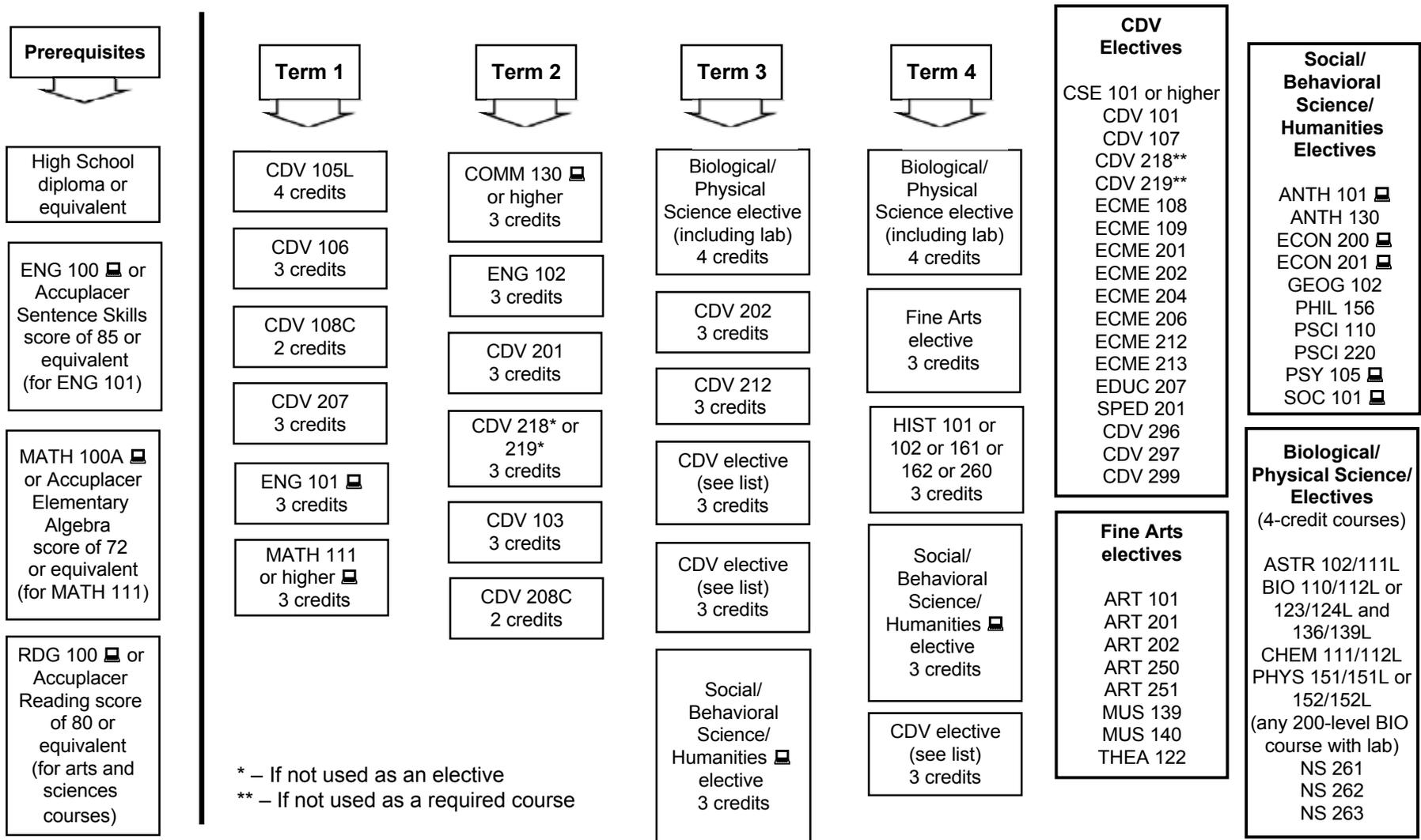


★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

CHILD, YOUTH & FAMILY DEVELOPMENT (Family Studies Concentration) Degree

Recommended Course sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirement = 70 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

• Clinical Laboratory Assistant (CLA) Certificate

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.

Career and Advancement Opportunities

The CNM CLA program has a 100% placement rate for its graduates. CLA graduates seeking employment found jobs in area healthcare 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 103C.

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.

There is a \$11 program fee for CLA 101L, which pays for a nametag, hospital parking permits and preventative lab tests in the case of needle stick or exposure to other bodily fluids. 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 certification prior to the clinical portion of the program.

Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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. Some programs require documentation of a recent health screening from a licensed healthcare 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

Students in the Health, Wellness & Public Safety Division must graduate under the current catalog.

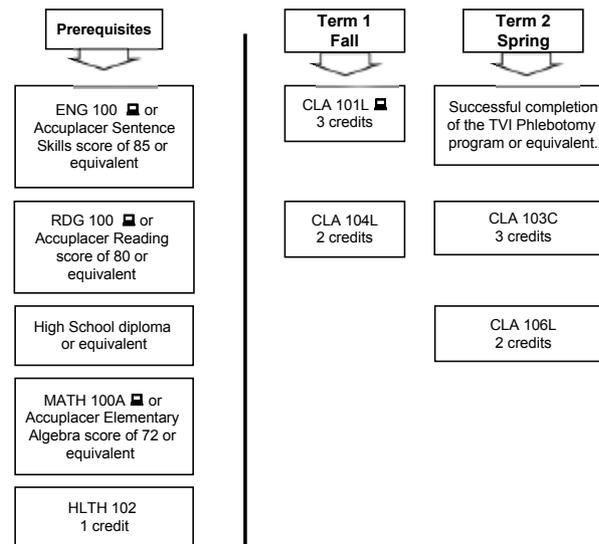
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. 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 concerning this program is available from the program director, Monica Lewis at mlewis@cnm.edu, (505) 224-5068 or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.

Clinical Laboratory Assistant Course Sequence Chart

Recommended Course Sequence
Certificate requirement = 10 credits



– Course available through Distance Learning (see page 49.)

COMPUTER INFORMATION SYSTEMS

Business & Information Technology

- **Associate of Applied Science Degree in Computer Information Systems (Digital Media, Network Administration, Software Systems and Applications and Systems Administration)**
- **Certificate in Computer Information Systems (concentrations in: Digital Media, Network Administration, Software Systems and Applications and Systems Administration)**
- **Skill Sets in Business Applications Design, Cisco Certified Network Associate (CCNA), Database Management, Graphics Specialist, Information Security, Microsoft Certified Systems Administrator (MCSA), Microsoft Certified Systems Engineer (MCSE), Microsoft Office Specialist (MOS) Certification Prep (for Access, Excel, PowerPoint, Word), Microsoft Software Support, Multimedia Development, Red Hat Certified Technician (RHCT), Web Graphics Specialist and Web Site Development**

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 manager, computer operator, network administrator, database management, web design, multimedia and software applications.

Special Requirements

None.

CONTACT INFORMATION

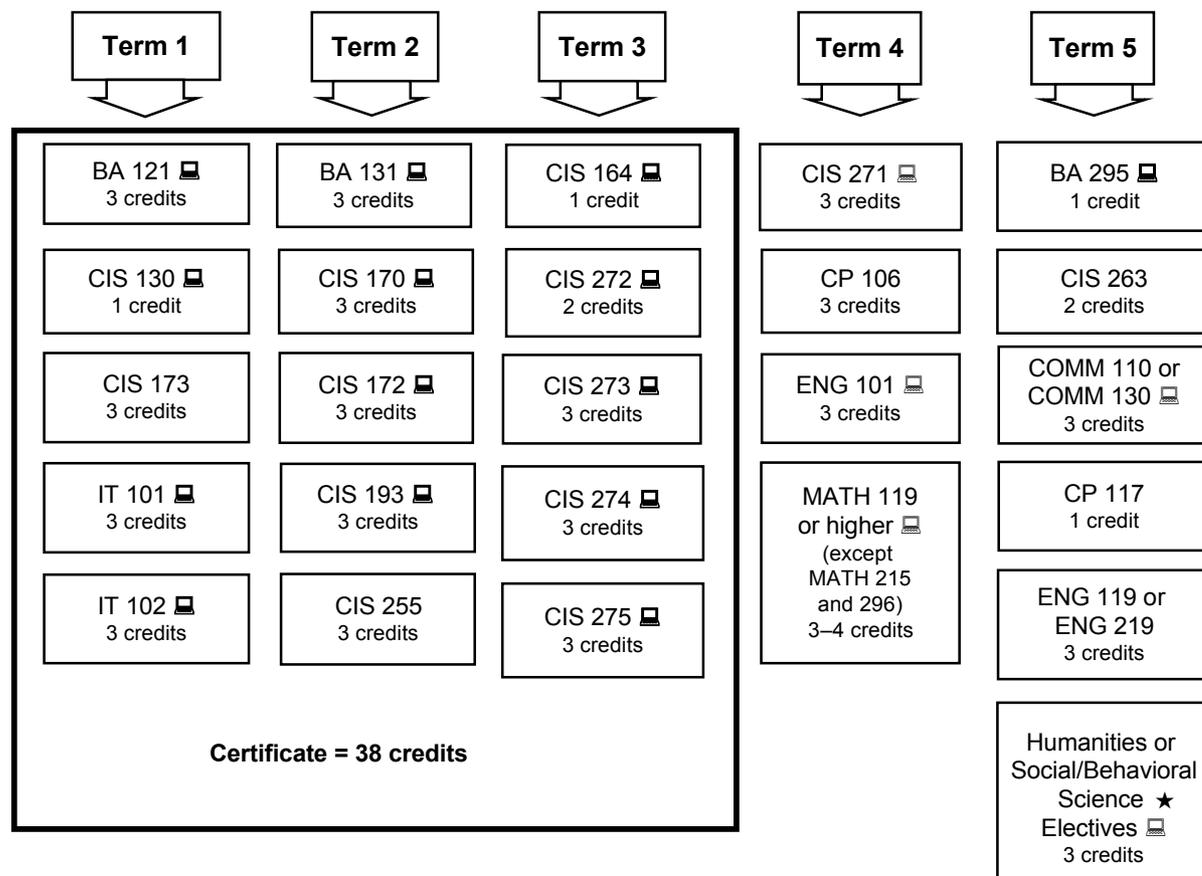
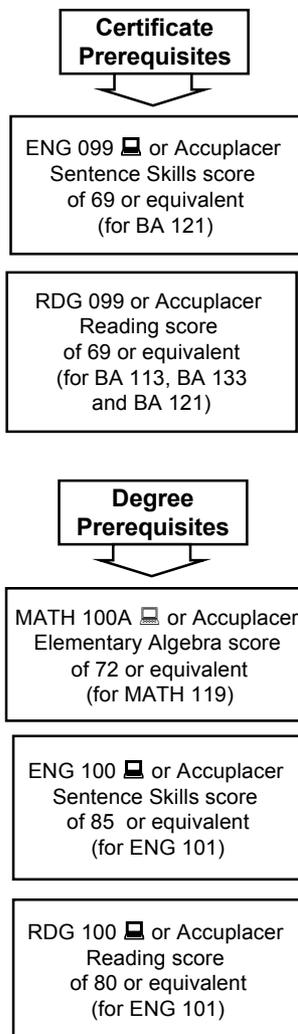
Program information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

COMPUTER INFORMATION SYSTEMS (Digital Media Concentration) Degree and Certificate

Recommended Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 38 credits
 Degree requirement = 63–64 credits



★ See page 269 for courses in this category.

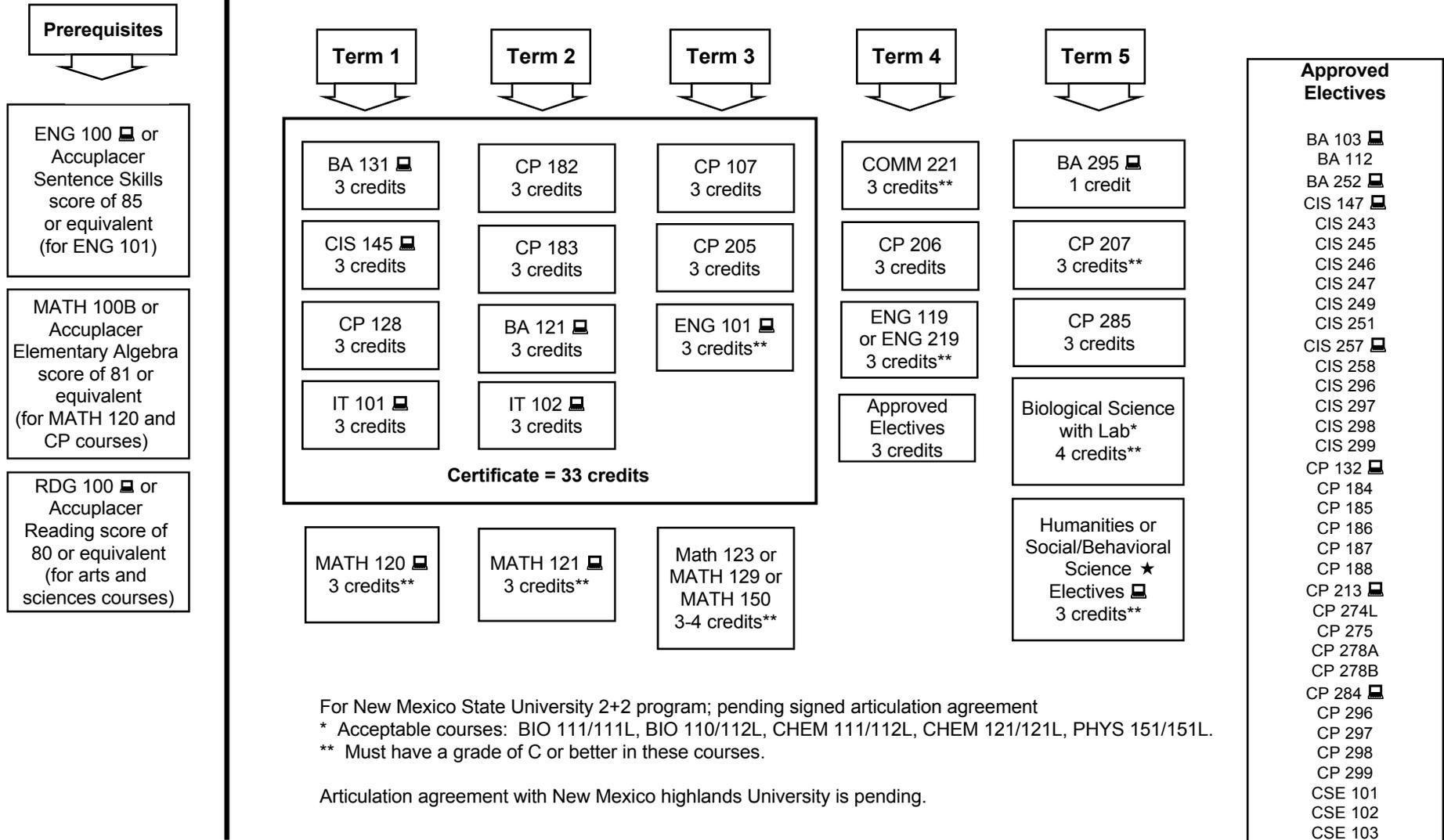
– Course available through Distance Learning (see page 49.)

COMPUTER INFORMATION SYSTEMS (Network Administration Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 33 credits

Degree requirement = 68–69 credits

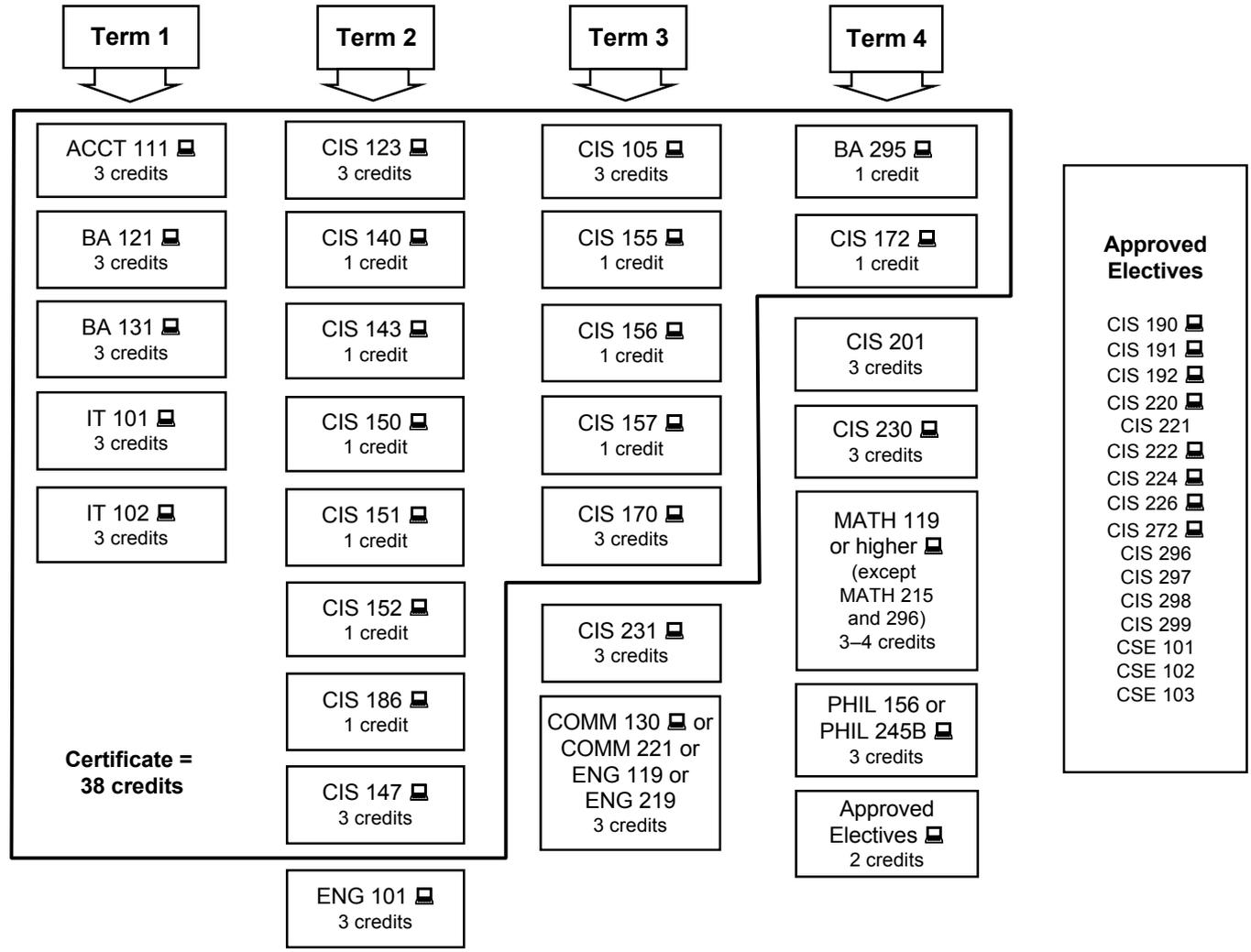
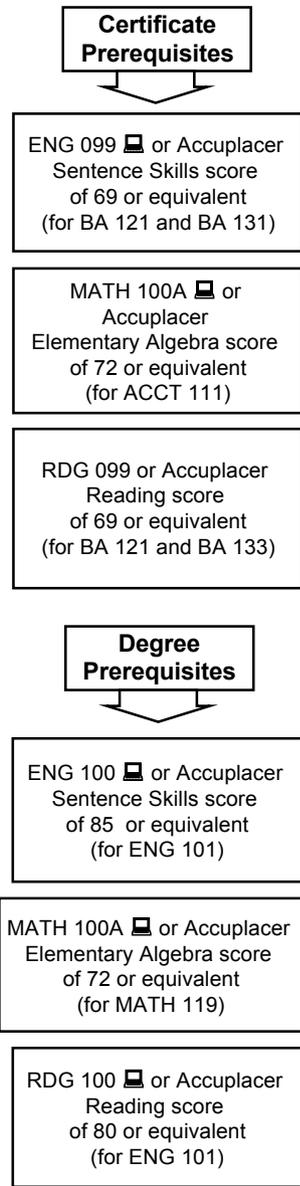


★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

COMPUTER INFORMATION SYSTEMS (Software Systems and Applications Concentration) Degree and Certificate

Recommended Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 38 credits
 Degree requirement = 61–62 credits

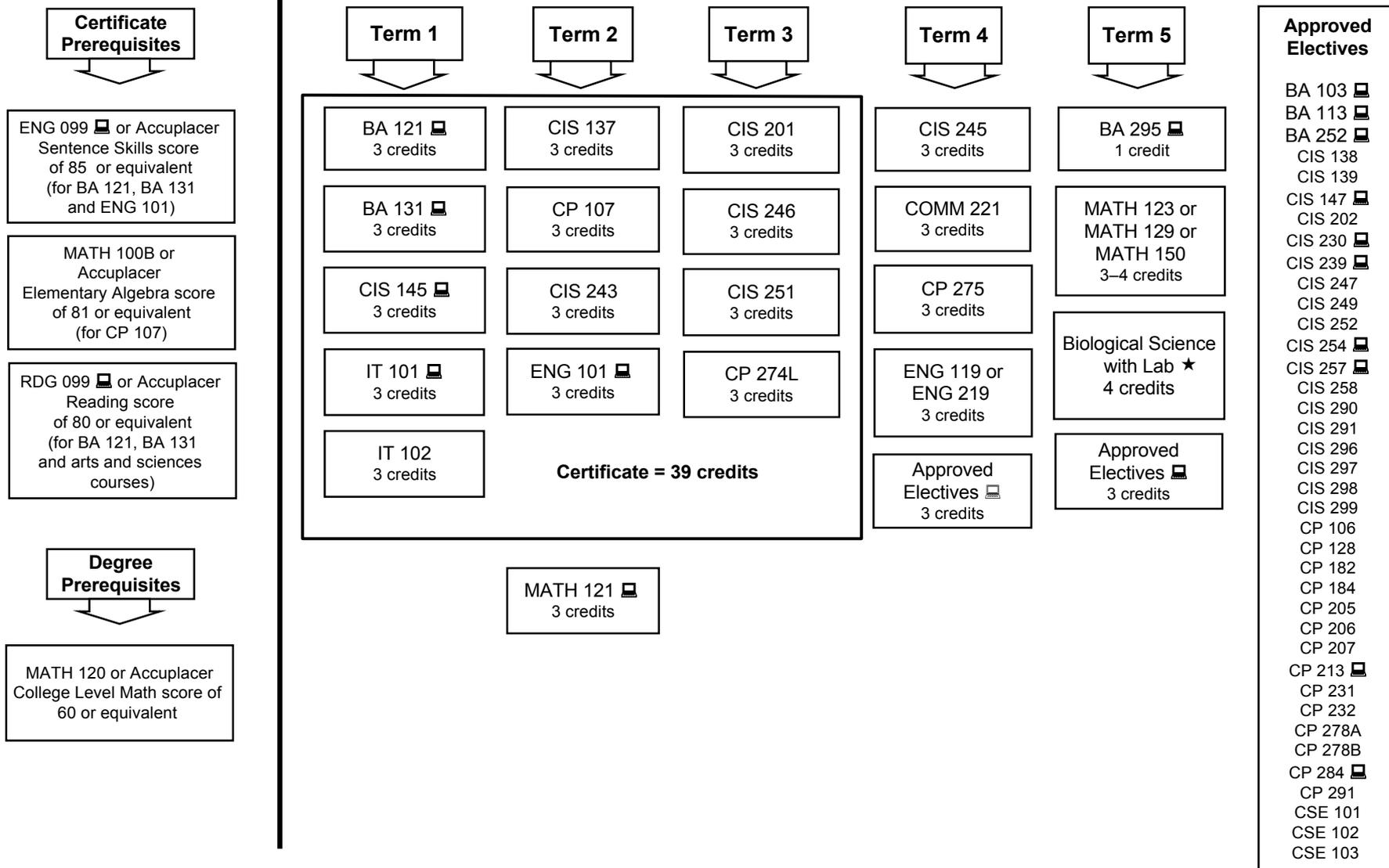


★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

COMPUTER INFORMATION SYSTEMS (Systems Administration Concentration) Degree and Certificate

Recommended Sequence for Full-time Students
 (Part-time students should see an Academic Advisor customize their educational plans.)
 Certificate requirement = 39 credits
 Degree requirement = 68–69 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

A Skill Set is issued by an instructional 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.

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.

Cisco Certified Network Associate (Skill Set)

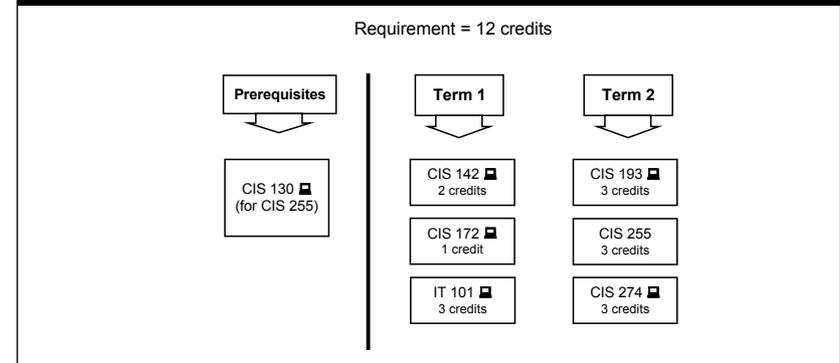
The courses in this skill set prepares the student for the CCNA Certification, to achieve Cisco Routing and Switching certification at Associate Level. CCNA is for individuals who are interested in building a future in networking domain on Cisco products.

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 for small to big enterprises.

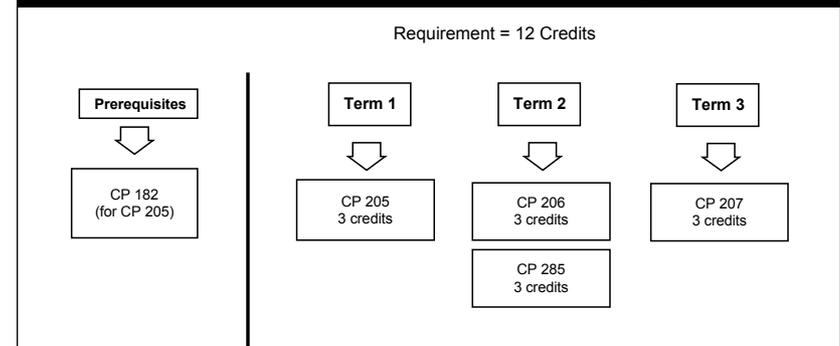
CONTACT INFORMATION

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.

Business Application Design Course Sequence Chart



Cisco Certified Network Associate Course Sequence Chart



Database Management (Skill Set)

This Skill Set is designed as an entry point for job opportunities that include entering, storing, organizing, analyzing and retrieving data. This Skill Set is for the person wanting to develop and manage relational databases using Object-Linking-Embedding (OLE) objects, advanced queries and Structured-Query-Language (SQL). 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.

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.

Information Security (Skill Set)

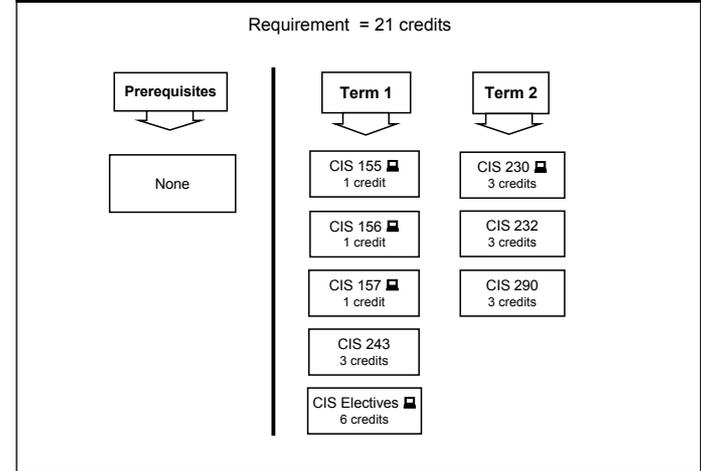
This Skill Set is designed as an entry point for job opportunities that include developing and maintaining computer security. This Skill Set is for the person wanting to learn to protect company data and information from unauthorized access to or unauthorized use of computers and networks. Students need to have strong computer skills combined with a strong knowledge of computer hardware and networks.

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

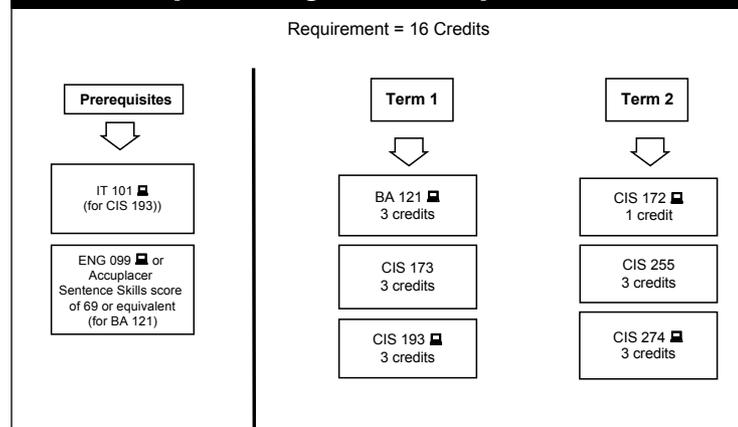
CONTACT INFORMATION

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.

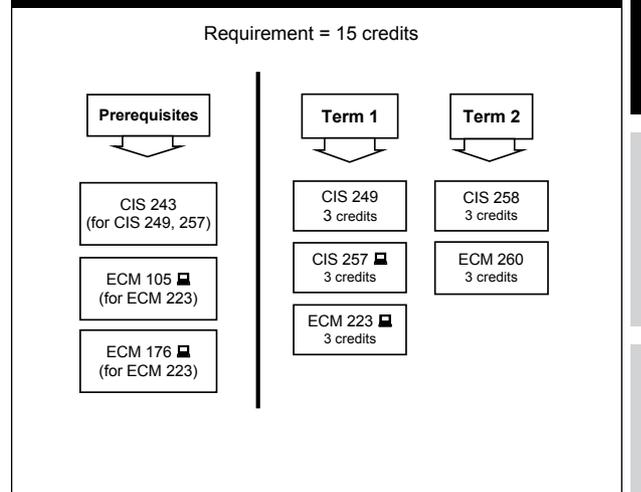
Database Management Course Sequence Chart



Graphics Design Course Sequence Chart



Information Security Course Sequence Chart



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

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. This Skill Set is designed to assist in preparation for MCSA certification and will not result in being MCSA certified. Students need to have strong computer skills. Students without strong computer skills will 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.

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. This Skill Set is designed to assist in preparation for Microsoft Certified Professional (MCP) or MCSE certification and will not result in MCSE certification. Students need to have strong computer skills. Students without these strong computer skills will 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.

Microsoft Office Specialist (MOS) Certification Prep for Access, Excel, PowerPoint and Word (Skill Sets)

These Skill Sets are designed as an entry point for job opportunities in desktop application software. These Skill Sets assist with the preparation of the Microsoft Office Specialist (MOS) examination for Access, Excel, PowerPoint or Word—the globally recognized standard for demonstrating desktop skills and productivity. Students need to have strong computer skills. Students without strong computer skills (specifically Microsoft Windows and file management skills) will need to develop these skills.

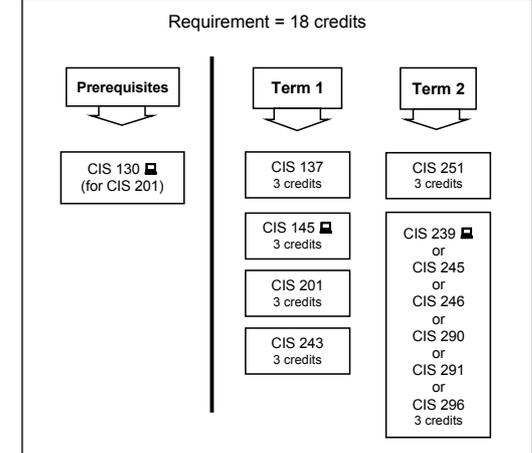
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

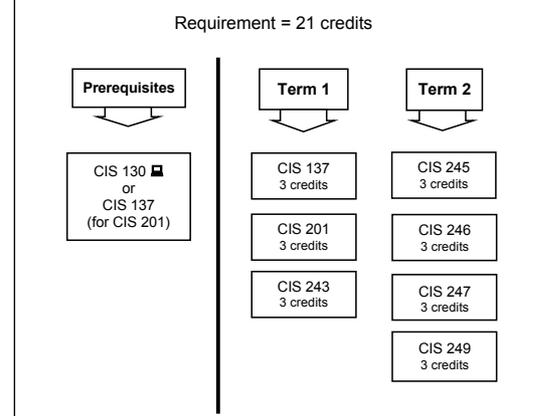
Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

★ See page 269 for courses in this category.

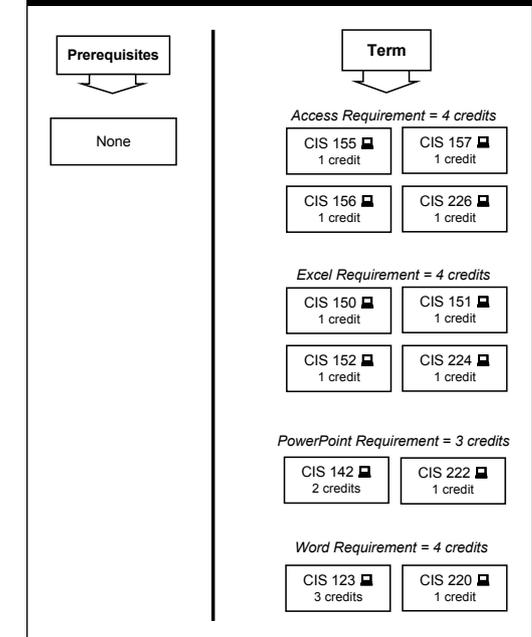
MCSA Course Sequence Chart



MCSE Course Sequence Chart



MOS Course Sequence Chart



 – Course available through Distance Learning (see page 49.)

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 need to 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.

Multimedia Development (Skill Set)

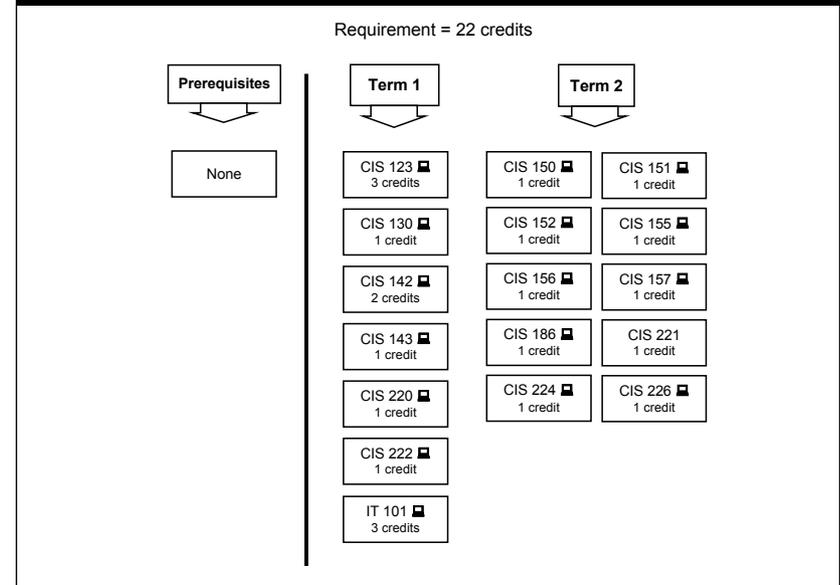
This Skill Set is designed as an entry point for job opportunities that include multimedia development. This Skill Set is for the person wanting to combine interactive multimedia skills with video, sound and the Web. Students need to have strong basic computer skills. Students without strong basic computer skills (specifically Microsoft Windows and file management skills) will need to develop these skills.

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

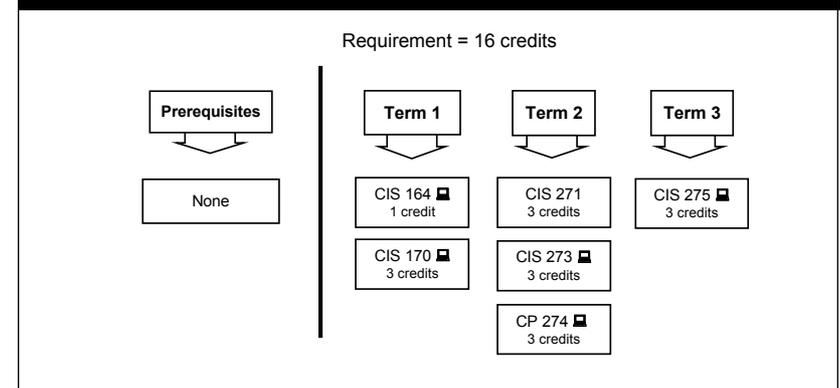
CONTACT INFORMATION

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.

Microsoft Software Support Course Sequence Chart



Multimedia Development Course Sequence Chart



Red Hat Certified Technician (Skill Set)

The courses in this skill set prepares the student 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.

Web Graphics Specialist (Skill Set)

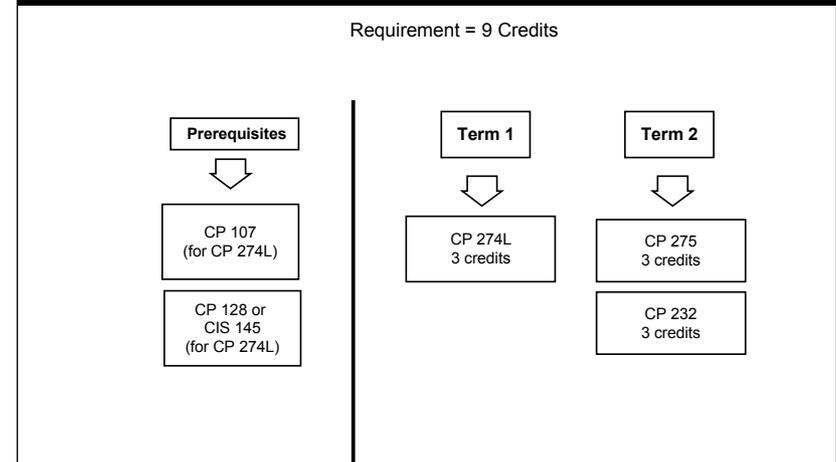
This Skill Set is designed as an entry point for job opportunities that include multimedia development. This Skill Set is for the person wanting to combine coding, digital images and animations using application software to build a Web site. Students need to have strong basic computer skills. Students without strong basic computer skills (specifically Microsoft Windows and file management skills) will need to develop these skills.

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

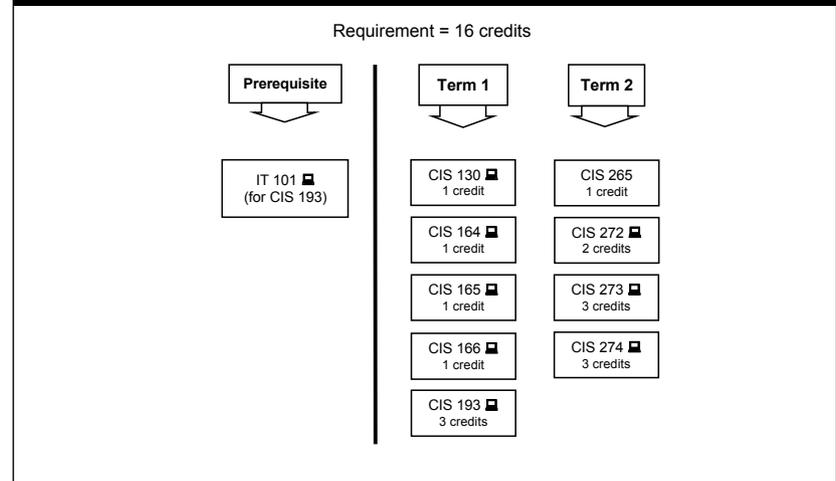
CONTACT INFORMATION

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.

Red Hat Certified Technician Course Sequence Chart



Web Graphics Course Sequence Chart



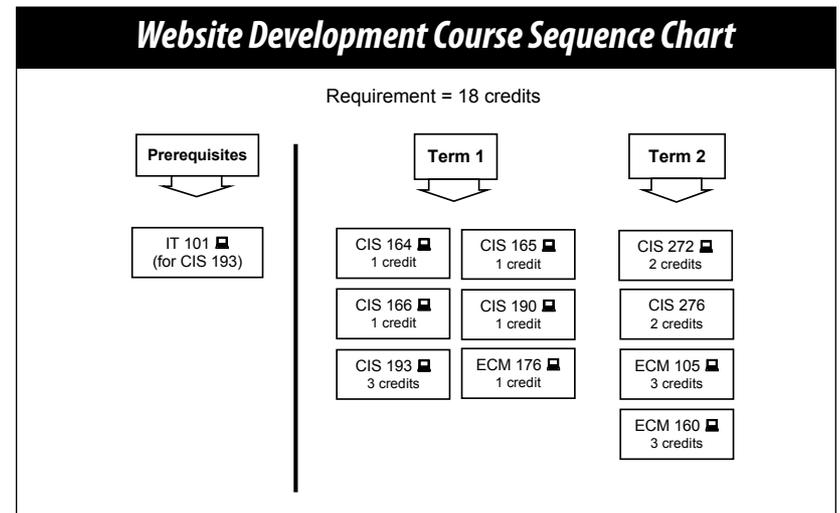
WebSite Development (Skill Set)

This Skill Set is designed as an entry point for job opportunities that include designing a functioning business web site. This Skill Set is for the person wanting to combine web development skills and business marketing skills to set up, organize and operate an online business. Students need to have strong 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 the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- *Associate of Applied Science Degree in Computing Technology (concentrations in Computer Animation or Computer Programming)*
- *Certificate in Computing Technology (concentrations in Computer Animation or Computer Programming)*

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 and C++; Visual Basic and Cobol; networking operating systems; data structures; database concepts (Oracle and SQL); web application programming; and personal computer operating systems. The Animation concentration 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 entry-level business applications programmers or as computer animation technicians.

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.

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) 224-3340, or from Academic Advisement and Career Development at (505) 224-4321.

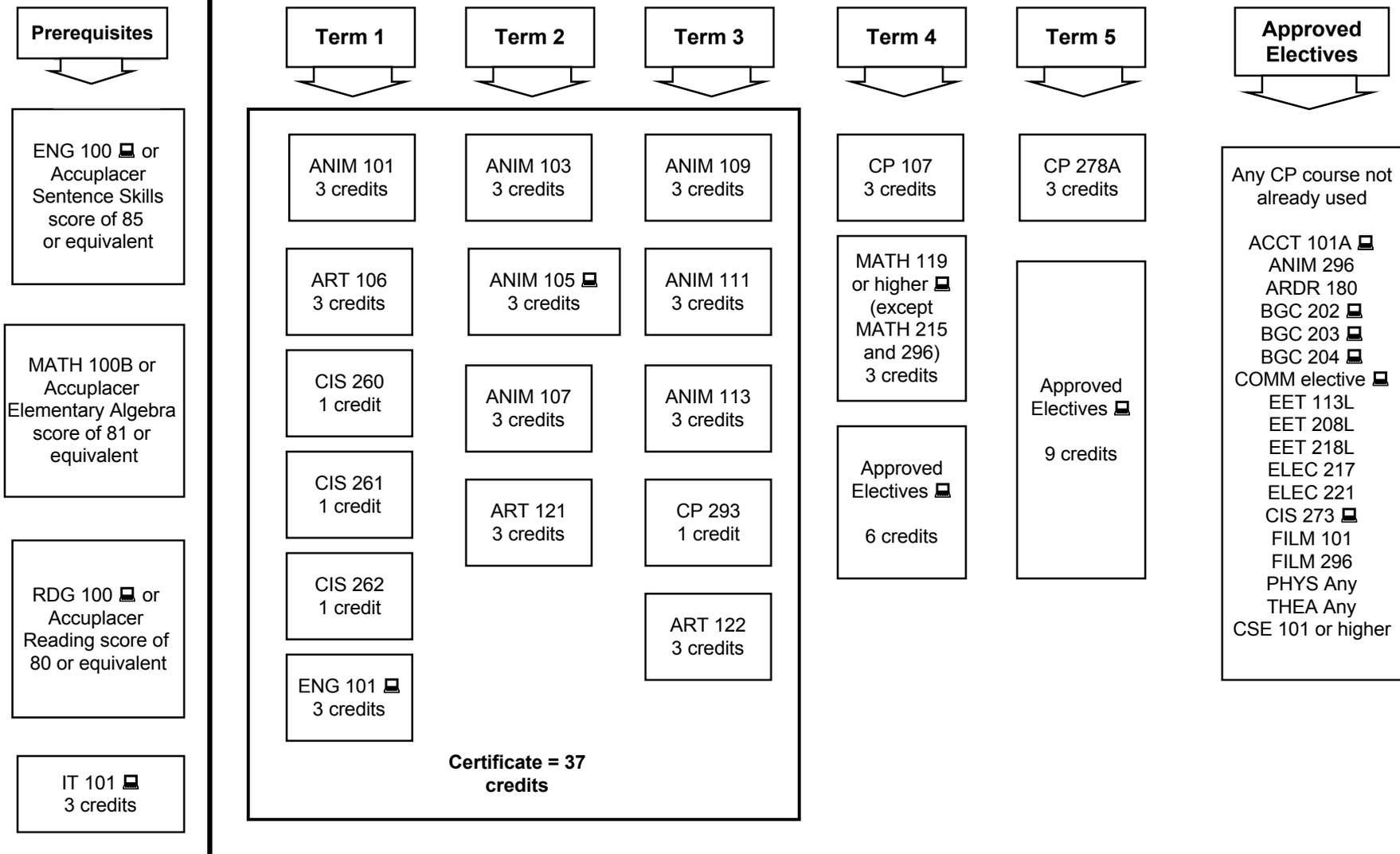


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

COMPUTING TECHNOLOGY (Computer Animation Concentration) Degree and Certificate

Requirements = 61 credits



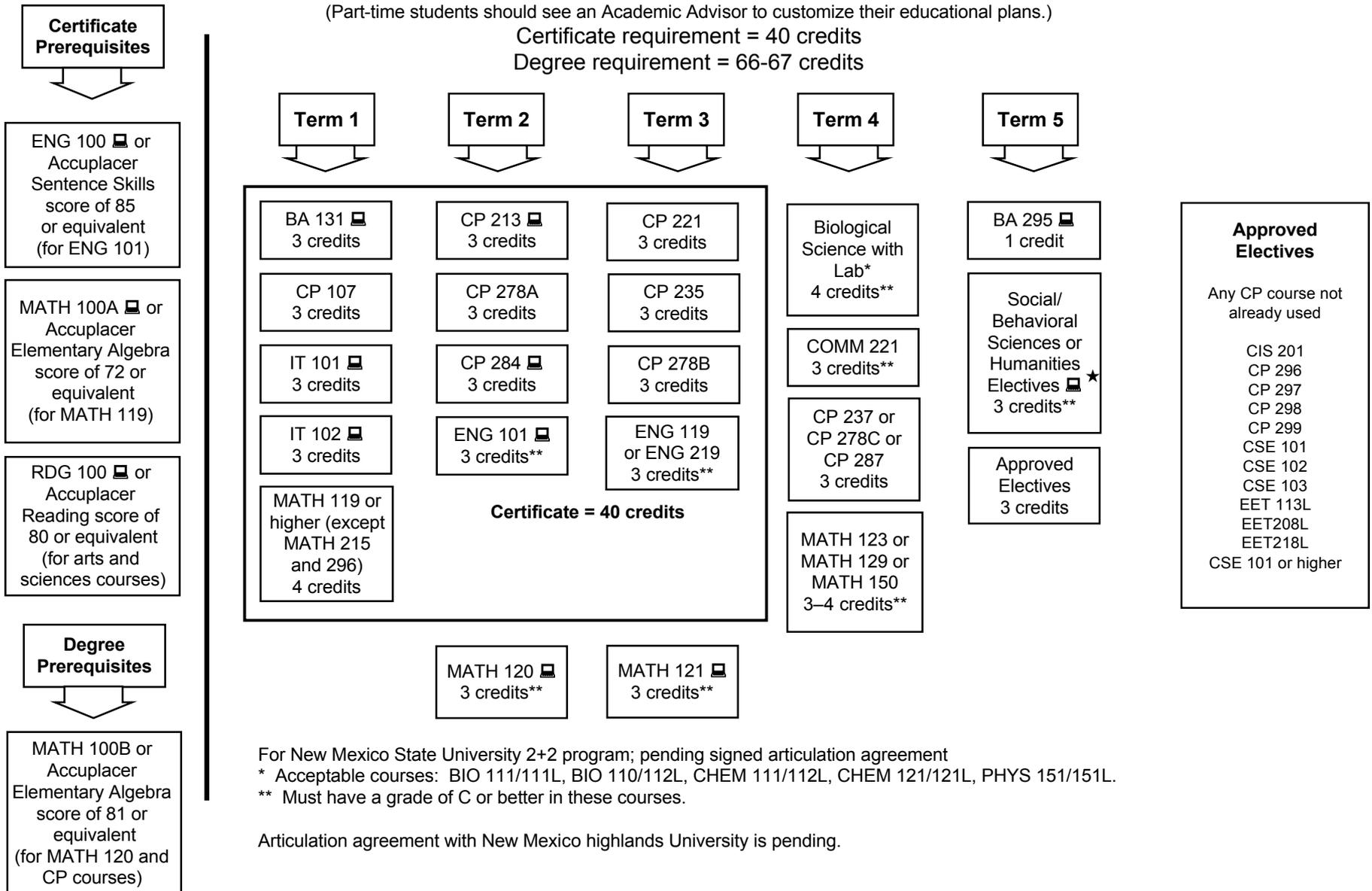
★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

COMPUTING TECHNOLOGY (Computer Programming Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 40 credits
Degree requirement = 66-67 credits



CONSTRUCTION MANAGEMENT TECHNOLOGY

Applied Technologies Division

- *Associate of Applied Science Degree in Construction Management Technology*
- *Skill Sets in Construction Estimator, Construction Scheduling 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

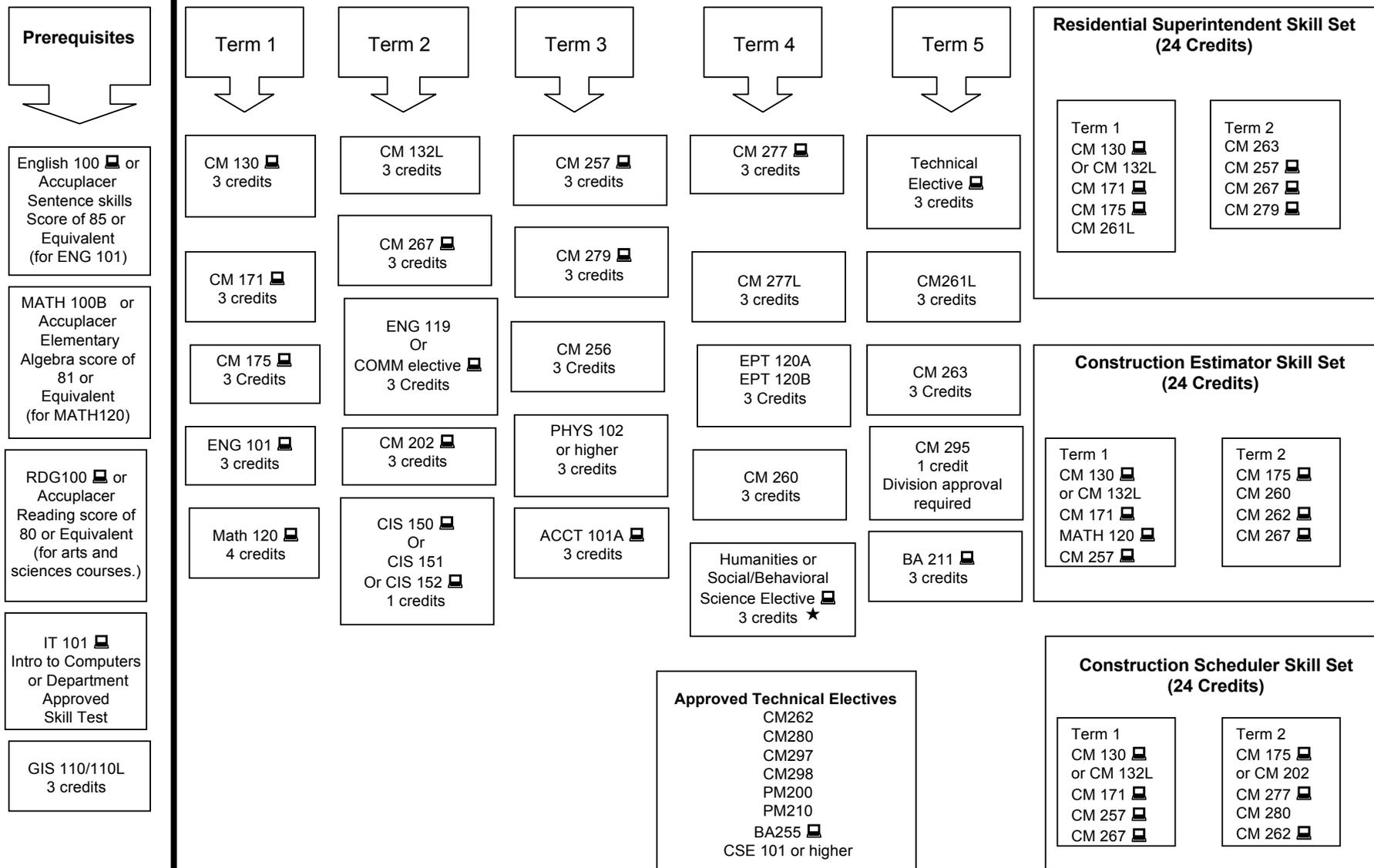
Program information is available from the program director or associate dean at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus).



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

CONSTRUCTION MANAGEMENT TECHNOLOGY Degree

(Also Construction Estimator, Construction Scheduler and Residential Superintendent Skill Sets)



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

CONSTRUCTION TECHNOLOGY

Applied Technologies Division

- *Associate of Applied Science Degree in Construction Technology (Concentration in Electrical or General Construction)*
- *Certificates in Carpentry, Residential Wiring or Electrical Trades*
- *Skill Set in Framing*

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 through the year 2008. Over 90 percent of Carpentry, Residential Wiring and Electrical Trades and Construction Technology graduates in 2002–03 obtained employment.

The AAS degree prepares graduates for faster career advancement and greater earning potential.

Special Requirements

Students are required to purchase textbooks, personal hand tools and personal protective equipment.

CONTACT INFORMATION

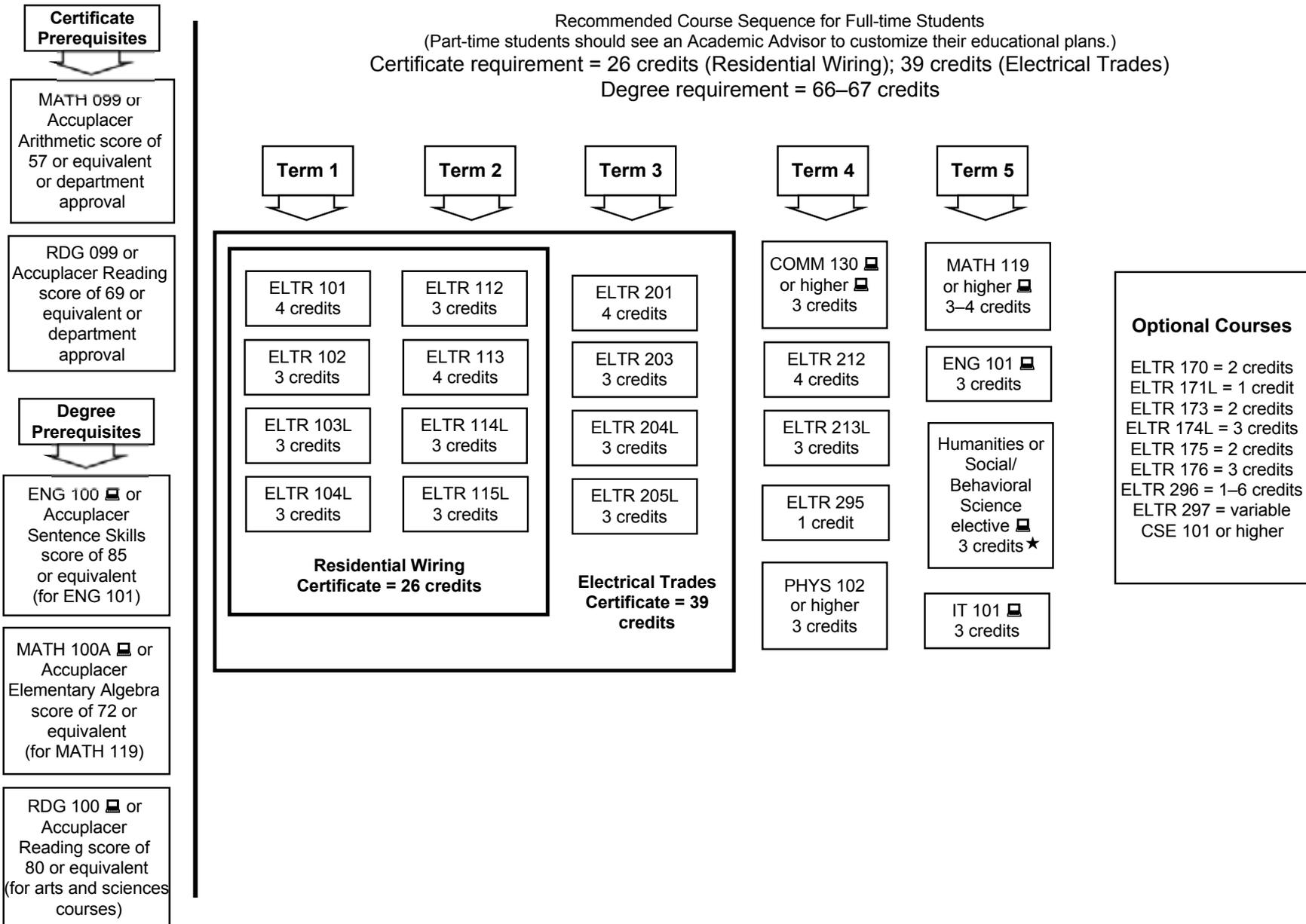
Information about these programs is available from the carpentry chair at (505) 224-3793, the electrical trades chair at (505) 224-3733, the program director at (505) 224-3716, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

CONSTRUCTION TECHNOLOGY (Electrical Concentration) Degree (Also Residential Wiring Certificate and Electrical Trades Certificate)

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)
Certificate requirement = 26 credits (Residential Wiring); 39 credits (Electrical Trades)
Degree requirement = 66–67 credits

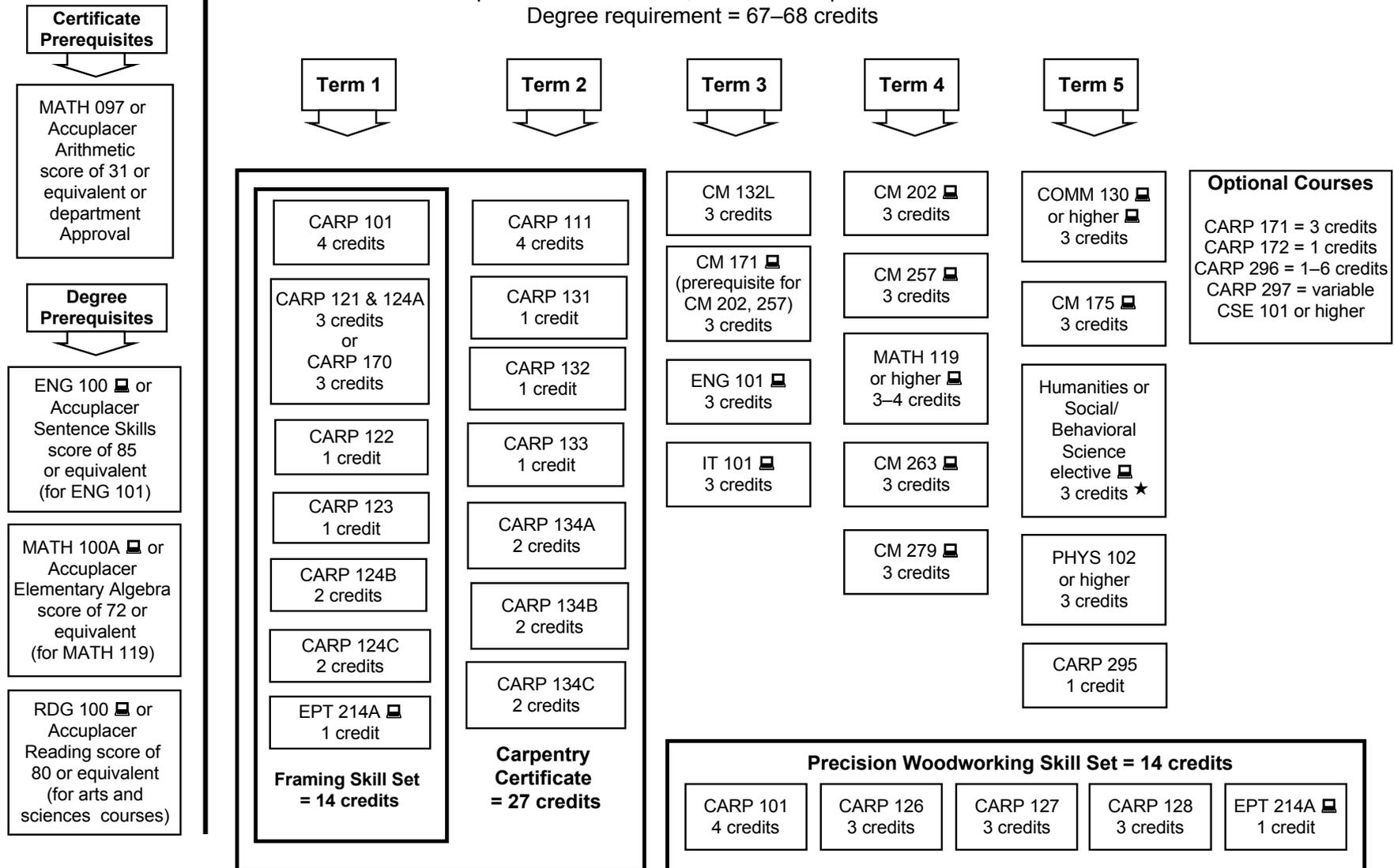


★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

CONSTRUCTION TECHNOLOGY (General Construction Concentration) Degree (Also Carpentry Certificate and Framing Skill Set)

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)
Skill Set requirement = 14 credits; Certificate requirement = 27 credits
Degree requirement = 67–68 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *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 directors, Vickie Ratliff at vratliff@cnm.edu or (505) 224-4122 or Jon Stull, jstull@cnm.edu or (505) 224-5025, or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus).

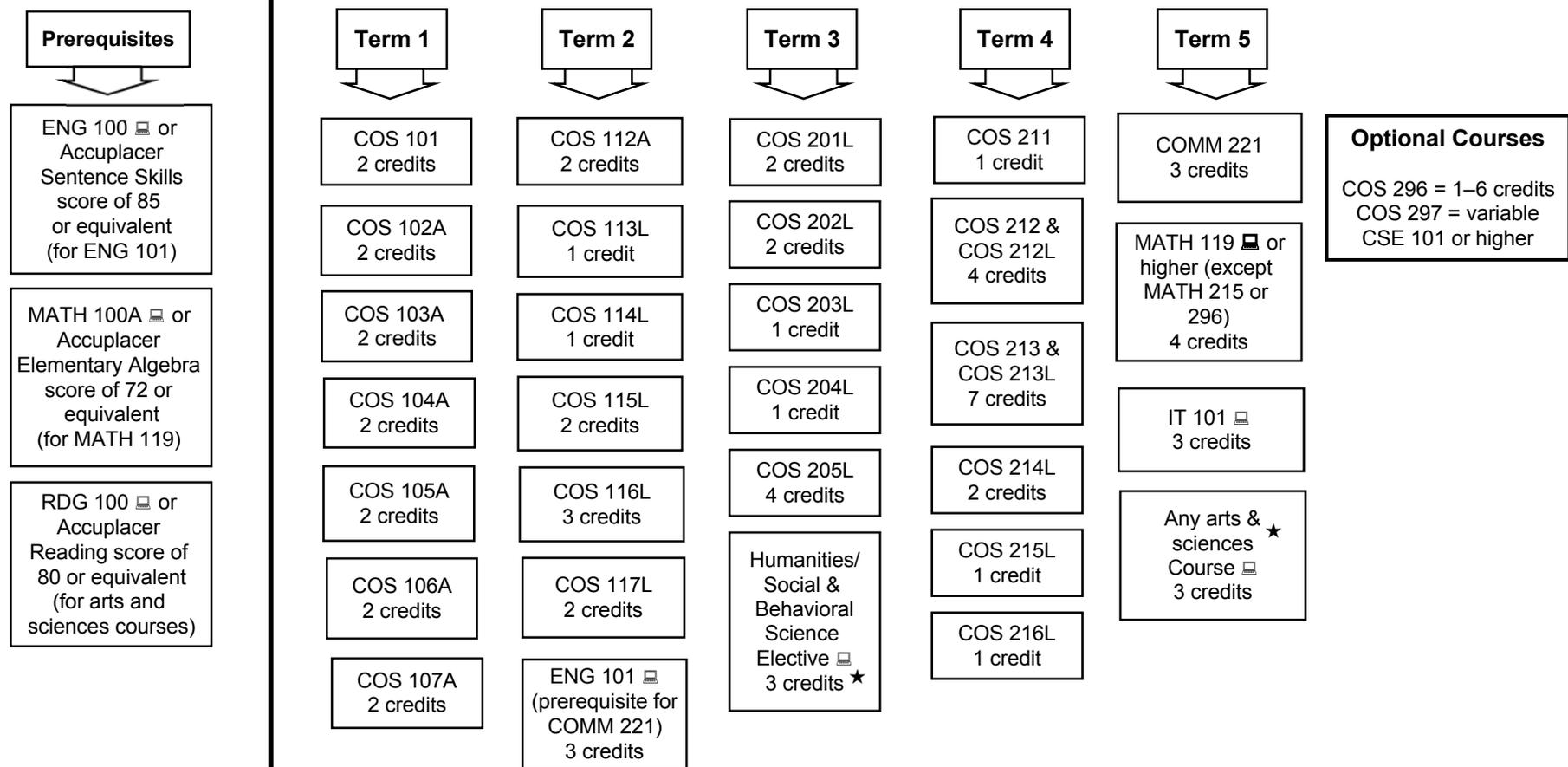


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

COSMETOLOGY Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize your educational plan.)
 Degree requirements = 70 credits



★ See page 269 for courses in this category.

☐ – Course available through Distance Learning (see page 49.)

- **Certificate in Court Reporting**
- **Skill Set in Stenotranscription**

Program Description

Students study machine shorthand theory, computer real-time technology, with an emphasis on speed building and accuracy. The certificate requires the completion of Introduction to Court Reporting (CR 111), Machine Shorthand II (CR 113), Machine Shorthand III (CR 211), Machine Shorthand IV (CR 212) and Machine Shorthand V (CR 213). Introduction to Court Reporting involves instruction on the theory principles used to write steno on the machine. The next four courses contain speed requirements in order to advance to the next level. These courses are open/entry, open/exit.

In addition to the certificate requirements, students are encouraged to enroll in punctuation for court reporters, medical terminology and anatomy, legal terminology, computer-aided transcription, business English, court reporting procedures and a court reporting internship. These courses will provide a well-rounded education for the future court reporter and when offered, will be listed under CR 296.

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.

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 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.

Stenotranscription (Skill Set)

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.

Students receive instruction on the functions and applications of stenotranscription software. This software allows students to transcribe tapes by entering any command that is used by Microsoft Word to produce documents directly from the steno machine. 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.

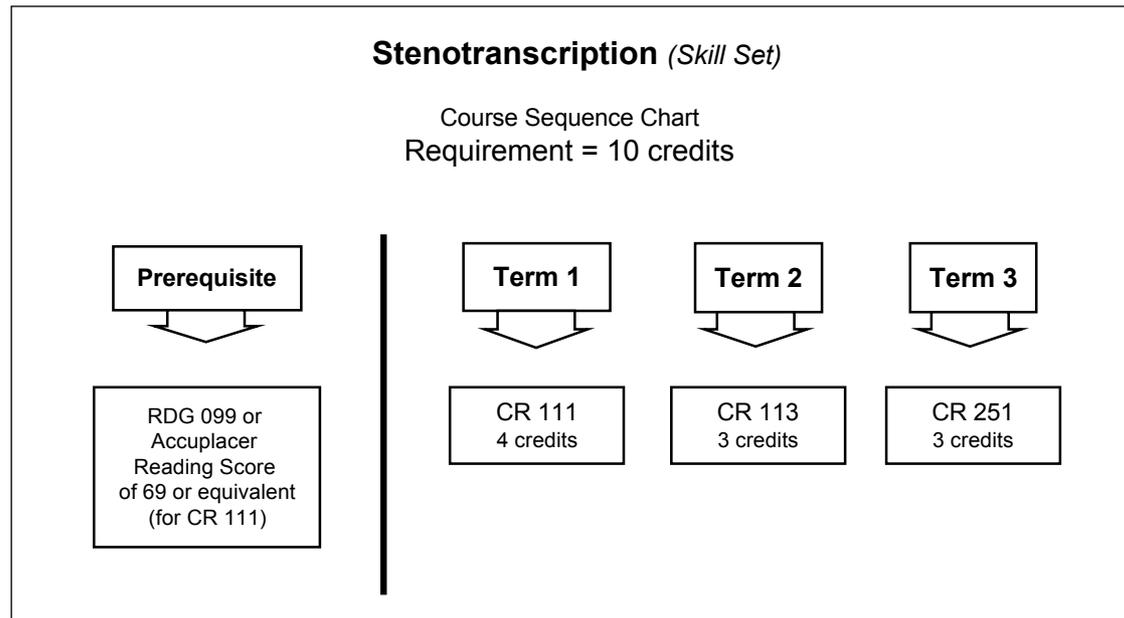
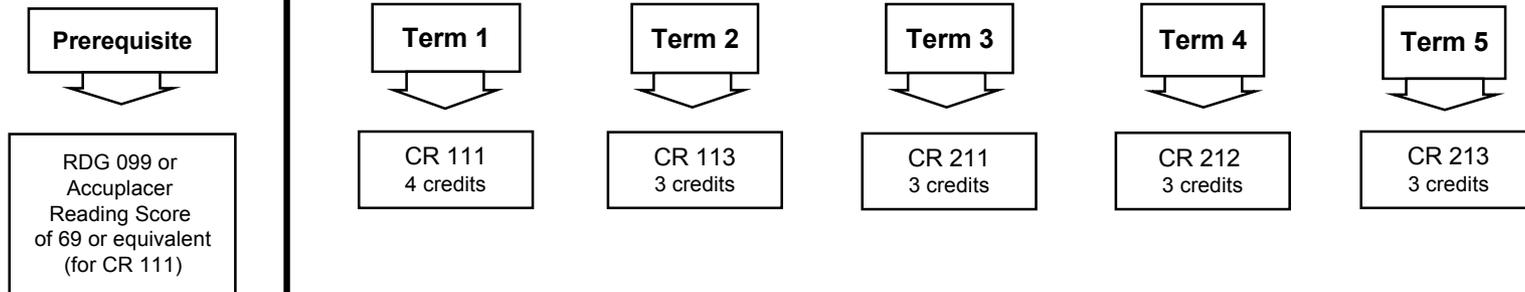
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

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.

COURT REPORTING Certificate (And Stenotranscription Skill Set)

Recommended Course Sequence
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 16 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *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 private security. Classes include classroom study, critical thinking exercises, computer labs and field trips.

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 private 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.

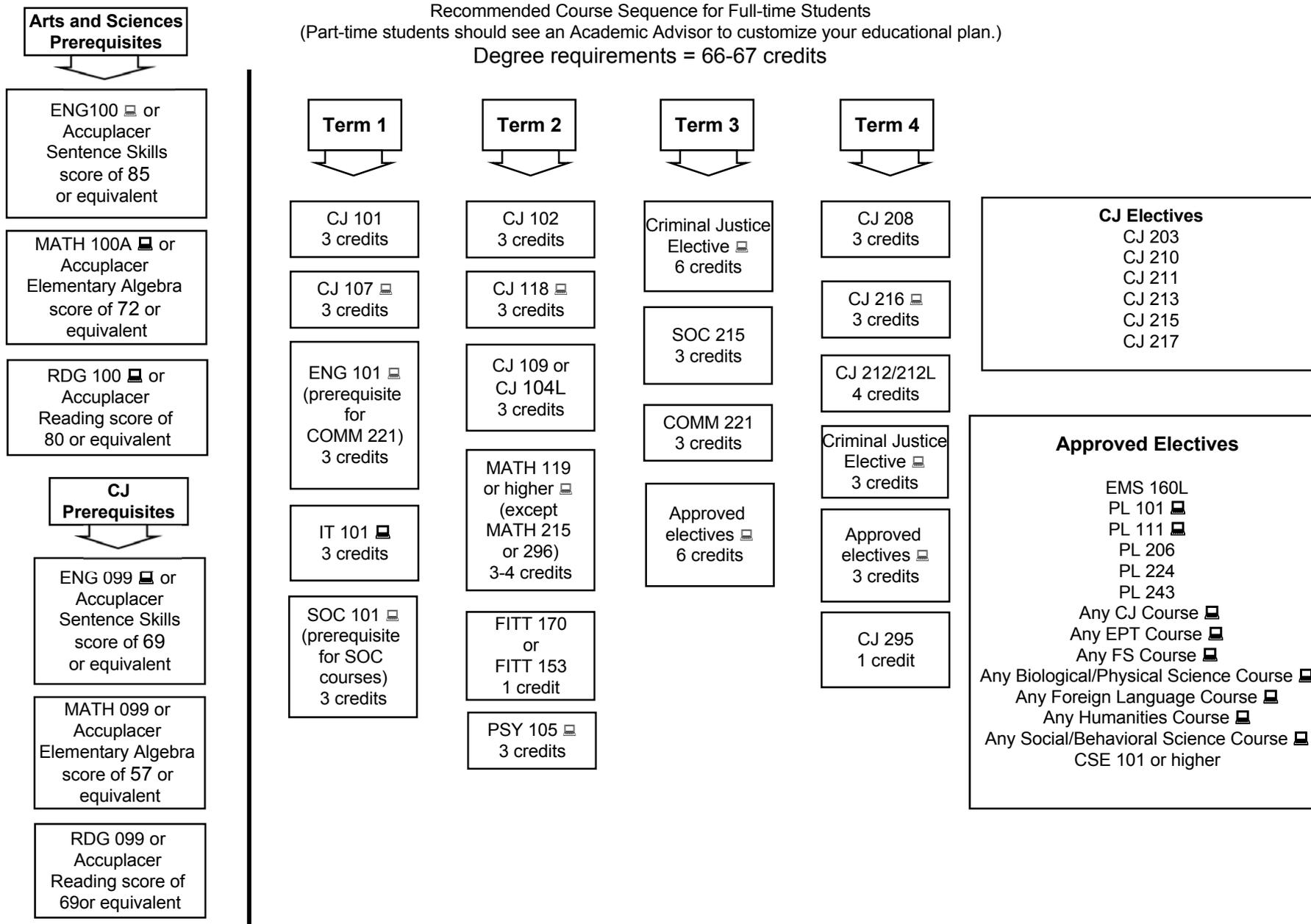


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

CRIMINAL JUSTICE Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize your educational plan.)
 Degree requirements = 66-67 credits



★ See page 269 for courses in this category.

☐ – Course available through Distance Learning (see page 49.)

- *Associate of Applied Science Degree in Culinary Arts*
- *Certificates in Baking (see page 80) and Professional Cooking (see page 239)*

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 or cooks, managers or chefs and opportunities from the fast food industry to fine dining establishments.

Special Requirements

Students are required to purchase at least four sets of chef's uniforms, dining room service attire, textbooks and tools. Students 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 and should be able to lift 30 pounds. Students must be able to stand for the duration of laboratory classes.

CONTACT INFORMATION

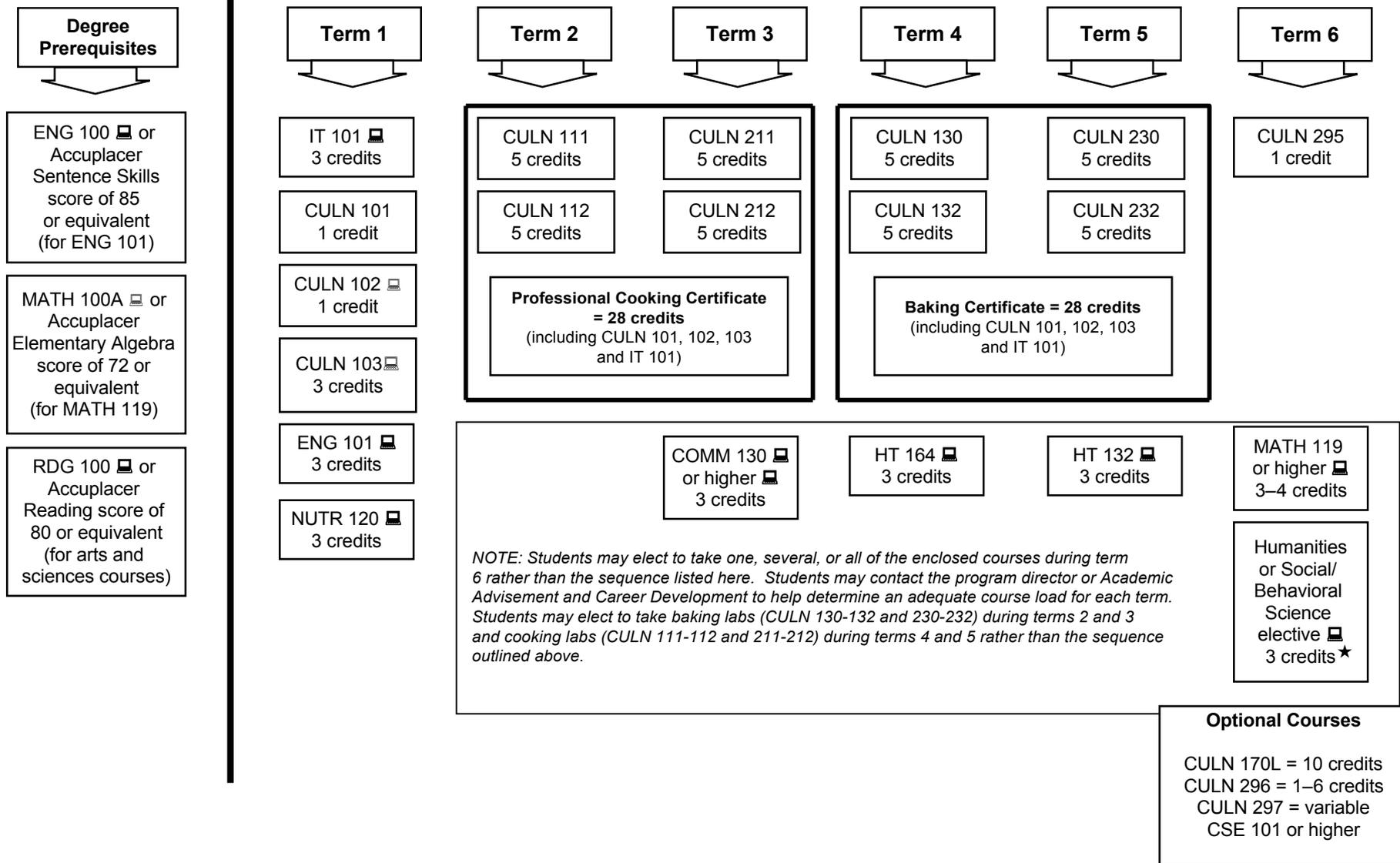
Information about these programs is available from the program director at (505) 224-3758, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

CULINARY ARTS Degree

Recommended Sequence for Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirements = 70-71 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *Dental Assisting Certificate*

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 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.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 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 may be required to undergo routine drug screening and a criminal background check 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 healthcare 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 \$70 program fee is charged in DA 102L to cover the cost of a lab coat, two sets of scrubs, DA pin, a pair of safety goggles, nametags and preventative lab tests in case of a needle stick or other exposure to bodily fluids. A \$30 program fee is charged in DA 108L, 118L, 120C and 124C for dosimeter badges. In addition, students must purchase their own textbooks.

Graduation Policy

Health, Wellness & Public Safety Division students must graduate under the current catalog.

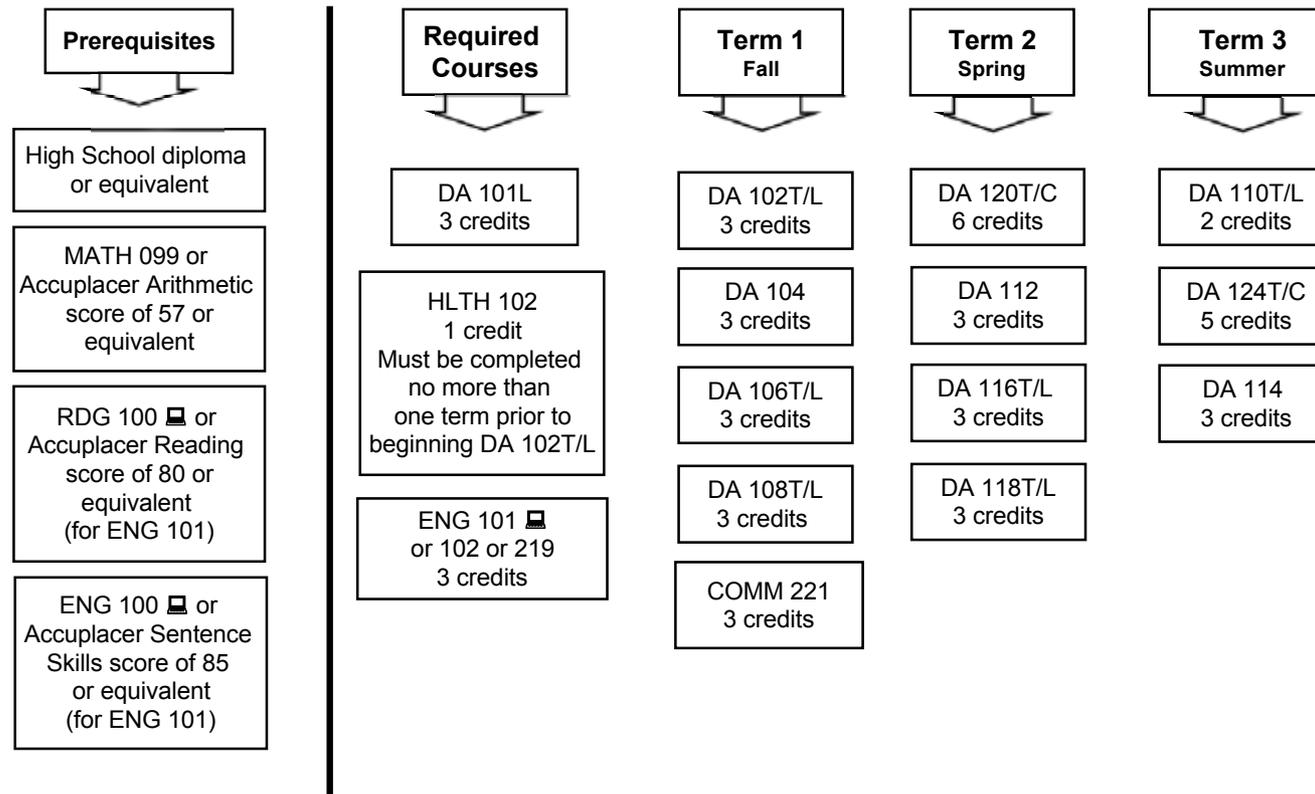
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. 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 sessions are scheduled regularly. For dates and times, applicants may contact the Health, Wellness & Public Safety Division information line at (505) 224-4161; program director, Melanie Upshaw, at (505) 224-5247, mupshaw@cnm.edu; or Academic Advisement and Career Development at (505) 224-4321.

DENTAL ASSISTING Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 44 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

DEVELOPMENTAL EDUCATION

Division of Educational & Career Advancement

Description

Students in Introductory classes develop basic academic, work and life skills necessary for success. Developmental courses are numbered 090 through 100. 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 (CSCI) 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

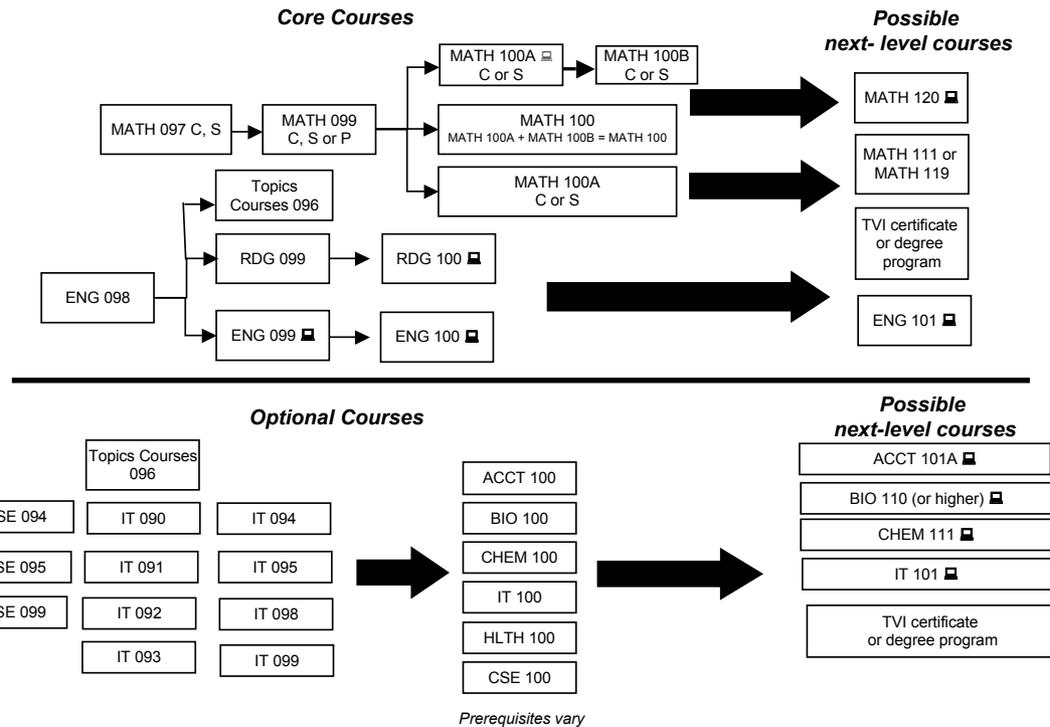
Developmental courses prepare students for arts and sciences or vocational majors, for self-improvement or for career enhancement.

CONTACT INFORMATION

Program information is available by contacting the Division of Educational & Career Advancement, Max Salazar Hall, room 570, at (505) 224-3939.

Developmental Education Course Options

Course placement and order are based on Accuplacer test results.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

DIAGNOSTIC MEDICAL SONOGRAPHY

Health, Wellness & Public Safety Division

• Associate of Science Degree in Diagnostic Medical Sonography

Program Description

Diagnostic Medical Sonography 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 healthcare 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

Selection of students is based on a petition process. 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. Due to limited capacity of the DMS program, petitions for admission will not be accepted in fall 2006. Entry requirements and the selection process are in the process of being revised; information will be available on the DMS program website (www.cnm.edu) and at program information sessions (224-4161) beginning in early fall 2006. Students who have petitioned and given a start date will begin the program as scheduled.

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 healthcare 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. 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 may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 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. 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 \$60 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.

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

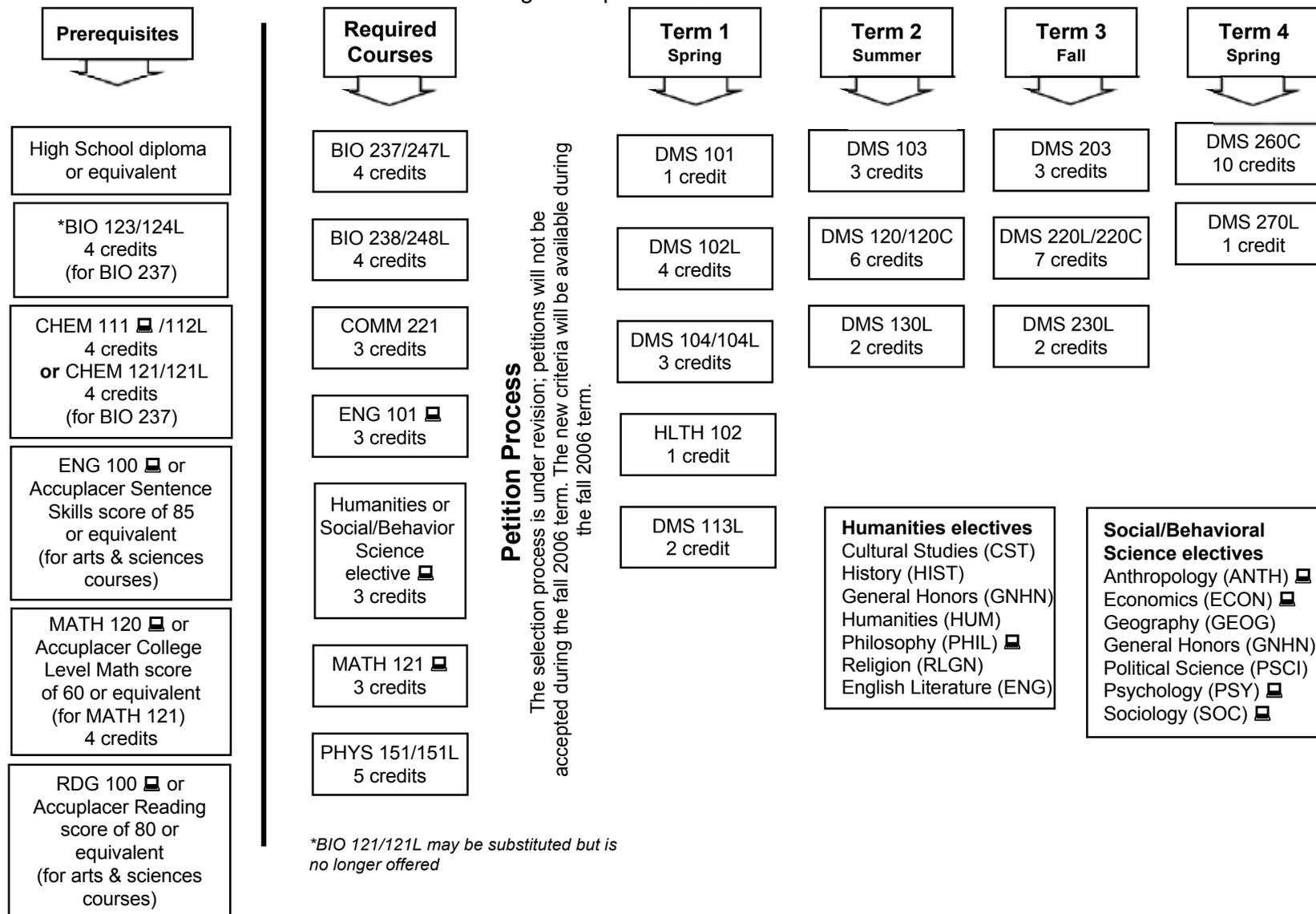
For more information, contact Darlene Blagg, Program Director, at dblagg@cnm.edu or (505) 224-4127, or Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

DIAGNOSTIC MEDICAL SONOGRAPHY Degree

Recommended Course Sequence for Full-time Students
Degree requirement = 70 credits



Petition Process
The selection process is under revision; petitions will not be accepted during the fall 2006 term. The new criteria will be available during the fall 2006 term.

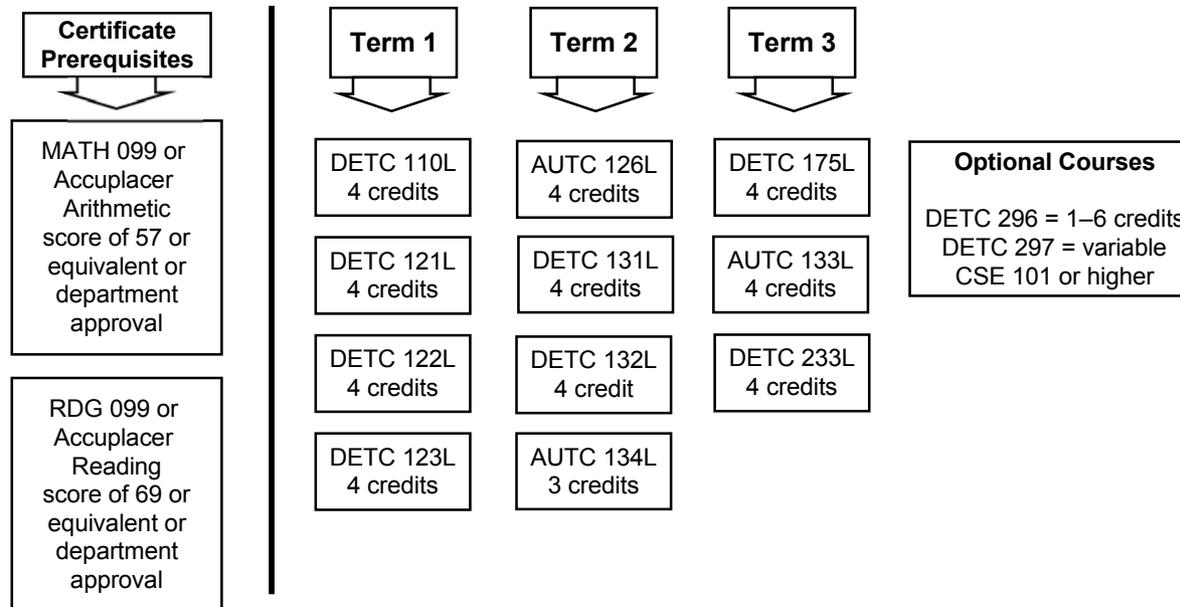
*BIO 121/121L may be substituted but is no longer offered

DIESEL EQUIPMENT TECHNOLOGY Certificate

Applied Technologies Division

For additional information about this certificate and how it fits within the Transportation Technology Associate of Applied Science Degree see page 257.

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 43 credits



– Course available through Distance Learning (see page 49.)

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS.)

- **Associate of Applied Science Degree in E-Commerce**
- **Certificate in E-Commerce**

Program Description

The Web has created a new, electronic, global economy where businesses are being transformed. E-Commerce is a pathway to managing and conducting online business in a global economy. The E-Commerce program provides opportunities to combine business knowledge and skills with Internet skills to develop and manage a web-based business or add Web-based applications to an existing business. Students will focus on understanding, designing, managing and maintaining online business processes that include management, marketing, sales, customer service, payment systems, database design and management.

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 Web design, Web management and operating your own Web business. Many students are currently employed and take the courses to improve their computer and business skills.

Special Requirements

Basic familiarity with Microsoft Windows is required. Students without computer skills in Microsoft Windows may need to take additional courses to develop those skills.

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.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

E-COMMERCE Degree and Certificate

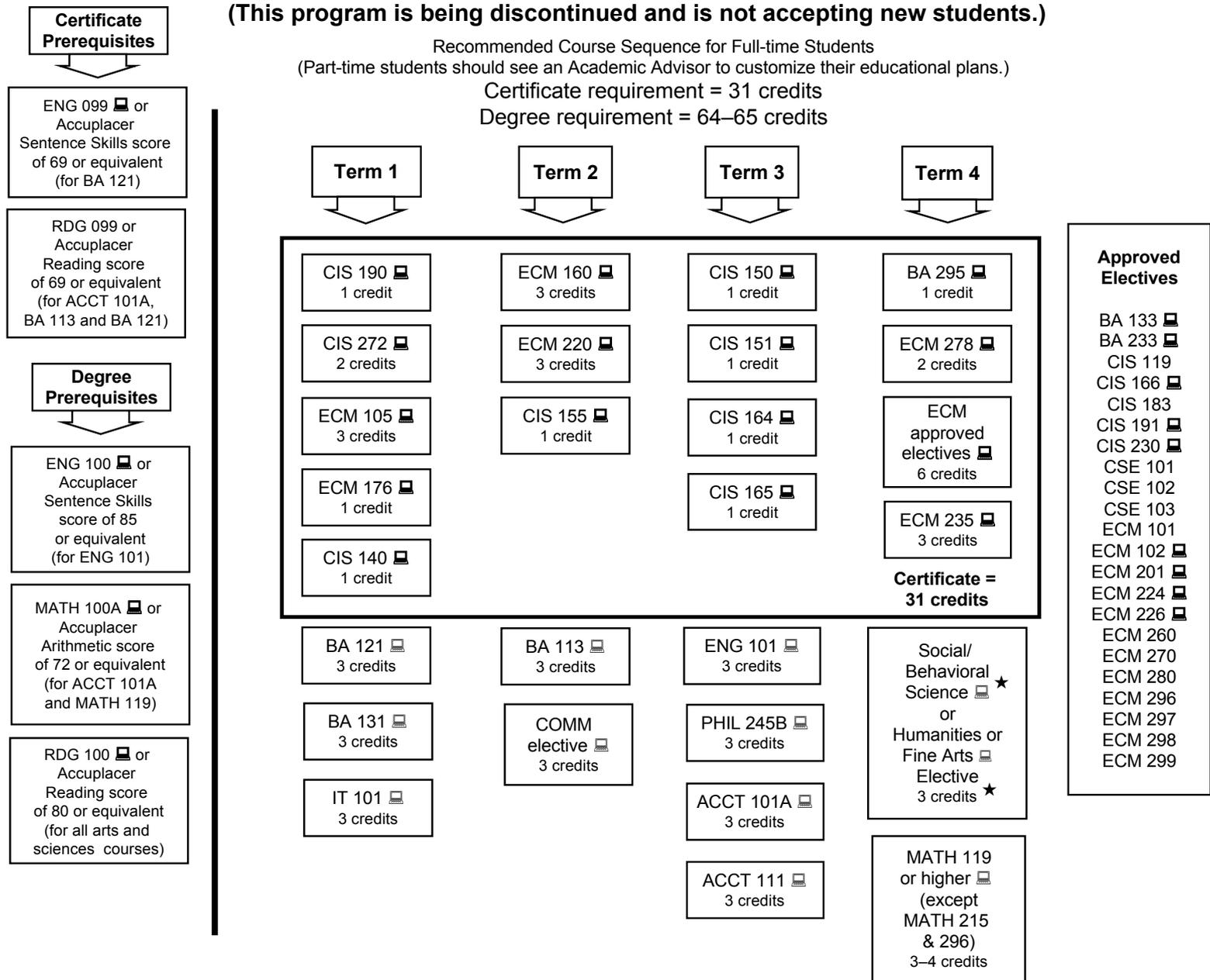
(This program is being discontinued and is not accepting new students.)

Recommended Course Sequence for Full-time Students

(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 31 credits

Degree requirement = 64–65 credits



★ See page 269 for courses in this category.

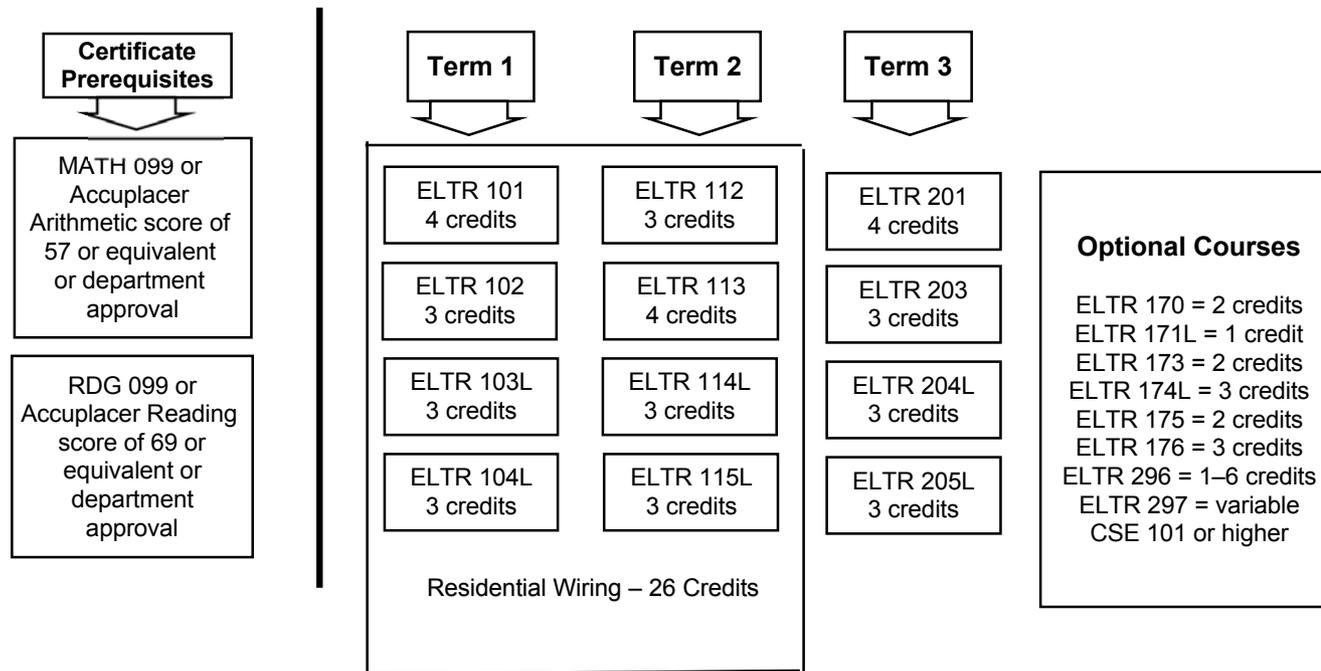
– Course available through Distance Learning (see page 49.)

ELECTRICAL TRADES Certificate (Also Residential Wiring Certificate)

Applied Technologies Division

For additional information about this certificate and how it fits within the Construction Technology Associate of Applied Science Degree see page 115.

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 39 credits



– Course available through Distance Learning (see page 49.)

ELECTRONICS ENGINEERING TECHNOLOGY

Applied Technologies Division

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS.)

• *Associate of Applied Science Degree in Electronics Engineering Technology*

Program Description

The Electronics Engineering Technology (EET) program emphasizes the application of scientific and engineering methods along with related technical skills to support engineering activity in research, development, production, maintenance and operation.

This program represents a rigorous, engineering-type course of study. Lectures, laboratory work and homework provide the basis for the skills necessary for employment in a broad occupational area at levels between the electronics technician and the electrical engineer.

The Electronics Engineering Technology associate degree program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Career and Advancement Opportunities

Jobs are available as an entry-level electronic technicians or engineering assistants. EET is typically with companies whose primary activity is manufacturing and production and research and development. EET course credits will transfer to New Mexico State University or other schools offering bachelor's degrees in engineering technology.

Special Requirements

Students applying for this program should be seriously interested in the study of electronics with emphasis on mathematics and science and should have high standards of excellence.

CONTACT INFORMATION

Additional program information is available from the program chair at (505) 224-5919, or from Academic Advisement and Career Development at (505) 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus).



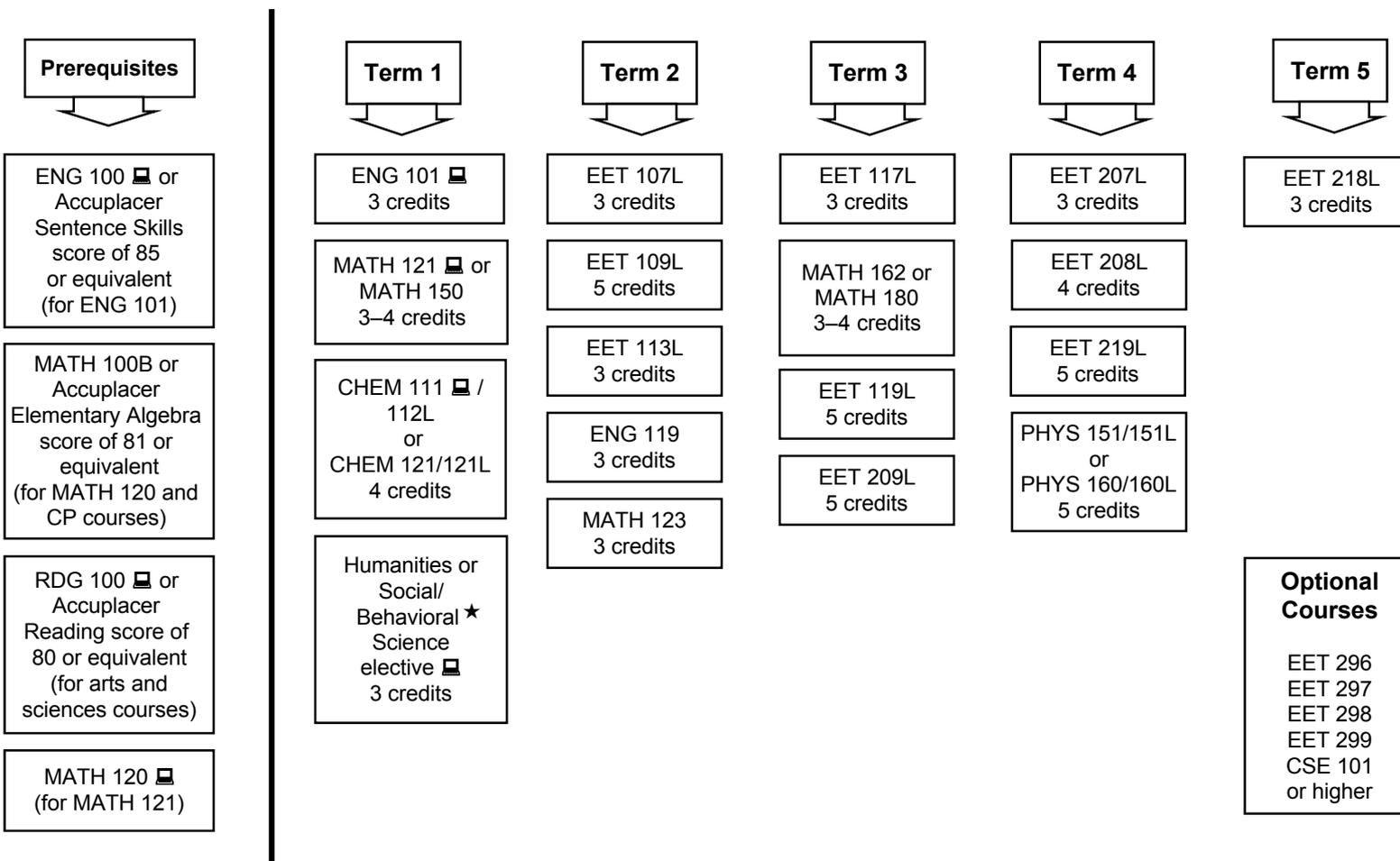
Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

ELECTRONICS ENGINEERING TECHNOLOGY Degree

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS.)

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Degree requirement = 66–68 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

ELECTRONICS TECHNOLOGY

Applied Technologies Division

- *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 Consumer Electronics provide students troubleshooting techniques for digital video and audio equipment and 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.

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) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.



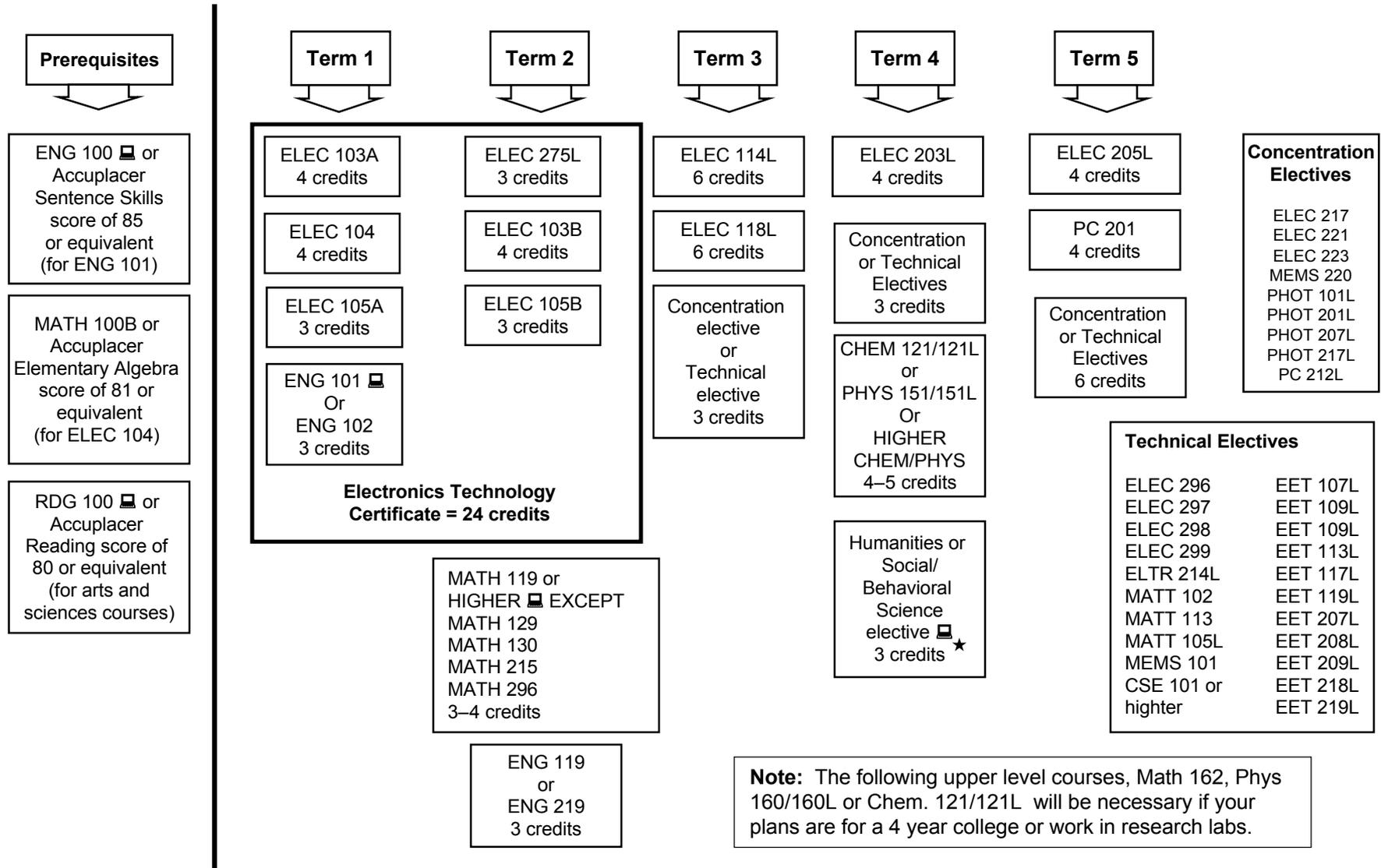
Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

ELECTRONICS TECHNOLOGY (General Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

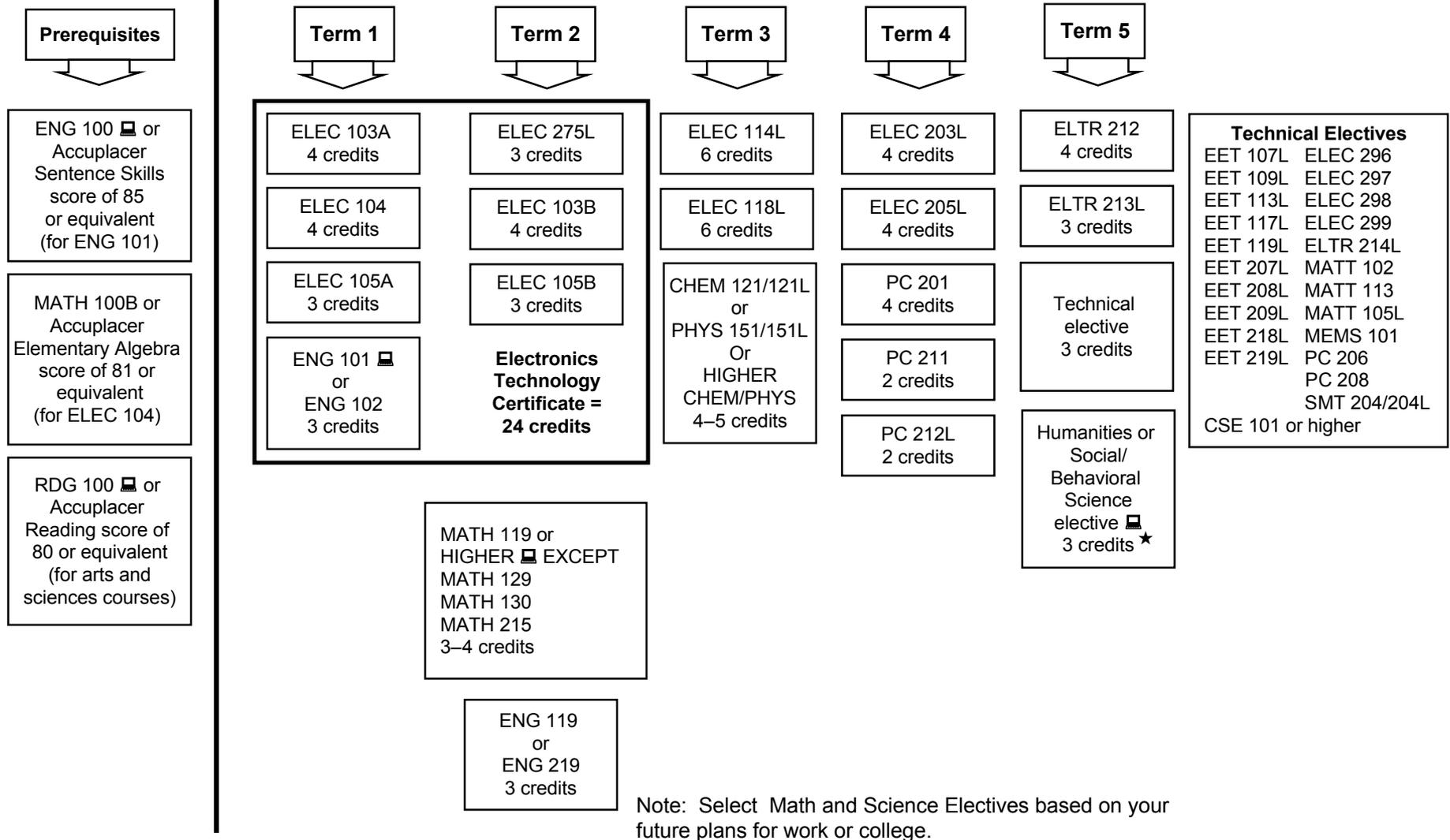
Certificate requirement = 24 credits

Degree requirement = 73–75 credits



ELECTRONICS TECHNOLOGY (Process Control Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 24 credits
 Degree requirement = 75-77 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• 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 89).

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 70 and 71 for the recommended course sequence for each Alternative Teacher Licensure area.

Special Requirements

All courses required for graduation must be taken for a traditional grade of A, B or C. 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.

Students preparing for Alternative Teacher Licensure must undergo formal application and interview process with the Education Department. Students preparing for Alternative Teacher Licensure must maintain a 3.0 GPA and fulfill all the requirements for Teacher Licensure as specified by the State Public Education Department.

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.

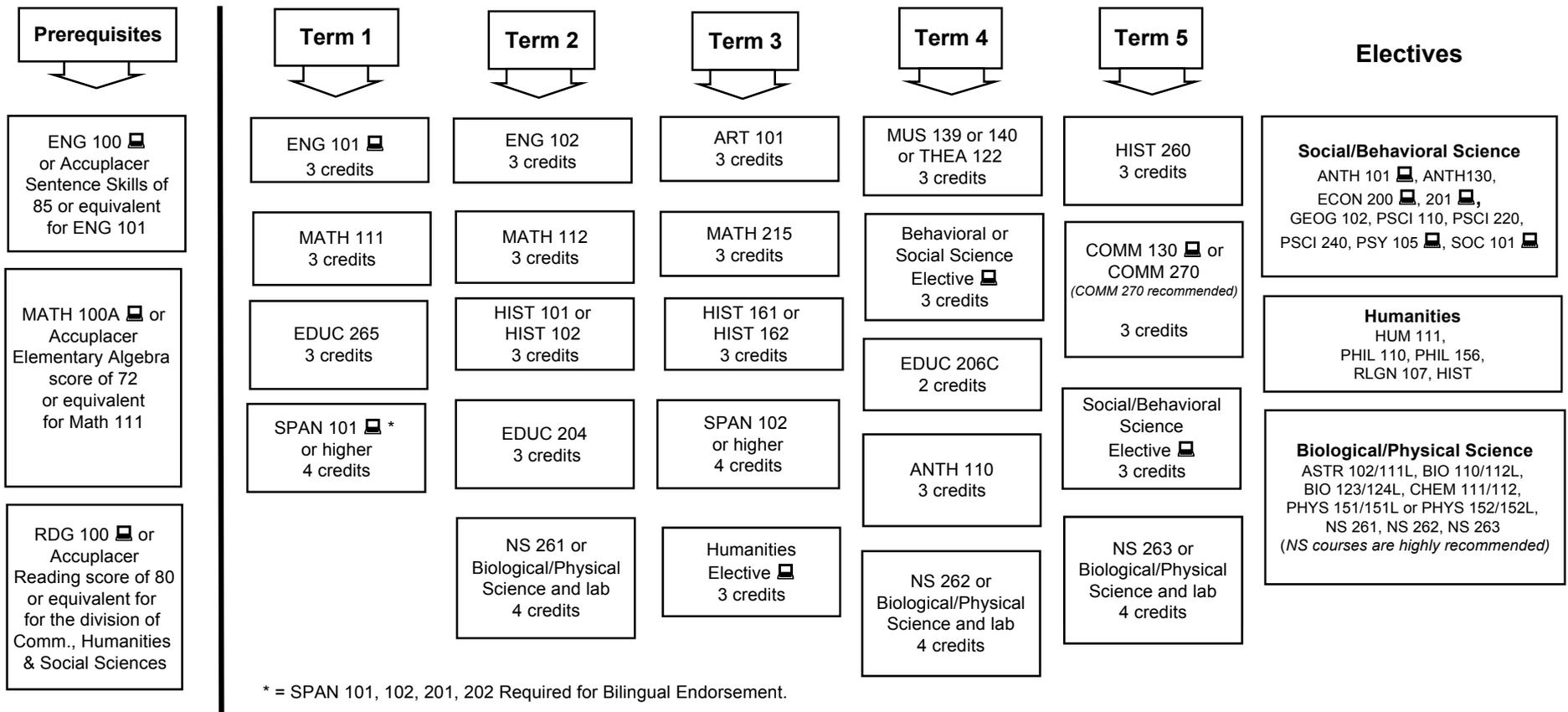


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

ELEMENTARY EDUCATION (Bilingual Education Concentration) Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plan.)
 Degree requirements = minimum of 73 credits

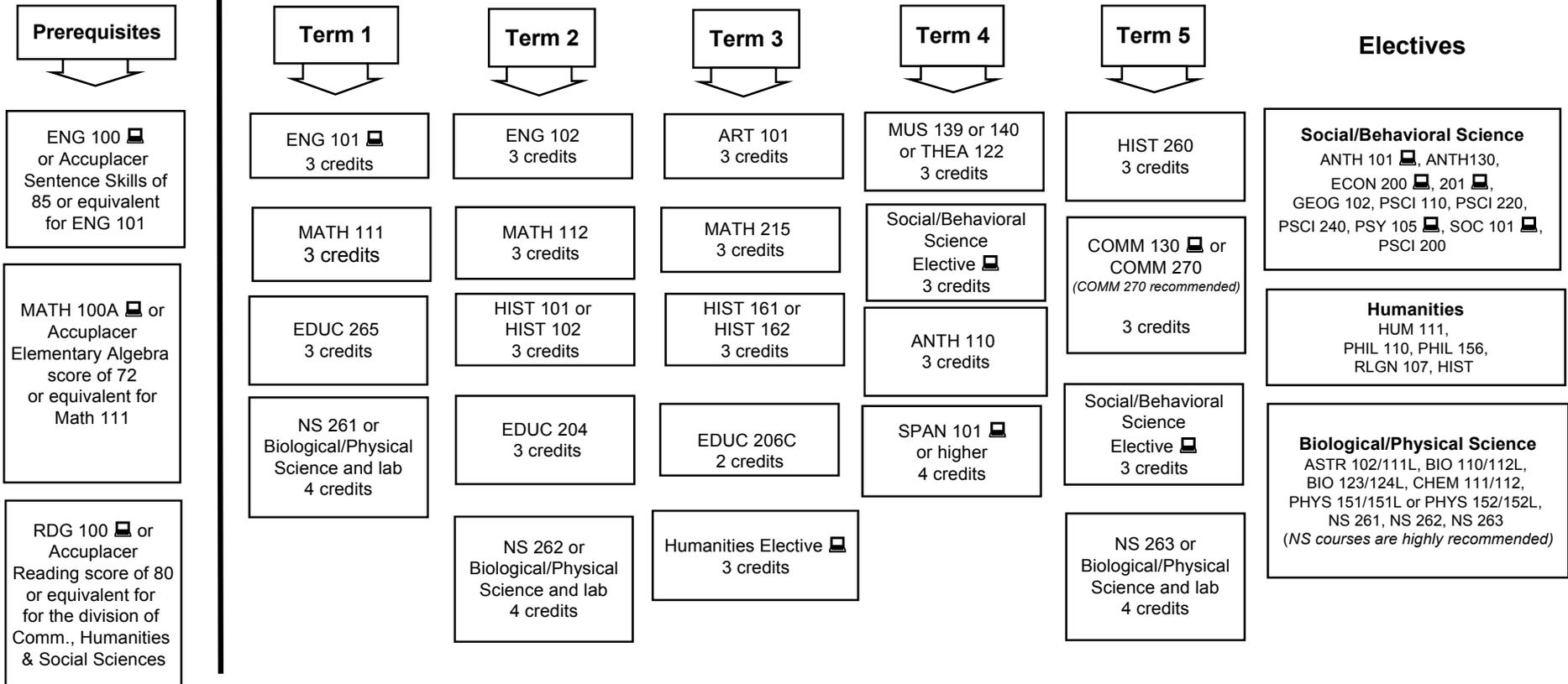


★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

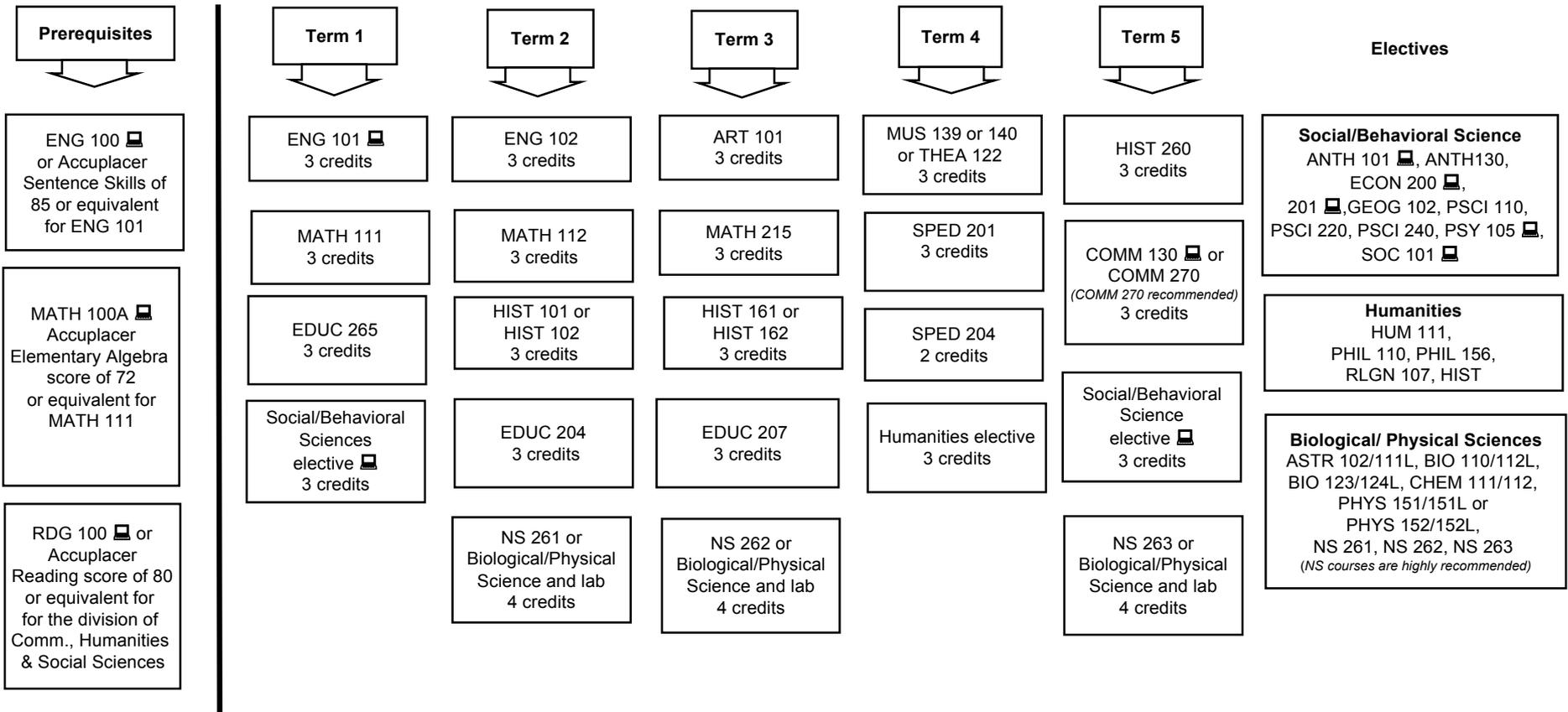
ELEMENTARY EDUCATION (Elementary Education Concentration) Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plan.)
 Degree requirements = minimum of 69 credits



ELEMENTARY EDUCATION (Special Education Concentration) Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plan.)
 Degree requirements = minimum of 68 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

• **Certificate in Emergency Medical Technician Paramedic**

• **Skill Sets in Emergency Medical Technician – Basic, Emergency Medical Technician – Intermediate 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 and intermediate technicians 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-I and Emergency Department Technician courses. Intermediate students must have successfully completed EMS 160L prior to starting the intermediate course. 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 healthcare 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 MMR, DTP, PPD and varicella) are required for the EMT intermediate courses.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 may 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 high school diploma or equivalent is required for EMT licensing. Students enrolled in EMS 260 T/L and 270C pay a \$11 program fee.

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.

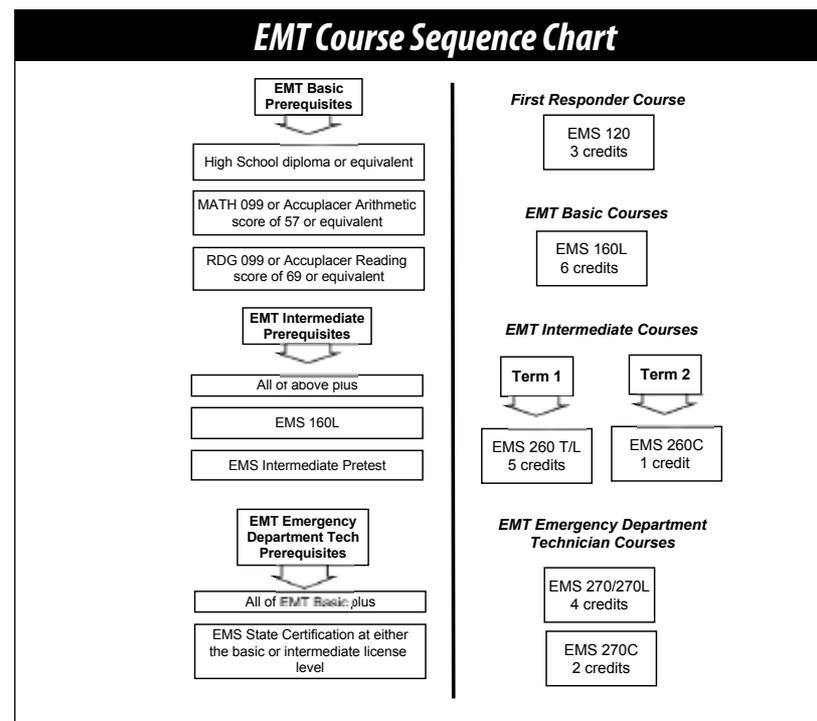
Graduation Policy

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

Contact the HWPS Division at (505) 224-4111, or Academic Advisement and Career Development at (505) 224-4321.



– Course available through Distance Learning (see page 49.)

• *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 after successful completion of the EMS Pharmacology (EMS 162) prerequisite. 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 100 or an Accuplacer reading score of 80 and Math 100A or an Accuplacer Elementary Algebra score of 72. Students are required to maintain their license as an EMT-Basic 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 (tetanus, rubella, rubeola and hepatitis B) and a negative PPD prior to working with patients in a clinical setting. Students are required to provide documentation from a licensed healthcare 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.

Students with a criminal background may have limited employment opportunities in

healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 of \$45 in EMS 295L to take their certification exam. Students may be required to undergo routine drug screening and a criminal background check prior to beginning and throughout 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 career and technical courses offered only for credit/no credit, a grade of credit (CR) must be earned.

CONTACT INFORMATION

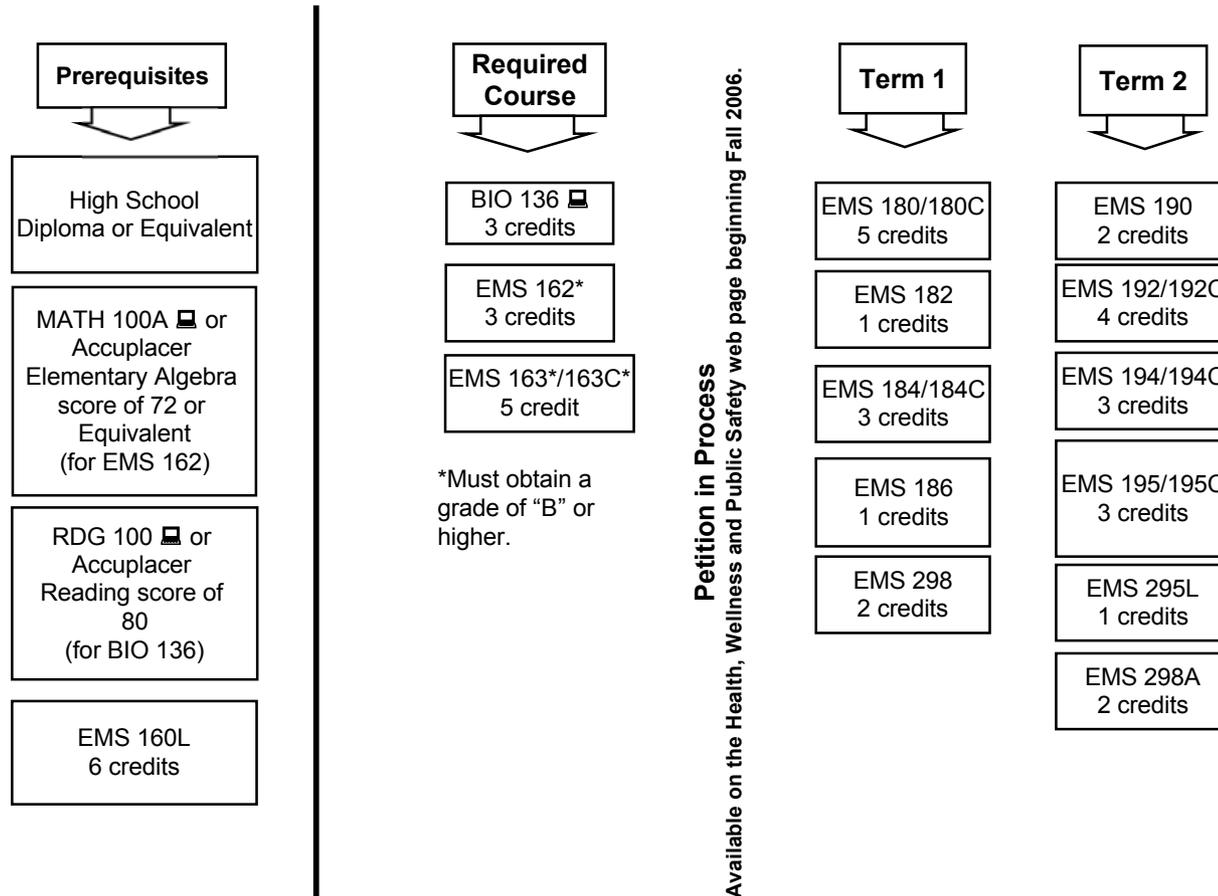
For more information, contact the HWPS Division (505) 224-4111, or Academic Advisement and Career Development at (505) 224-4321.

For prerequisites and a recommended course sequence, turn the page... ►

 – Course available through Distance Learning (see page 49.)

EMERGENCY MEDICAL TECHNICIAN PARAMEDIC Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 38 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *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

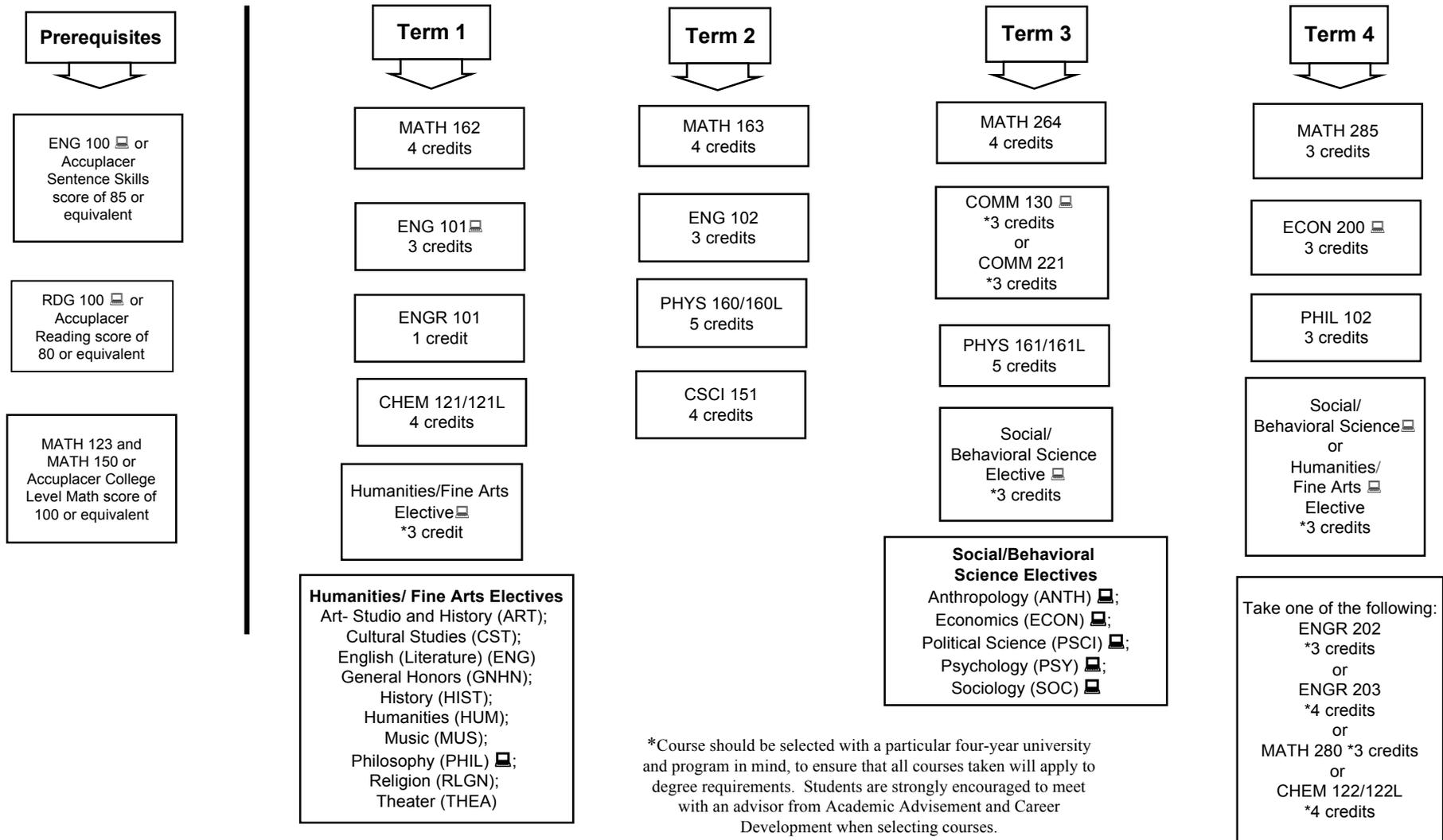
Program information is available from the dean's office of the Math, Science & Engineering Division at (505) 224-3561 or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

ENGINEERING Degree

This chart identifies a possible full-time sequence of courses.
 Students should see an advisor to customize their educational plans.
 Credit Hour Requirement = 61-62 Credits



ENGINEERING DESIGN TECHNOLOGY

Applied Technologies Division

• Associate of Applied Science Degree in Engineering Design Technology

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.

CONTACT INFORMATION

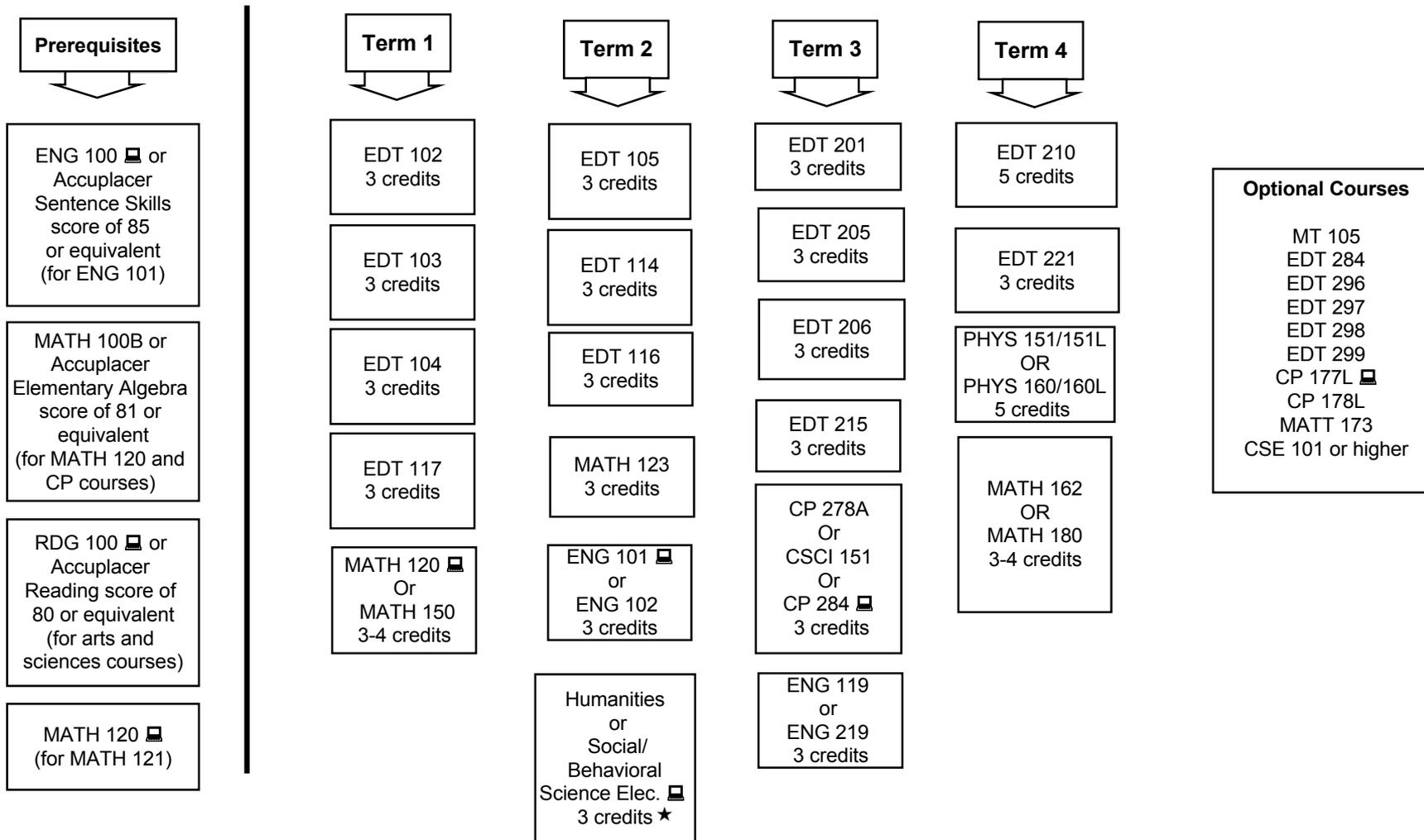
Program information is available from the program chair or Associate Dean at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321. Students may also visit www.cnm.edu and navigate to the Applied Technologies Division.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

ENGINEERING DESIGN TECHNOLOGY Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize your educational plan.)
 Degree requirements = 67-69 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- *Associate of Applied Science Degree in Environmental Safety and Health*
- *Skill Sets in Environmental Safety and Health Compliance Radiation Protection Technologist and Water and Wastewater Operator*

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, Liyen Jong at (505) 224-4221, or from Academic Advisement and Career Development at (505) 224-4321.



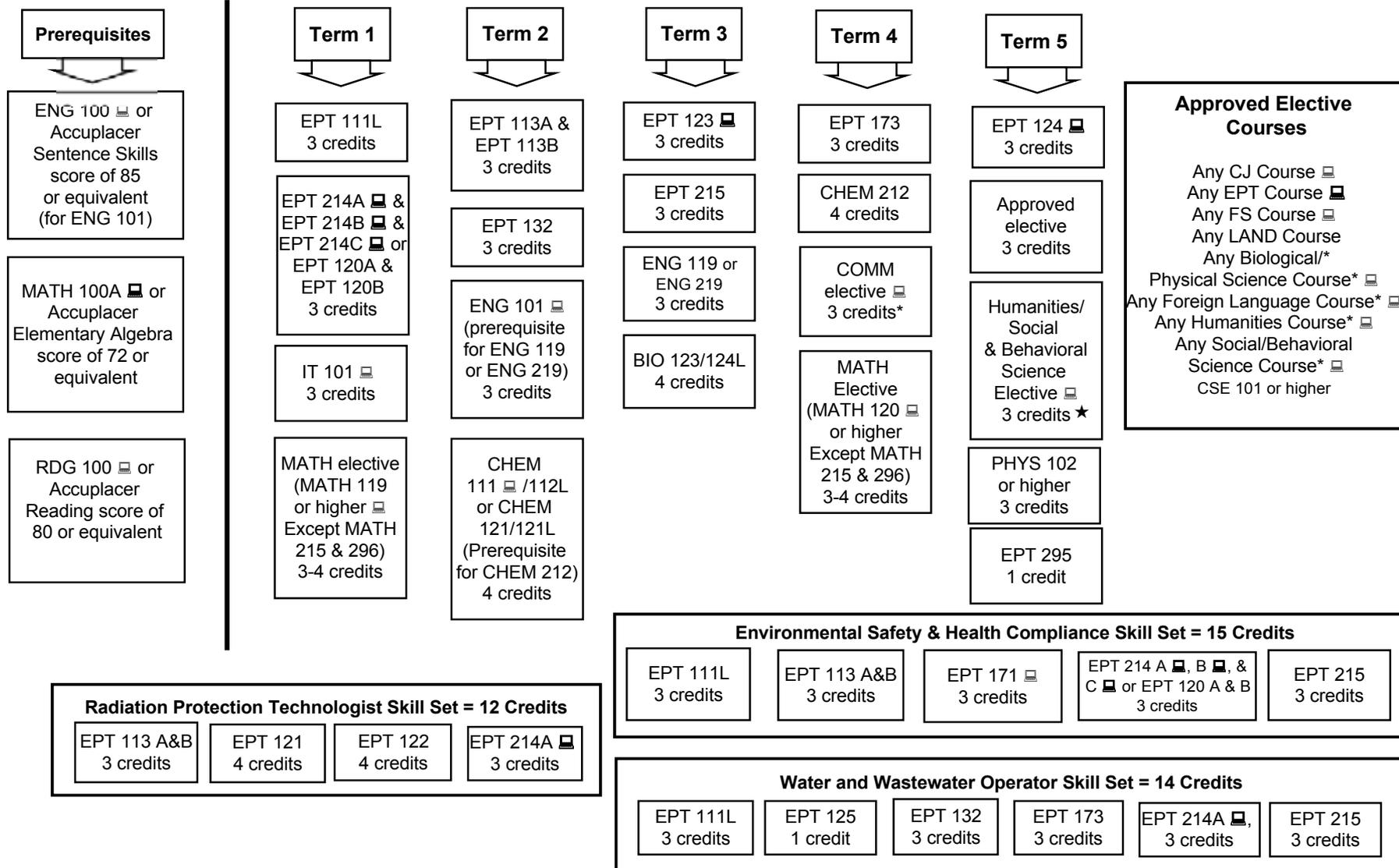
Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

ENVIRONMENTAL SAFETY AND HEALTH Degree

(And Environmental Safety and Compliance, Radiation Protection Technologist and Water and Wastewater Operator Skill Sets)

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize your educational plan.)

Degree requirements = 64–66 credits



★ See page 269 for courses in this category.

☐ – Course available through Distance Learning (see page 49.)

• *Certificate in Film Crew Technician*

Program Description

The Film Crew Technician Program certificate is designed as a three-term 27-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 and third terms 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, make-up/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.

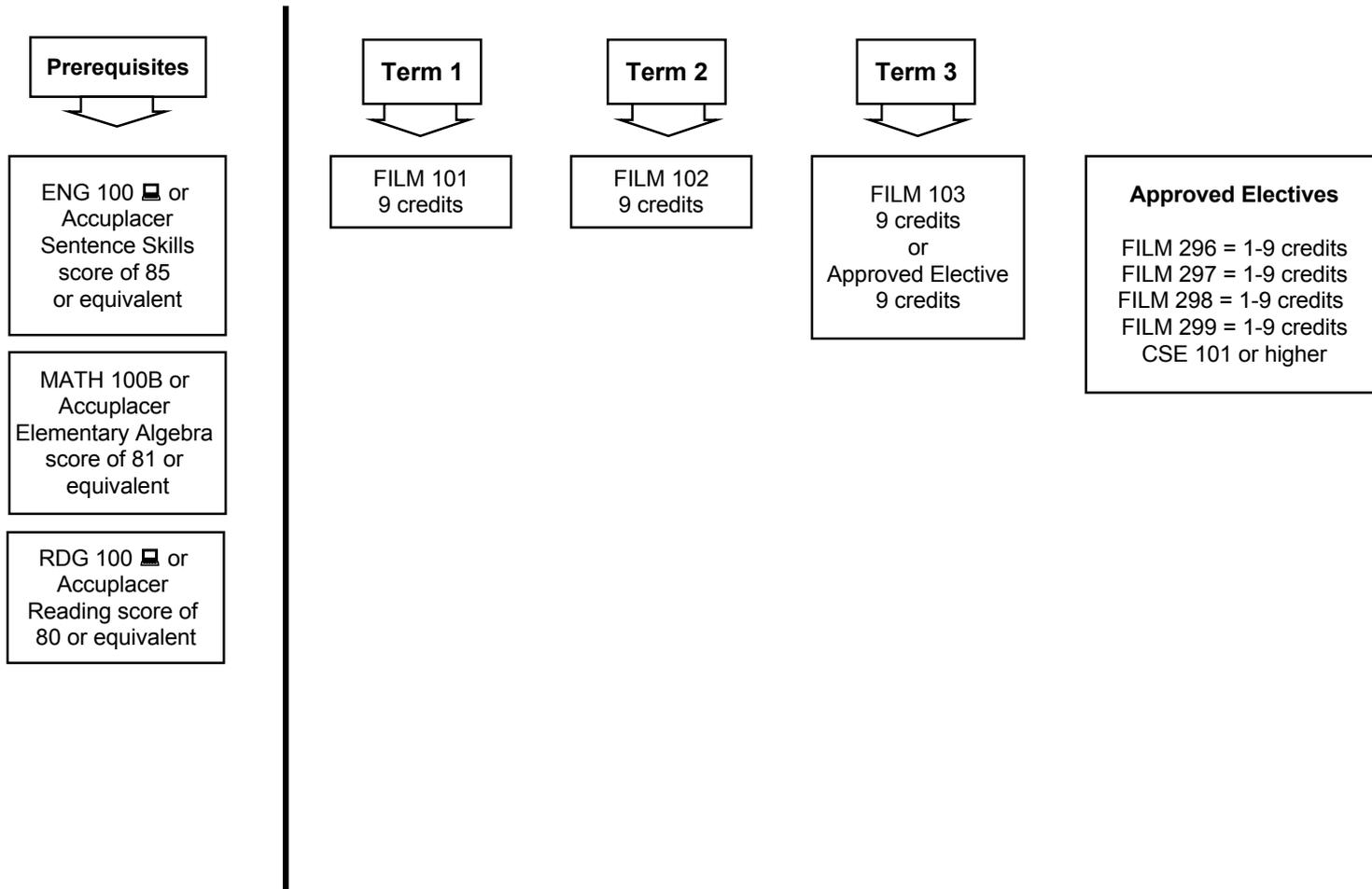


For prerequisites and a recommended course sequence, turn the page... ►

 – Course available through Distance Learning (see page 49.)

FILM CREW TECHNICIAN PROGRAM Certificate

Certificate requirement = 27 credits



- *Associate of Applied Science Degree in Financial Services*
- *Certificate in Financial Services*

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

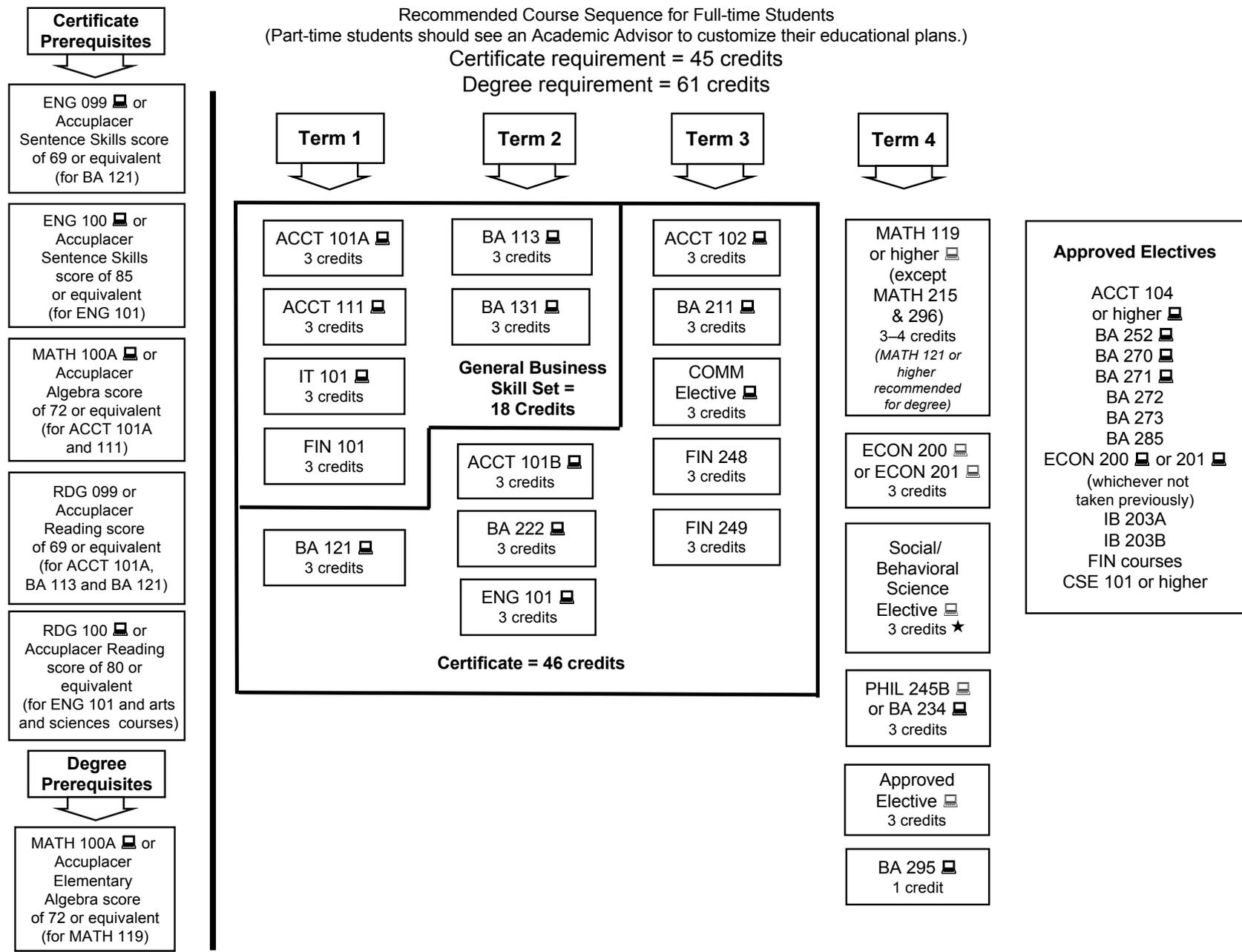
Program information is available from the Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

FINANCIAL SERVICES Degree and Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 45 credits
 Degree requirement = 61 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• Associate of Arts Degree in Fine Arts (Concentration 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 on the Art Studio flowchart. Those wishing to concentrate on the history of art should take classes in the sequence suggested by the Art History flowchart.

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 and Social Sciences (505) 224-3588 or Academic Advisement and Career Development at (505) 224-4321.

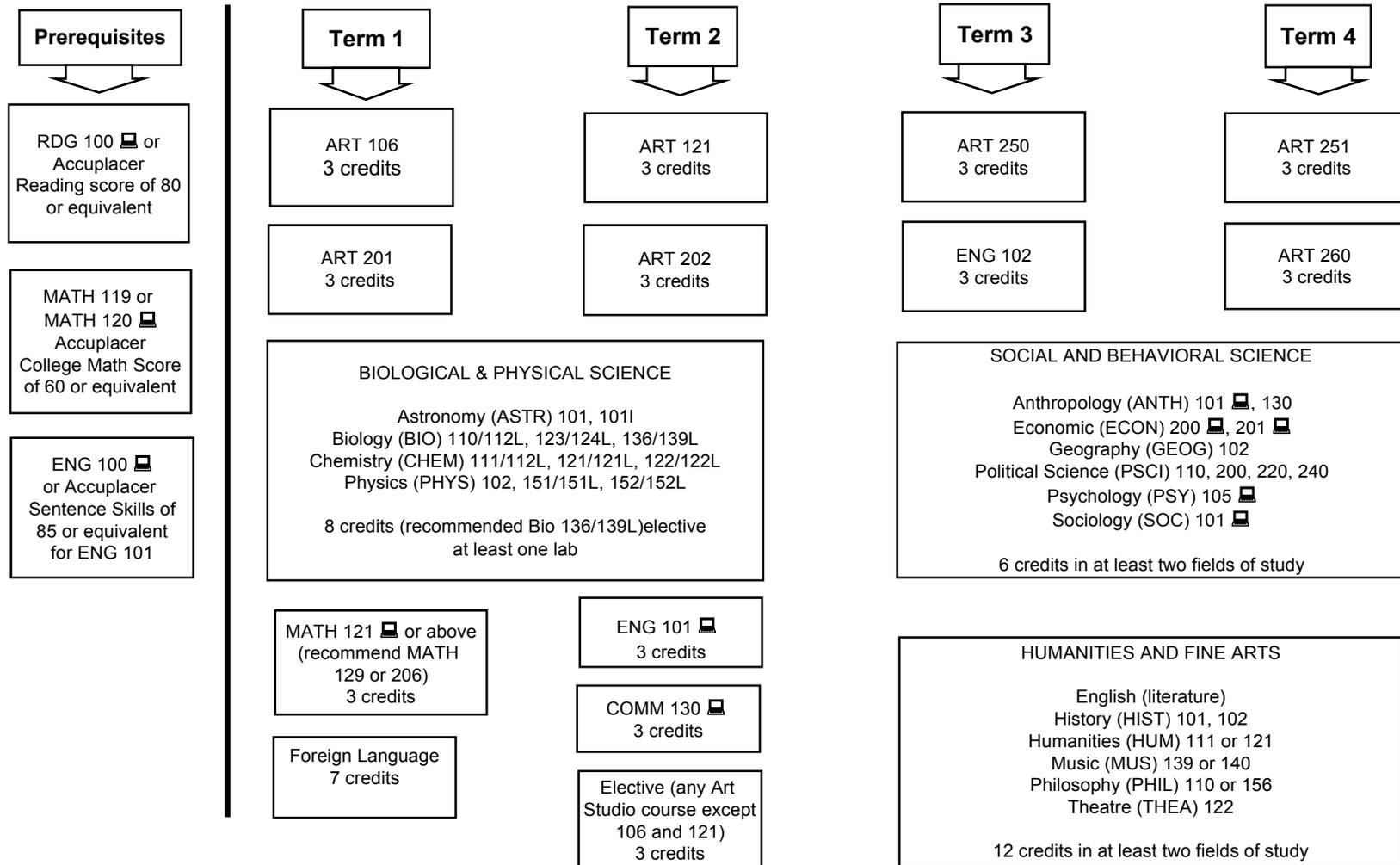


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ▶

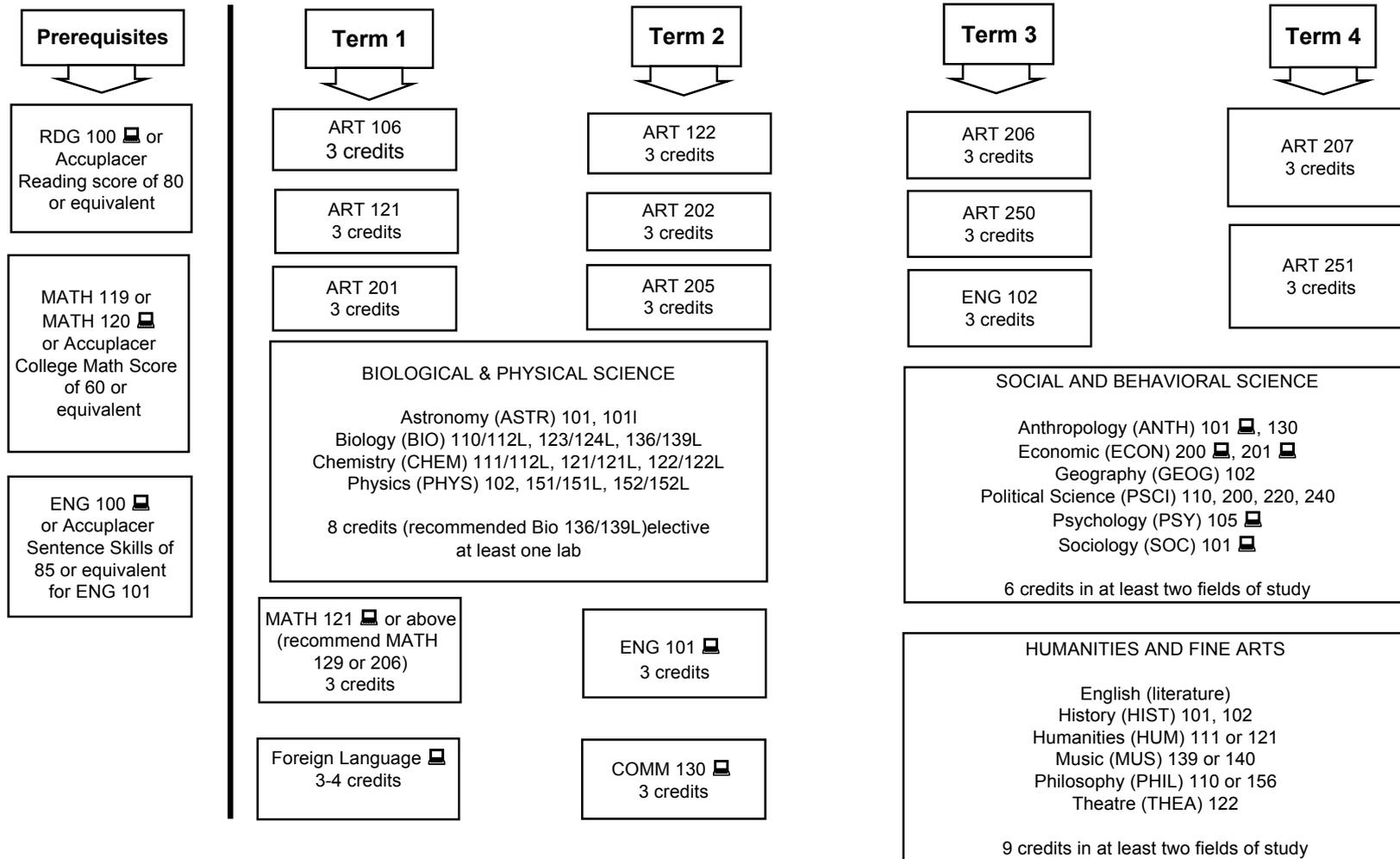
FINE ARTS (Art History Concentration) Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor customize their educational plan.)
 Degree requirements = minimum of 69 credits



FINE ARTS (Art Studio Concentration) Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plan.)
 Degree requirements = minimum of 68 credits



★ See page 269 for courses in this category.

📖 – Course available through Distance Learning (see page 49.)

• 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

For 2004–05, graduates from this program had a 100 percent placement rate. 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 healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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.

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.

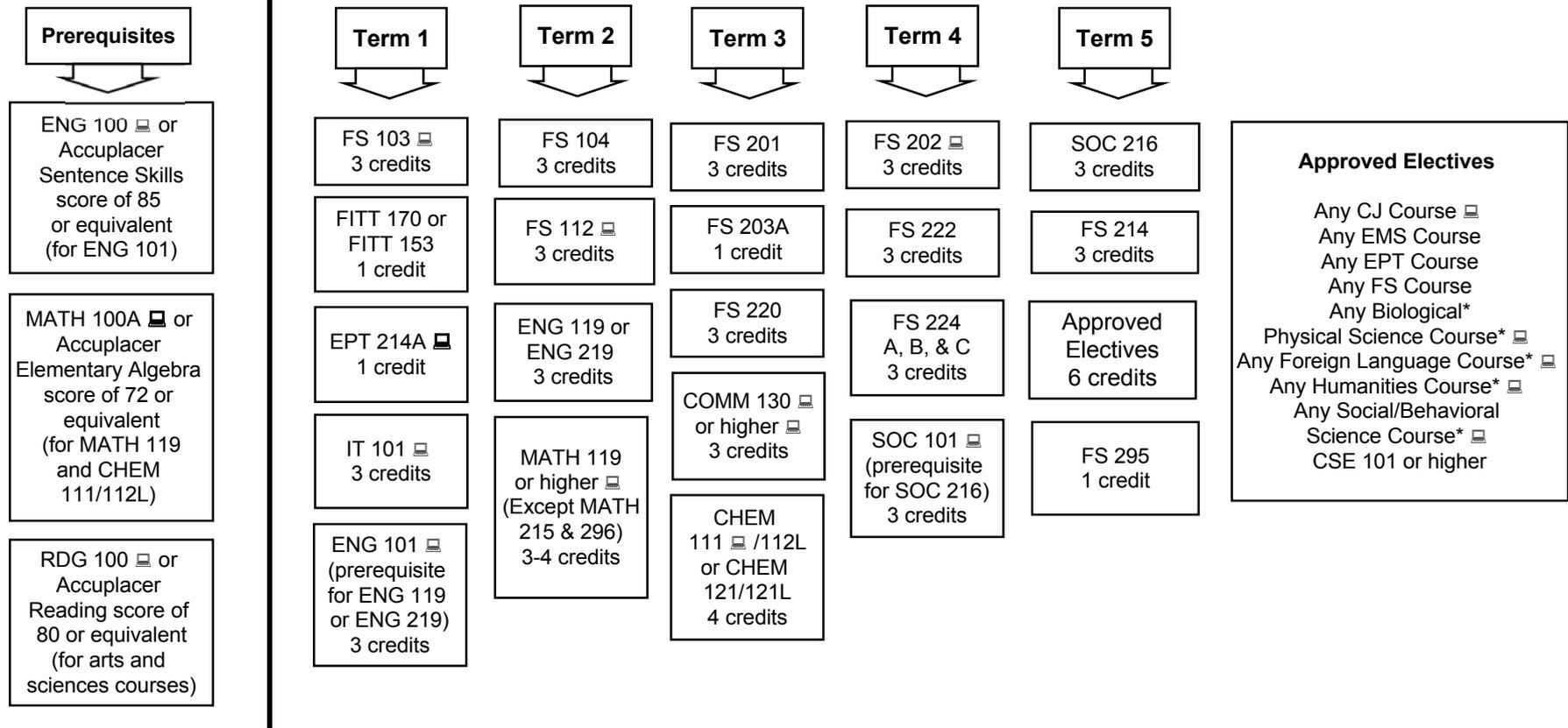


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

FIRE SCIENCE Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize your educational plan.)
 Degree requirements = 62-63 credits



★ See page 269 for courses in this category.

☐ – Course available through Distance Learning (see page 49.)

• *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 of group fitness leaders. Courses include classroom and lab time. All 100-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.

Career and Advancement Opportunities

For 2004–05, graduates had a 100 percent placement rate. 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, Tom Morris 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 healthcare 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.

This is a very intense and difficult program requiring hard work and excellent study habits. 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 and 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, Tom Morris, at (505) 224-4211, or from Academic Advisement and Career Development at (505) 224-4321.

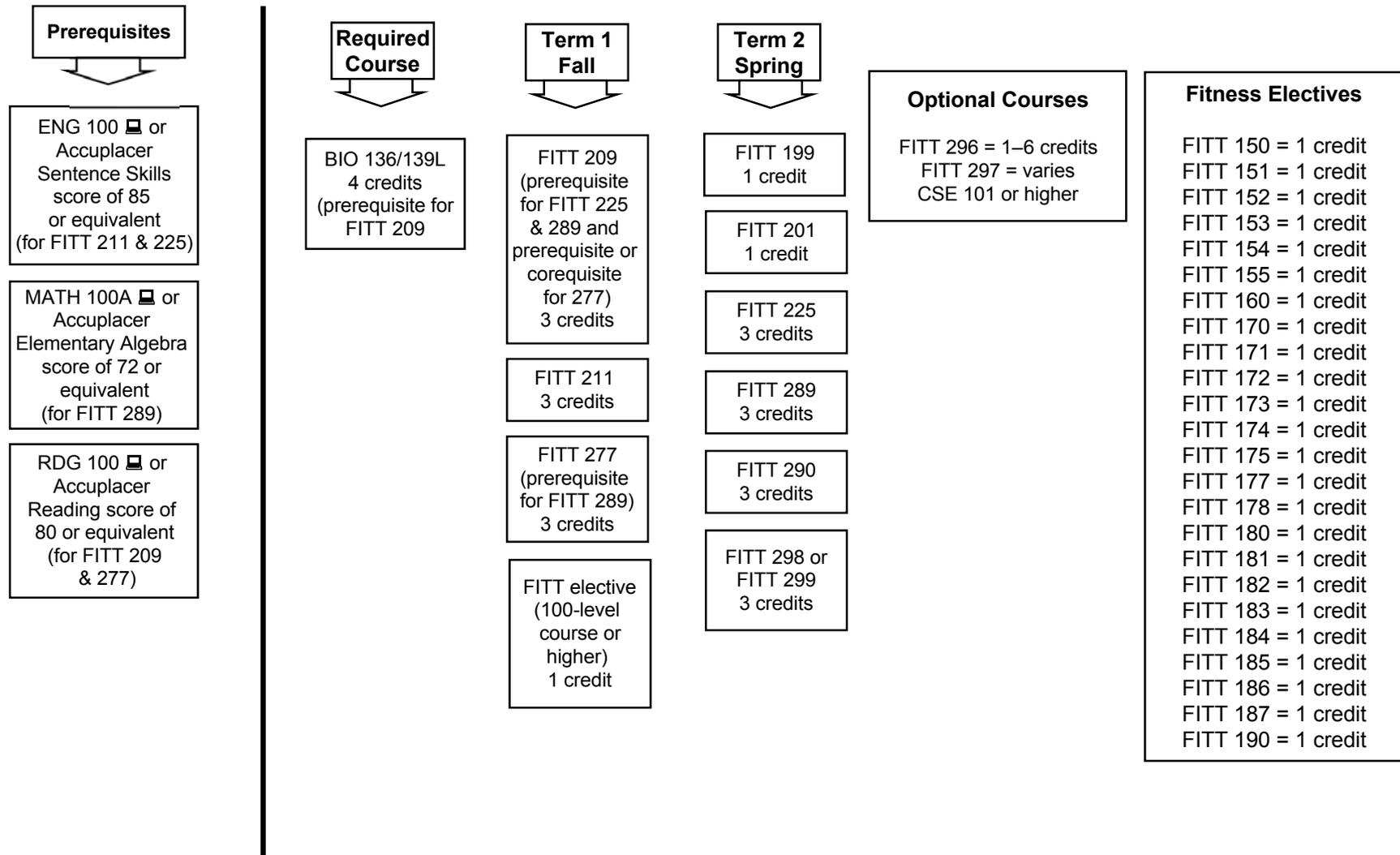
For prerequisites and a recommended course sequence, turn the page... ►



– Course available through Distance Learning (see page 49.)

FITNESS TECHNICIAN Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 28 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

• *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 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 Business & Information Technology Division Office at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

For prerequisites and a recommended course sequence, turn the page... ►

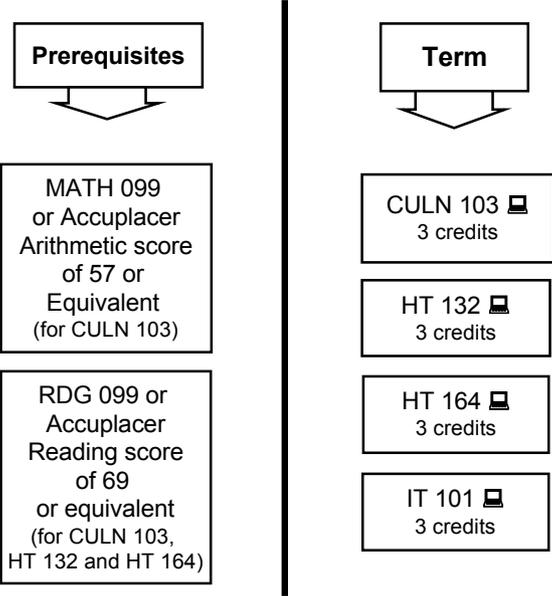


– Course available through Distance Learning (see page 49.)

FOOD SERVICE MANAGEMENT Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 12 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

(PENDING HED APPROVAL)

- *Associate of Arts Degree in General Studies for Transfer*
- *Certificate in General Studies 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 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.

CONTACT INFORMATION

For further information about the General Studies Transfer Degree, contact the Division of Educational and Career Advancement at (505) 224-3939 or Academic Advisement and Career Development at (505) 224-4321.



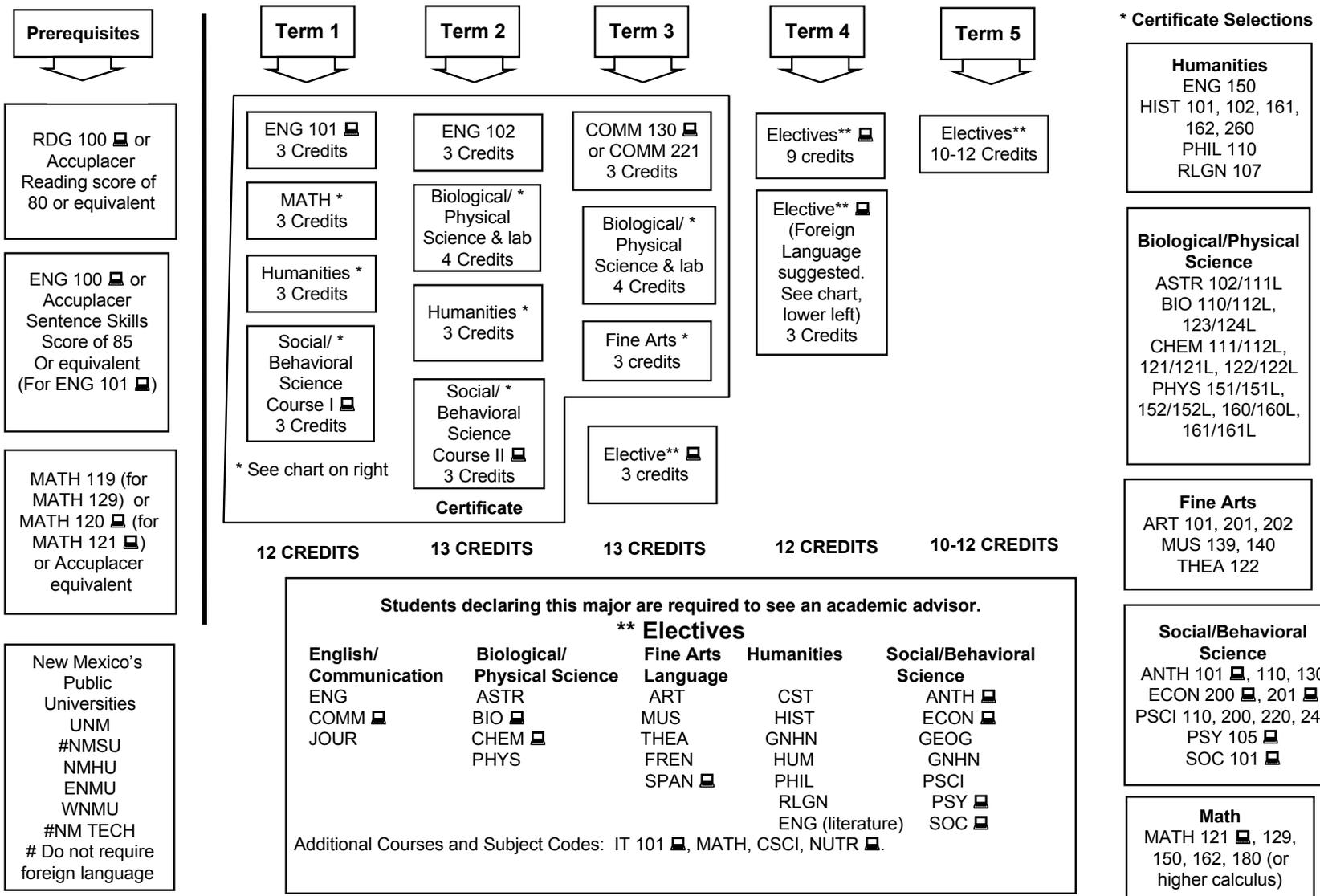
Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

GENERAL STUDIES Degree and Certificate

(PENDING HED APPROVAL)

35 Credits = Certificate Requirements; Degree Requirements = Minimum 60 Credits



★ See page 269 for courses in this category.

— Course available through Distance Learning (see page 49.)

GEOGRAPHIC INFORMATION TECHNOLOGY

Applied Technologies Division

- *Associate of Applied Science Degree in Geographic Information Technology*
- *Certificate in Geographic Information Technology*

Program Description

Students will study the aspects of Geographic Information Systems (GIS) that relate to the skills required to work as technicians. Theoretical concepts couple effectively into the lab exercises, where examples of realistic situations are conceived, designed, analyzed and evaluated for their applicability and effectiveness. Both the certificate and associate degree options are offered as stand-alone choices for the student. Additionally, completion of the introductory certificate courses neatly becomes the foundation for the more rigorous associate degree curriculum.

Career and Advancement Opportunities

Numerous private industry and government agencies 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 are prepared for entry-level jobs as GIS technicians that utilize a variety of hardware and software applications prevalent in industries such as civil engineering, landscape architecture, information technology, market research, health industry needs analysis, business development and analysis, disaster preparation, migration pattern interpretation, federal land management, cartography, mapping and surveying.

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.

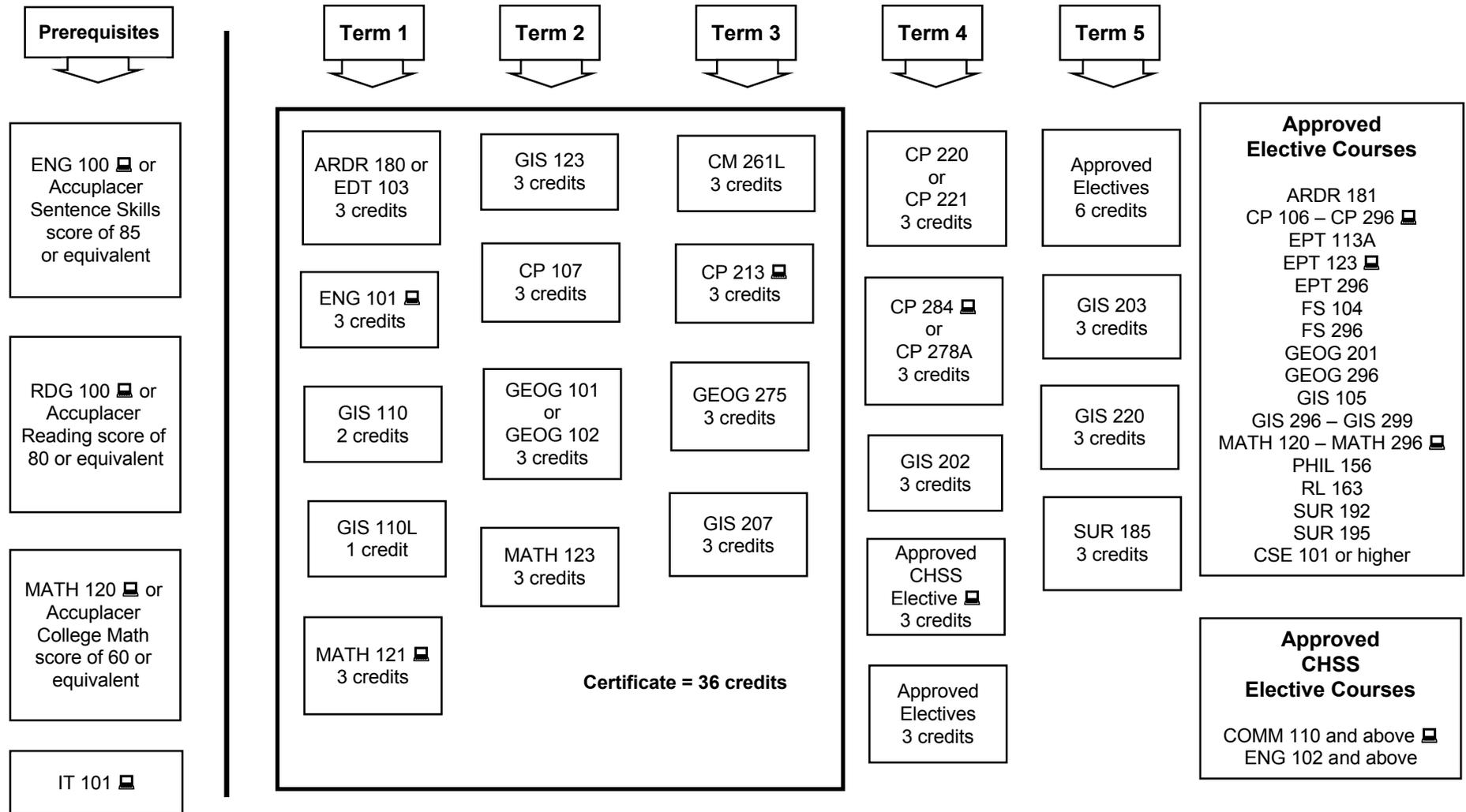


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

GEOGRAPHIC INFORMATION TECHNOLOGY Degree and Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize your educational plan.)
 Certificate requirements = 36 credits
 Degree requirements = 66 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *Certificate in Geomatics Technology*

Program Description

Geomatics refers to the gathering and interpretation of spatial data of the Earth. The program combines Geographical Information Systems, GPS technology and Land Surveying to develop the skills commonly used by Mapping/Surveying Technicians. The Geomatics certificate is designed as a 36 credit program that encompasses the core of the National Society of Professional Surveyors' technician certification.

Career and Advancement Opportunities

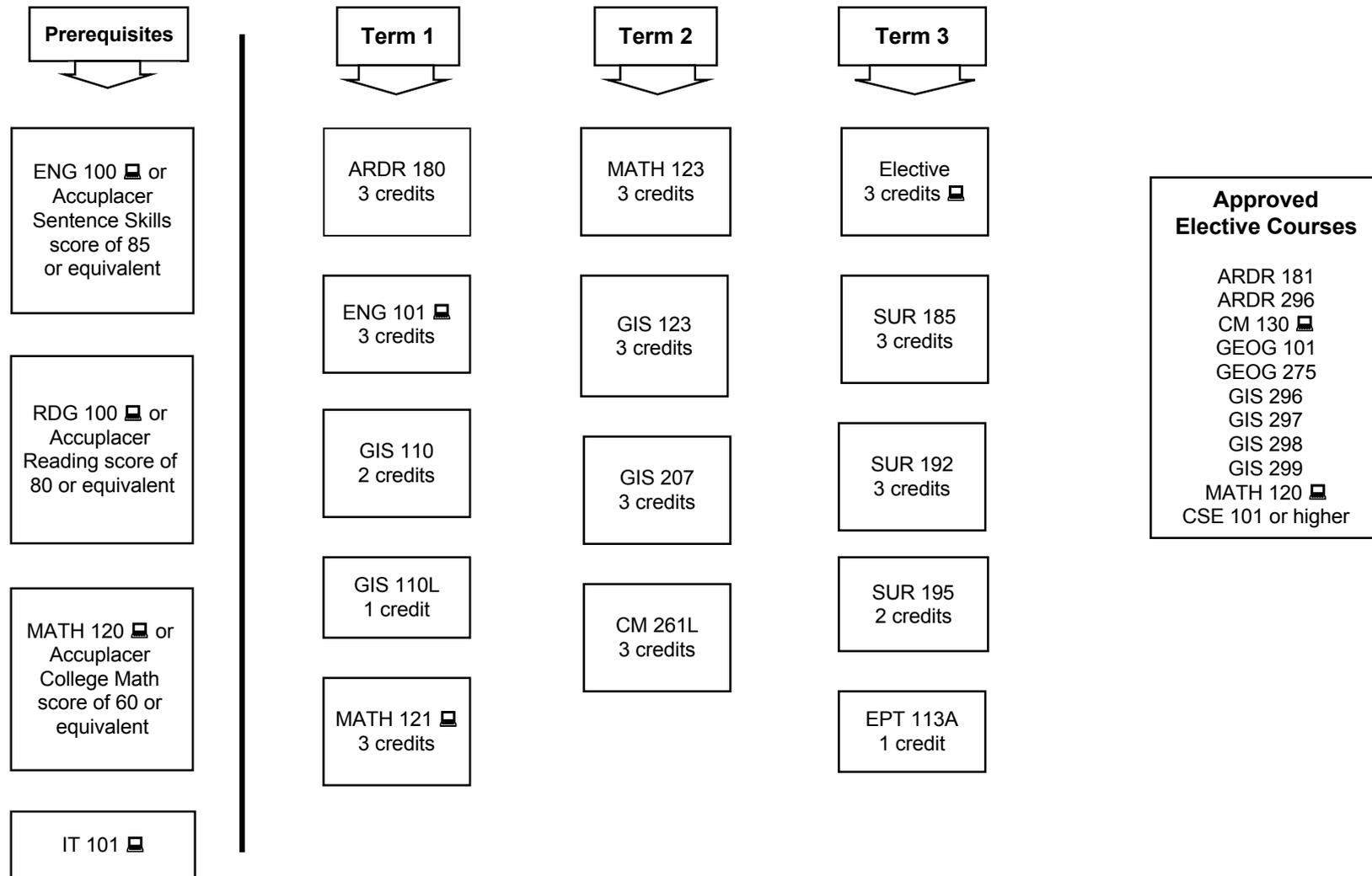
Graduates are prepared for entry-level positions Surveying Technicians in the private and public sector.

CONTACT INFORMATION

Program information is available from the program director or associate dean at (505) 224-3340, or from Academic Advisement and Career Development at (505) 224-4321.

GEOMATICS TECHNOLOGY Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize your educational plan.)
 Certificate requirements = 36 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• 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 healthcare delivery system. Students will study: physiology and anatomy; 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; IDC-9-CM and CPT coding; healthcare 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. HIT courses are not offered every 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 2333 N. Michigan Ave., Suite 2150, Chicago, IL 60601-5800, (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.

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. A grade of C or better must be achieved in IT 101, CIS and HIT courses and BIO 136/139L (science courses 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 101 – Introduction to Health Information Technology.
- Completion of HIT 120 – Health, Data, Content and Structure.
- An information interview with the HIT program director.

CONTACT INFORMATION

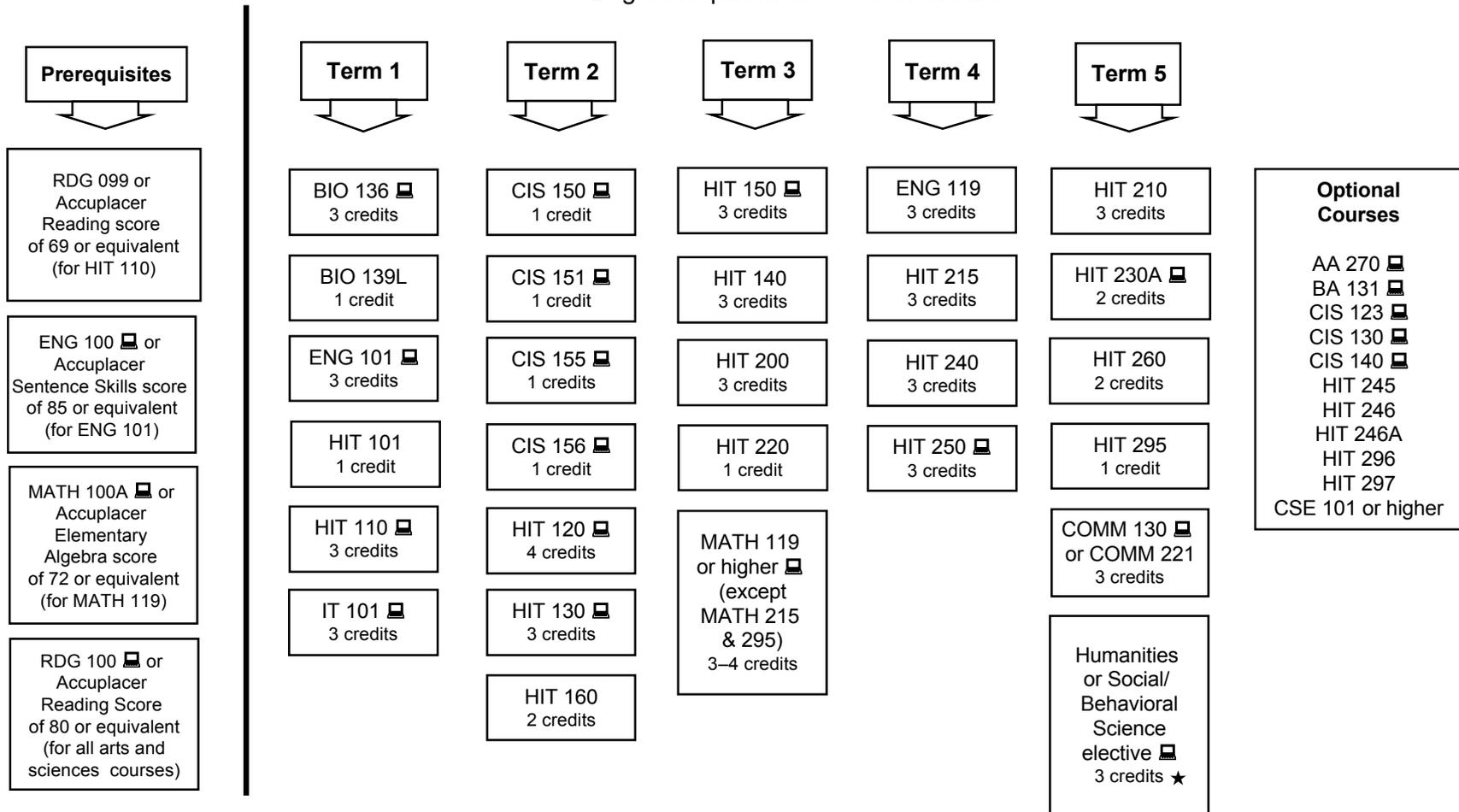
Information about this program is available from the Program Director Mechel McKinney at (505) 224-3905, mmckinney@cnm.edu, or from Business & Information Technology Associate Dean Susie Cutler at (505) 224-3820, scutler@cnm.edu, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

HEALTH INFORMATION TECHNOLOGY Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirements = 66-67 credits



Students must achieve a letter grade of C or higher in all CIS and HIT courses, IT 101 and BIO 136/139L.

★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• **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% in various locations such as hospitals and physicians offices.

Special Requirements

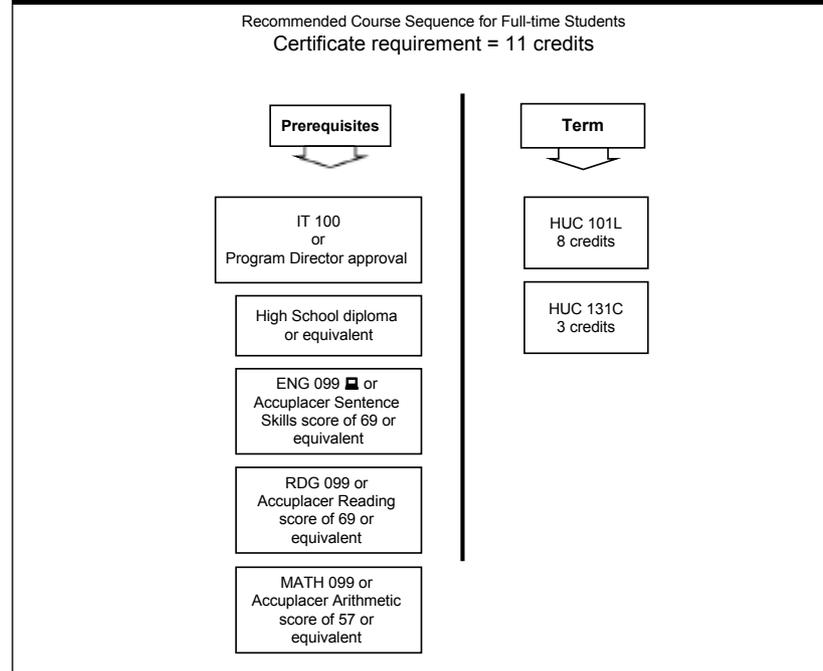
There is a \$37 program fee that covers the cost of a uniform top, hospital parking permits, nametag and health tests. Neutral-colored slacks or skirts are required for clinicals but are not covered by the fee. Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience. Students enrolled in this program may not be eligible to receive financial aid or Veterans Administration benefits.

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. All students will be required to have a PPD and current immunizations (including MMR and DTP) prior to clinicals.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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. Some programs require documentation of a recent health screening from a licensed healthcare 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.

Health Unit Coordinator Course Sequence Chart



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 is available from June Vermillion, program director, at (505) 224-5069, junev@cnm.edu, or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.

– Course available through Distance Learning (see page 49.)

HOSPITALITY AND TOURISM

Business & Information Technology Division

- **Associate of Applied Science Degree in Hospitality and Tourism (concentrations in Food and Beverage Management, Gaming Operations and Casino Management and Hospitality Operations and Hotel Management)**
- **Certificate in Hospitality and Tourism (concentrations in Food and Beverage Management, Gaming Operations and Casino Management and Hospitality Operations and Hotel Management)**
- **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 of this program will be prepared to work effectively within businesses whose primary operations center around hospitality and tourism. 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 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 operations, food and beverage operations and casino 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

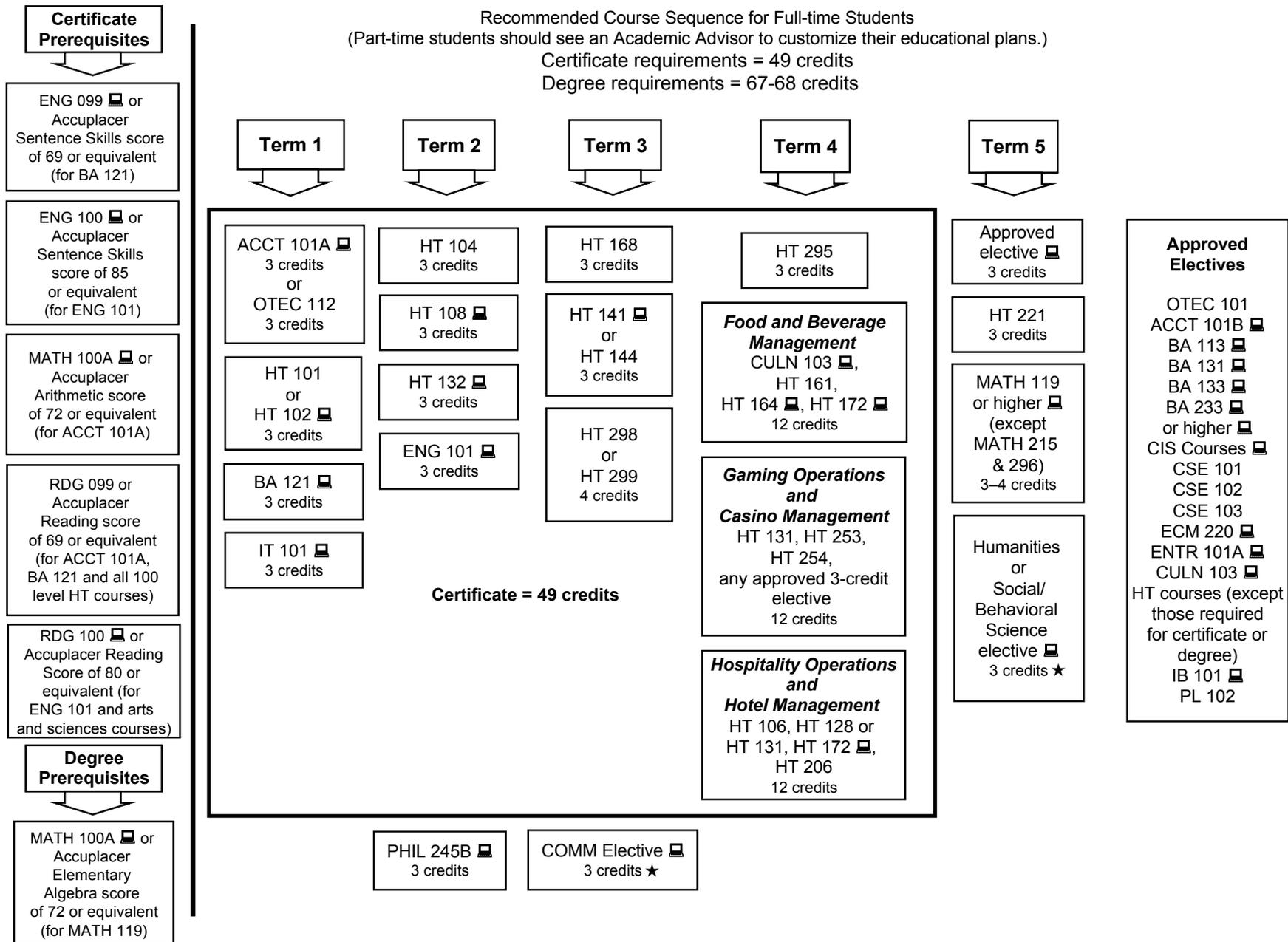
Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

HOSPITALITY AND TOURISM Degree and Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirements = 49 credits
 Degree requirements = 67-68 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

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 Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

Food and Beverage (Skill Set)

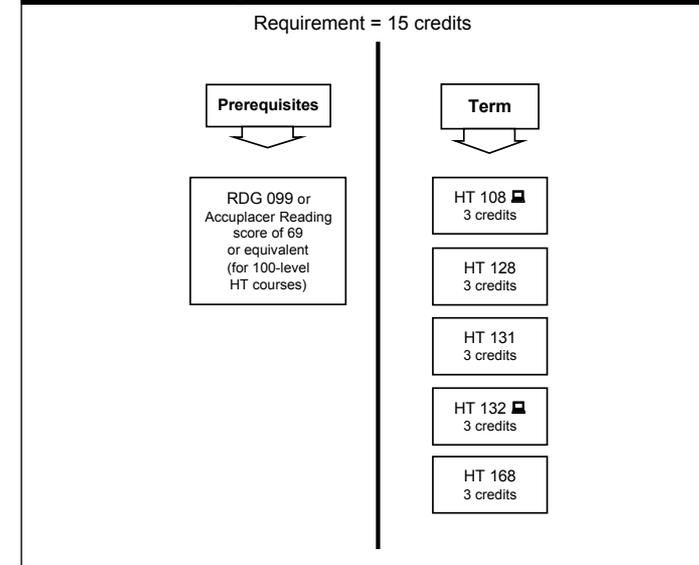
The Food and Beverage Skill Set is a specific sequence of courses for individuals who desire the knowledge and skills that promote safe food-handling procedures, satisfy guests' demands for value and quality and use forward-thinking, cost-saving purchasing practices. A certificate and an associate of 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.

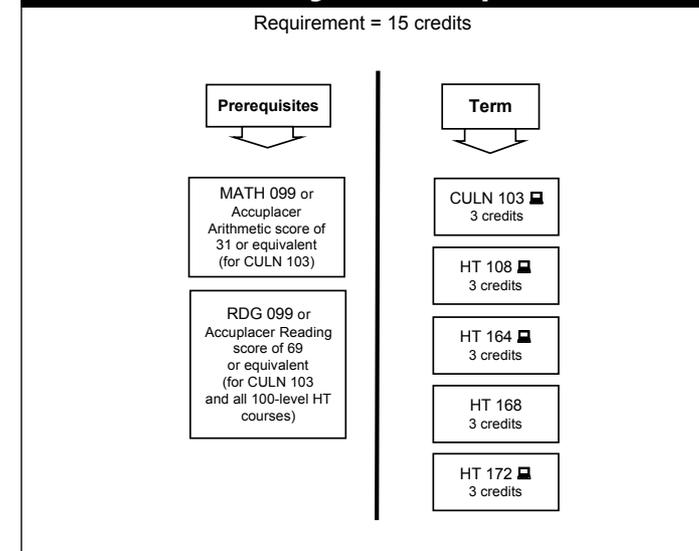
CONTACT INFORMATION

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

Club Management Course Sequence Chart



Food and Beverage Course Sequence Chart



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

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 Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

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 Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

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.

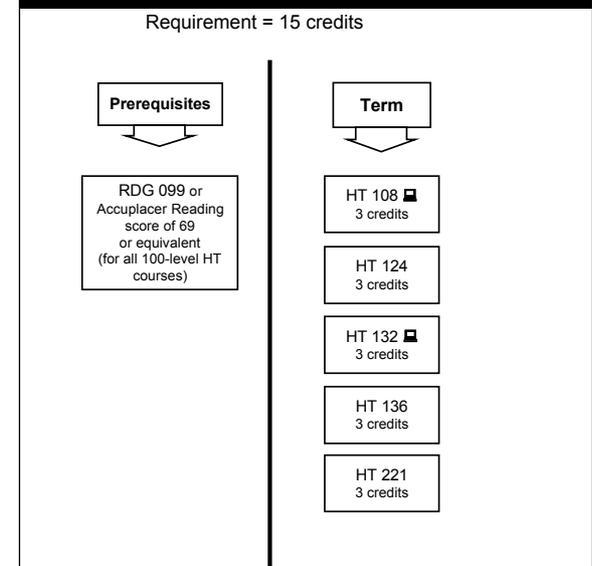
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

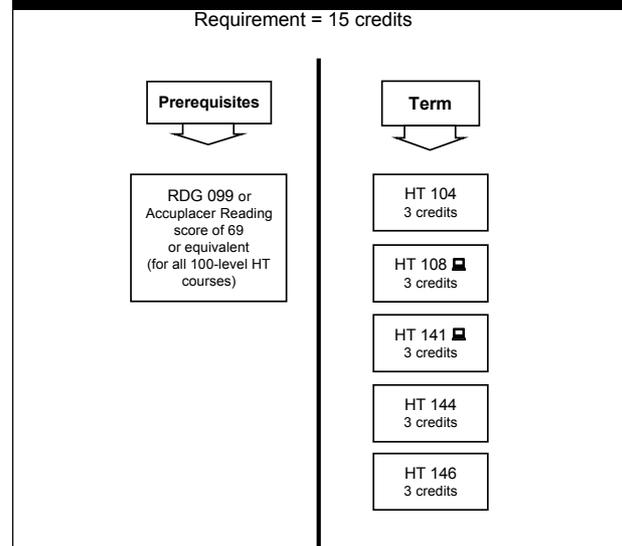
Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

★ See page 269 for courses in this category.

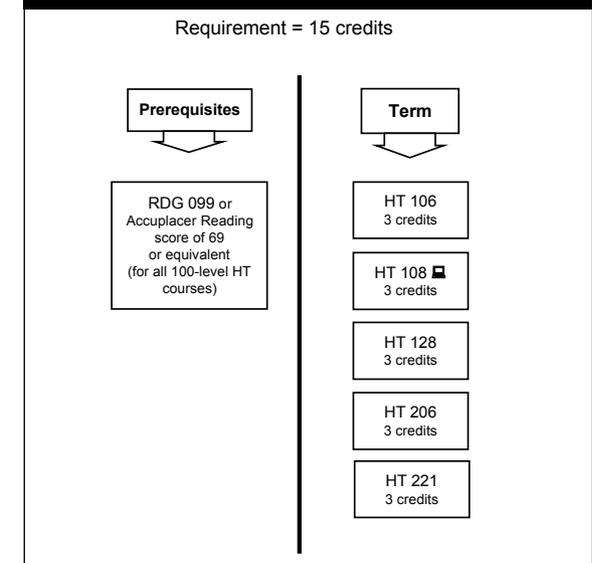
Human Resources Course Sequence Chart



Marketing and Sales Course Sequence Chart



Room Division Course Sequence Chart



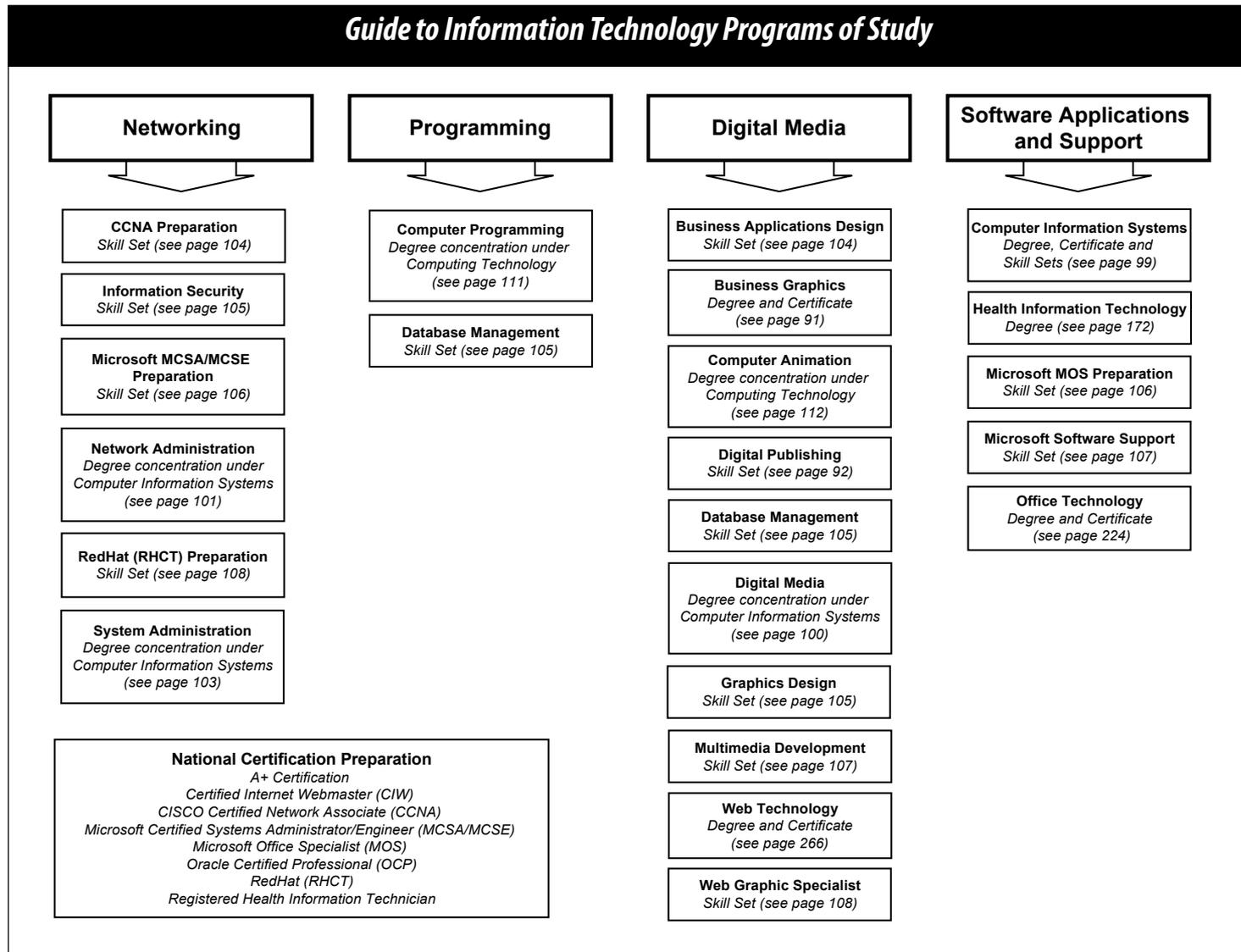
 – Course available through Distance Learning (see page 49.)

INFORMATION TECHNOLOGY

Divisions Vary

Albuquerque 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. It was developed through a unique partnership of CNM academic divisions and Albuquerque Public Schools using a national IT model.

The chart below cross-references existing programs of study with appropriate pathways. (Page numbers for more information on each program of study are listed.)



(PENDING HED APPROVAL)

• *Associate of Applied Science in Integrated Studies*

Program Description

The AAS 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

For further information about the Integrated Studies Degree, contact the Division of Educational and Career Advancement at (505) 224-3939 or Academic Advisement and Career Development at (505) 224-4321.



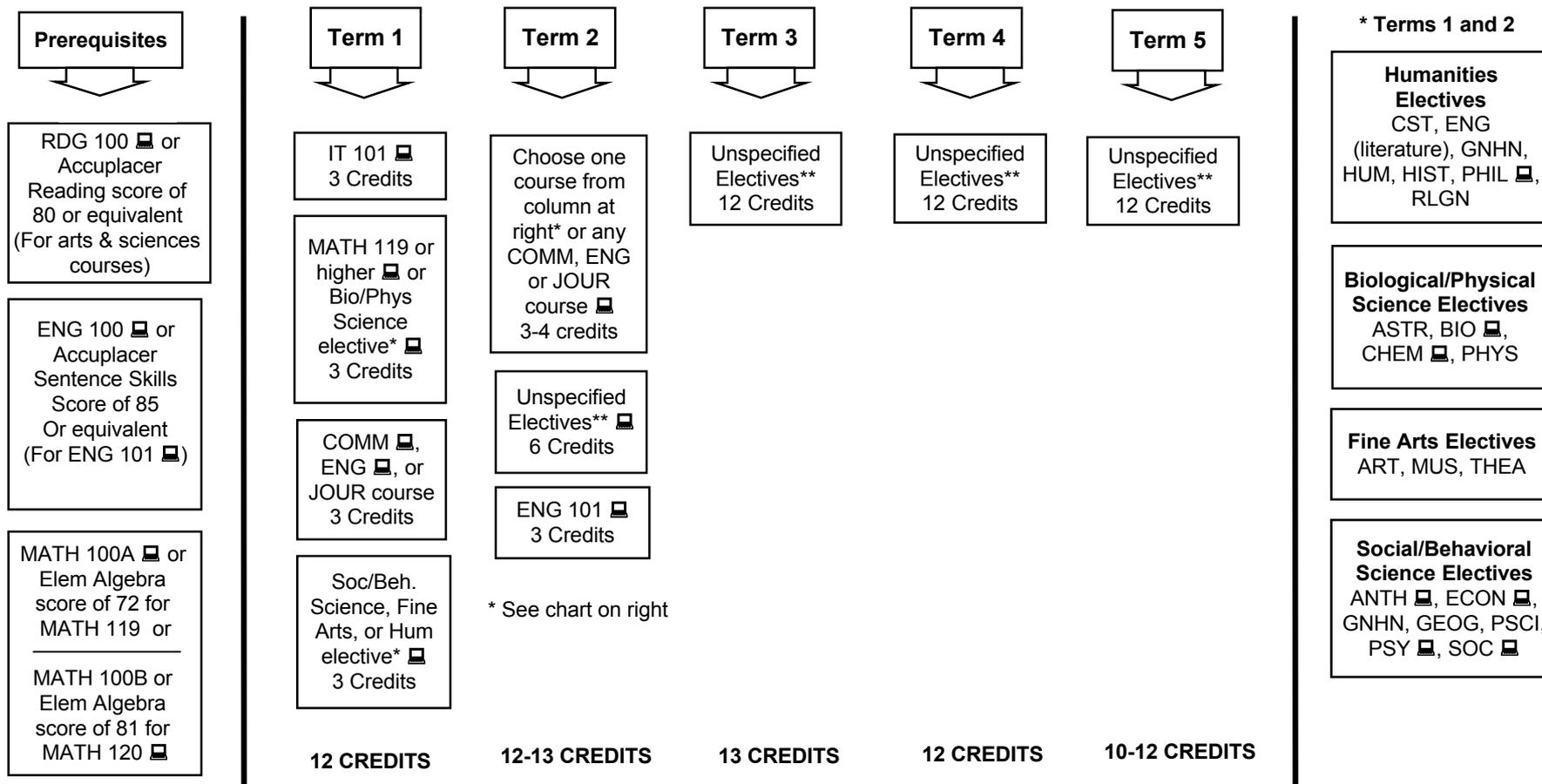
Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

INTEGRATED STUDIES Degree

(PENDING HED APPROVAL)

Minimum 60 Credits Hours



This Associate of Applied Science degree is not intended for transfer to four-year institutions. See an academic advisor for information on transfer degrees.

** Unspecified Electives: Any course numbered 101 or above.

★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- **Certificate in International Business**
- **Skill Sets in International Business Fundamentals, International E-Commerce, International Entrepreneurship, International Finance and Spanish Fundamentals for International Business and Tourism**

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.

For prerequisites and a recommended course sequence, turn the page... ►

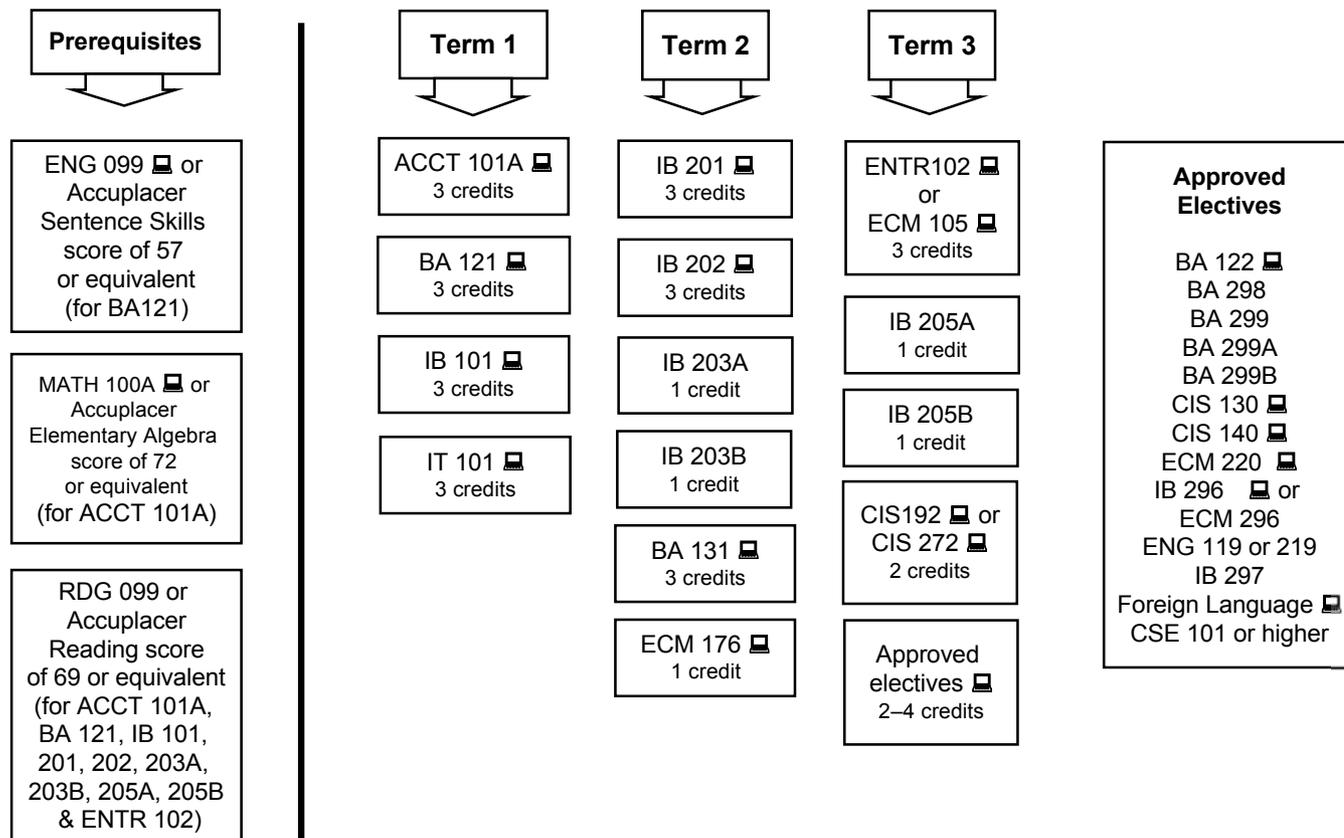


– Course available through Distance Learning (see page 49.)

INTERNATIONAL BUSINESS Certificate

For additional information about this certificate and how it fits within the Business Administration Associate of Applied Science Degree see page 86.

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 33–35 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

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.

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, develop an understanding of marketing in international markets, manage crosscultural differences and gain an overview of the principles and considerations of international trade finance when exporting and/or importing products and services. A certificate in International Business is available to students who wish to further expand their international business knowledge. Basic computer skills in Microsoft Windows are required. Students who do not have basic computer skills will need to take additional courses 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 E-Commerce (Skill Set)

International E-Commerce Skill Set is a series of courses for individuals that would like to use a web site to expand their business into international markets. A certificate in International Business is available to students who wish to further expand their international business knowledge. Basic computer skills in Microsoft Windows are required. Students who do not have basic computer skills will need to take additional courses to develop those skills.

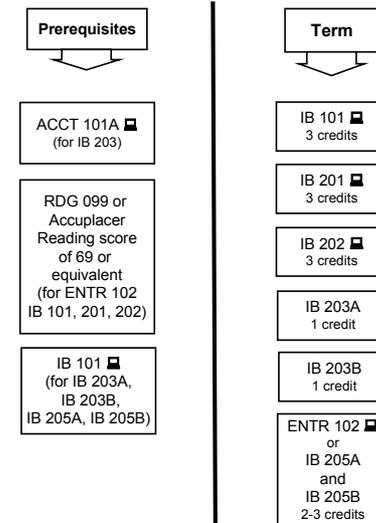
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

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.

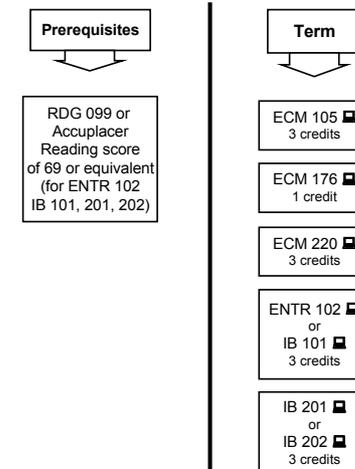
Fundamentals Course Sequence Chart

Requirement = 13-14 credits



E-Commerce Course Sequence Chart

Requirement = 13 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

International Entrepreneurship (Skill Set)

The International Entrepreneurship Skill Set is a series of courses for the student or business owner who would like start a business or expand an existing business to international markets. A certificate in International Business is available to students who wish to further expand their international business knowledge. Basic computer skills in Microsoft Windows are required. Students who do not have basic computer skills will need to take additional courses 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 Finance (Skill Set)

The International Finance Skill Set is a series of courses for the student or business owner who is interested in learning about basic financial statements, QuickBooks general ledger software for small business and in obtaining an overview of international finance. A certificate in International Business is available to students who wish to further expand their international business knowledge. Basic computer skills in Microsoft Windows are required. Students who do not have basic computer skills will need to take additional courses 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.

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.

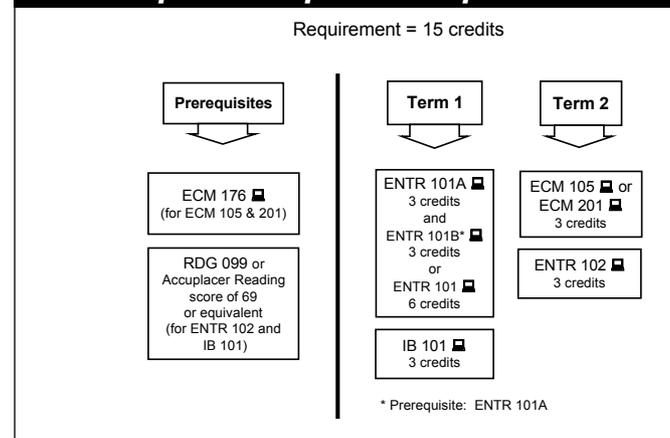
Students enrolled in these courses may not be eligible to receive financial aid or Veterans Administration benefits.

CONTACT INFORMATION

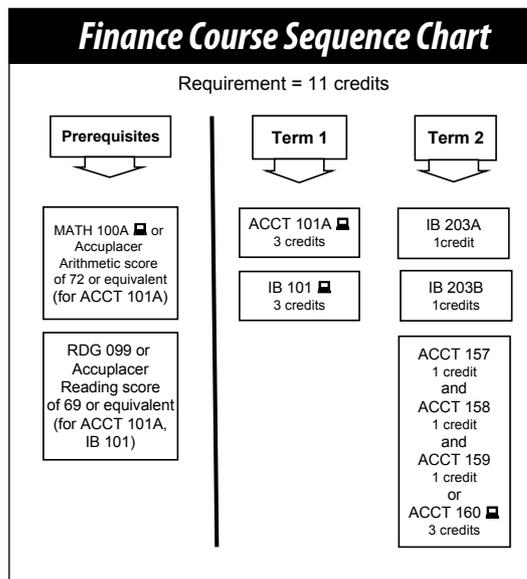
Information about these courses is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.

★ See page 269 for courses in this category.

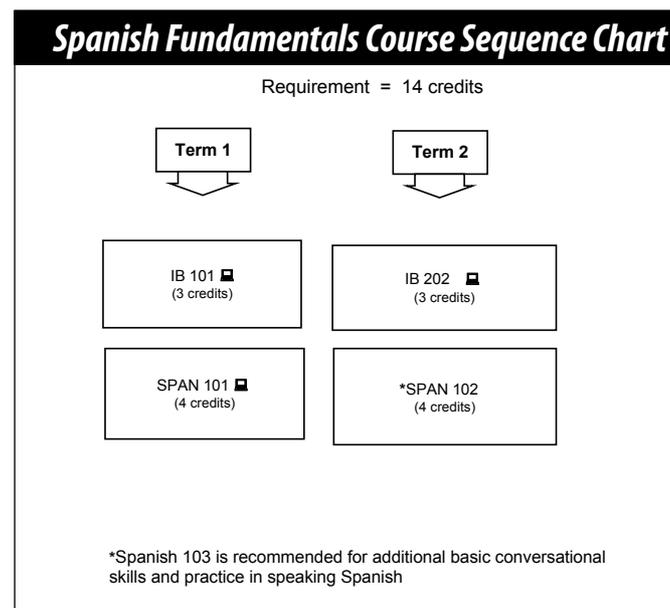
Entrepreneurship Course Sequence Chart



Finance Course Sequence Chart



Spanish Fundamentals Course Sequence Chart



- ***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

Many students are currently employed by the court system. 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.

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.

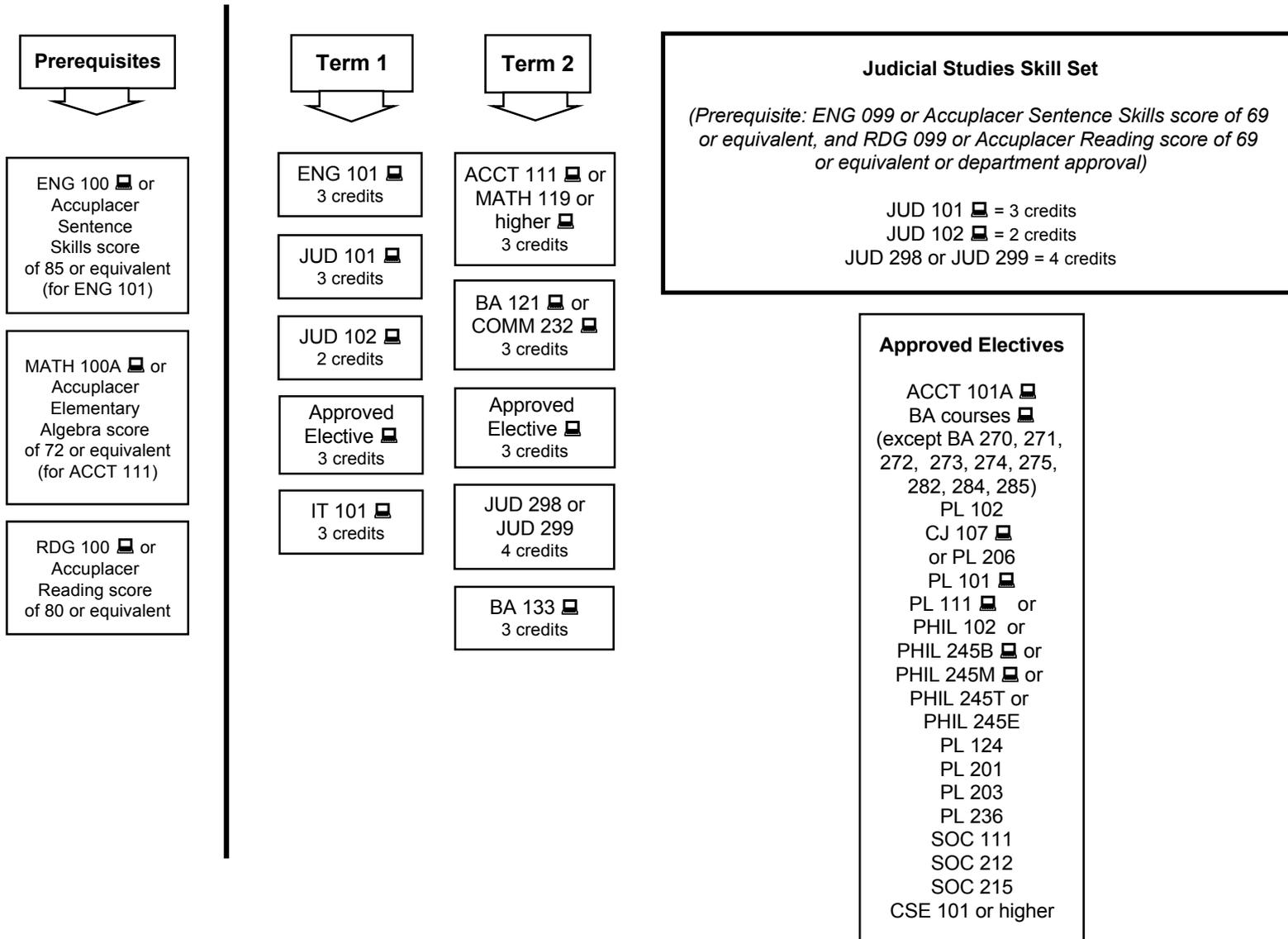
For prerequisites and a recommended course sequence, turn the page... ►



– Course available through Distance Learning (see page 49.)

JUDICIAL STUDIES Certificate

Recommended Course Sequence for Full-time Students
 (Part-time Students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 30 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- *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. One hundred percent of 2002–03 graduates found employment.

Special Requirements

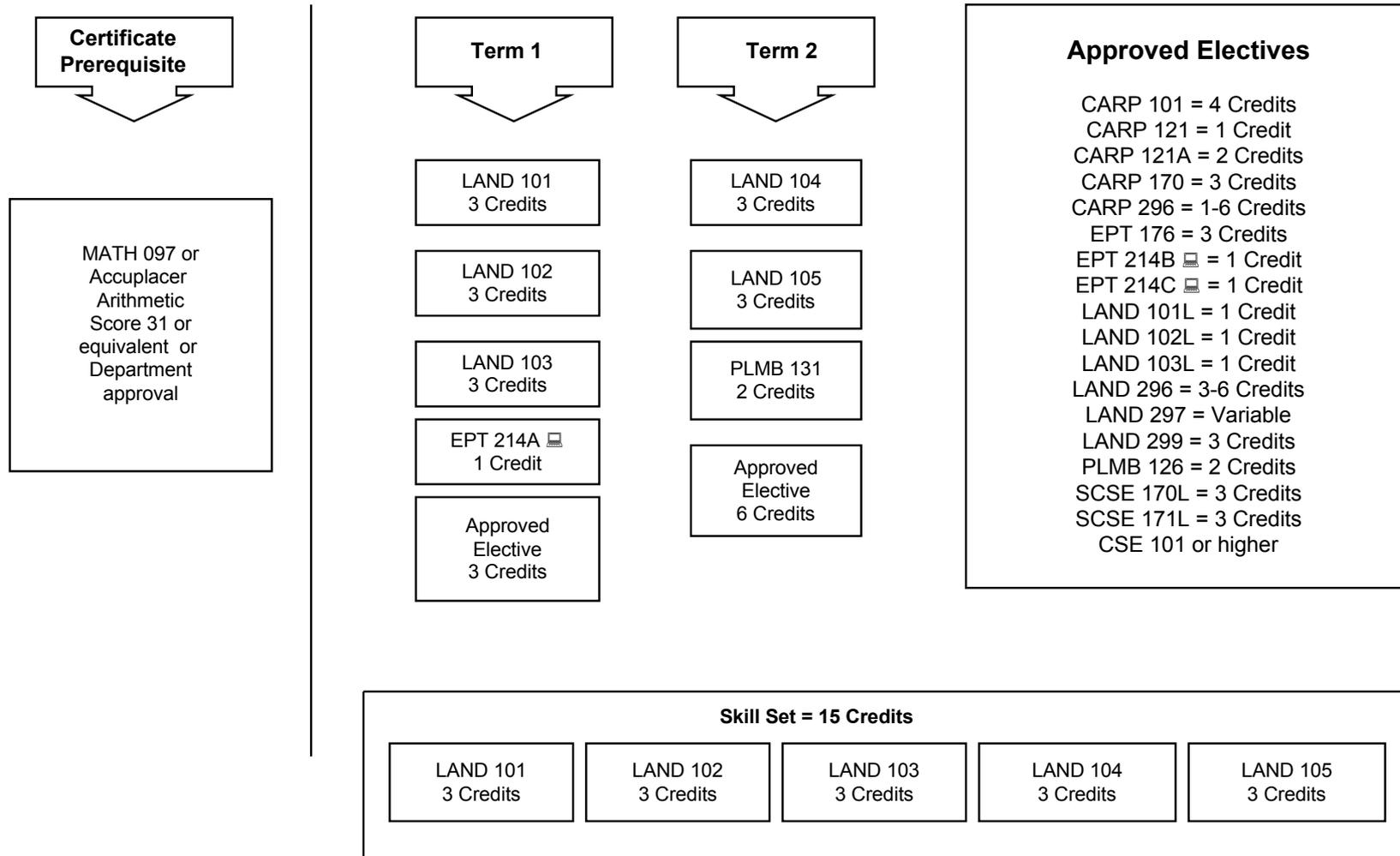
Students are required to purchase textbooks, tools and personal protection equipment.

CONTACT INFORMATION

Program information is available from the program chair at (505) 224-3796, the director at (505) 224-3716, or from Academic Advisement and Career Development at (505) 224-4321.

LANDSCAPING Certificate and Skill Set

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize your educational plan.)
 Skill Set Requirements = 15 credits
 Certificate Requirements = 27 Credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- *Associate of Arts Degree in 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 192 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 flow chart for specific requirements). There are three specific requirements: English 102 (prerequisite ENG 101), one Communication course (either COMM 130 or COMM 221) and any Math course with a prerequisite of MATH 119 or higher.

The term "applied arts" refers to THEA 120 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 101.

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.

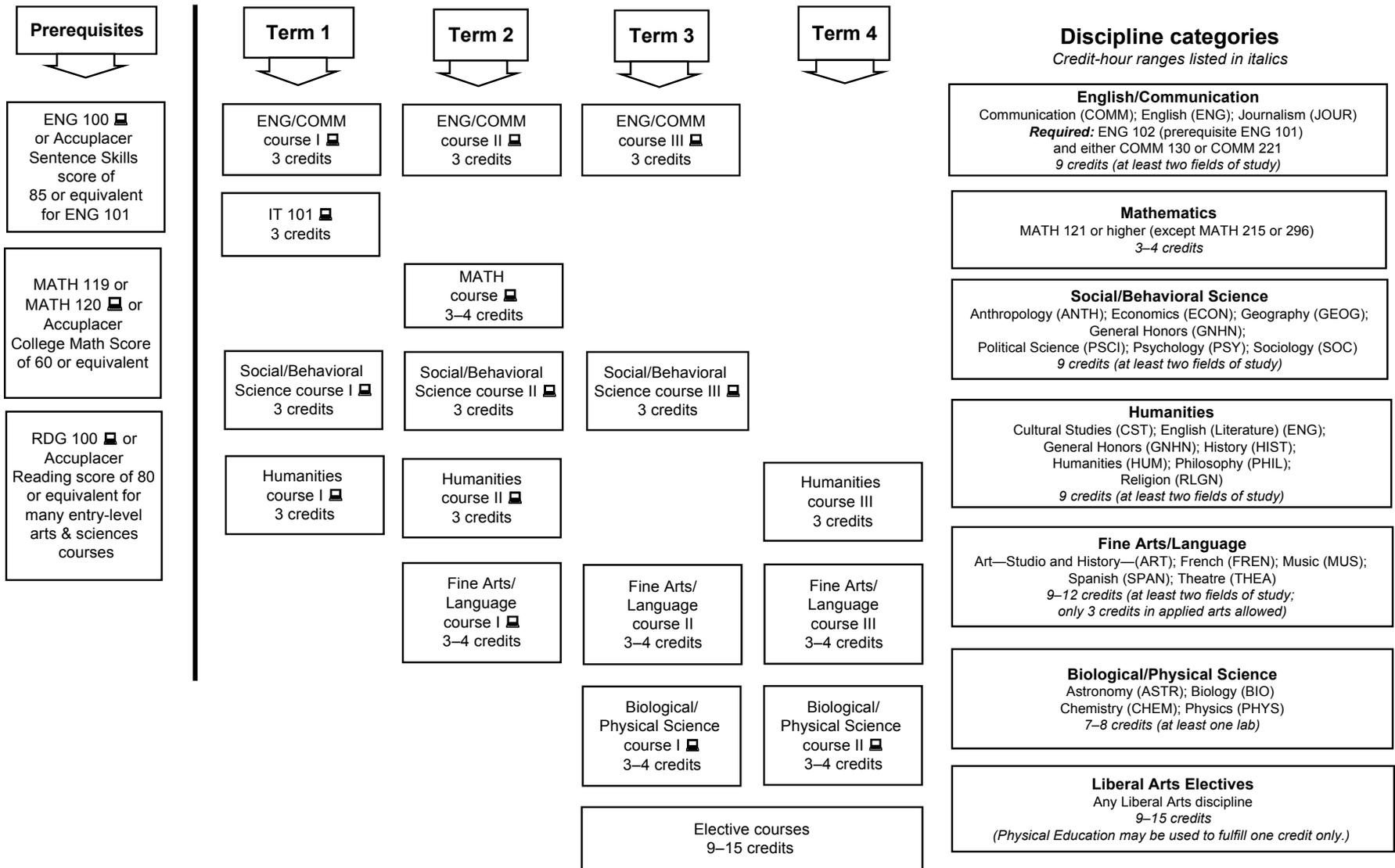


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ►

LIBERAL ARTS Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirements = minimum of 64 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

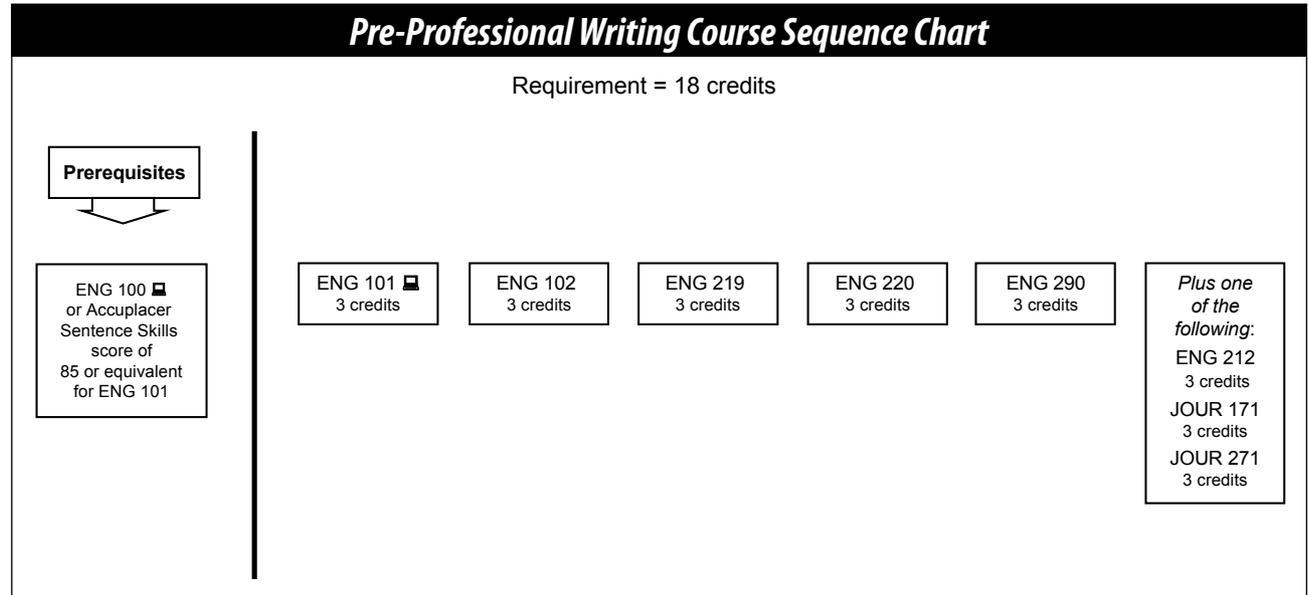
A Skill Set is issued by an academic division upon successful completion of a combination of approved courses that provide specific skills. Application for a Skill Set may be made within the division upon completion of the coursework.

Pre-Professional Writing (Skill Set)

Pre-Professional Writing is a series of courses designed to develop an individual’s writing skills. Students who complete Pre-Professional Writing may be granted junior status in a major should they transfer to other state colleges or universities.

CONTACT INFORMATION

For further information about this skill set, contact the Communication, Humanities & Social Sciences Division at (505) 224-3588, or Academic Advisement and Career Development at (505) 224-4321.



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

LICENSED PRACTICAL NURSE REFRESHER Skill Set

Health, Wellness & Public Safety Division

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 may 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. A \$25 program fee covers the cost of supplies and preventative lab tests in case of needle sticks or other 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.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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. Some programs require documentation of a recent health screening from a licensed healthcare 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.

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

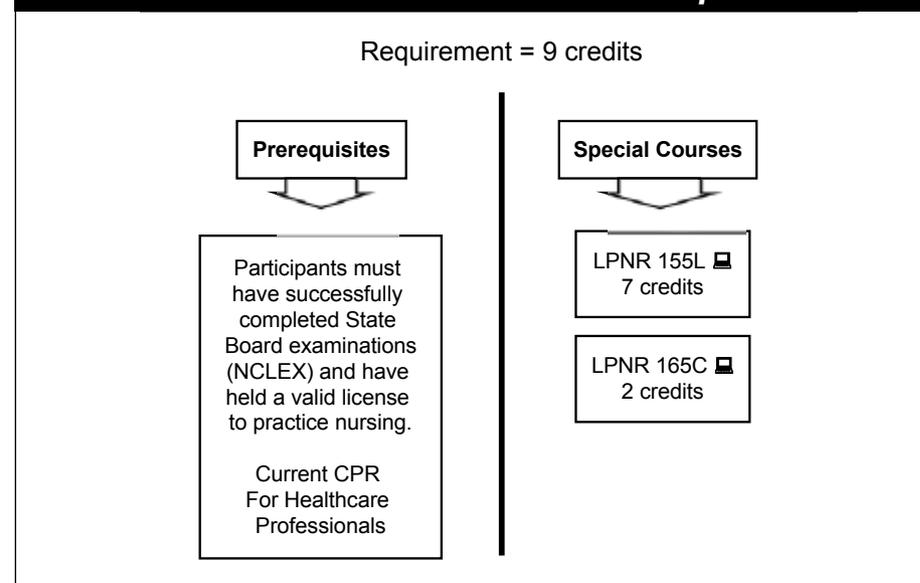
Health, Wellness & Public Safety Division students must graduate under the current catalog.

- 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.

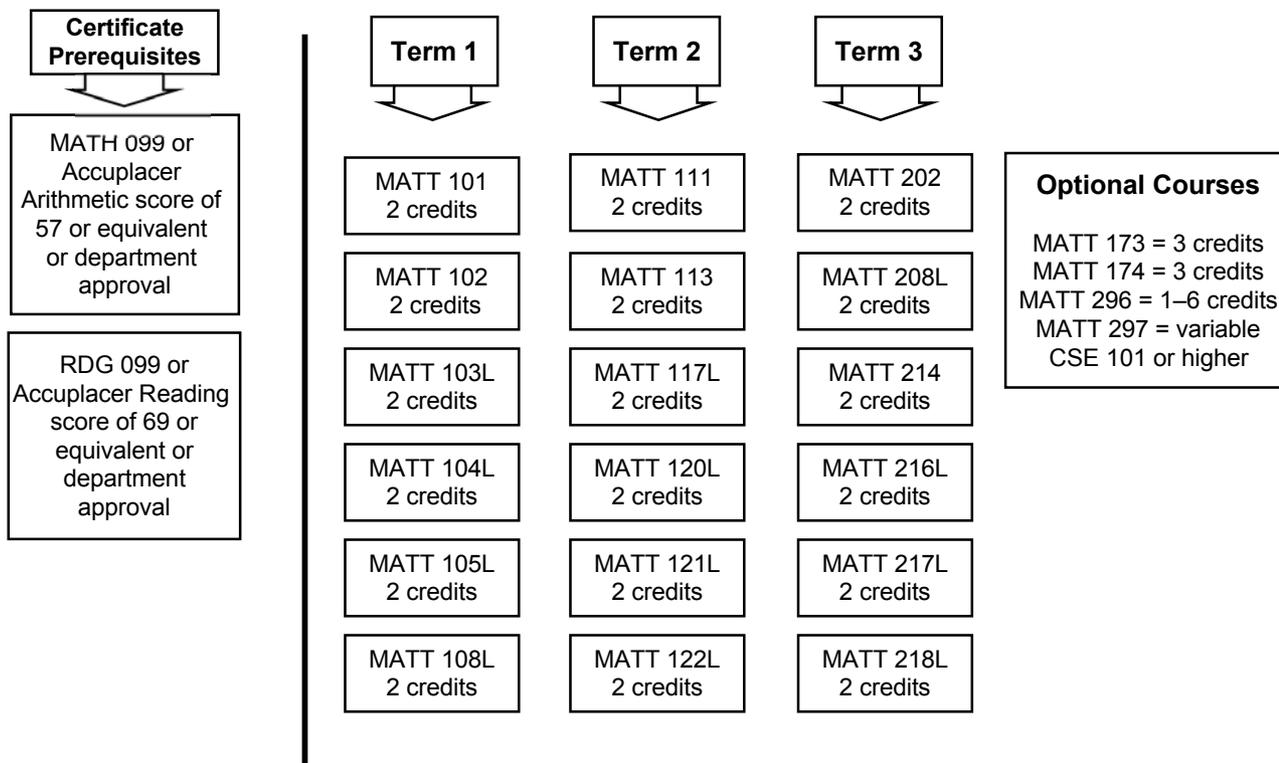
Licensed Practical Nurse Refresher Course Sequence Chart



– Course available through Distance Learning (see page 49.)

For additional information about this certificate and how it fits within the Metals Technology Associate of Applied Science Degree see page 208.

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 36 credits



– Course available through Distance Learning (see page 49.)

MANUFACTURING TECHNOLOGY

Applied Technologies Division

- **Associate of Applied Science Degree in Manufacturing Technology (Concentration in Advanced Manufacturing, MEMS Designer, MEMS Technician or Semiconductor Manufacturing)**
- **Certificate in Manufacturing Technology**

Program Description

The Manufacturing Technology program provides students with a broad base of skills in analog and digital electronics with concentrations in Advanced Manufacturing, 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 depending on the concentration. Laboratory facilities containing modern equipment for testing, troubleshooting, calibrating, analyzing and designing electronic systems and for processing wafers are used in the SMT and MEMS concentrations. Advanced Manufacturing, in addition, studies the science of materials, including computers, electronic instruments, wafer processing equipment and electromechanical equipment. Other laboratory facilities provide the ability to analyze and test various materials and components.

Career and Advancement Opportunities

Manufacturing Technology is a rapidly growing and changing technical field. Whether in Semiconductor Manufacturing, Advanced Manufacturing or with Micro Devices, the student will be a trained technician that can expect favorable job opportunities, promotion potential and rapid advancement in many manufacturing industries. MT graduates are typically employed with companies whose primary activity is manufacturing and production and research and development. Graduates will be eligible for entry-level technical positions in a wide range of scientific disciplines utilizing state-of-the-art 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 fundamental concepts of electronics and mechanical components.

CONTACT INFORMATION

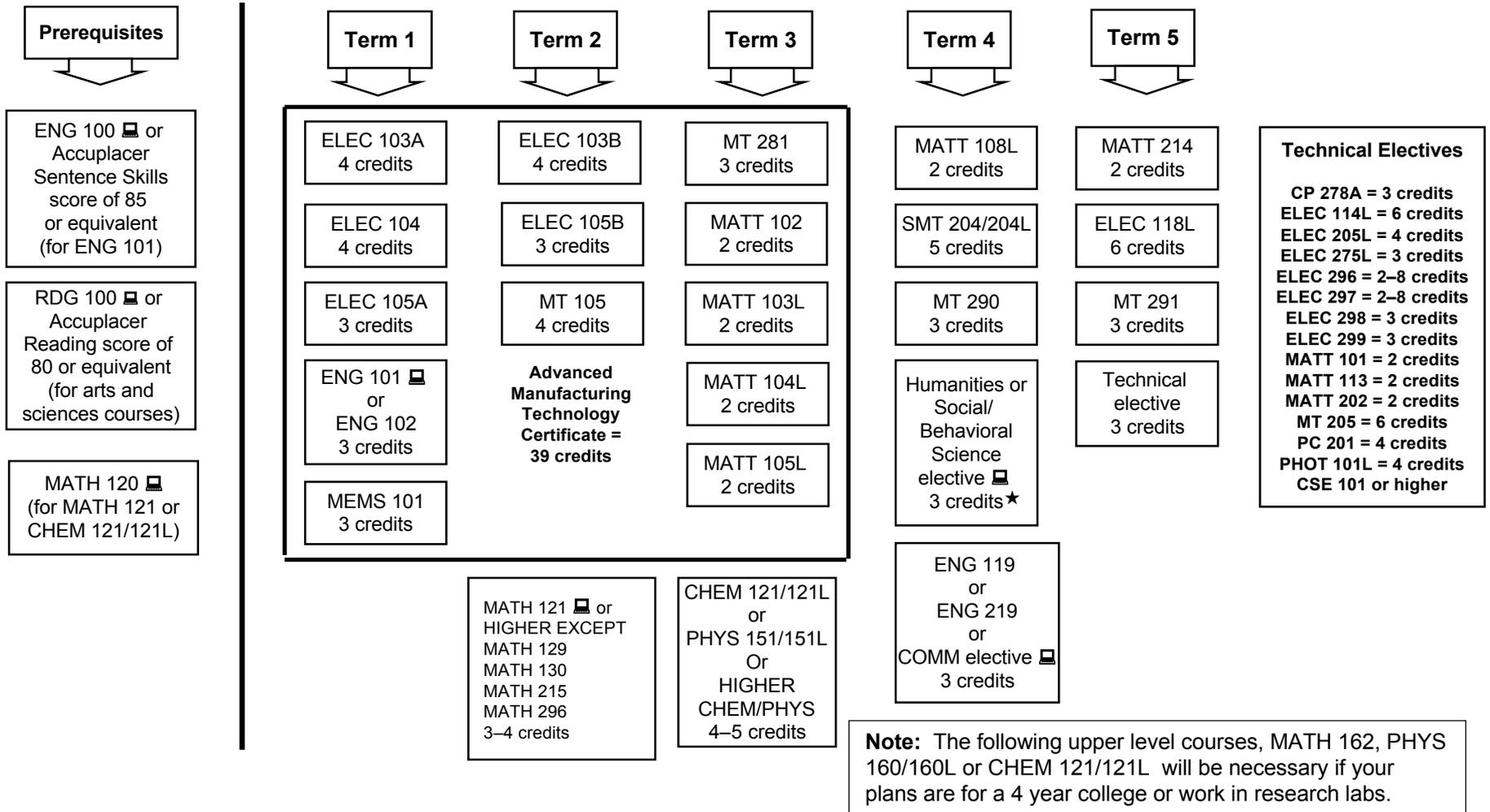
Program information is available from the program director at (505) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

MANUFACTURING TECHNOLOGY (Advanced Manufacturing Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 39 credits
 Degree requirement = 76-78 credits

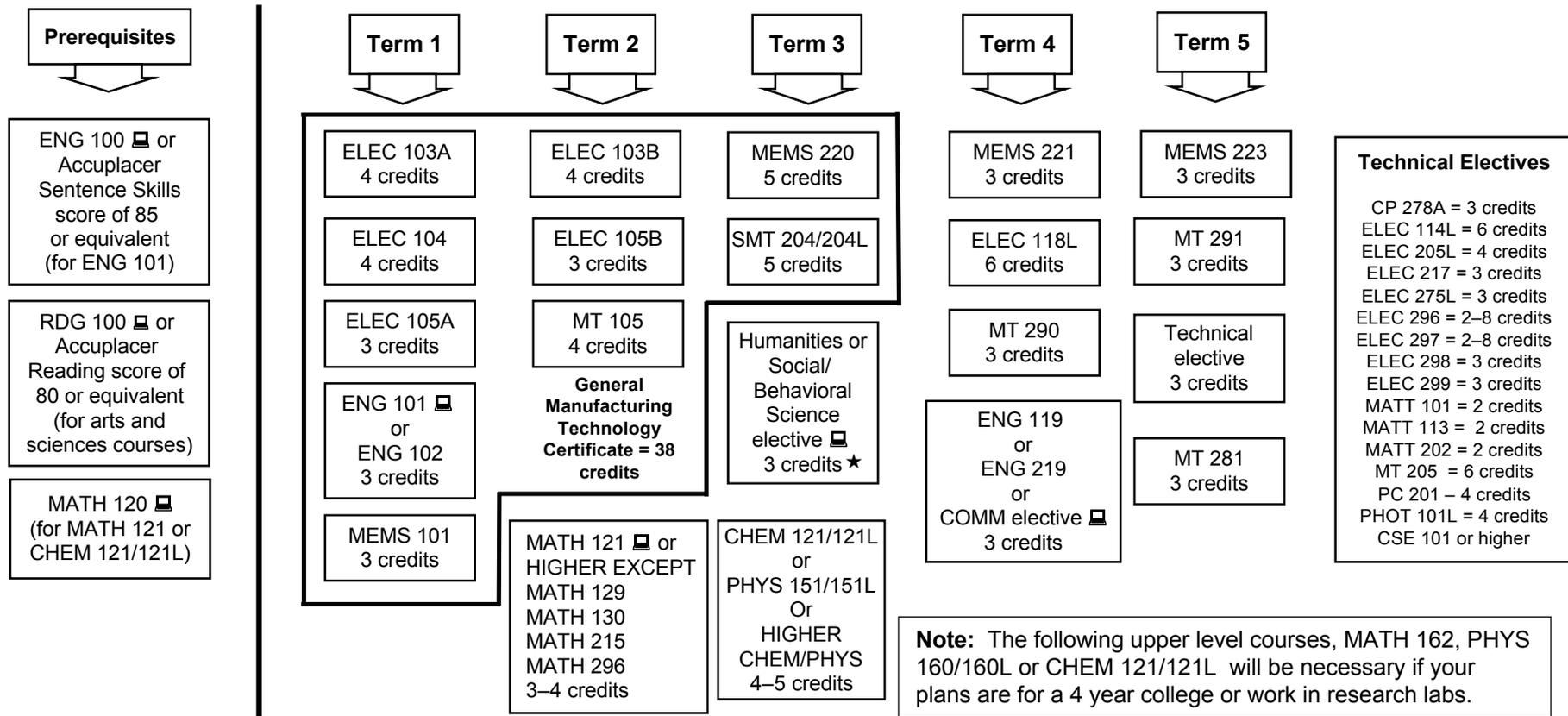


★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

MANUFACTURING TECHNOLOGY (MEMS Designer Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 38 credits
 Degree requirement = 75-77 credits



★ See page 269 for courses in this category.

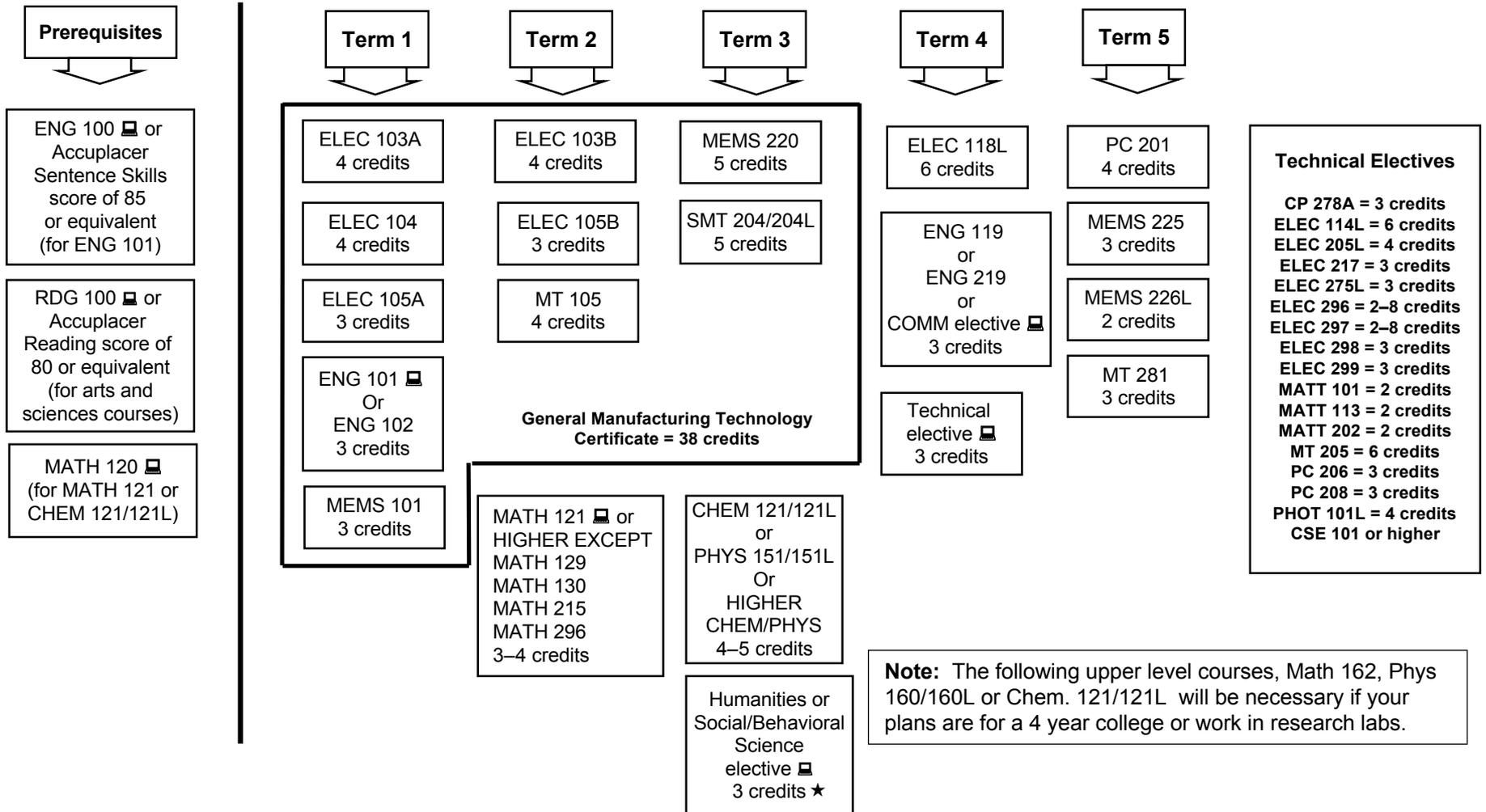
- Course available through Distance Learning (see page 49.)

MANUFACTURING TECHNOLOGY (MEMS/SMT Technician Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 38 credits

Degree requirement = 72-74 credits



MECHANICAL TECHNOLOGY

Applied Technologies Division

- *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 and take EPA and ICE certification exams. Both ACHR and plumbing students are prepared for the New Mexico State Journeymen Certificate exam. Students will meet in classrooms and labs and at off-campus construction sites.

Career and Advancement Opportunities

One hundred percent of ACHR and plumbing certificate graduates obtained jobs in 2002–03. One hundred percent of the Mechanical Technology graduates obtained jobs. Graduates are employed by local service and installation contractors as well as local manufacturers, hospitals and facilities.

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.

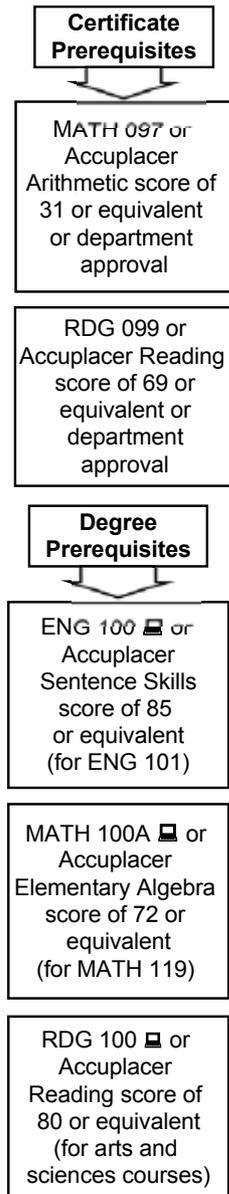
CONTACT INFORMATION

Information about these programs is available from the program chair at (505) 224-3796, the director at (505) 224-3716, or from Academic Advisement and Career Development at (505) 224-4321.

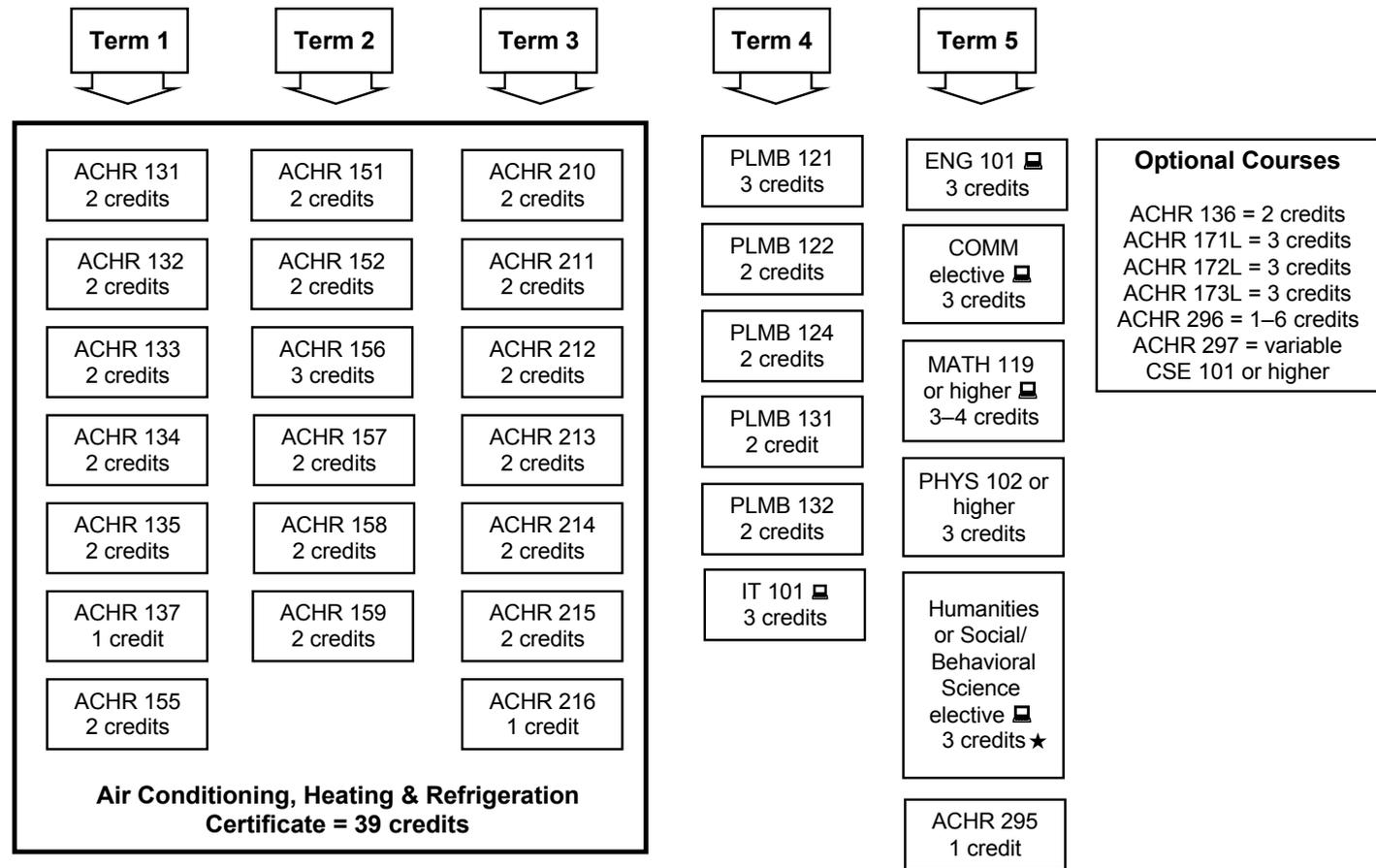


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

MECHANICAL TECHNOLOGY (Air Conditioning, Heating and Refrigeration Concentration) Degree (Also Air Conditioning, Heating and Refrigeration Certificate) (Also known as HVACR in the Industry)



Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)
Certificate requirement = 39 credits
Degree requirement = 69–70 credits



★ See page 269 for courses in this category.

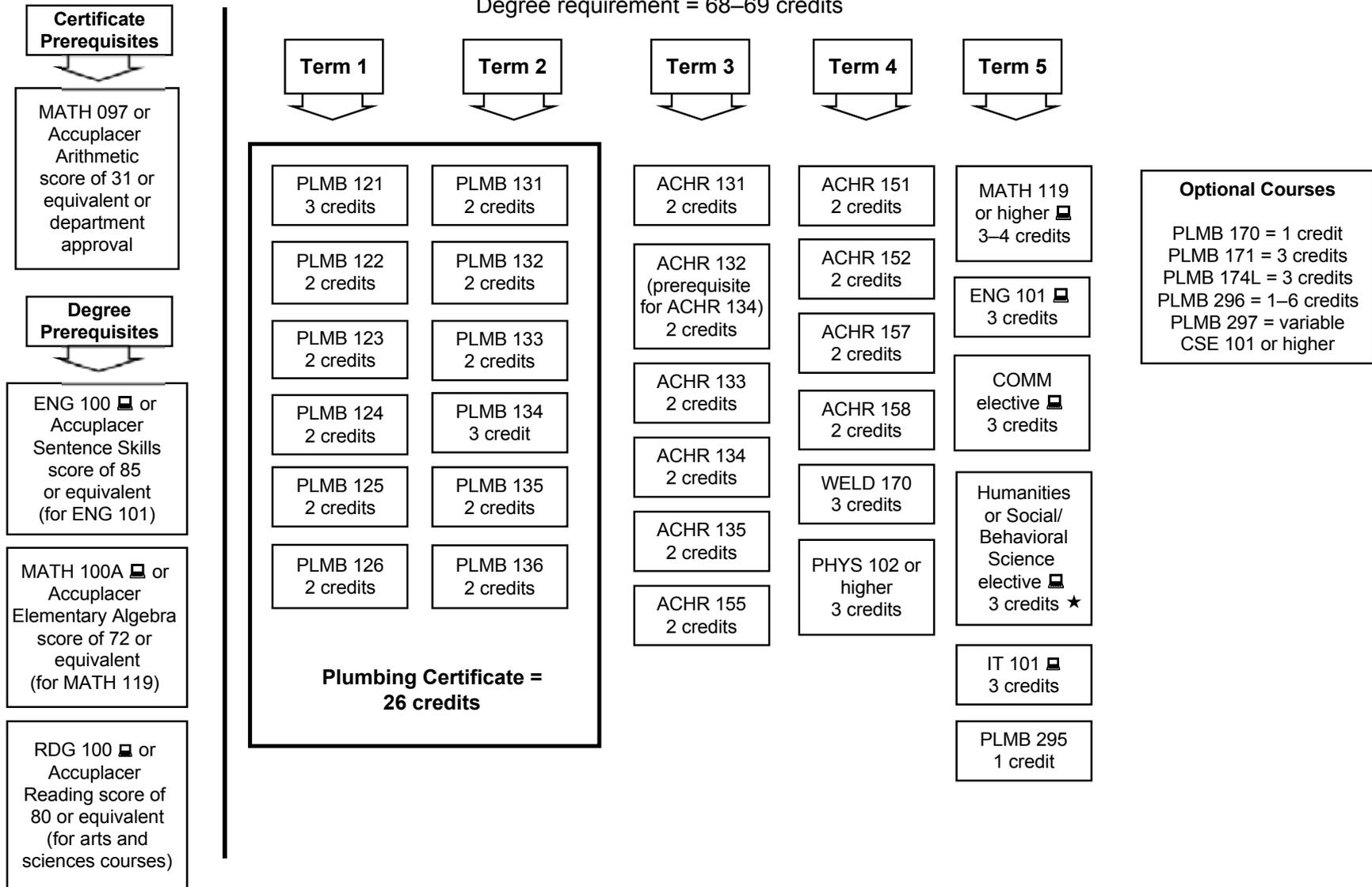
 – Course available through Distance Learning (see page 49.)

MECHANICAL TECHNOLOGY (Plumbing Concentration) Degree (Also Plumbing Certificate)

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 26 credits

Degree requirement = 68–69 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

• *Certificate in Medical Coding*

Program Description

The Medical Coding certificate program is designed to provide students the opportunity to prepare for a future in the healthcare 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

A grade of C or higher must be achieved in all courses. At the time of admission into the program, BIO 136/139L must have been taken within the last 10 years. Before entering the Medical Coding program, students must schedule an interview with the HIT program director.

CONTACT INFORMATION

Information about this program is available from the HIT program director, Mechel McKinney, at (505) 224-3905, mmckinney@cnm.edu, or from Business & Information Technology Division Associate Dean, Susie Cutler, at (505) 224-3820, scutler@cnm.edu, or from Academic Advisement and Career Development at (505) 224-4321.

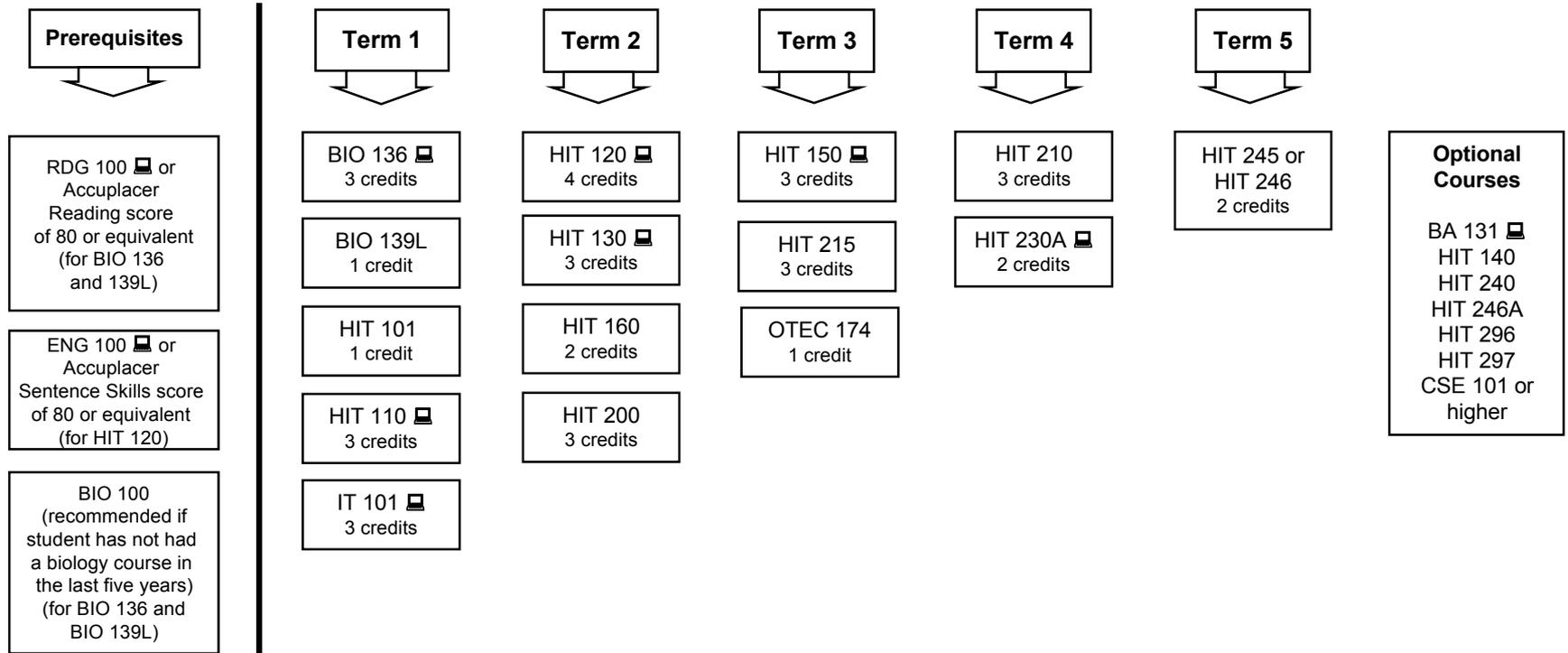
For prerequisites and a recommended course sequence, turn the page... ►



– Course available through Distance Learning (see page 49.)

MEDICAL CODING Certificate

Recommended Course Sequence
Certificate requirement = 37 credits



Students must achieve a letter grade of C or higher in all courses.

★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

MEDICAL LABORATORY TECHNICIAN

Health, Wellness & Public Safety Division

• 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. MLTs 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. Students may petition from the beginning of the summer term through the month of July. 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 have been sent to CNM's Record Office (allow three-four weeks) and a cumulative GPA of 2.0 or higher. Students are responsible for meeting the eligibility requirements.

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 healthcare 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.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

Current certification in CPR, a physical exam and current vaccinations (including hepatitis A & 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). There is a \$25 program fee for MLT 102L for the purchase of a nametag, hospital parking permits and preventative lab tests in the case of needle stick or other exposure to bodily fluids. There is a \$35 program fee (MLT 205C) for an online practice exam for the national board of registry.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 may be required to undergo routine drug screening and a criminal background check 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 career or technical courses offered only for credit/no credit, a grade of credit (CR) must be earned. The arts and sciences courses are prerequisites for submitting a petition for enrollment in the advanced MLT courses in the Fall Term (MLT 114/114C). 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 102/102L, 104 and 151C) along with their arts and sciences courses with the program director's approval.

The sequence of the MLT core courses may be modified with permission of the Program Director.

Advanced Placement: Applicants seeking advanced placement into the MLT program should contact the program director for more information.

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.

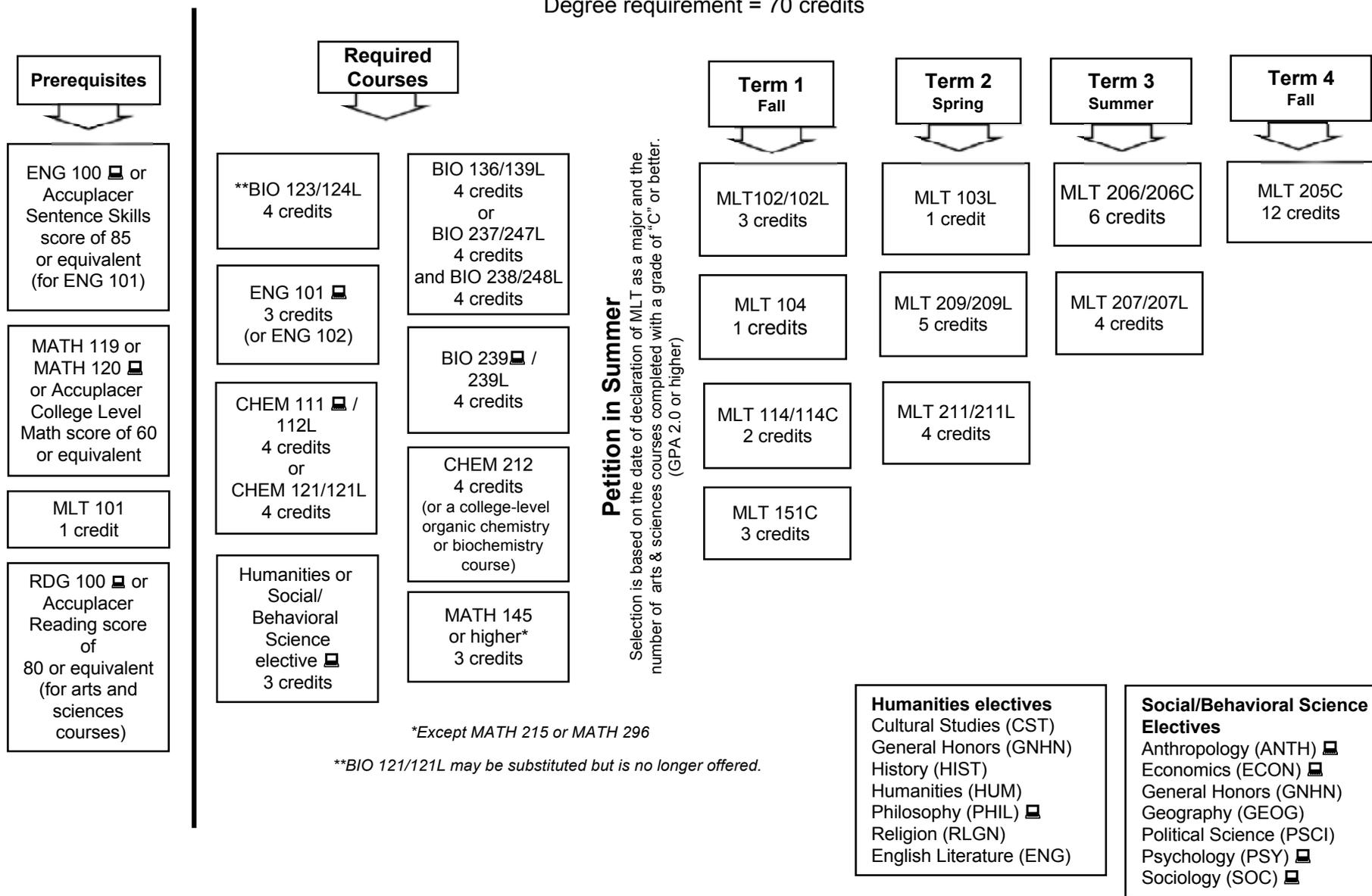
CONTACT INFORMATION

Program information is available from Monya Kmetz, Program Director, (505) 224-5021, monya@cnm.edu, or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.

For prerequisites and a recommended course sequence, turn the page... ►

MEDICAL LABORATORY TECHNICIAN Degree

Recommended Course Sequence for Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirement = 70 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *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 to be 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.

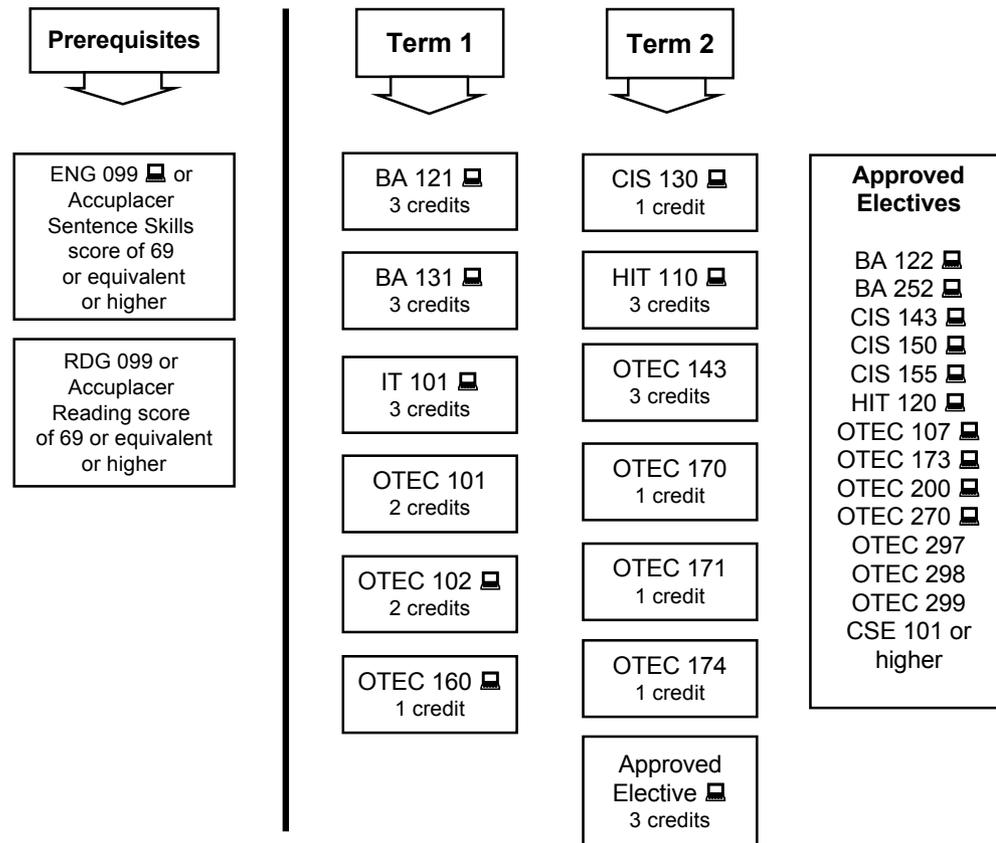
For prerequisites and a recommended course sequence, turn the page... ►



– Course available through Distance Learning (see page 49.)

MEDICAL OFFICE ASSISTANT Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 27 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- ***Associate of Applied Science Degree in Metals Technology (concentrations in Machine Tool Technology and Welding)***
- ***Certificates in Machine Tool Technology or Welding***

Program Description

Students will study hands-on machine tool technology, welding, blueprint reading, mathematics, metallurgy and other general course work. Classes include classroom and lab time.

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 faster career advancement and greater earning potential.

Special Requirements

Students are required to purchase textbooks, tools and personal safety equipment.

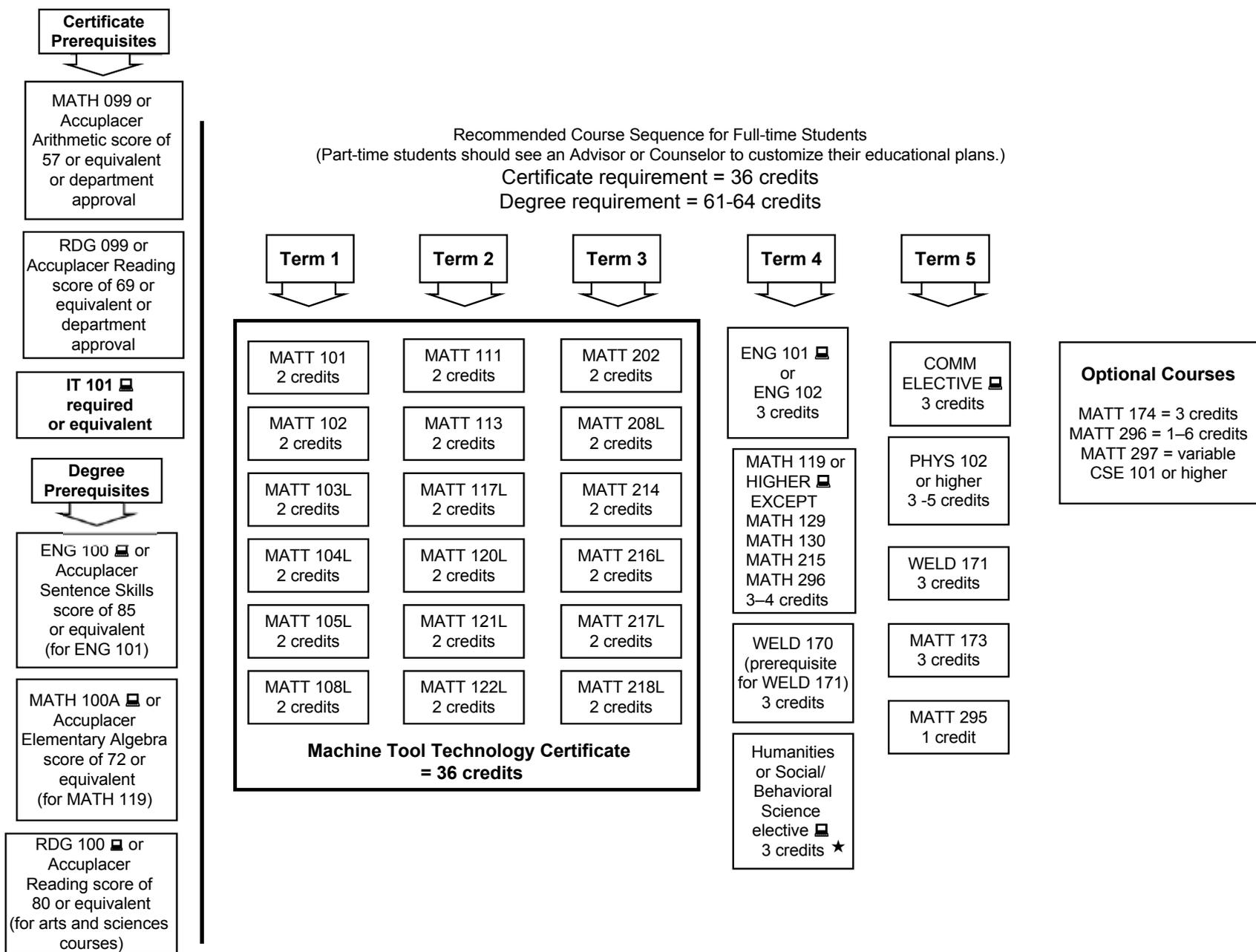
CONTACT INFORMATION

Information about these programs is available from the program chair at (505) 224-3751, the director at (505) 224-3718, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

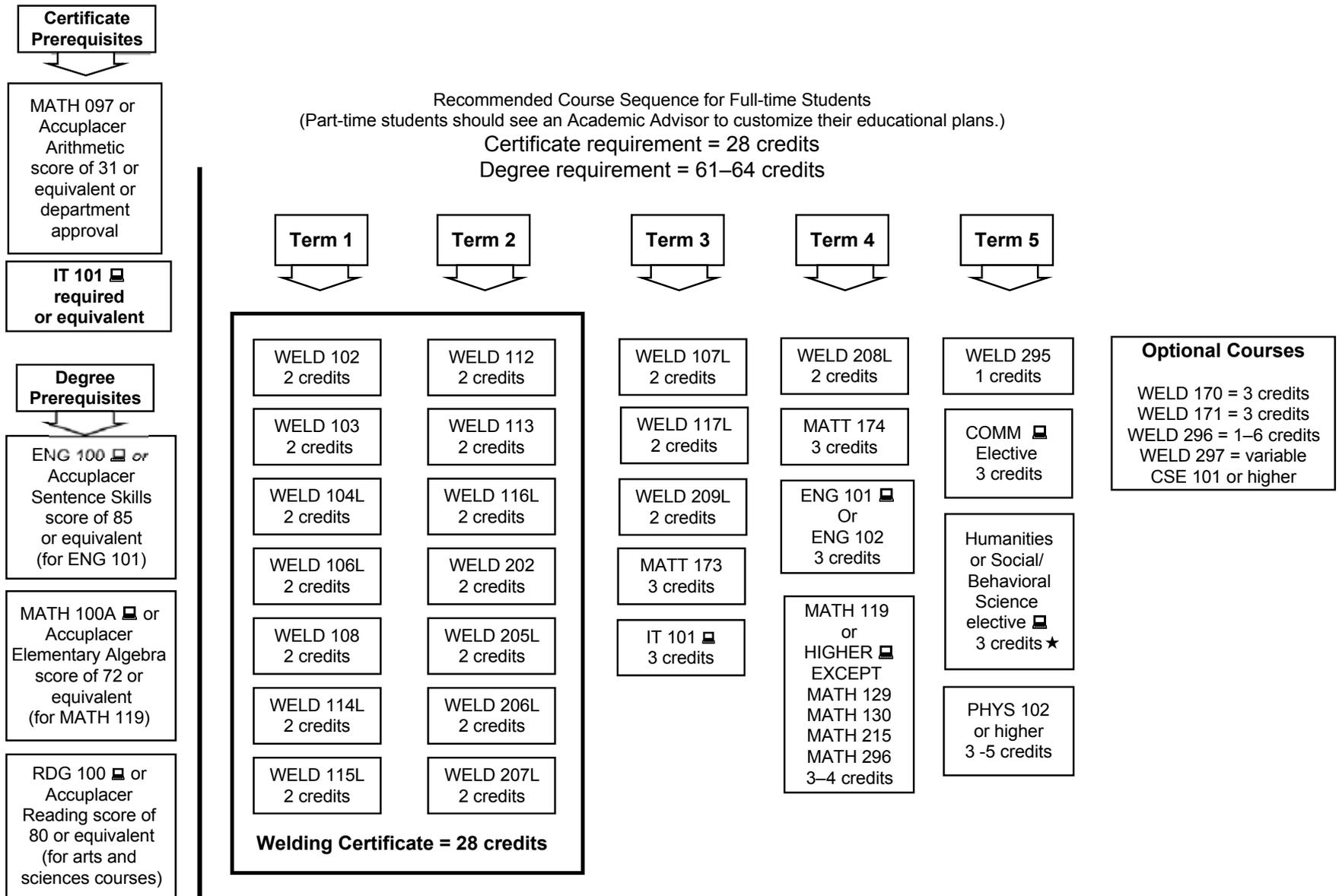
METALS TECHNOLOGY (Machine Tool Concentration) Degree (Also Machine Tool Certificate)



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

METALS TECHNOLOGY (Welding Concentration) Degree (Also Welding Certificate)



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

NETWORKING TECHNOLOGY

Business & Information Technology Division

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS. THE COURSES WILL BE INTEGRATED INTO THE COMPUTER INFORMATION SYSTEMS PROGRAM WITH A CONCENTRATION IN NETWORK ADMINISTRATION.)

- **Associate of Applied Science Degree in Networking Technology**
- **Certificate in Networking Technology**

Program Description

In this program students acquire the skills to administer and support computer systems and networks. The program is designed for a person who is responsible for the day-to-day operation of a network. Students will attain skills to diagnose, troubleshoot and resolve network problems in a real-time environment. Early courses emphasize written and verbal communications, business knowledge and basic computer skills. Students must choose one Prep Option: Cisco CCNA Prep, Linux Prep or Microsoft Certification Prep.

Career and Advancement Opportunities

Graduates are prepared for entry-level jobs in government, business and industry. Network or systems administrators typically perform tasks such as: system installation, configuration and maintenance; administering user accounts; backing up servers; loading applications; and maintaining security. Other job responsibilities include minor network troubleshooting and network performance.

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.



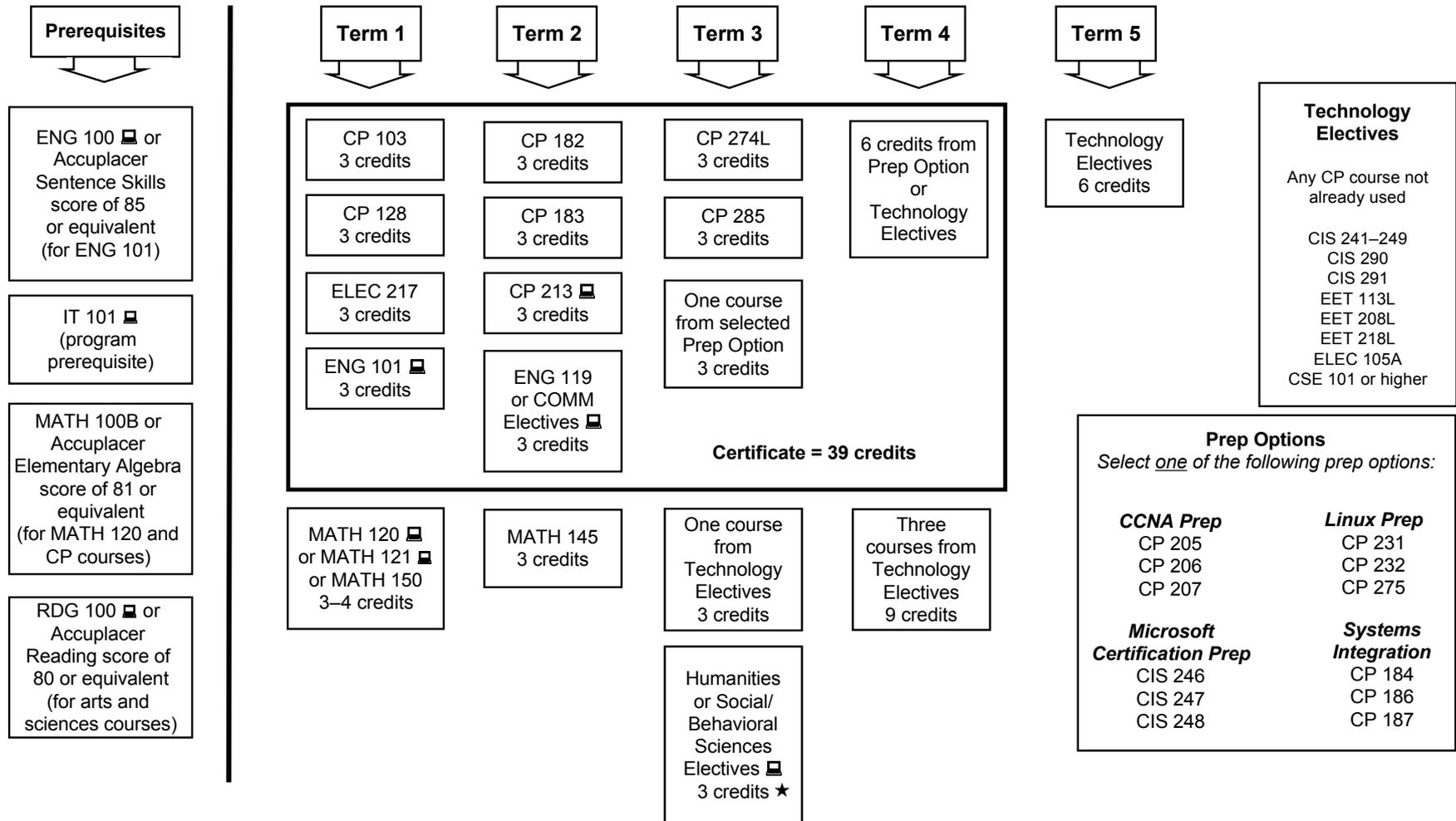
Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

NETWORKING TECHNOLOGY Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 39 credits

Degree requirement = 66–67 credits



- *Associate of Science in Nursing (Associate Degree in Nursing – A.D.N.)*
- *Certificate in Practical Nursing (P.N.)*

Program Descriptions

Nursing is an exciting and rewarding field that requires highly ethical individuals who have the ability to problem-solve and think critically in a rapidly changing environment. Nursing is a science as well as an art because it is essential that the nurse combine scientific knowledge and technical skills with a compassionate and creative heart. To be successful, nurses must have the physical, mental, emotional and ethical ability to meet the needs of patients in a safe and effective manner. Applicants are encouraged to request a copy of “Admission Eligibility” from the Nursing/Health, Wellness & Public Safety Division office since it outlines the functional abilities and attributes required for effective performance in the nursing programs. Students with concerns about disabilities that may interfere with their ability to complete either nursing program are encouraged to discuss these concerns with the nursing programs director before they begin taking prerequisite courses. The A.D.N. and P.N. programs begin in the fall, spring and summer.

Information Sessions: Information sessions are scheduled regularly for both programs. For dates and times, applicants may call the Health, Wellness & Public Safety Division information line at (505) 224-4161. These sessions review levels of nursing, the petition process for enrollment, program requirements and curriculum changes. Individuals interested in either nursing program must attend one of these sessions and continuing students are encouraged to attend at least one session a year. Students may declare their major in practical nursing or associate degree nursing at any time; however, when ready to enter clinical courses, students must petition for selection into a specific program.

There are two programs available: associate degree nursing (leading to eligibility for licensure as a Registered Nurse) and practical nursing (leading to eligibility for licensure as a Licensed Practical Nurse). Both 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.

Licensure: All new applicants for licensure in New Mexico are required to submit fingerprints for a federal criminal background check. In addition, it is essential that prospective students be informed that the New Mexico Board of Nursing (NMBON) may deny, revoke or suspend any license held or applied for under the Nursing Practice Act, upon grounds that the licensee or applicant has been involved in any of the following actions:

1. is guilty of fraud or deceit in procuring or attempting to procure a license or certificate of registration;
2. is convicted of a felony;
3. is unfit or incompetent;
4. is intemperate or is addicted to the use of habit-forming drugs;
5. is mentally incompetent;
6. is guilty of unprofessional conduct as defined by the rules and regulations adopted by the board pursuant to the Nursing Practice Act [Chapter 61, Article 3 NMSA 1978].

7. has willfully or repeatedly violated any provisions of the Nursing Practice Act [Chapter 61, Article 3 NMSA 1978] including any rule or regulation adopted by the board pursuant to that act; or
8. was licensed to practice nursing in any jurisdiction, territory or possession of the United States or another country and was the subject of disciplinary action as a licensee for acts described in the subsection. A certified copy of the record of the jurisdiction, territory or possession of the United States or another country taking the disciplinary action is conclusive evidence of the action.

Career Advancement Opportunities

NURSING (Associate Degree in Nursing)

The associate degree in nursing (A.D.N.) program prepares nurses to provide nursing care to individuals in inpatient and outpatient healthcare facilities. Graduates are experiencing 100% placement in a wide variety of healthcare settings where they provide and manage client care, teach clients and promote communication while participating as members of the nursing profession.

Advanced Placement: To apply for advanced standing in the A.D.N. program, individuals must meet the enrollment requirements for the program. Official transcripts of all vocational/college courses must be sent to CNM. All advanced placement students must take NURS 190C or 202C prior to enrollment in the Nursing courses. Advanced placement may be granted in three ways:

- 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.
- 2) **Challenge Exam:** for former nursing students with credits too old, military medics, corpsmen or performance of basic nursing skills during employment in an in-patient setting within the last three years. Individuals interested in challenge must make an appointment with the director of the A.D.N. program.
- 3) **LPN Mobility:** is designed to enroll qualified licensed practical nurses into the third term of the A.D.N. program who meet the following requirements:
 - meet all enrollment criteria for the A.D.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;
 - 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 115 and NURS 202C. Priority is given to those who have also completed NURS 231.

Students are responsible for meeting the prerequisites and notifying the nursing chair of their readiness to enter advanced placement four months prior to the term when they want to enter. Students are notified by mail when they are selected to enter the clinical courses.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

For prerequisites and a recommended course sequence, turn the page... ▶

NURSING continued

PRACTICAL NURSING (P.N. Certificate)

The P.N. certificate program prepares practical nurses to care for patients in a variety of healthcare facilities under the supervision of registered nurses, physicians or dentists. Following licensure, LPN's have been finding 100% placement in long-term care facilities, physician offices and other healthcare agencies. The Presbyterian Healthcare Services (PHS) School of Practical Nursing was started in 1956 at Presbyterian Hospital. In 1965, CNM assumed administrative responsibility for the school. Presbyterian continues to support the school by providing clinical facilities for patient care experiences. Advanced placement may be given in two ways to Practical Nurse applicants: credit granted for equivalent coursework and/or successful completion of a challenge exam. For additional information, applicants may contact the nursing programs at (505) 224-4141.

Special Program Requirements (for both the A.D.N. and P.N. programs)

Petitioning: 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 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% on the (Nursing/MLT) Basic Math test within 12 months prior to petitioning and a cumulative CNM GPA of 2.0 or higher. Anatomy, physiology and microbiology course must be taken within five years from the date of petition to the nursing program. *Note: anatomy and physiology courses have general biology (BIO 123/124L) and chemistry (CHEM 111/112L) prerequisites. These prerequisites may be met by a passing score on the biology placement exam. Permission to enroll is provided by the biology faculty.*

Once all criteria are fulfilled, students must petition for enrollment into the first clinical course in either nursing program. Should there be more petitioners than available spaces, the date of declaration of A.D.N. or P.N. as a major will be 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. The date of completion will be the last day of the term in which the course was successfully completed. Because of the high demand for these programs, it may take more than one year after petitioning to begin the nursing core coursework.

Requirements for entering clinical courses: AFTER SELECTION into the first clinical course, students must submit:

- 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 information session for more details.
- 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 healthcare 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 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 healthcare 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 with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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. *Note: Students may be required to undergo routine drug screening and a criminal background check prior to beginning and throughout their clinical experience.*

Students must arrange for their own transportation to all classes, observations and clinical experiences. There may be some 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 and preventive lab tests in case of needle stick or other exposure to bodily fluids. 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.

Health, Wellness & Public Safety Division nursing 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. In addition, competency in dosage calculations, as tested by clinical calculation exams, must be maintained for progress in either program.

CONTACT INFORMATION

Information about the nursing programs is available from the administrative support specialist, Jennifer Cooke at jcooke@cnm.edu, (505) 224-4141, or from Academic Advisement and Career Development at (505) 224-4321.

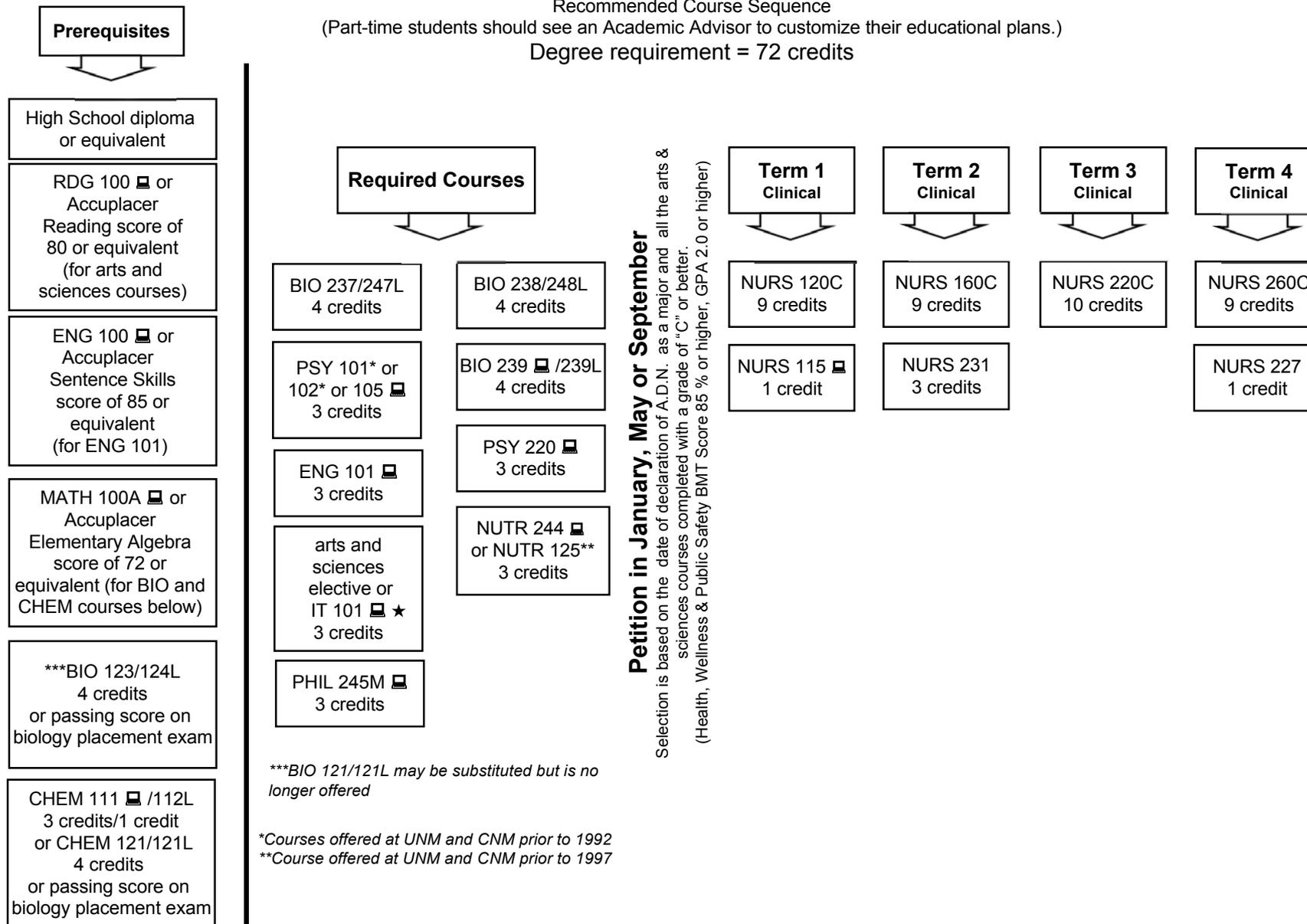
For prerequisites and a recommended course sequence, turn the page... ►



– Course available through Distance Learning (see page 49.)

NURSING DEGREE (A.D.N)

Recommended Course Sequence
(Part-time students should see an Academic Advisor to customize their educational plans.)
Degree requirement = 72 credits



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 a grade of "C" or better.
(Health, Wellness & Public Safety BMT Score 85% or higher, GPA 2.0 or higher)

***BIO 121/121L may be substituted but is no longer offered
*Courses offered at UNM and CNM prior to 1992
**Course offered at UNM and CNM prior to 1997

★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

PRACTICAL NURSING Certificate

Prerequisites

- High School diploma or equivalent
- RDG 100  or Accuplacer Reading score of 80 or equivalent (for arts and sciences courses)
- ENG 100  or Accuplacer Sentence Skills score of 85 or equivalent (for ENG 101)
- MATH 100A  or Accuplacer Elementary Algebra score of 72 or equivalent (for BIO and CHEM courses below)
- ***BIO 123/124L 3 credits/1 credit or passing score on biology placement exam
- CHEM 111  /112L 4 credits or CHEM 121/121L 4 credits or passing score on biology placement exam

Recommended Course Sequence
(Part-time students should see an Academic Advisor to customize their educational plans.)
Certificate requirement = 50 credits

Required Courses

- BIO 237/247L 4 credits
- BIO 238/248L 4 credits
- NUTR 244  (or NUTR 125**) 3 credits
- PSY 101* or PSY 102* or PSY 105  3 credits
- ENG 101  3 credits

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 a grade of "C" or better.
(Health, Wellness & Public Safety BMT Score 85 % or higher, TVI GPA 2.0 or higher)

Term 1 Clinical

- NURS 120C 9 credits
- NURS 115  1 credit
- NURS 107C 1 credits
- NURS 112 2 credits

Term 2 Clinical

- NURS 160C 9 credits
- NURS 231 3 credits
- NURS 109C 1 credit

Term 3 Clinical

- NURS 185C 7 credits

***BIO 121/121L may be substituted but is no longer offered.

*Courses offered at UNM and CNM prior to 1992
**Course offered at UNM and CNM prior to 1997

• **Nursing Assistant Certificate**

Program Description

Students will study basic nursing skills, including classroom and lab (nine weeks) and clinical (six weeks). Graduates are eligible to take the state certification exam.

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). Students interested in certain Health, Wellness and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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 documentation from a licensed healthcare provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience.

Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience. Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 \$55 program fee covers the cost of the required apron (2), name tag, stethoscope, health test, CNA pin, hospital parking permits, transfer belt and preventive lab tests in case of needlestick or other exposure to bodily fluids. The student must provide a watch with a second hand, uniform slacks, shirt and shoes.

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.

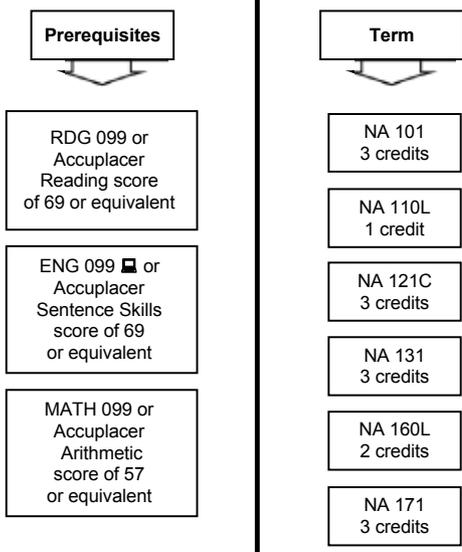
- Pre- and corequisites are listed in course descriptions and are subject to change with each new catalog. It is the student's responsibility to meet the pre- and/or corequisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. 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

Program information is available from the HWPS Division office, (505) 224-4111, or from Academic Advisement and Career Development at (505) 224-4321.

Nursing Assistant Course Sequence Chart

Recommended Course Sequence for Full-time Students
Certificate requirements = 15 credits



– Course available through Distance Learning (see page 49.)

NURSING HOME/HOME HEALTH ATTENDANT Skill Set

Health, Wellness & Public Safety Division

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 nursing skills, classroom and lab (100 hours) and clinical (50 hours) sessions. Topics include basic nursing skills, geriatrics, simple anatomy and physiology, rehabilitation, residents' rights and housekeeping chores. Lab experiences focus on personal care, vital signs and mobility skills.

Students are eligible to take the state certification exam, CNA, at the completion of this course.

A \$25 program fee covers the cost of the required apron, nametag, health test and transfer belt. A student must provide a watch with a second hand, uniform slacks, shirt and shoes. Students are required to have a physical exam, PPD and current immunizations (tetanus, MMR and hepatitis B). Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience. Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 healthcare provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience.

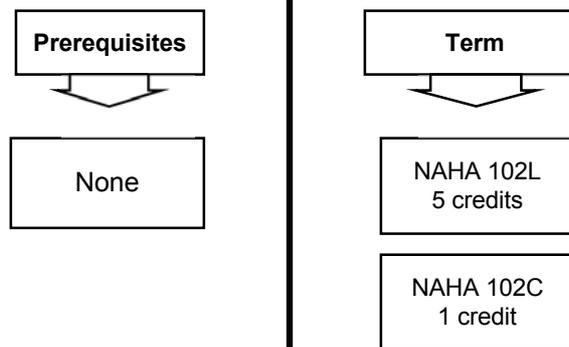
Students interested in certain Health, Wellness and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare provider confirming the ability to safely perform program specific activities 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.

Special 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.

Nursing Home/Home Health Attendant Course Sequence Chart

Requirement = 6 credits



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

Program information is available from the HWPS Division office, (505) 224-4111, or from Academic Advisement and Career Development at (505) 224-4321 or (505) 224-4321 (South Valley).

 – Course available through Distance Learning (see page 49.)

OFFICE ADMINISTRATION

Business & Information Technology Division

(THIS PROGRAM IS BEING DISCONTINUED AND IS NOT ACCEPTING NEW STUDENTS. SEE OFFICE TECHNOLOGY PROGRAM ON PAGE 224.)

- *Associate of Applied Science Degree in Office Administration (concentrations in Legal and Office Technology)*
- *Certificate in Office Administration (concentrations in Legal and Office Technology)*

Program Description

The Office Administration 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 Administration 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 administration has been 88 to 100 percent since 1997. The office administration 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 administrative profession—according to the U.S. Department of Labor, 400,000 new jobs will be added to the workforce by the year 2005.

Special Requirements

None.

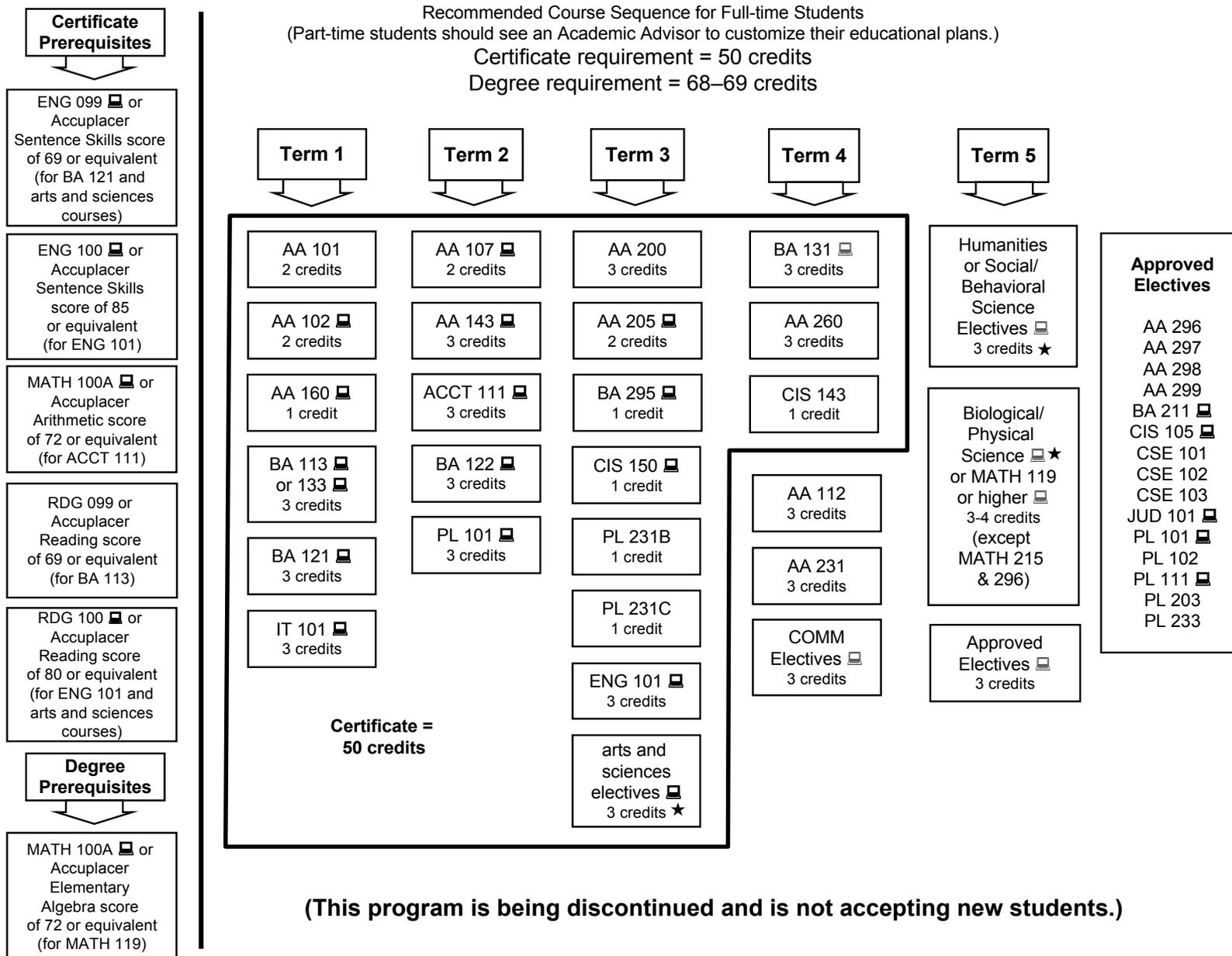
CONTACT INFORMATION

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.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

OFFICE ADMINISTRATION (Legal Concentration) Degree and Certificate

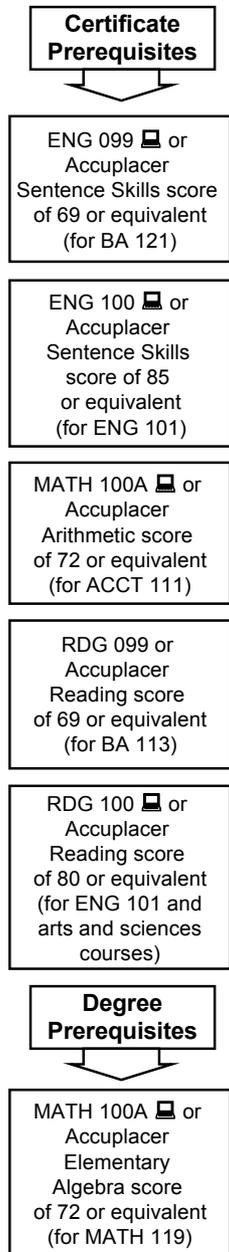


(This program is being discontinued and is not accepting new students.)

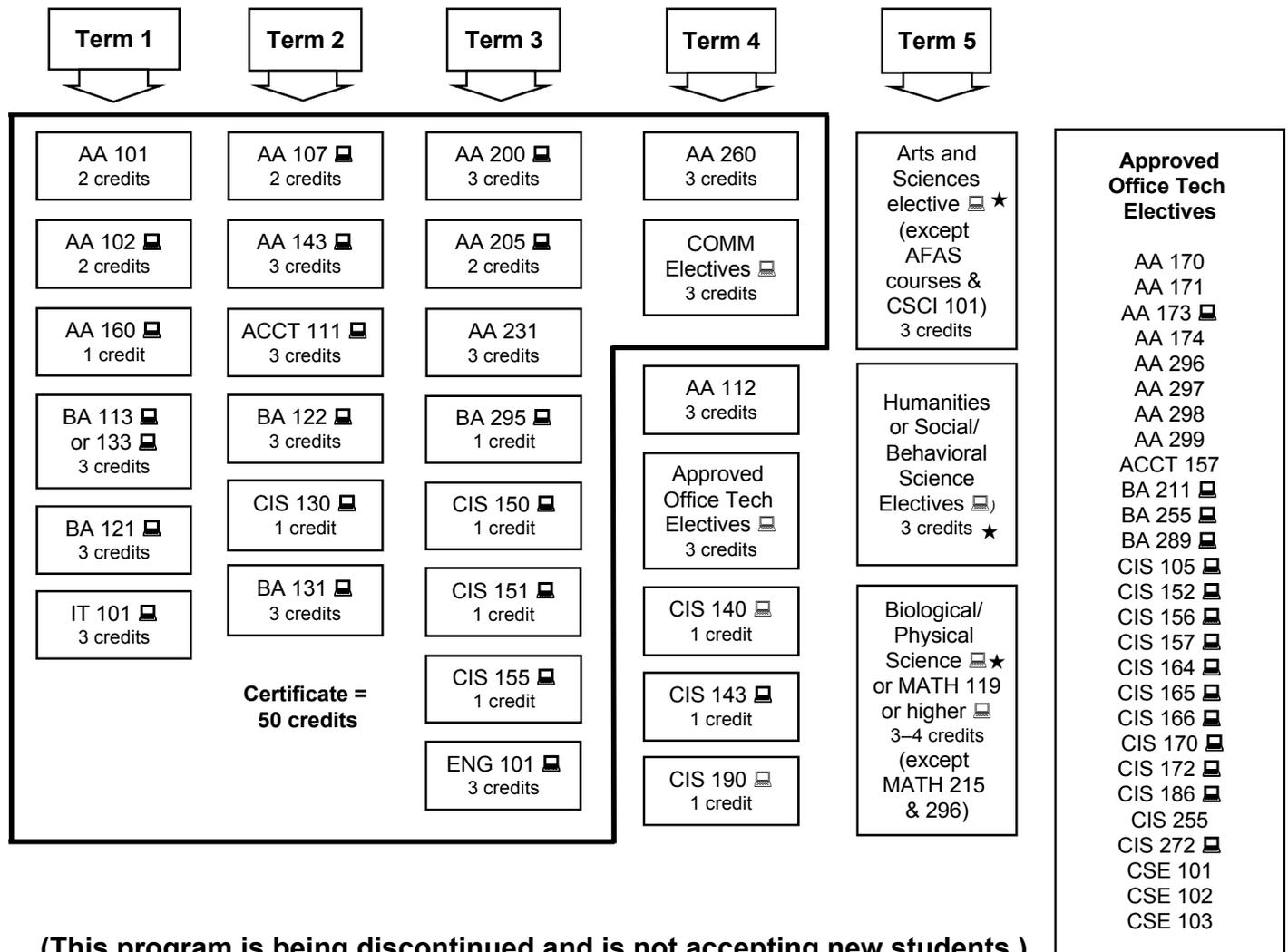
★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

OFFICE ADMINISTRATION (Office Technology Concentration) Degree and Certificate



Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 50 credits
 Degree requirement = 68–69 credits



(This program is being discontinued and is not accepting new students.)

★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• *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

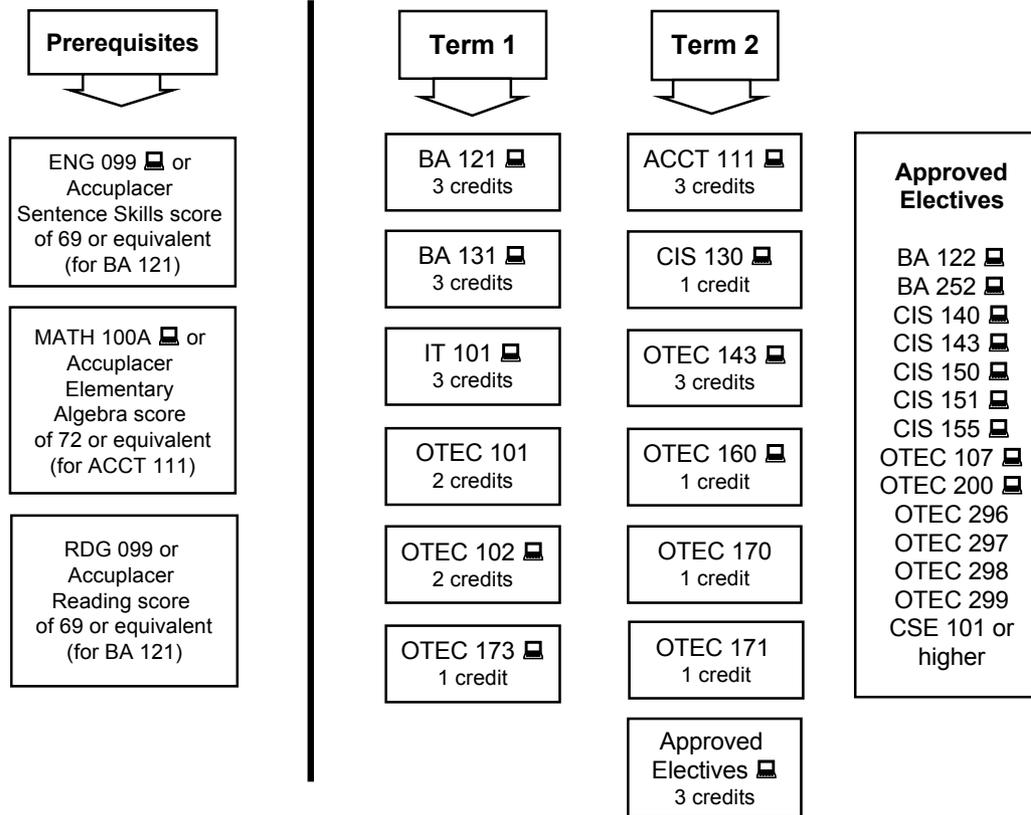
None.

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.

OFFICE ASSISTANT Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 27 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- **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 administrative profession—according to the U.S. Department of Labor, 400,000 new jobs will be added to the workforce by the year 2005.

Special Requirements

None.

CONTACT INFORMATION

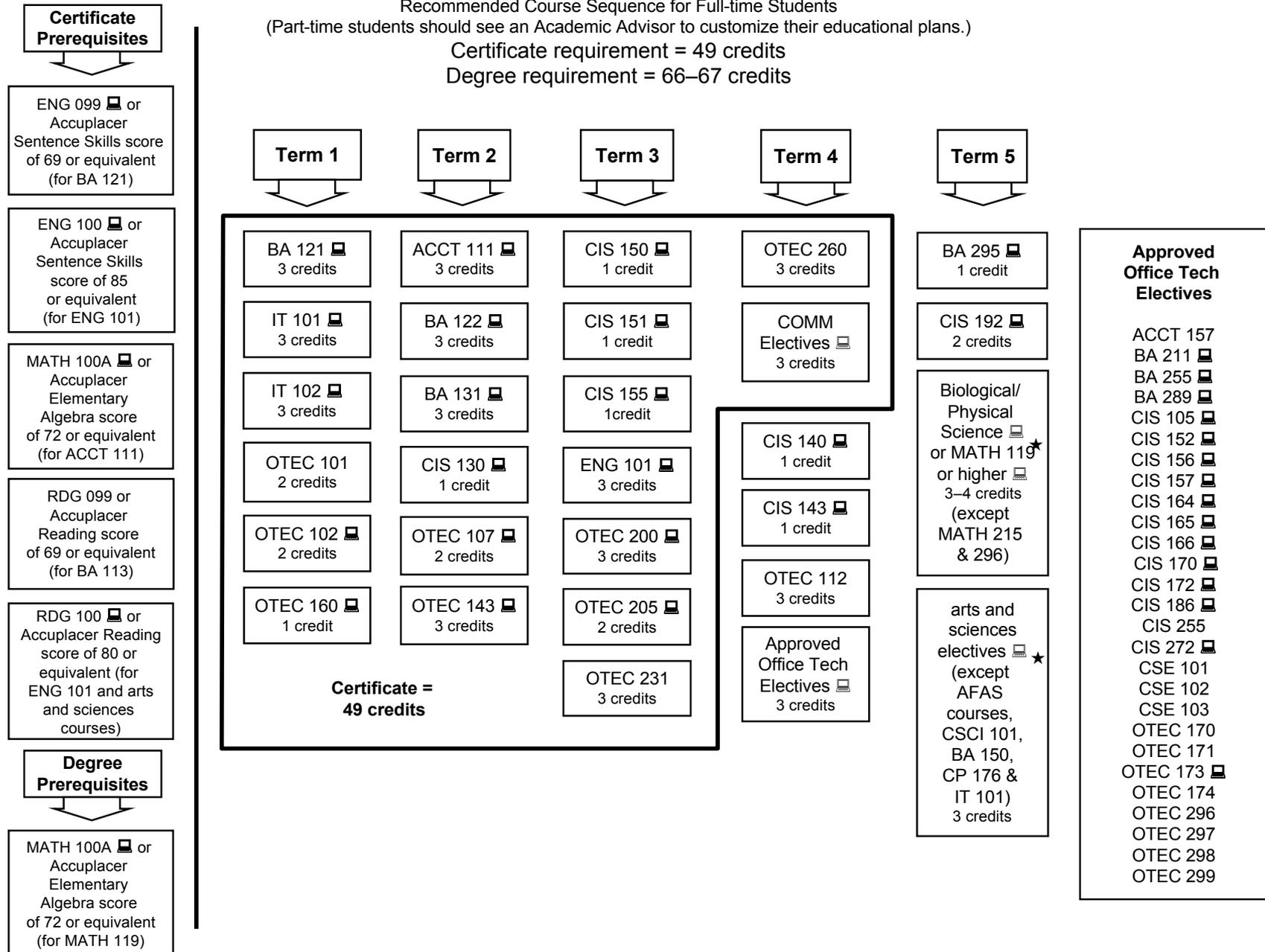
Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

OFFICE TECHNOLOGY (Office Technology Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 49 credits
 Degree requirement = 66–67 credits

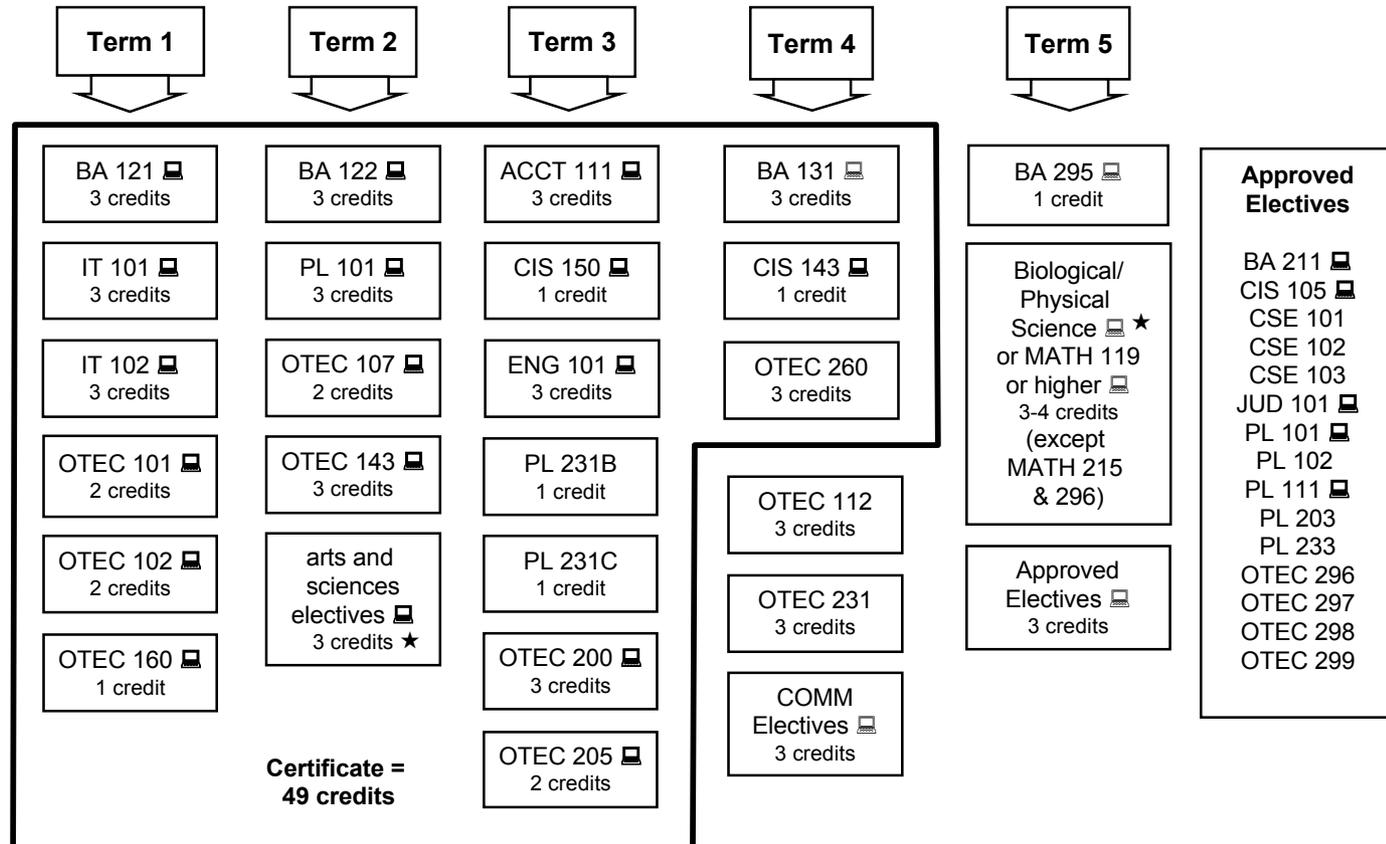
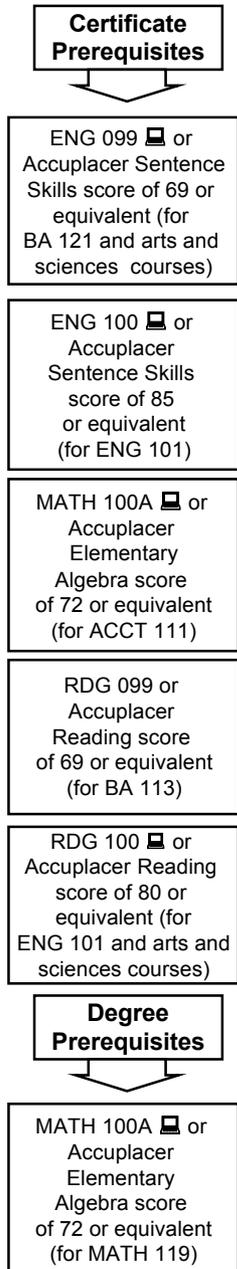


★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

OFFICE TECHNOLOGY (Legal Concentration) Degree and Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 49 credits
 Degree requirement = 65–66 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

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 was 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.

Word Processing (Skill Set)

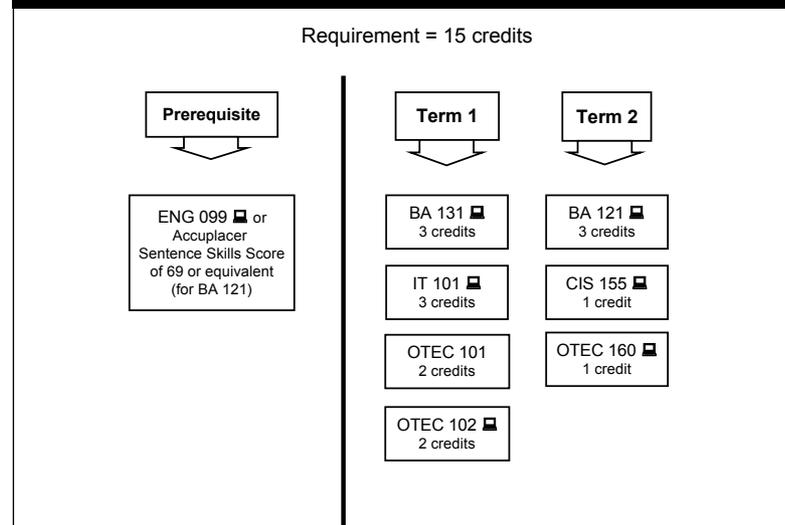
The Word Processing Skill Set was developed for the person interested in advanced applications for preparing business documents using Microsoft Word.

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

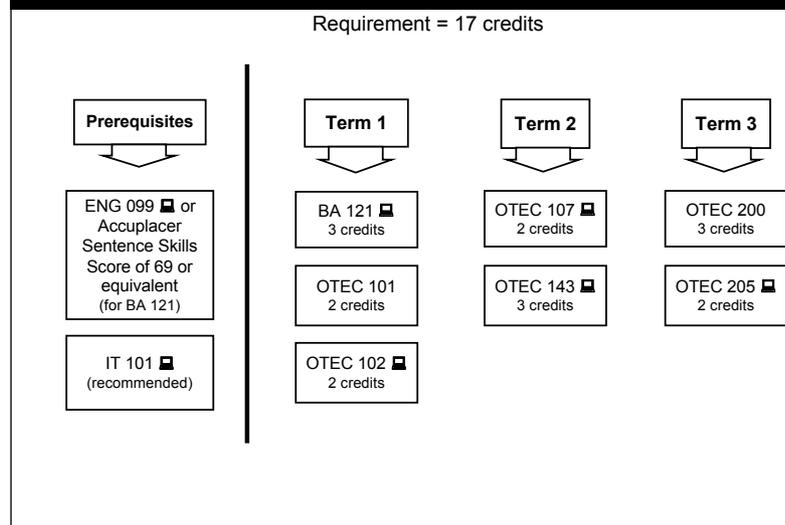
CONTACT INFORMATION

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.

Records Clerk Course Sequence Chart



Word Processing Course Sequence Chart



• *Associate of Applied Science Degree in Paralegal Studies*

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.

Career and Advancement Opportunities

Employment opportunities include placement in law firms, corporate legal departments, legal aid offices, public agencies and insurance companies.

Special Requirements

None.

CONTACT INFORMATION

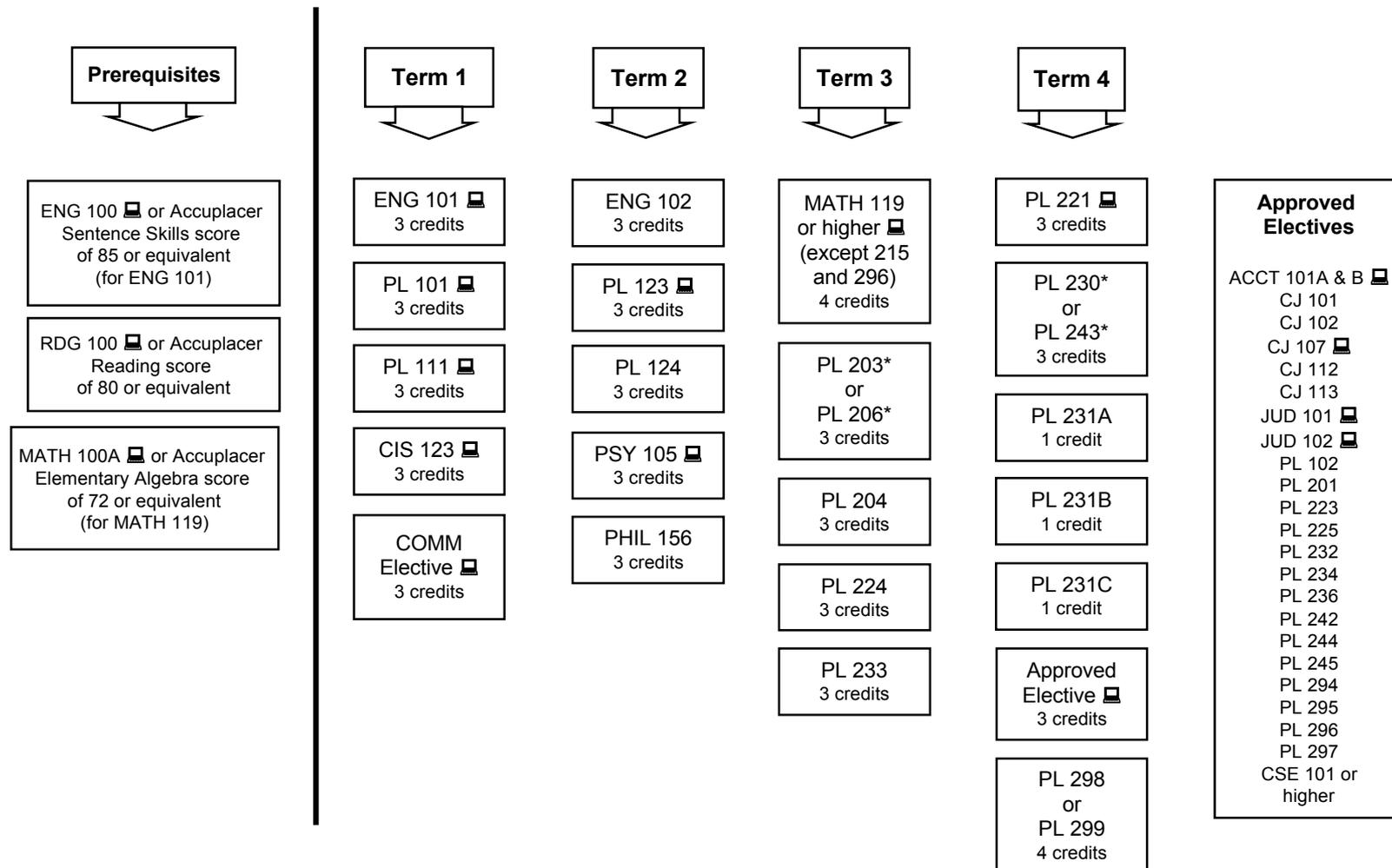
Program information is available from the Business & Information Technology Division at (505) 224-3811 or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

PARALEGAL STUDIES Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirement = 62 credits



* Course not chosen to fulfill requirement may be taken to fulfill elective.

★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

PERIOPERATIVE NURSING Skill Set

Health, Wellness & Public Safety Division

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. Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience. Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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.

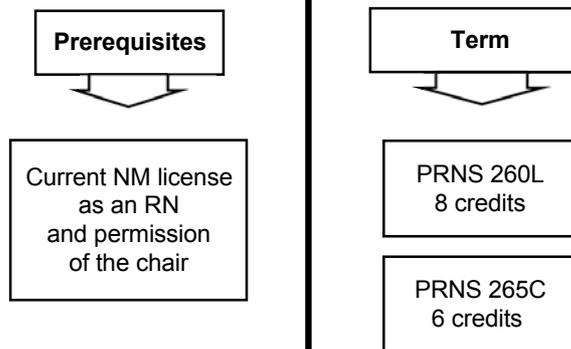
Students are required to provide documentation from a licensed healthcare provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience. Students interested in certain Health, Wellness and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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. Written permission from the program chair is required for enrollment.

All Health, Wellness & Public Safety Division career 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 pay a program fee of \$80 for PRNS 260L which covers the cost of x-ray badge, parking and preventative lab tests in case of needle stick or other exposure to bodily fluids.

Perioperative Nursing Course Sequence Chart

Requirement = 14 credits



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 Liz Alongi, RN, BSN, CNOR, director of surgical programs, (505) 224-4166, elialongi@cnm.edu, or from Academic Advisement and Career Development at (505) 224-4321.

– Course available through Distance Learning (see page 49.)

• Pharmacy Technician Certificate

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 has a 100% 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 111/112L and COMM 221.

Special Requirements

Students are required to have a New Mexico driver's license, PPD and current immunizations (including DTP and MMR). Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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.

There is a \$35 program fee for the purchase of one lab coat and a name tag.

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

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.

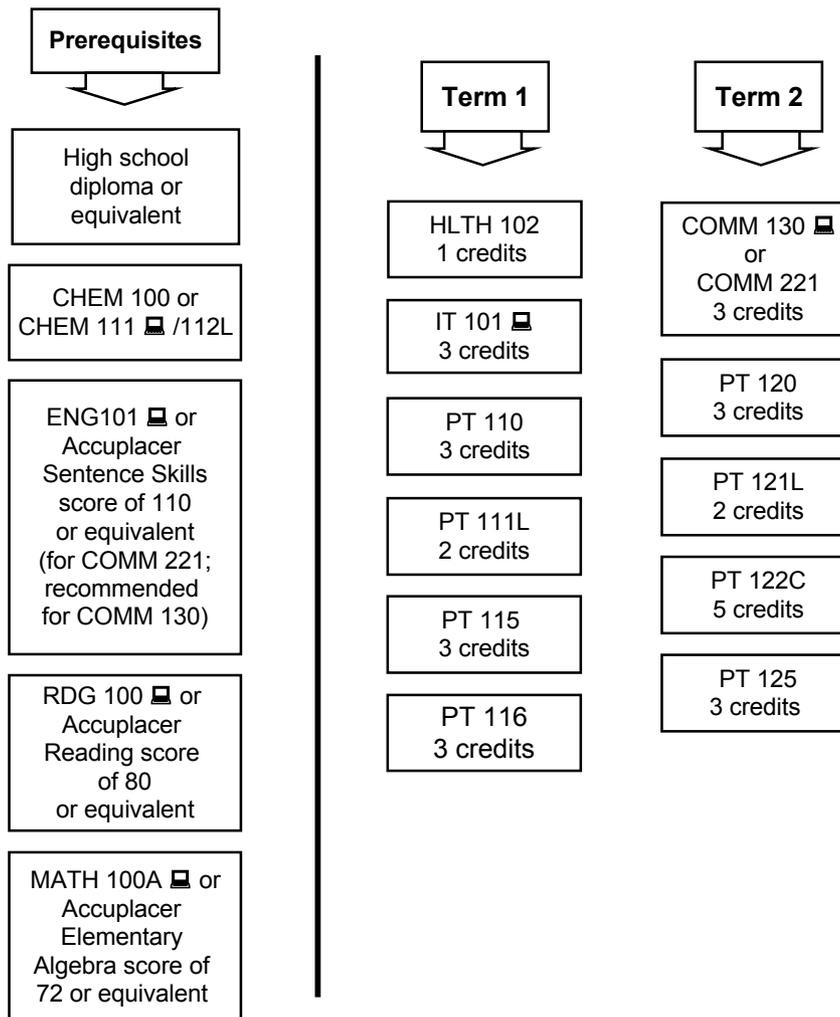
For prerequisites and a recommended course sequence, turn the page... ►



– Course available through Distance Learning (see page 49.)

PHARMACY TECHNICIAN Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 31 credits



• **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 healthcare 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).

Career and Advancement Opportunities

The CNM Phlebotomy program has a 100% placement rate for its graduates. Graduates seeking employment found phlebotomy jobs in area healthcare facilities and laboratories.

Special Requirements

Students interested in certain Health, Wellness and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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. Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience. Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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.

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.

A \$47 program fee covers the cost of a set of scrubs, 2 disposable lab coats, health tests, nametags, hospital parking permits and preventive lab tests in case of needle stick or other exposure to bodily fluids. 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 110 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.

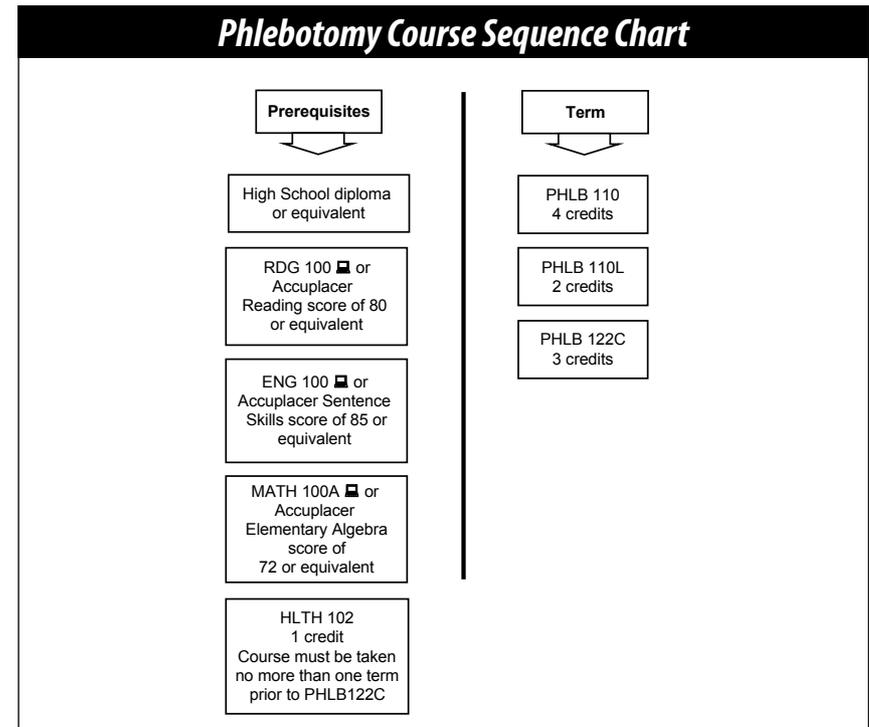
Graduation Policy

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 concerning this program is available from the program director, Monica Lewis at mlewis@cnm.edu or (505) 224-5068, or from Academic Advisement and Career Development at (505) 224-5056 (South Valley) or (505) 224-4321.



– Course available through Distance Learning (see page 49.)

- *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 learn about 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) 224-3711, or from Academic Advisement and Career Development at (505) 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus).

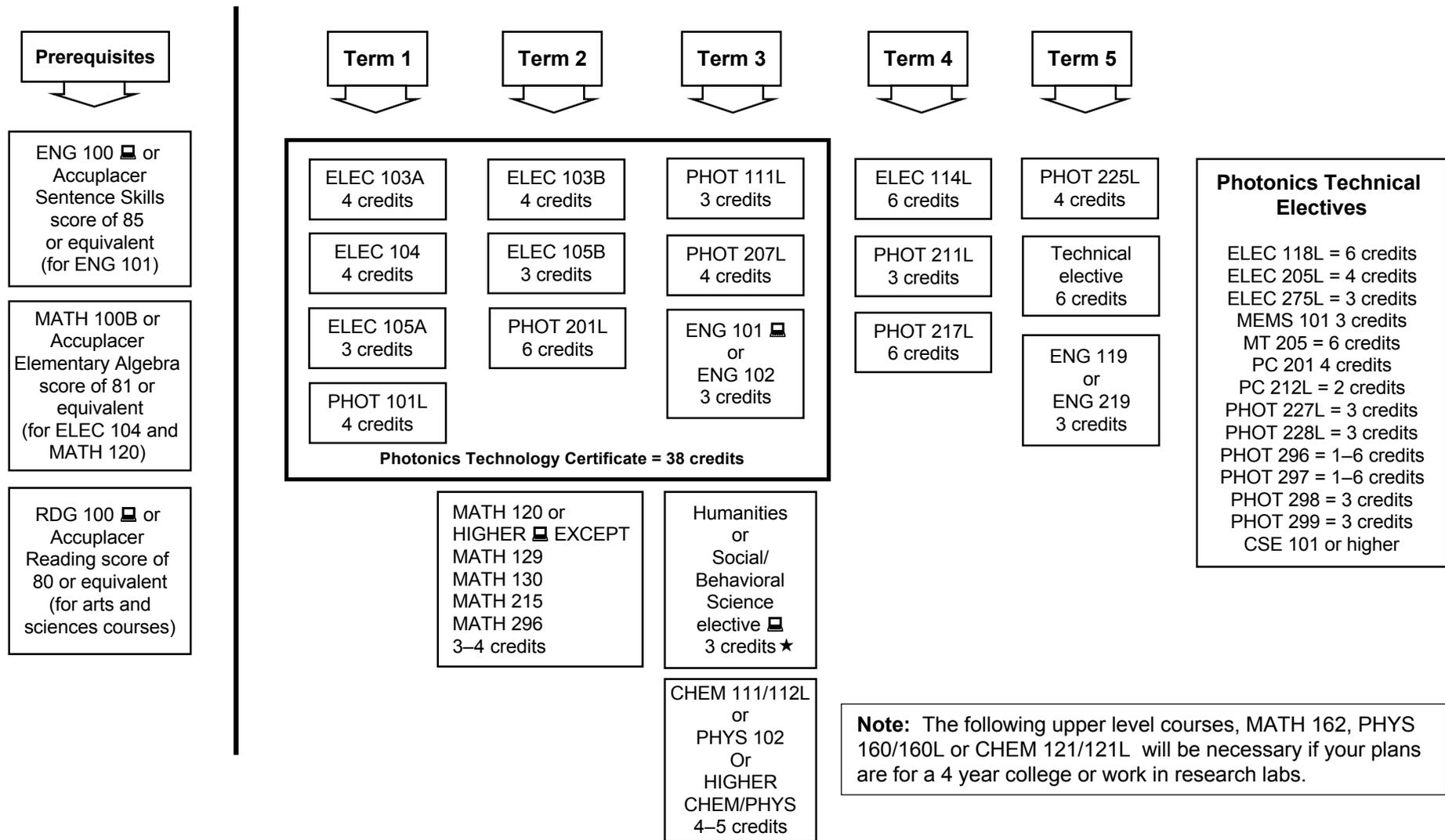


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

PHOTONICS TECHNOLOGY Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

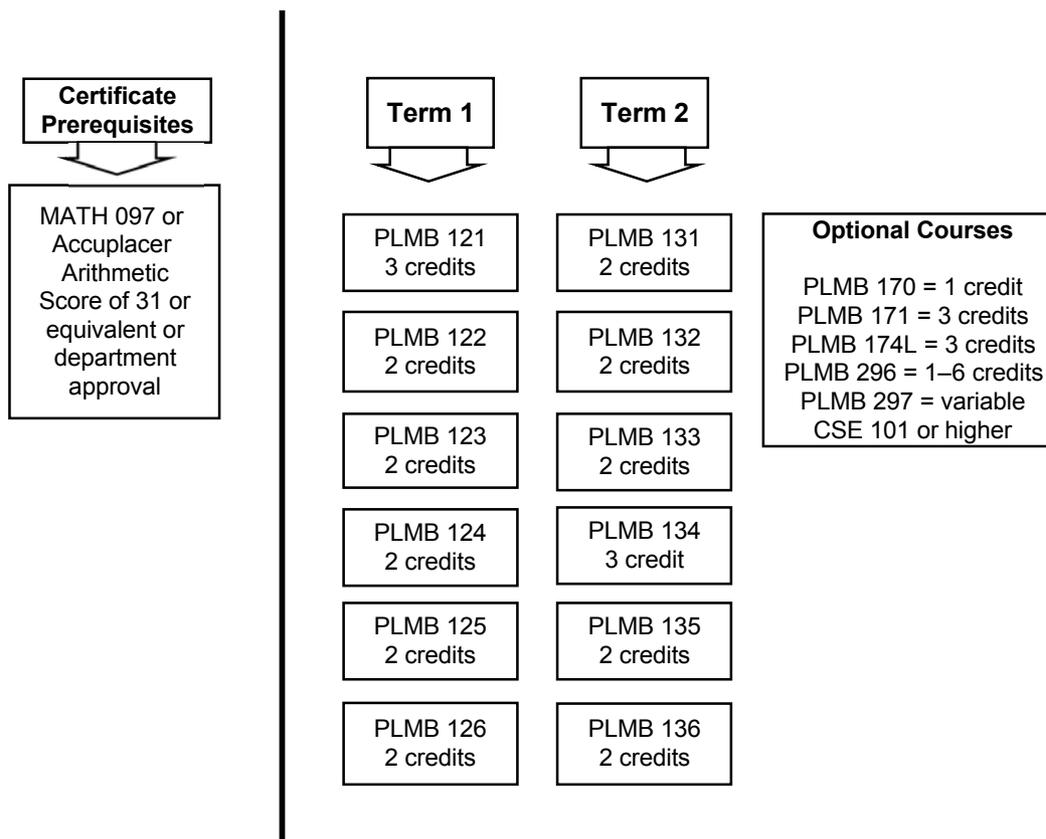
Certificate requirement = 38 credits
Degree requirement = 75–78 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 26 credits



• 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

This degree is designed as a transfer degree to a four-year institution where students will complete their area of specialization in business. According to the 2003–04 U.S. Department of Labor Statistics Job Outlook Handbook, careers that may require a bachelor's degree in business range widely from accounting, marketing, public relations and financial analysis to management of production, human resources, health care, purchasing, real estate and information systems. Demand for professionals in many of these areas is strong and is expected to remain so over the next few years.

Special Requirements

Transfer Information:

Since some New Mexico schools classify ANTH 150 and GEOG 101 as physical sciences, CNM pre-management students may use either of these courses to meet the 3 credit hour 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: ASTR 101 (3 credits) and 102 (3 credits) from CNM transfer to UNM as equivalent to ASTR 101 (3 credits). Consideration should be given to taking other sciences to meet the physical science requirements. It is recommended that students coordinate their choices of classes with the Anderson Schools of Management (ASM) pre-admission requirements listed on the ASM web site <http://bba.mgt.unm.edu/admissions/requirements.asp> and CNM equivalencies to UNM course numbering which can be accessed at <http://www.unm.edu/~apply/CNM.pdf>

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

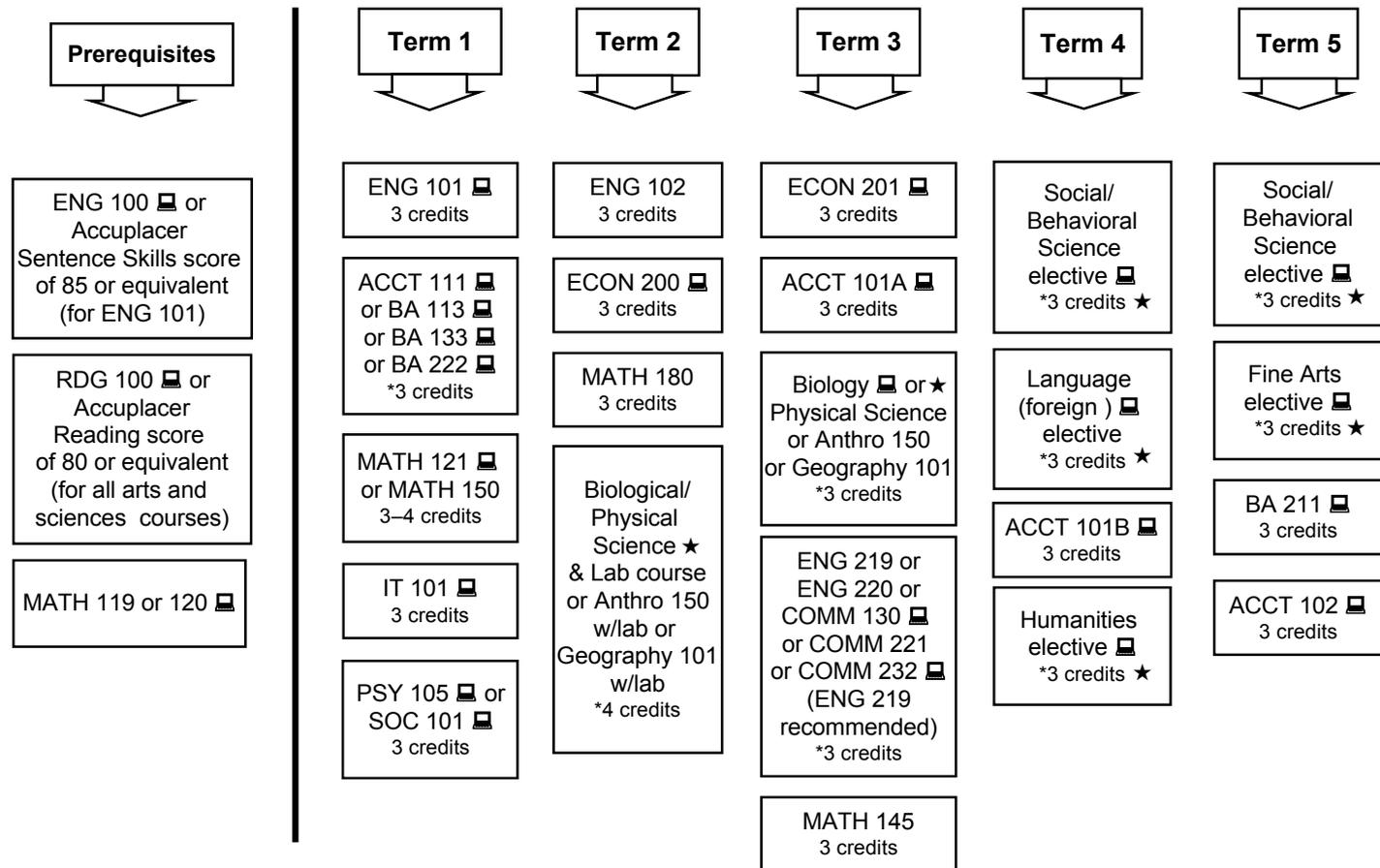
Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

PRE-MANAGEMENT Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirement = 67-68 credits



*Student selection should depend upon articulation/transfer requirements of four-year transfer institution. Since some New Mexico schools classify Anthropology 150 and Geography 101 as a physical science, CNM pre-management students may use either course to meet the three credit hour biology/physical science requirement. However, CNM's acceptance of these classes to meet the biology/physical science requirement does not bind the transfer institutions to the same classifications. Students are cautioned to check with their transfer institution to ensure that the use of those classes to meet that requirement will be accepted by that institution in that category.

• *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 a 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 to fine dining establishments.

Special Requirements

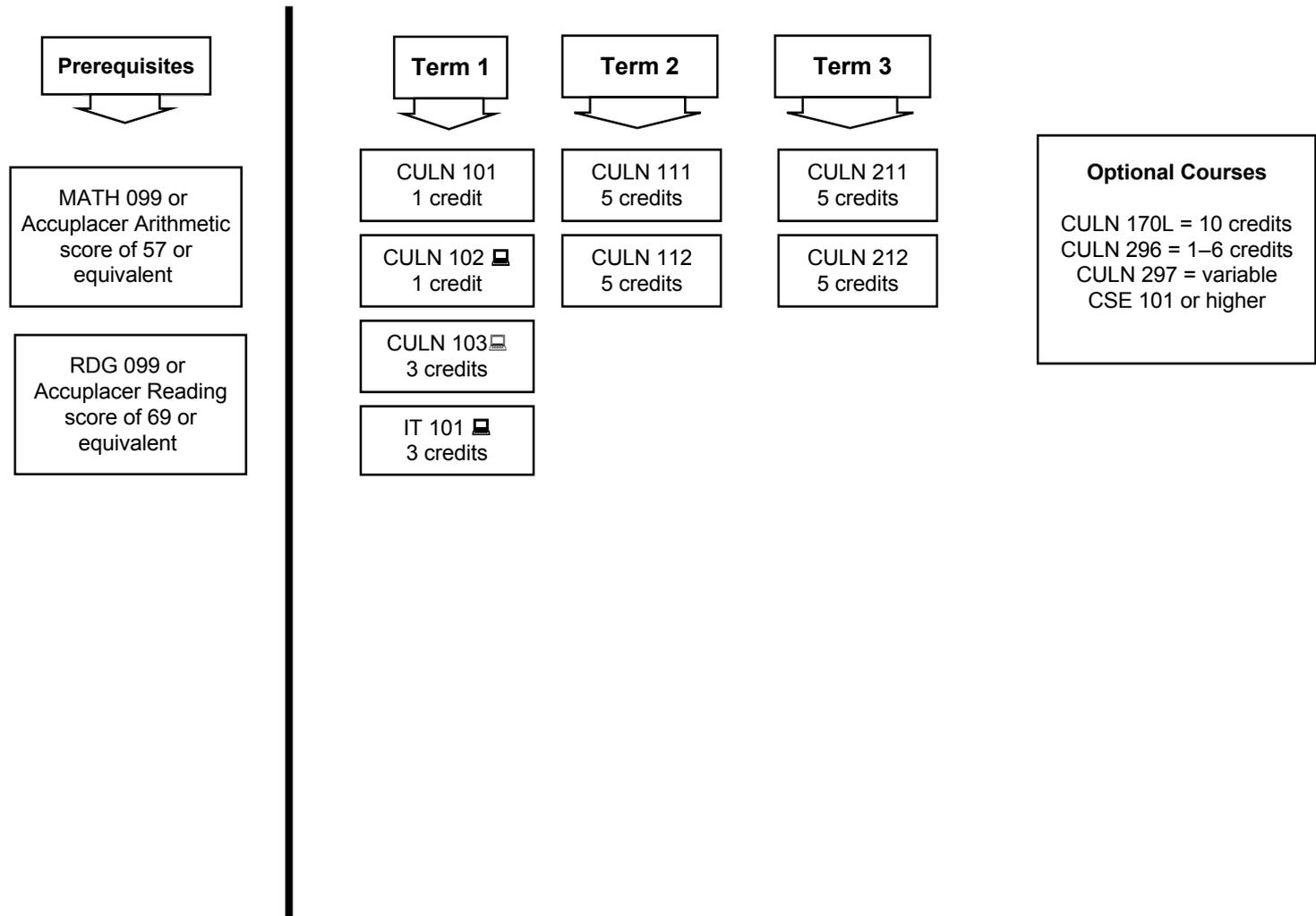
Students are required to purchase four sets of chef's uniforms, dining room service attire, textbooks and tools. Students must present a physician's certificate to CNM at the start of classes stating that the student is free from tuberculosis in a transmissible form and should be able to lift 30 pounds. 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) 224-3758, or from Advisement and Counseling at (505) 224-4321.

PROFESSIONAL COOKING Certificate

Recommended Course Sequence for Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 certificate requirement = 28 credits



PROJECT MANAGEMENT TECHNOLOGY

Business & Information Technology Division

• Associate of Applied Science Degree in Project Management

Program Description

Project Management is the specific terminology used to define the process of oversight, scheduling, budgeting, supervision and management of a specific project from inception to completion. This degree program exists to educate students in the art of project scheduling, estimating and completion. State-of-the-art computer technology and software are featured as well as local industry project management standards.

Career and Advancement Opportunities

Students are prepared of entry- and mid-level management positions in project management that include project scheduling, expediting, oversight, estimating, job costing, project controls, forecasting and critical path management.

Special Requirements

Due to the level of experience required for entering students, prospective students should contact the associate dean by phone or e-mail to develop an appropriate degree plan.

CONTACT INFORMATION

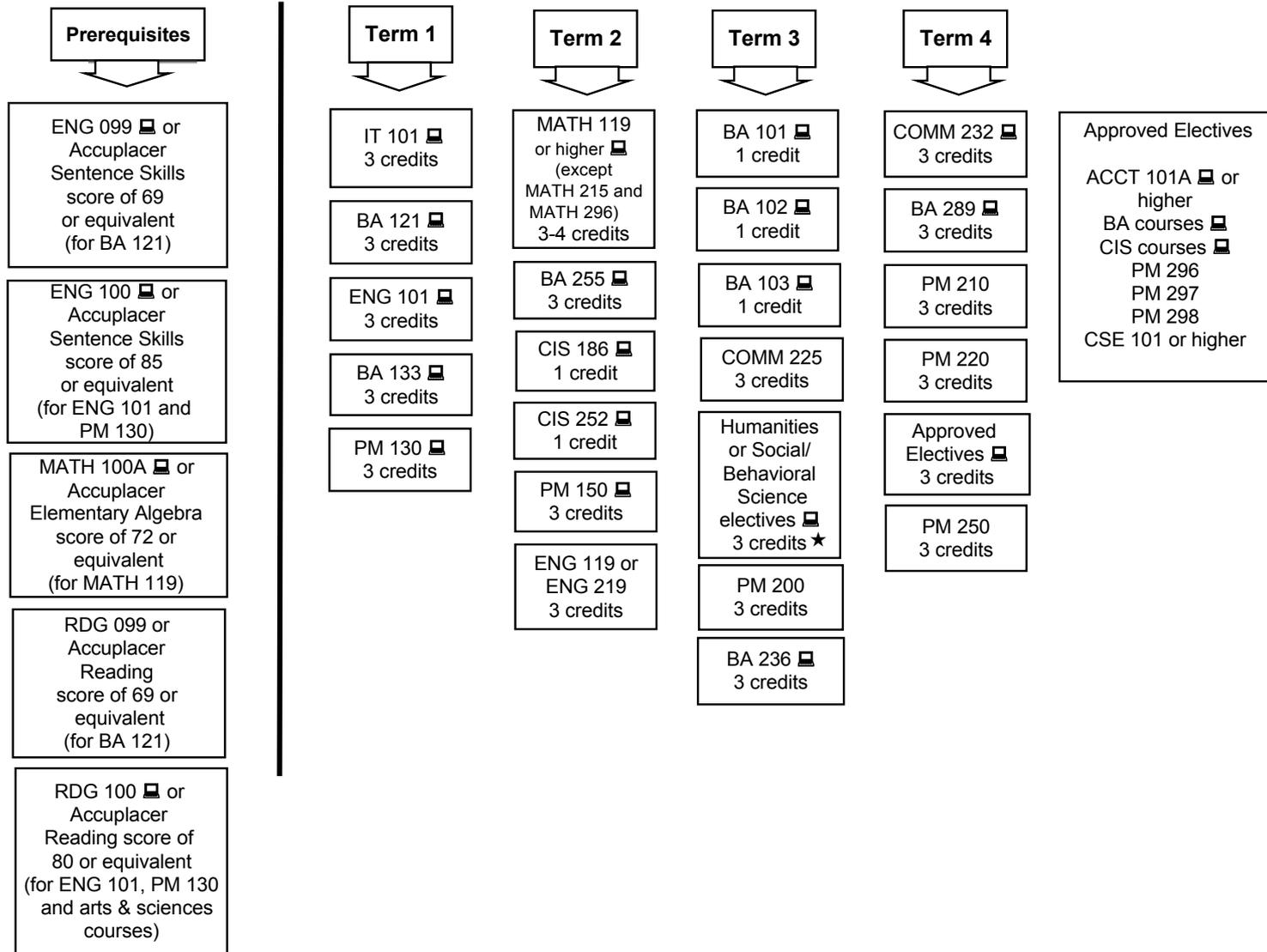
Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus)



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

PROJECT MANAGEMENT TECHNOLOGY Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirement = 62-63 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

• Associate of Science in Radiologic Technology

Program Description

Radiologic Technology is a 5-term associate of science degree program. Radiologic technology is a healthcare profession whose practitioners work in hospitals, clinics and free-standing imaging centers. The radiographer is a member of the healthcare 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. Upon completion of the program, students will be eligible to take the certification examination administered by the American Registry of Radiologic Technologists (ARRT). This program is accredited by the ARRT.

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 18 percent, while, locally the vacancy rate is approximately 14 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.

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. 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 in Radiologic Technology.

Once admitted to the core courses, students pay a program fee of \$115 to cover the cost of the uniform, name tag, hospital parking permits, film markers and preventative lab tests in case of needle stick or other exposure to bodily fluids; a \$30 fee will also be charged to each clinical course for Dosimeter film badges. A program fee of \$70 is charged during RADT 280 for a certification practice exam. Students are required to provide documentation of CPR certification,

results of a recent health screening, be in good physical health and current immunizations (tetanus, rubella, Rubeola and hepatitis B) and PPD, prior to working with patients in a clinical setting.

Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience. Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 healthcare provider that they can safely lift a minimum of 50 lbs. prior to beginning their clinical experience.

Students interested in certain Health, Wellness and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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

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

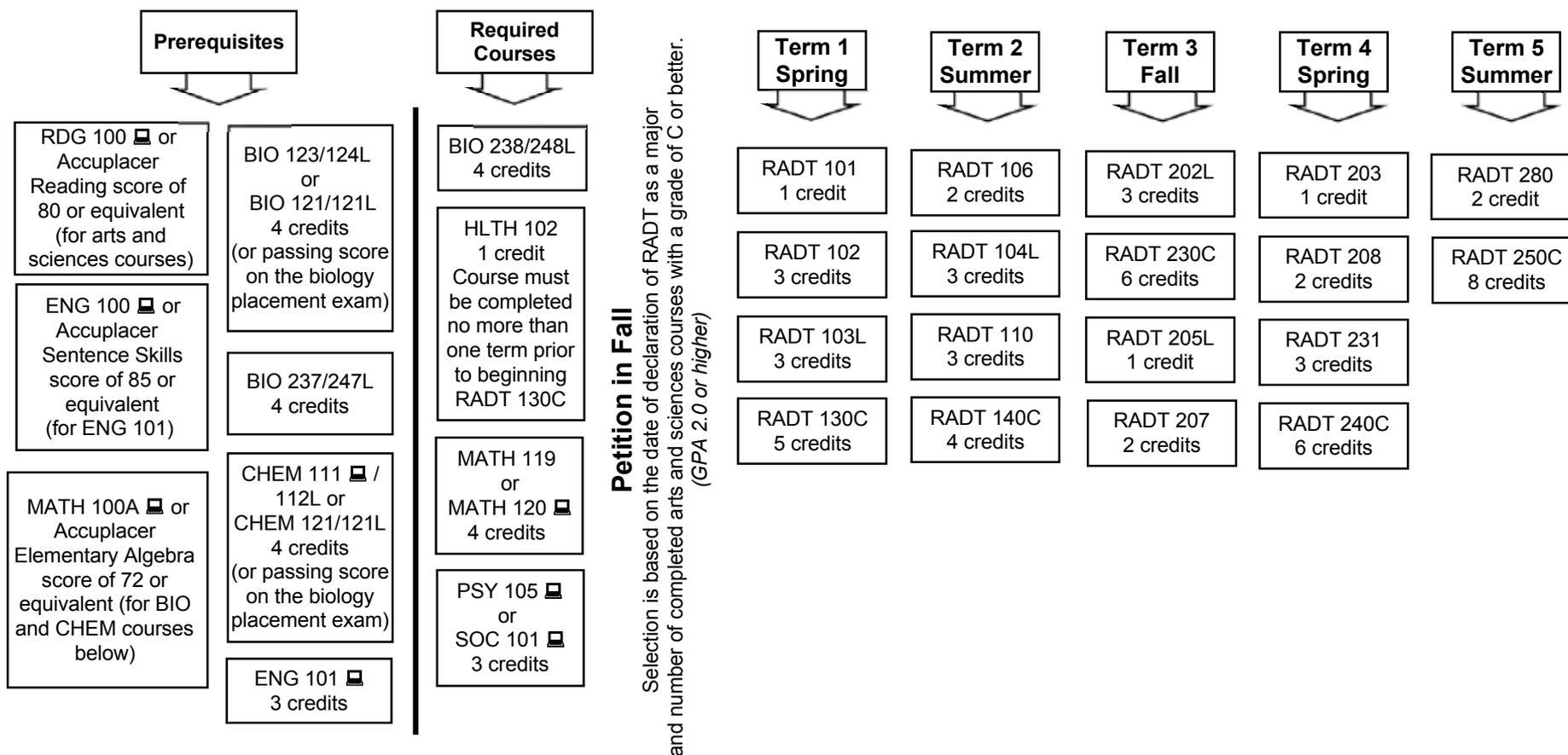
Information concerning this program is available from the director of the program, Paul "Jack" Wilder, at (505) 224-5208, pwilder@cnm.edu, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

RADIOLOGIC TECHNOLOGY Degree

Recommended Course Sequence for Full-time students
Degree requirement = 70 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

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: Real Estate Law (BA 270), Real Estate Practice (BA 271) and Broker Basics (BA 285) are required for the Real Estate 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 270), Real Estate Principles and Practice (BA 271), Broker Basics (BA 285) and Real Broker Office Management to be developed by NMREC are required.

Note: Beginning January 1, 2004, 24-months' experience as a real estate associate broker is required to be a qualifying broker (a broker in charge of a 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.

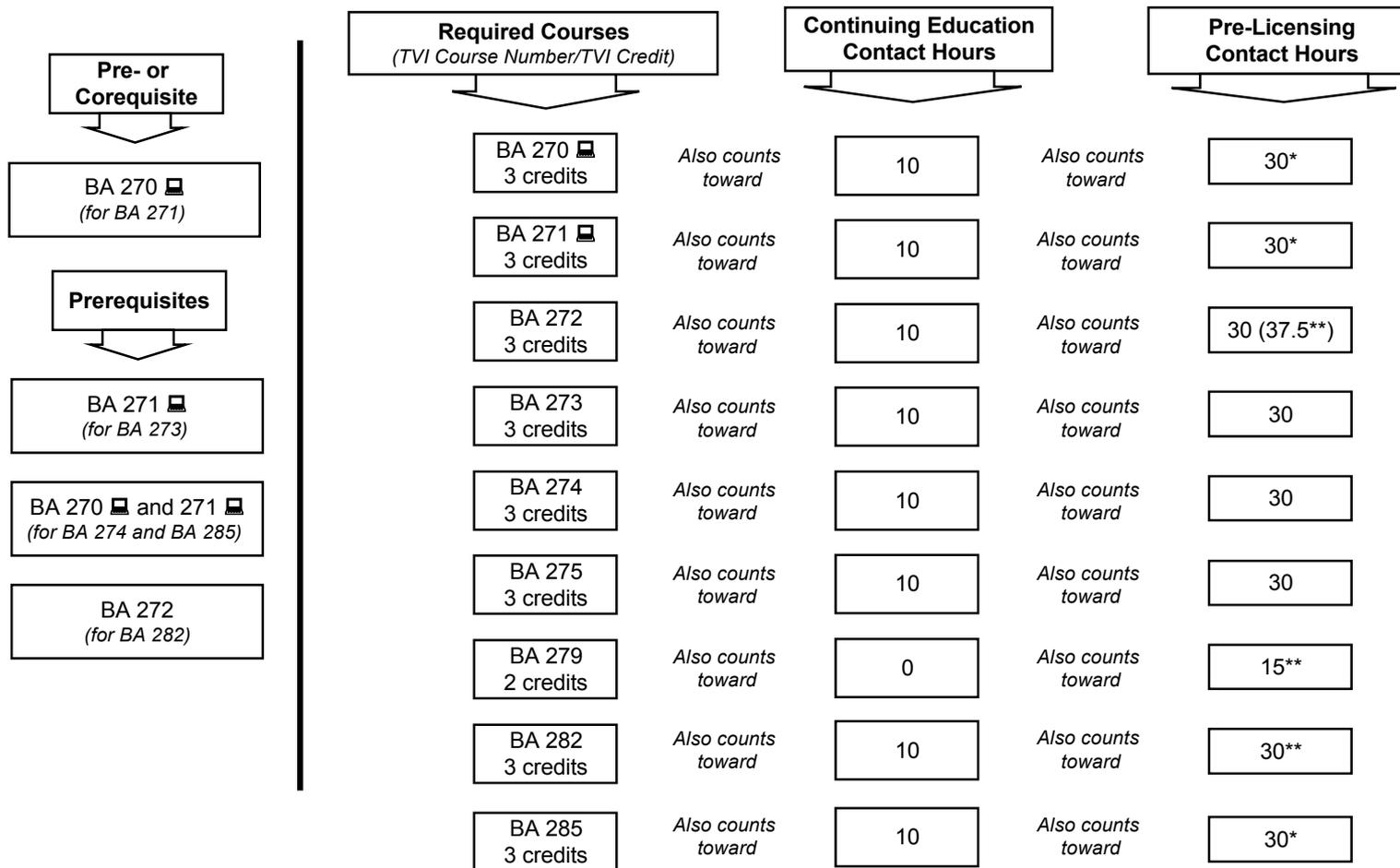
CONTACT INFORMATION

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.

For prerequisites and a recommended course sequence, turn the page... ►

 – Course available through Distance Learning (see page 49.)

REAL ESTATE Courses



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.

*Pre-licensing for New Mexico Real Estate Associate Broker
 **Pre-licensing for Real Estate Appraisal Credit

RECREATION AND LEISURE

Health, Wellness & Public Safety Division

(THIS PROGRAM WILL BE DISCONTINUED AND IS CURRENTLY NOT ACCEPTING NEW STUDENTS.)

- *Associate of Applied Science Degree in Recreation and Leisure*
- *Certificate in Recreation and Leisure*

Program Description

This program will be discontinued and is currently not accepting new students. The program covers leadership, program planning and behavior management as they relate to community, outdoor and therapeutic recreation. Courses are classroom in nature with frequent field trips.

Career and Advancement Opportunities

Jobs for graduates of the program are in a variety of settings (community centers, parks, senior centers, after-school activity centers, correctional institutions, camps, YMCAs, etc.) and in a variety of positions (aquatics specialist, armed forces recreational leader, camp counselor, community center director, cruise ship recreation leader, youth sports coach, corporate wellness leader, etc.)

Special 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.

CONTACT INFORMATION

Program information is available from the program director, Garry Wolfe at (505) 224-4215 or gwolfe@cnm.edu, or from Academic Advisement and Career Development at (505) 224-4321 through the Fall 2006 term.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

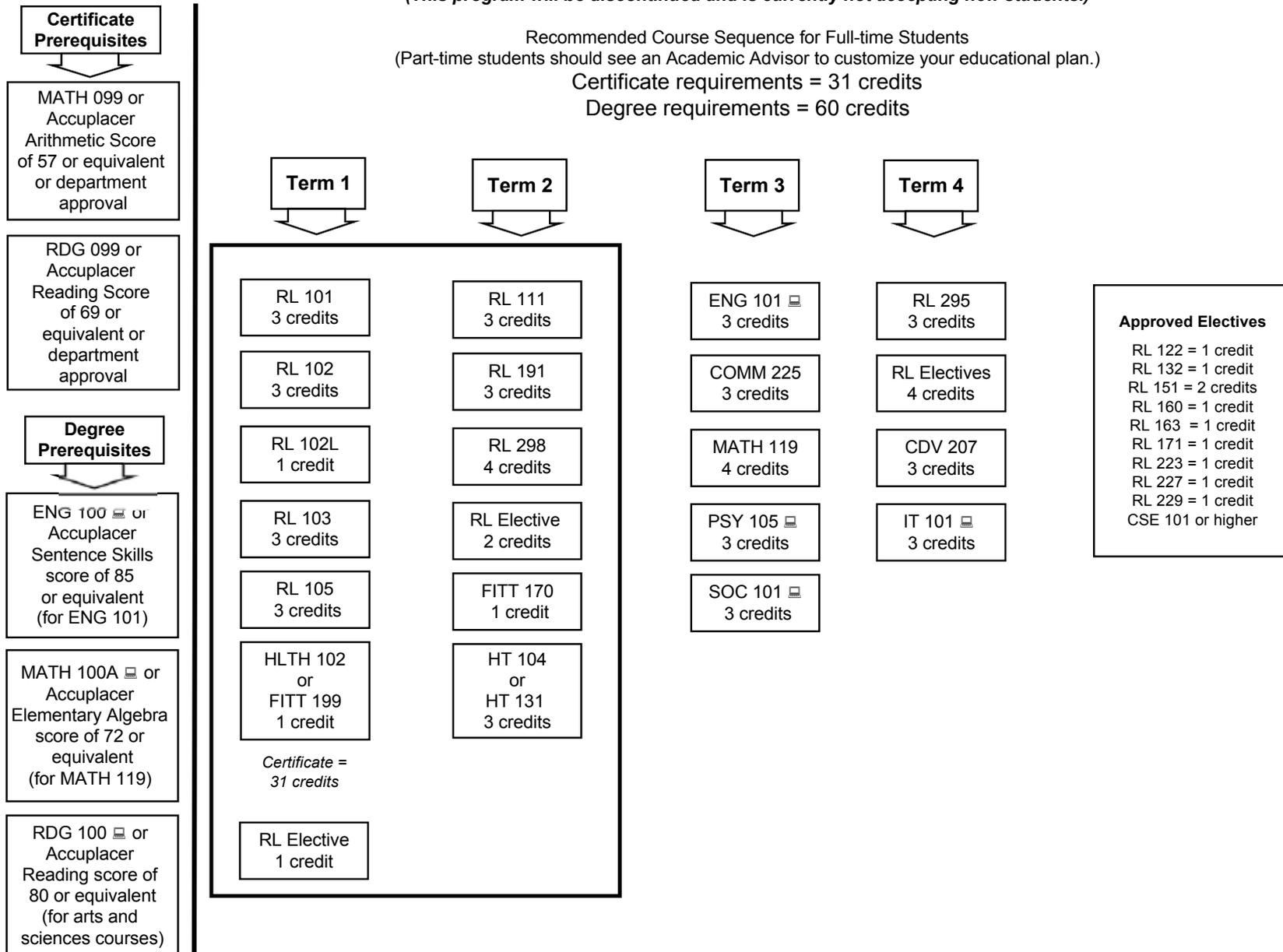
RECREATION AND LEISURE Degree and Certificate

(This program will be discontinued and is currently not accepting new students.)

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize your educational plan.)

Certificate requirements = 31 credits

Degree requirements = 60 credits



REGISTERED NURSE REFRESHER Skill Set

Health, Wellness & Public Safety Division

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. Students may be required to undergo routine drug screening and a criminal background check prior to beginning their clinical experience. Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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 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. A \$25 program fee covers the cost of supplies and preventative lab tests in case of needle stick exposure. 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.

Registered Nurse Refresher Course Sequence Chart

Requirement = 9 credits

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)

Special Courses

RNR 255L  7 credits

RNR 265C  2 credits

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, Rene Kagan at (505) 224-4112, rbarronkagan@cnm.edu, or from Academic Advisement and Career Development at (505) 224-4321.

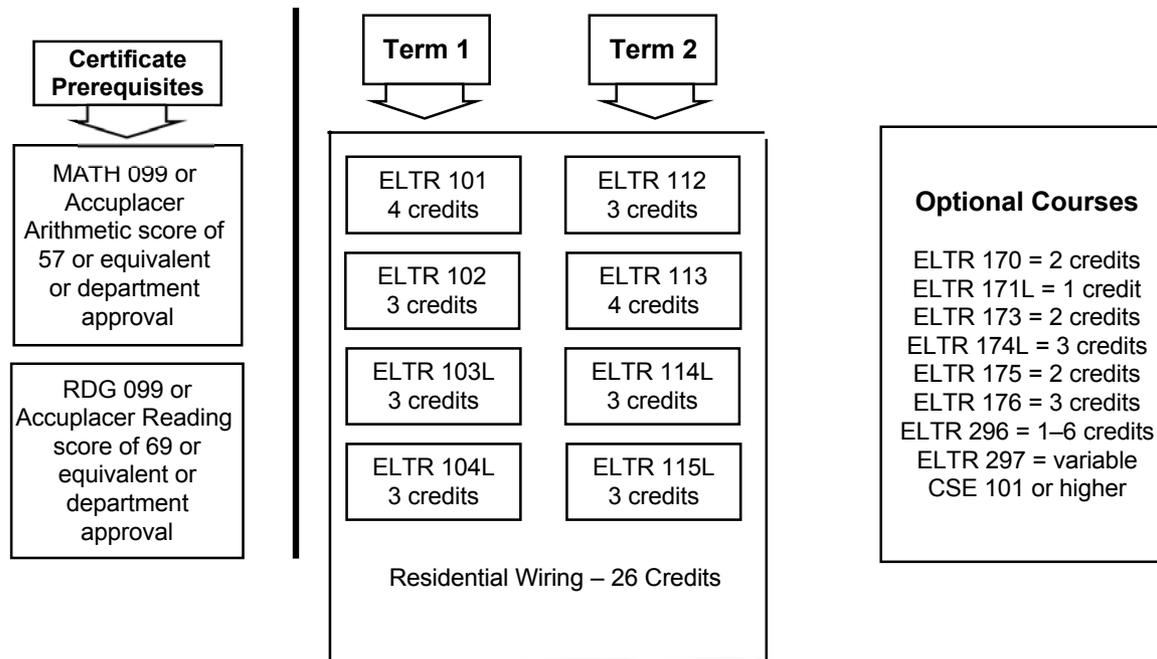
 – Course available through Distance Learning (see page 49.)

RESIDENTIAL WIRING Certificate

Applied Technologies Division

For additional information about this certificate and how it fits within the Construction Technology Associate of Applied Science Degree see page 114.

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)
Certificate requirement = 26 credits



 – Course available through Distance Learning (see page 49.)

RESPIRATORY THERAPY

Health, Wellness & Public Safety Division

• 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 Educations 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 healthcare agencies, skilled nursing homes and cardiopulmonary rehabilitation centers within New Mexico and throughout the nation. The CNM program has a 100% 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 of \$100 to cover the cost of the uniform, stethoscope, name tag, hospital parking permits and preventative lab tests in case of needle stick or other exposure to bodily fluids. Students will also pay an ACLS certification fee of \$10 and a program fee of \$125 during the final term of the program to cover the cost the National Board assessment tests. Students interested in certain Health, Wellness and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

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) before beginning clinical coursework. 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.

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 102.

Students may be required to undergo a routine drug screen and a criminal background check at their own expense. Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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.

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

Information sessions covering petition and selection process and the Respiratory Therapy career opportunities are scheduled monthly during the year. Dates and times for these sessions can be obtained by calling the Health, Wellness & Public Safety Division information hotline at (505) 224-4161.

Program information is available from the program director, John Blewett, (505) 224-4138, jblewett@cnm.edu, or Clinical Coordinator Charles Fatta, (505) 224-4128, cfatta@cnm.edu, or from Academic Advisement and Career Development at (505) 224-4321.

For prerequisites and a recommended course sequence, turn the page... ▶

RESPIRATORY THERAPY Degree

Prerequisites

High school diploma or equivalent

ENG 100  or Accuplacer Sentence Skills score of 85 or equivalent

RDG 100  or Accuplacer Reading score of 80 or equivalent

MATH 100A  Or Accuplacer Elementary Algebra score of 72 or equivalent

*BIO 123/124L 4 credits (for BIO 237/247L and BIO 239/239L) or passing score on Biology Placement Exam

CHEM 111  /112L 4 credits (or CHEM 121/121L) (for BIO 237/247L and BIO 239/239L) or passing score on Biology Placement Exam

HLTH 102 (Must be completed no more than one term prior to beginning RT 121C)

Recommended Course Sequence for Full-time Students
Degree requirement = 69 credits

Required Courses

| | |
|--|--|
| BIO 237/247L 4 credits | BIO 238/248L 4 credits |
| MATH 119 or higher 3 or 4 credits  | BIO 239  /239L 4 credits |
| PHIL 245M  | ENG 101  |

Petition in Summer
Selection is based on the number of arts & sciences courses completed with a grade of C or better and the date of declaration of RT as a major. (CNM GPA 2.0 or higher)

| Term 1 Fall | Term 2 Spring | Term 3 Summer | Term 4 Fall | Term 5 Spring |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| RT 101/101L 4 credits | RT 102/102L 4 credits | RT 201/201L 4 credits | RT 202/202L 4 credits | RT 203/203L 4 credits |
| RT 121C 4 credits | RT 122C 4 credits | RT 221C 4 credits | RT 222C 4 credits | RT 223C 4 credits |
| RT 133 3 credits | RT 140 1 credit | RT 240 1 credit | RT 241 1 credit | RT 242 1 credit |

Optional Courses

RT 150--1 credit
RT 250--1 credit
CSE 101 or higher

*BIO 121/121L may be substituted but is no longer offered

• *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).

Graduates are eligible to take the Surgical Technologist National Certifying Examination. Surgical Technologists who take and pass this examination are certified and authorized to use the initials CST to designate their status as 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. 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.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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 and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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.

Before beginning Surgical Technology courses, students must present a physical exam, PPD and current immunizations (tetanus, rubella, rubeola and hepatitis B). Students may 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. Students must have the emotional and physical stamina to stand for extended periods of time (8 to 10 hours) while concentrating on a specific task.

Students are required to pay a program fee of \$118 which covers the cost of a uniform, hospital parking permits, name tags, self-assessment exam, program assessment exam and preventative lab tests in case of needle stick or other exposure to bodily fluids.

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 department at (505) 224-4111 for more information.

CONTACT INFORMATION

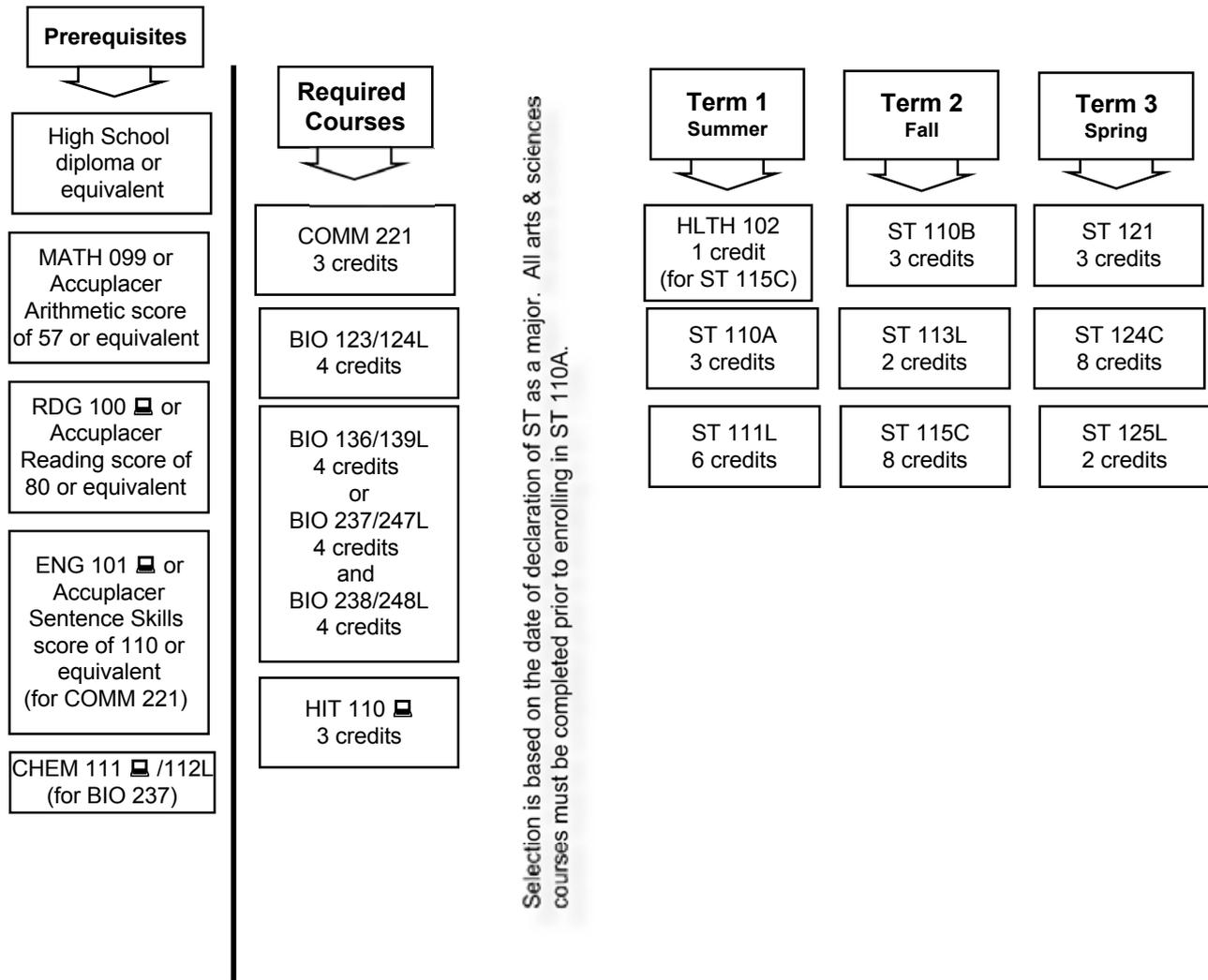
For information contact Liz Alongi, RN, BSN, CNOR, (505) 224-4166, ealongi@tvi.edu or from Advisement and Counseling at (505) 224-4321 (Main Campus) or (505) 224-5646 (Montoya Campus).

For prerequisites and a recommended course sequence, turn the page... ►

 – Course available through Distance Learning (see page 49.)

SURGICAL TECHNOLOGY Certificate

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Advisor or Counselor to customize their educational plans.)
 Certificate requirement = 50 credits



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 110A.

• *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 101 or its equivalent and BA 113) to take the required credit hours of arts and sciences course work 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 course work.

Courses taken with the credit/no credit option, transfer credits and nontraditional credits accepted by CNM towards 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

- An associate of applied science degree in a technical discipline (with at least 30 technical hours, excluding BA 150, CSCI 101, CP 176, IT 101 and BA 113).
- Overall GPA of 2.5.

CONTACT INFORMATION

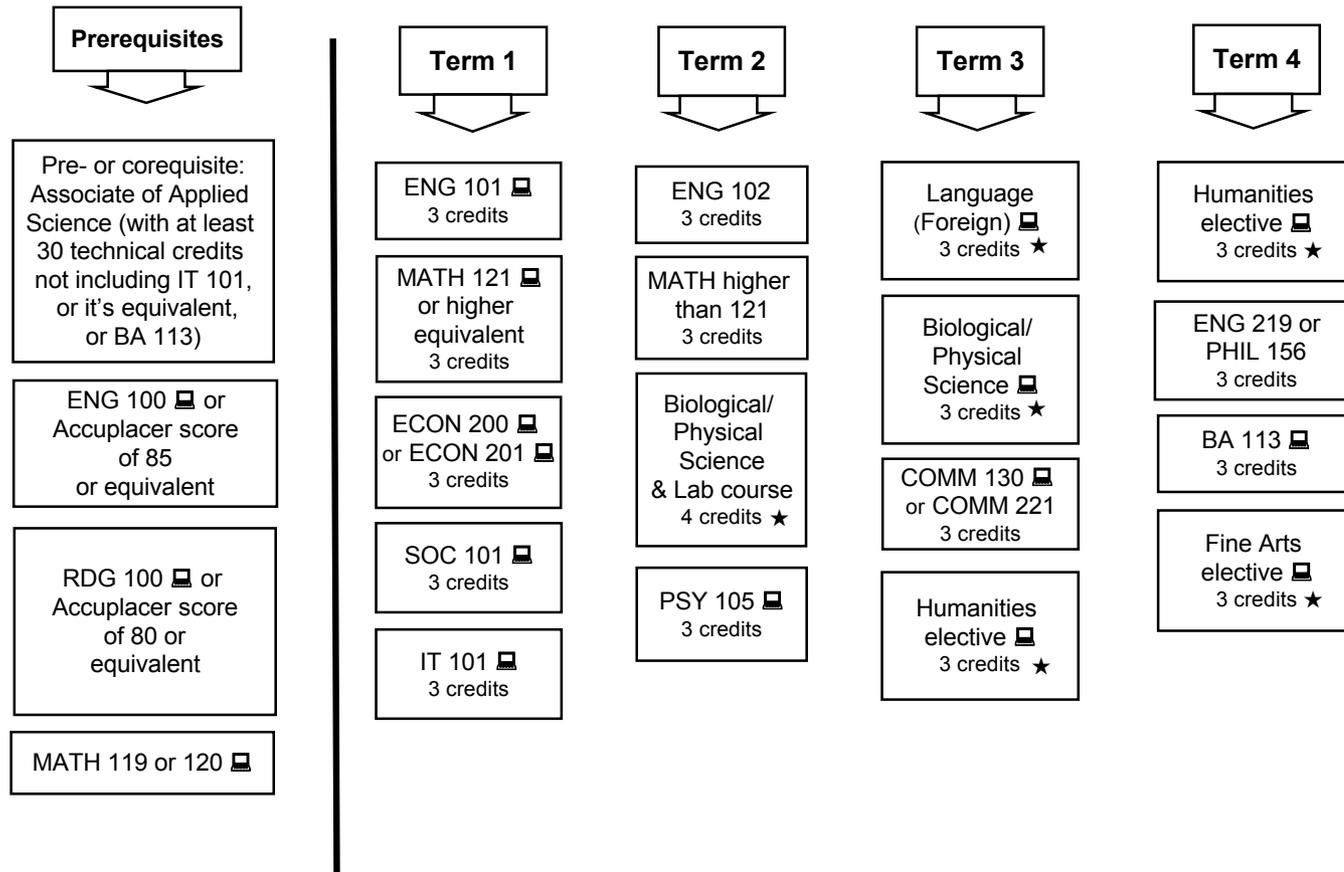
Program information is available from the Business & Information Technology Division at (505) 224-3811, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

TECHNOLOGY MANAGEMENT AND TRAINING Degree

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Degree requirement = 82 credits (including the 30 technical credits required from AAS degree)



Arts and sciences courses taken in an AAS degree may be applied where appropriate to these requirements, if grade of C or better was earned. If taken for AAS degree, student can apply IT 101 and BA 113 from AAS degree above.

TRANSPORTATION TECHNOLOGY

Applied Technologies Division

- **Associate of Applied Science Degree in Transportation Technology (concentrations in Automotive Technology and Diesel Equipment Technology)**
- **Certificates in Automotive Technology or Diesel Equipment Technology**
- **Skill Set in Automotive Service Fundamentals**

Program Description

Students in the Automotive and Diesel programs study bumper-to-bumper systems in a combination of theory and laboratory classes that prepare graduates to work on a variety of gasoline and diesel-powered equipment, heavy-duty trucks and automobiles and light trucks. Transportation programs provide extensive hands-on training opportunities to ensure competency at program completion. The Automotive Technology program is certified in all areas by the National Automotive Technicians Education Foundation.

Career and Advancement Opportunities

More than 90 percent of 2002–03 graduates found employment. 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 both automotive and diesel fields ensures that every program graduate can obtain employment along 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. HIST 296 – History of American Technology, when available, is recommended for the Humanities or Social/Behavioral Science elective.

CONTACT INFORMATION

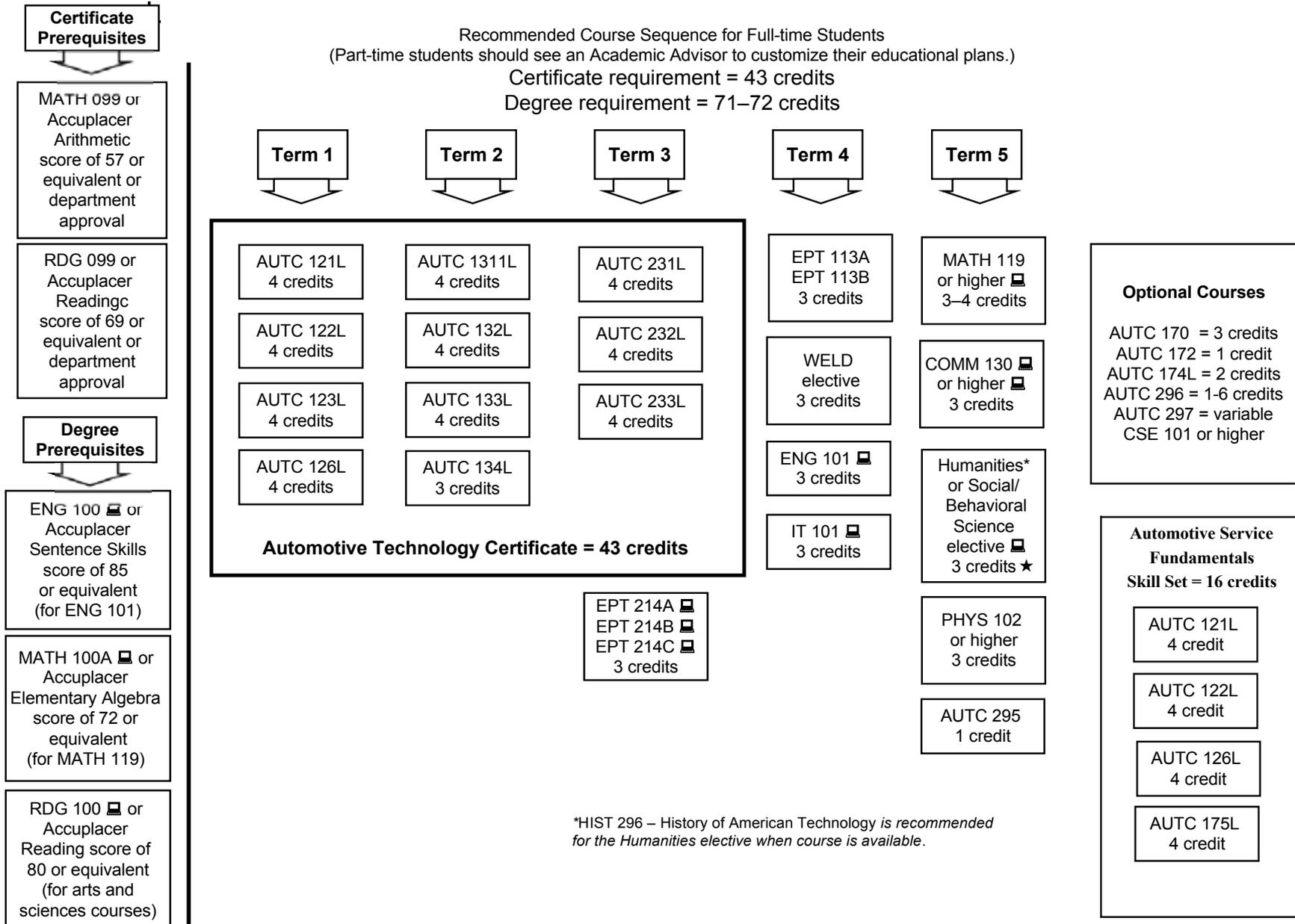
Information about these programs is available from the program chair at (505) 224-3711 or the director (505) 224-3718, or from Academic Advisement and Career Development at (505) 224-4321.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

TRANSPORTATION TECHNOLOGY (Automotive Technology Concentration) Degree (Also Automotive Technology Certificate and Automotive Service Fundamentals Skill Set)

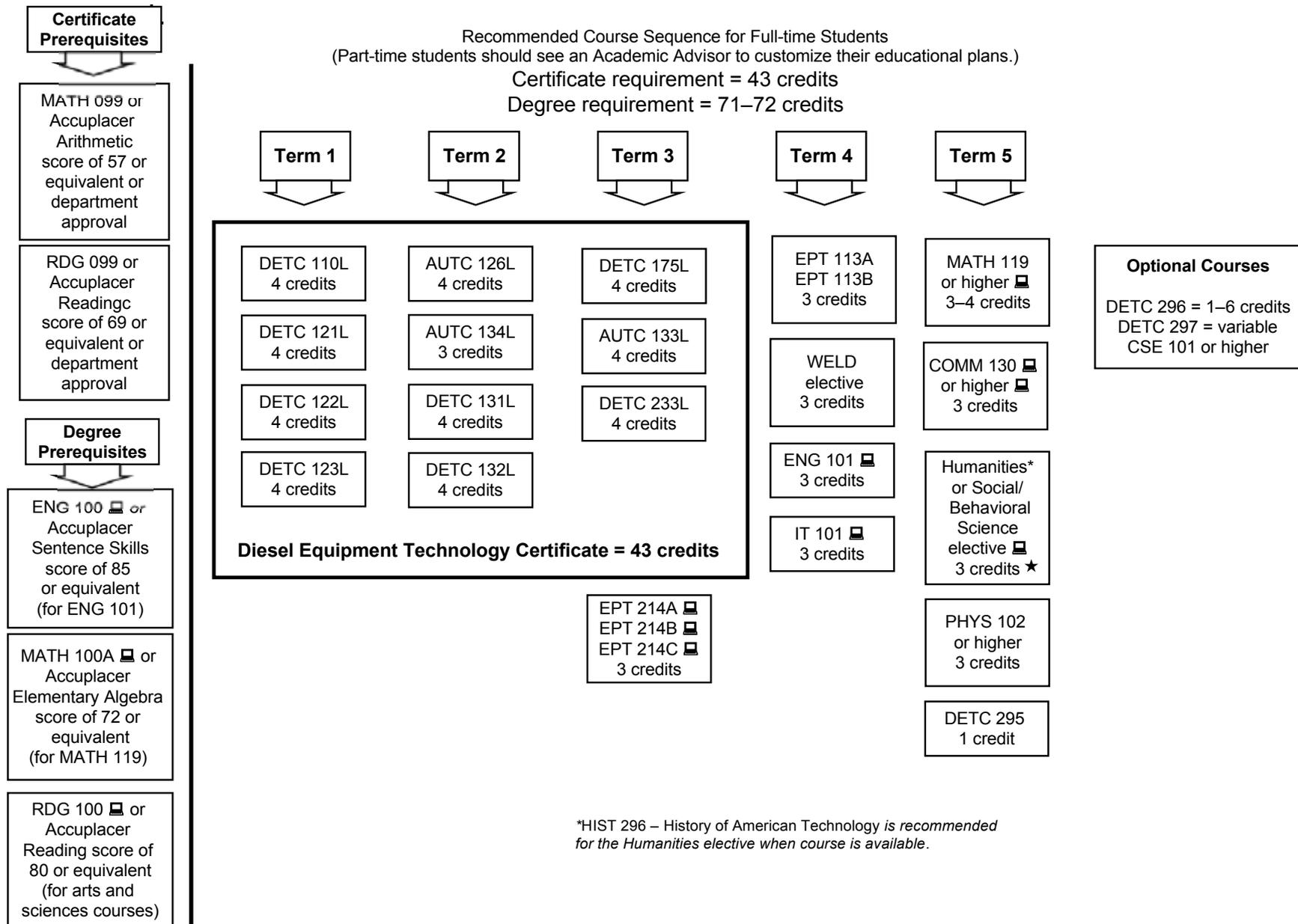
Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)
Certificate requirement = 43 credits
Degree requirement = 71–72 credits



*HIST 296 – History of American Technology is recommended for the Humanities elective when course is available.

TRANSPORTATION TECHNOLOGY (Diesel Equipment Technology Concentration) Degree (Also Diesel Equipment Technology Certificate)

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)
Certificate requirement = 43 credits
Degree requirement = 71–72 credits



★HIST 296 – History of American Technology *is recommended for the Humanities elective when course is available.*

 – Course available through Distance Learning (see page 49.)

★ See page 269 for courses in this category.

• *Certificate in Truck Driving*

Program Description

Provides students basic instruction required to become professional commercial truck drivers. Students learn how to operate a tractor trailer safely and efficiently through classroom, range and over-the-road environments and through full-time and part-time course work. The program is certified by the Professional Truck Driver Institute and students will receive certificates through the Professional Truck Driving Institute and CNM. 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:

- 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 more than one DWI conviction and not within the past five years;
- Obtain a background check in accordance with FMCSR; and
- 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 follow-up) 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 101. Students pay a non-refundable course fee of \$250 prior to entering TRDR 102L and \$300 prior to entering TRDR 103L. This program may not qualify students for Veterans Administration benefits or other financial aid.

In TRDR 102L, students will receive a minimum of 20 hours behind-the-wheel driving and in TRDR 103L a minimum of 30 hours behind-the-wheel driving time.

CONTACT INFORMATION

Program information is available from the program director at (505) 224-3799, the director at (505) 224-3718, or from Academic Advisement and Career Development at (505) 224-4321.

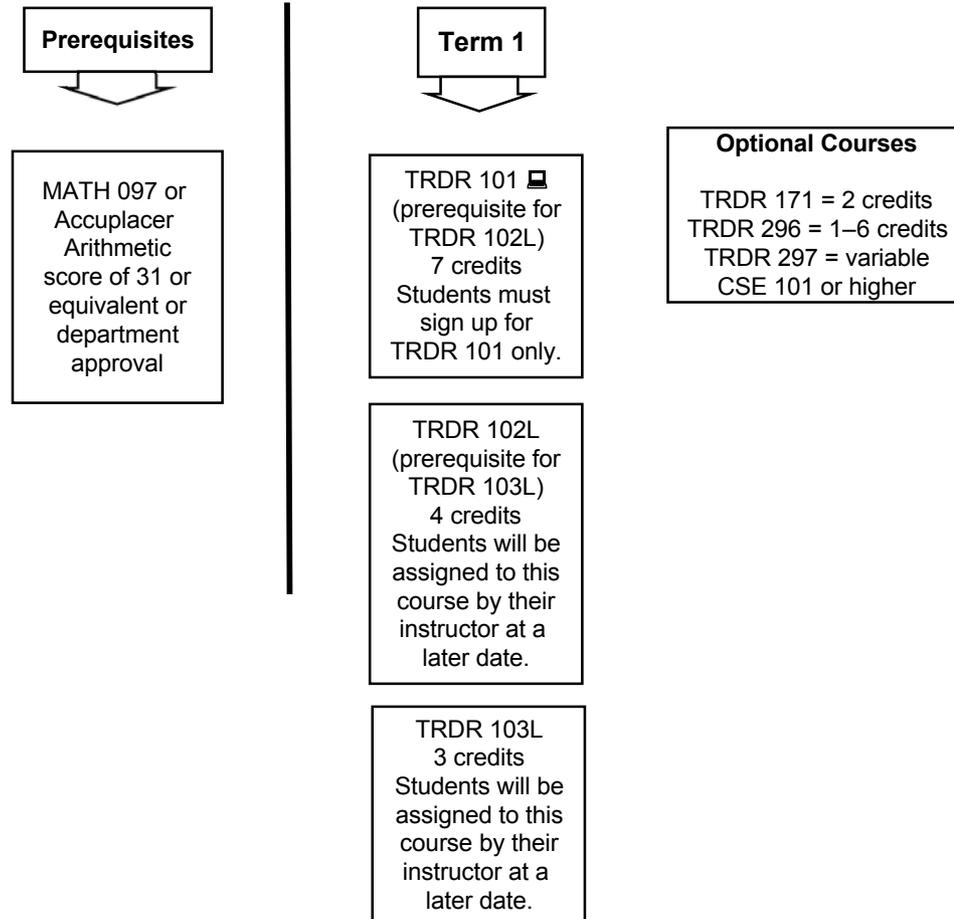
For prerequisites and a recommended course sequence, turn the page... ►



– Course available through Distance Learning (see page 49.)

TRUCK DRIVING Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)
Certificate requirement = 14 credits



★ See page 269 for courses in this category.

 – Course available through Distance Learning (see page 49.)

• 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 as an integral member of the veterinary healthcare 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 upon 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.

Students with a criminal background may have limited employment opportunities in healthcare and public service. Those who have a felony conviction should refer to the relevant New Mexico legislation (NMSA, Section 29-17-5 for healthcare employees available at <http://legis.state.nm.us/Sessions/05%20Regular/final/HB0627.pdf>). 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.



Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

Students interested in certain Health, Wellness and Public Safety Division programs must be in good physical and psychological health. Some programs require documentation of a recent health screening from a licensed healthcare 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.

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 provide their own health insurance and transportation to classes, labs and clinical sites. A \$90 uniform fee covers the cost of consultation jacket, scrubs (two sets), hemostat, nametags and preventive lab tests in case of exposure to human blood. A program fee of \$15 will be charged in VT 103L for a lab kit and a film badge fee of \$30 will be charged for VT 114L, 120C, 210C and 220C.

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.

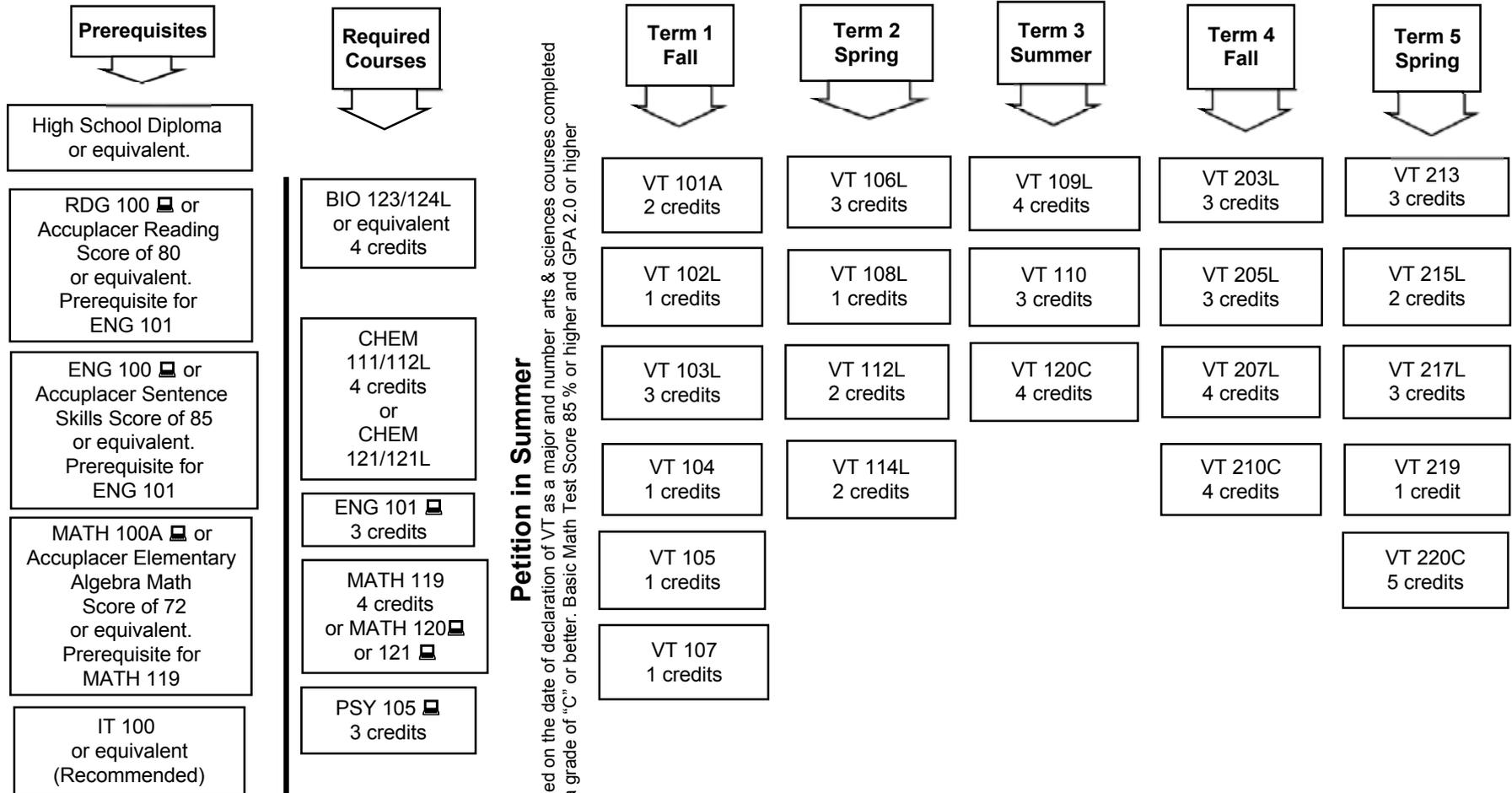
CONTACT INFORMATION

Program information is available from the Program Director, Dr. Bonnie Snyder, at (505) 224-5043, bsnyder6@cnm.edu, or Clinical Coordinator, Evelyn Hamilton, RVT, (505) 224-5071, ehamilton9@cnm.edu, or from Academic Advisement and Career Development at (South Valley) or (505) 224-5056 (505) 224-4321.

For prerequisites and a recommended course sequence, turn the page... ►

VETERINARY TECHNOLOGY Degree

Recommended Course Sequence for Full-time students
 Part-time students should see an Academic Advisor to customize their educational plans
 Degree requirement = 74 credits



★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

- *Associate of Applied Science Degree in Web Technology*
- *Certificate in Web Technology*

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 web site 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.

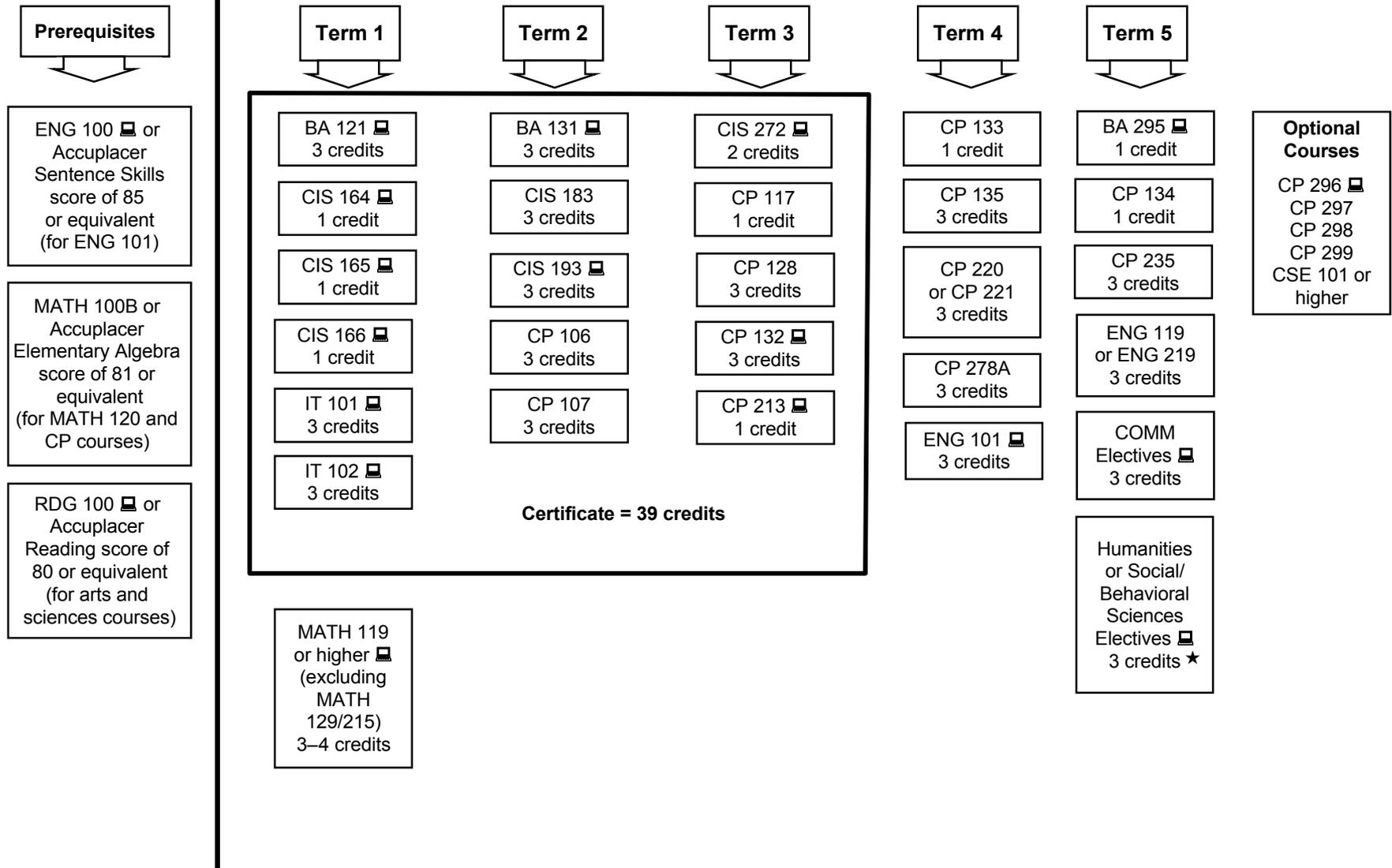


Exit competencies (see page 5) for this program of study are available at <http://planet.cnm.edu/instruction/index.htm>.

WEB TECHNOLOGY Degree and Certificate

Recommended Course Sequence for Full-time Students
(Part-time students should see an Academic Advisor to customize their educational plans.)

Certificate requirement = 39 credits
Degree requirement = 69–70 credits

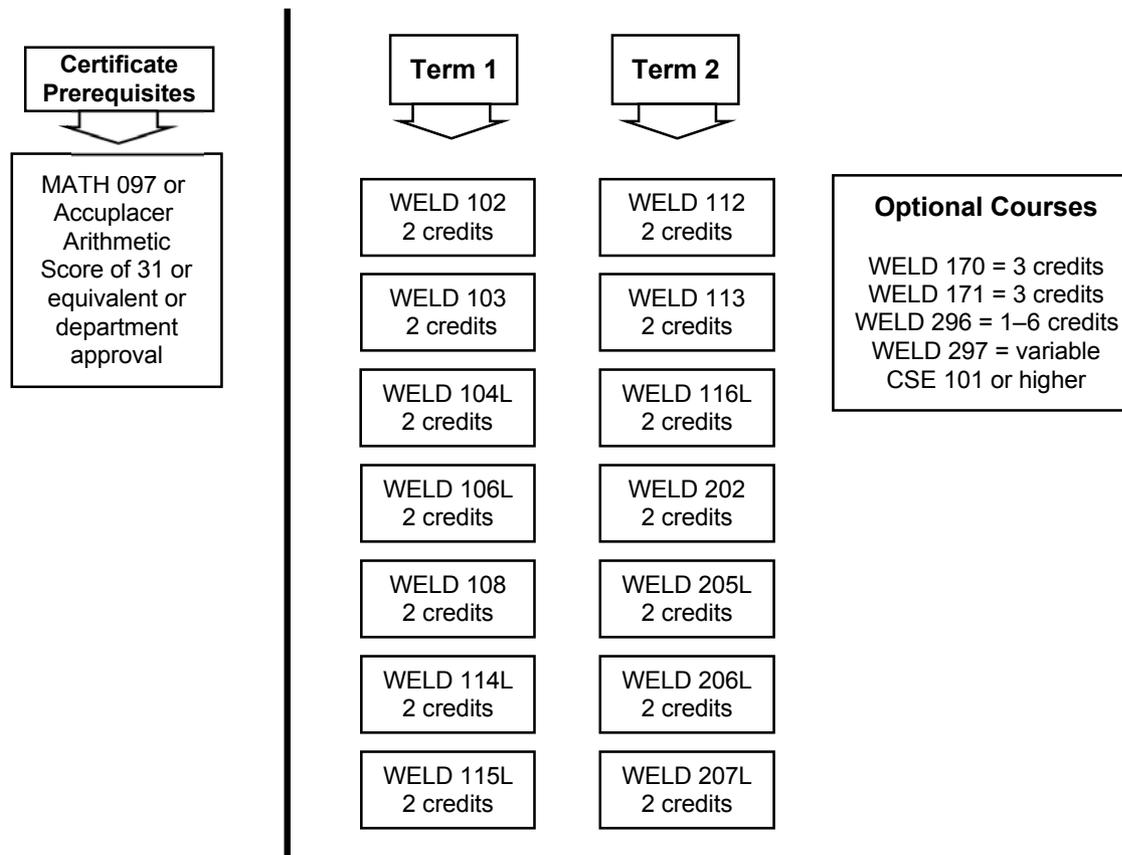


★ See page 269 for courses in this category.

– Course available through Distance Learning (see page 49.)

For additional information about this certificate and how it fits within the Metals Technology Associate of Applied Science Degree see page 208.

Recommended Course Sequence for Full-time Students
 (Part-time students should see an Academic Advisor to customize their educational plans.)
 Certificate requirement = 28 credits



Course Descriptions

| Topic | Page |
|--|------|
| Non-Credit Courses | 268 |
| Credit Course Information | 269 |
| Credit Courses (alphabetical by subject code) | 270 |



Non-Credit Course Descriptions *(listed alphabetically by subject code)*

Course Subject Code/Course number – Course Name

BSK – Basic Skills Courses (non-credit)

BSK 040 – Basic Language Skills

Explores basic reading/writing strategies using phonics, development of sight vocabulary, and collaborative use of materials in themes relevant to students' lives.

BSK 041 – Basic Language Skills II

Improves developmental phonics, dictionary skills, grammar, response to reading and self-expression.

BSK 050 – Basic Skills Reading

Analyzes nonfiction and fiction to identify main idea, point of view and organizational patterns. Includes summarizing, drawing conclusions and responding to readings.

BSK 051 – Reading in Literature and Arts

Focuses on reading and analysis of literature (short stories, poetry, drama and commentary) with multi-cultural themes to improve comprehension and prepare for the literature and arts test of the GED.

BSK 052 – Science

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.

BSK 053 – Social Studies

Presents history, political science, geography, and economics using critical thinking skills necessary for success in practical problem solving and on the GED exam.

BSK 060 – Math Fundamentals

Reviews the language and basic concepts of math as they relate to addition, subtraction, multiplication and division using whole numbers and decimals.

BSK 061 – Decimals, Fractions and Measurements

Covers intermediate math concepts with decimals, fractions and measurement applications.

BSK 062 – Proportions, Percentages and Data Analysis

Presents intermediate math concepts with proportions, percentages and data analysis.

BSK 063 – Basic Geometry, Measurement and Algebra

Focuses on measurement/geometry and fundamental algebra necessary for success on the GED exam and in practical problem solving.

BSK 070 – Beginning Writing

Covers the basics of grammar and the beginning writing process.

BSK 071 – Spelling and Grammar

Reviews language mechanics, usage and spelling improvement.

BSK 074 – General Composition

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.

BSK 079 – Spanish GED

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.

BSK 079 – GED en Español

Preparacion para el examen de GED en español, incluyendo instruccion en matematicas, escritura, gramatica, y lectura. Preparacion incluido por el porcion del examen que esta en inglés.

Course Subject Code/Course number – Course Name

BSK 080 – Basic Skills Learning Center

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.

BSK 081 – Basic Skills Integrated

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.

BSK 082 – Basic Skills Special Topics

Presents various topics. See **Schedule of Classes**.

BSK 085 – GED Refresher

Half-semester course covering the 5 GED subject areas.

ESL – English as a Second Language (non-credit)

ESL 040 – ESL Literacy

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 050 – ESL Beginning

Develops English language skills with an emphasis on pronunciation practice, listening comprehension, conversation and basic grammar.

ESL 060 – Low Intermediate ESL

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 061 – High Intermediate ESL

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 070 – Low Advanced ESL

Covers English conversation, writing, reading and evaluation of materials and study of advanced grammar in meaningful, communicative contexts.

ESL 081 – ESL Integrated

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 082 – ESL Special Topics*

Presents various topics. See **Schedule of Classes**.

ESL 085 – Citizenship

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.

JLS – Job/Life Skills (non-credit)

JLS 041 – Computer Literacy for Adult Education

Introduces computer hardware and terminology, word processing programs and use of the Internet.

How to Read a Course Description

1 **AA 102 – Keyboard Applications 3**

4 (Prerequisite: AA 101)

5 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.

6 Distance Learning option available (see page 49).

3

- 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 49 for more information).

Communication, Humanities & Social Sciences and Math, Science & Engineering Discipline Categories

Courses numbered 101 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). Below is a guide to which subject codes are in each discipline:

| | | | | | |
|---|--|--|---|--|---|
| <p>English/Communication</p> <p>ENG – English</p> <p>COMM – Communication</p> <p>JOUR – Journalism</p> | <p>Biological/Physical Science</p> <p>ASTR – Astronomy</p> <p>BIO – Biology</p> <p>CHEM – Chemistry</p> <p>PHYS – Physics</p> | <p>Fine Arts/Language</p> <p>ART – Art Studio and History</p> <p>FREN – French</p> <p>MUS – Music</p> <p>SPAN – Spanish</p> <p>THEA – Theatre</p> | <p>Humanities</p> <p>CST – Cultural Studies</p> <p>ENG – English (Literature)</p> <p>GNHN – General Honors</p> <p>HIST – History</p> <p>HUM – Humanities</p> <p>PHIL – Philosophy</p> <p>RLGN – Religion</p> | <p>Social/Behavioral Science</p> <p>ANTH – Anthropology</p> <p>ECON – Economics</p> <p>GEOG – Geography</p> <p>GNHN – General Honors</p> <p>PSCI – Political Science</p> <p>PSY – Psychology</p> <p>SOC – Sociology</p> | <p>Other liberal arts subject codes</p> <p>IT – Computer Science</p> <p>MATH – Mathematics</p> <p>NUTR – Nutrition</p> |
|---|--|--|---|--|---|

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 338)

ACCT – Accounting Courses *(Division of Educational & Career Advancement)*

ACCT 100 – Introduction to Accounting **3**
 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 101 – Accounting I **6**
(Prerequisites: MATH 100A or Accuplacer Algebra score of 72 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, Pre- or corequisite: ACCT 111 or MATH 121)
 This course is offered via distance learning only (see page 49). 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 101A and 101B). ACCT 101A plus 101B are equivalent to this course.
Distance Learning option available (see page 49).

ACCT 101A – Accounting IA **3**
(Prerequisites: MATH 100A or Accuplacer Algebra score of 72 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent)
 Note: Students going on to ACCT 101B should take ACCT 111 concurrently. Students analyze and record business transactions, implement accrual basis accounting and prepare basic financial statements. ACCT 101A plus 101B are equivalent to ACCT 101 in 2001–02 and prior catalogs.
Distance Learning option available (see page 49).

ACCT 101B – Accounting IB **3**
(Prerequisite: ACCT 101A and ACCT 111 or MATH 121)
 Applies basic generally accepted accounting principles to the elements of the balance sheet. ACCT 101A and 101B are equivalent to ACCT 101 in 2001–02 and prior catalogs.
Distance Learning option available (see page 49).

ACCT 102 – Accounting II **3**
(Prerequisites: ACCT 101A and 101B, IT 101)
 Presents utilization of accounting information for decision making by management in planning and controlling business activities. ACCT 102 and 180 from this catalog are equivalent to ACCT 102 from 1999–2000 and prior catalogs.
Distance Learning option available (see page 49).

ACCT 104 – Business Budgeting **3**
(Prerequisite: ACCT 101A)
 Focuses on accounting, finance and budget principles. Topics include accounting theory and practice, financial statement analysis, management of balance sheet items, the budget cycle, budget analysis and budget applications.

ACCT 111 – Business Math **3**
(Prerequisite: MATH 100A or Accuplacer Algebra score of 72 or equivalent, this course is a prerequisite for ACCT 101B)
 Applies basic arithmetic operations to business applications and accounting.
Distance Learning option available (see page 49).

ACCT 150 – Volunteer Tax Preparation **2**
 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.

ACCT 151 – Volunteer Tax Internship **1**
(Pre- or corequisite: ACCT 150)
 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.

ACCT 152 – Volunteer Tax Review **1**
(Prerequisites: ACCT 150 and ACCT 151)
 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.

ACCT 157 – Beginning Quickbooks **1**
(Recommended prerequisite: ACCT 101A)
 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.
[Previously offered as BA 157] (5 weeks; 10 theory + 15 lab hours per term)

ACCT 158 – Intermediate Quickbooks **1**
(Pre- or corequisite: ACCT 157 or division approval)
 Expands Quickbooks knowledge to merchandise-oriented businesses. *[Previously offered as BA 159] (5 weeks; 10 theory + 15 lab hours per term)*

ACCT 159 – Advanced Quickbooks **1**
(Pre- or corequisite: ACCT 158 or division approval)
 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)*

ACCT 160 – Quickbooks Complete **3**
(Recommended prerequisite: ACCT 101A)
 This course is offered via distance learning only (see page 49). Covers QuickBooks Pro 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 157/158/159 are equivalent to this course.
(30 theory + 45 lab hours per term)
Distance Learning option available (see page 49).

ACCT 170 – Payroll Accounting **3**
(Recommended prerequisite: ACCT 101A)
 Covers payroll accounting procedures and controls, tax and employment laws and tax reports that form the core of payroll responsibilities.

ACCT 180 – Accounting Applications **3**
(Prerequisites: ACCT 101A and 101B, IT 101 or division approval)
 Simulates the complete accounting process using practice sets to expand skills in the performance of accounting functions. *(ACCT 102 and 180 from current catalog are equivalent to ACCT 102 for 1999 and prior catalogs.)*

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| ACCT 201A – Intermediate Accounting IA (Prerequisite: ACCT 180 or division approval) 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. Distance Learning option available (see page 49). | 3 | ACCT 271 – Auditing (Prerequisite: ACCT 102 or division approval; recommended prerequisite: ACCT 201A) 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 |
| ACCT 201B – Intermediate Accounting IB (Prerequisite: ACCT 201A or division approval) Continues ACCT 201A and completes the focus on the asset side of the balance sheet and starts the study of liabilities. Distance Learning option available (see page 49). | 3 | ACCT 280 – Managerial Accounting (Prerequisite: ACCT 102 or division approval) Expands the student's ability to use and interpret accounting information for decision making by management in planning and controlling business activities. | 3 |
| ACCT 202 – Intermediate Accounting II (Pre- or corequisite: ACCT 201B or division approval) Completes the accounting theory framework started in ACCT 201A and ACCT 201B with the remaining liabilities, stockholder equity issues and special topics. | 3 | ACCT 296 – Accounting Topics (Prerequisites: ACCT 101A and 101B and ACCT 102 or division approval) Explores current topics in accounting. | 1–6 |
| ACCT 240 – Tax Accounting I (Prerequisite: ACCT 101A or ACCT 150/151 or division approval) Covers fundamental characteristics of individual federal income taxes. | 3 | ACCT 297 – Special Problems (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 applying analytical techniques and critical thinking to the problem. An oral presentation may be required. | Variable |
| ACCT 241 – Tax Accounting II (Prerequisite: ACCT 240 or division approval) Covers income tax aspects of corporations, partnerships, sub-chapter S corporations, fiduciaries, advanced concepts related to individual income taxes, tax planning and estate and gift taxation. | 3 | ACCT 298 – Internship (Prerequisites: ACCT 180 and division approval) 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 242A – Enrolled Agent Review I (Pre- or corequisites: ACCT 150, ACCT 151, ACCT 240 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. Not offered fall term. | 3 | ACCT 299 – Cooperative Education (Prerequisites: ACCT 180 and division approval) 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 242B – Enrolled Agent Review II (Pre- or corequisites: ACCT 241, ACCT 242A 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. Not offered fall term. | 3 | ACHR – Air Conditioning, Heating & Refrigeration Courses (Applied Technologies Division) | |
| ACCT 254 – Electronic Spreadsheets (Prerequisite: IT 101 and ACCT 101A and 101B or division approval; recommended prerequisite: ACCT 102) Applies electronic spreadsheets to accounting and business problems. (30 theory + 45 lab hours per term) Distance Learning option available (see page 49). | 3 | ACHR 131 – Refrigeration Fundamentals (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 097 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 |
| ACCT 255 – Computerized Accounting (Prerequisite: ACCT 180 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 | ACHR 132 – Basic Electricity (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 097 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 |
| ACCT 260 – Cost Accounting (Prerequisite: ACCT 102 or division approval) Covers job order and process costing systems for construction and manufacturing. | 3 | ACHR 133 – Refrigerant Management (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 097 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 take the EPA Universal CFC Certification exam. (15 theory + 37.5 lab hours per term) | 2 |
| ACCT 270 – Governmental Accounting (Prerequisite: ACCT 180 or ACCT 201A or division approval) Examines fund accounting for governmental entities. | 3 | | |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|---------------------|---|---------------------|
| ACHR 134 – Motors and Controls (Pre- or corequisite: ACHR 132 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 172L – Basic Air Conditioning, Heating and Refrigeration Introduces basic equipment and service techniques. Emphasizes installation and troubleshooting of parallel compressor systems, energy management systems and preventive maintenance programs. (15 theory + 75 lab hours per term) | 3 |
| ACHR 135 – Refrigeration Applications (Pre- or corequisite: ACHR 131 or division approval) Covers system design, accessories, performance characteristics and problem diagnosis. (15 theory + 37.5 lab hours per term) | 2 | ACHR 173L – Commercial Refrigeration Introduces commercial refrigeration and ice machine. Stresses preventive maintenance. Develops simple servicing and troubleshooting skills. (15 theory + 75 lab hours per term) | 3 |
| ACHR 136 – Control Circuit Applications (Prerequisite: ACHR 134 or division approval) Stresses electrical schematics, diagrams, troubleshooting of circuits and problem diagnosis. (15 theory + 37.5 lab hours per term) | 2 | ACHR 210 – Pumps and Valves (Prerequisites: ACHR 151 and 152 or division approval) 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 |
| ACHR 137 – Code and Safety Requirements I (Prerequisite: RDG 099 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 211 – Basic Hydronic Principles (Prerequisites: ACHR 151 and 152 or division approval) 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 |
| ACHR 151 – Air Conditioning (Prerequisite: ACHR 135 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 212 – Hot Water and Steam Generation Systems (Pre- or corequisites: ACHR 210 and 211 or division approval) Covers types, design, construction of typical systems, sizing and controls of units. (15 theory + 37.5 lab hours per term) | 2 |
| ACHR 152 – Air Conditioning Control (Prerequisite: ACHR 134 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 213 – Controls I (Pre- or corequisites: ACHR 210 and 211 or division approval) Stresses pneumatic, electronic and electric control systems with computer interfacing. (15 theory + 37.5 lab hours per term) | 2 |
| ACHR 155 – Commercial Refrigeration (Pre- or corequisite: ACHR 131 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 214 – Chilled Water Systems (Pre- or corequisites: ACHR 210 and 211 or division approval) Emphasizes commercial and industrial chilled water systems. (15 theory + 37.5 lab hours per term) | 2 |
| ACHR 156 – System Design Examines air properties, air movement, heat load calculations and water as a secondary refrigerant. (30 theory + 37.5 lab hours per term) | 3 | ACHR 215 – Controls II (Pre- or corequisite: ACHR 213 or division approval) Covers advanced building controls using interfaced operating monitor equipment. (15 theory + 37.5 lab hours per term) | 2 |
| ACHR 157– Heating Systems (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 097 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 216 – Code and Safety Requirements II (Prerequisite: ACHR 137 or division approval) Investigates code requirements and safety practices related to refrigeration. Code and safety searches are an integral part of this course. | 1 |
| ACHR 158– Heating Control Systems (Prerequisites: ACHR 132 and 134 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 | ACHR 295 – ACHR Capstone Course (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 |
| ACHR 159 – Installation and Retrofit of Heat/Cooling Systems 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 296 – Special Topics Provides an in-depth study of problems and advanced techniques. | 1–6 |
| ACHR 171L – Basic Refrigeration Maintenance Introduces the types and components of refrigerators and air conditioners. Stresses evaporative coolers and preventive maintenance. Develops troubleshooting skills. (15 theory + 75 lab hours per term) | 3 | ACHR 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem while working with an instructor. | Variable |

AFAS – Aerospace Studies *(Communication, Humanities & Social Sciences Division)*

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:

Aerospace Studies

Richard G. Trembley, Lt. Col., USAF
 Commander, Aerospace Studies
 University of New Mexico
 AFROTC Detachment 510
 Aerospace Studies Building
 1901 Las Lomas NE
 (505) 277-4502

Credits in Aerospace Studies may NOT be applied to any associate degree or certificate at CNM.

AFAS 120 – The Foundation of the United States Air Force 1
(Corequisite: AFAS 120L. Concurrent enrollment in leadership laboratory required for cadet status)
 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.*

AFAS 120L – Leadership Laboratory 1
 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 120 course. *Fall only.*

AFAS 121 – The Foundation of the United States Air Force 1
(Corequisite: AFAS 121L. Concurrent enrollment in leadership laboratory required for cadet status)
 Provides an introduction to the USAF, including an overview of the basic characteristics, missions and organization of the USAF. Meets once weekly. *Spring only.*

AFAS 121L – Leadership Laboratory 1
 Continues course of study begun in AFAS 120/120L. Graded CR/NC. Enrollment in the laboratory is required with AFAS 121 course. *Spring only.*

AFAS 250 – The Evolution of USAF Air and Space Power 1
(Corequisite: AFAS 250L. Concurrent enrollment in leadership laboratory required for cadet status)
 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.*

AFAS 250L – Leadership Laboratory 1
 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 250. *Fall only.*

AFAS 251 – The Evolution of USAF Air and Space Power 1
(Corequisite: AFAS 251L. Concurrent enrollment in leadership laboratory required for cadet status)
 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.*

AFAS 251L – Leadership Laboratory 1
 Continues course of study begun in AFAS 250/250L. Graded CR/NC. Enrollment in the laboratory is required with AFAS 251. *Spring only.*

ANIM – Computer Animation Courses *(Applied Technologies)*

ANIM 101 (formerly CP 113) – Survey of Computer Animation 3
 Progresses from traditional cell animation through building free-hand skills, use of paint software packages, digital media applications and introduces 3D-computer animation. *(30 theory + 45 lab hours per term)*

ANIM 103 (formerly CP 170) – Techniques for Animation Text 3
(Prerequisites: ENG 101)
 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 105 (formerly CP 177L) – Introduction to Lightwave 3
(Prerequisites: IT 101 and ART 106 or ANIM 101)
 Explores various components of Lightwave 3D-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)*
Distance Learning option available (see page 49).

ANIM 107 (formerly CP 178L) – Introduction to Maya 3
(Prerequisites: IT 101 and ART 106 or ANIM 101)
 Uses, extensively, Maya 3D 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 109 (formerly CP 180) – Intermediate Lightwave 3
(Prerequisites: ANIM 105)
 Expands the use of Lightwave 3D 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 111 (formerly CP 181L) – Intermediate Maya 3
(Prerequisite: ANIM 107)
 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 113 (formerly CP 179) – Advance Computer Animation 3
(Co – or – Prerequisites: ANIM 109, ANIM 111)
 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 150 (formerly CP 190) Game Design Theory 3
(Prerequisite: IT101 and ENG 101)
 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)*
Distance Learning option available (see page 49).

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****ANIM 296 – Topics****1-9***(Prerequisite: permission of director)*

Topics vary based on the requests from the community and available software, hardware and instructors.

ANIM 297 – Special Problems**1-9***(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 298 – Internship**3***(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 299 – Cooperative Education**3***(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 paid.

ANTH – Anthropology Courses *(Communication, Humanities & Social Sciences Division)***ANTH 101 – Introduction to Anthropology****3***(Prerequisite: RDG 100 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 49).***ANTH 110 – Language, Culture and the Human Animal****3***(Prerequisite: RDG 100 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.

ANTH 120 – Archaeology: Discovering Our Past**3***(Prerequisite: RDG 100 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 130 – Cultures of the World**3***(Prerequisite: RDG 100 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.

ANTH 150 – Evolutionary Anthropology**3***(Prerequisite: RDG 100 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 222 – Ancient Mesoamerica**3***(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*

Traces Mesoamerican archaeology from the earliest inhabitants through the Aztec period. Emphasizes cultural processes and dynamics of cultural evolution.

Course Subject Code/Course number – Course Name**Credit Hours****ANTH 231 – North American Indians****3***(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*

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.

ANTH 238 – Cultures of the Southwest**3***(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*

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.

ANTH 255 – Southwestern Archaeology**3***(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*

Presents interpretations and dynamics of Southwestern archaeology from the time of the earliest inhabitants until European contact.

ANTH 265 – The Anthropology of Drugs**3***(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*

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.

ANTH 296 – Topics in Anthropology**1-3***(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*Presents various topics. See **Schedule of Classes**.**ARDR – Architectural Drafting Courses** *(Applied Technologies Division)***ARDR 107L – Architectural Drafting I****4***(Pre- or corequisite: ARDR 108, ARDR 109, ARDR 180)*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)***ARDR 108 – Architectural Mathematics****3***(Prerequisite: MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, pre- or corequisite: ARDR 180)*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)***ARDR 109 – Building Materials and Methods I****3***(Prerequisite: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent)*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)***ARDR 113L – Site Analysis****2***(Prerequisites: ARDR 180, ARDR 107L)*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)*

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|--|--------------|
| ARDR 115 – Building Materials and Methods II (Prerequisites: ARDR 109; Pre- or corequisite: ARDR107L) Continues ARDR 109 with emphasis on steel, concrete, roofing, glazing and cladding systems. (30 theory + 45 lab hours per term) | 3 | ARDR 214L – Architectural CAD Drafting II (Prerequisite: ARDR 107L; Pre- or corequisite: ARDR 115, ARDR 213) Continues ARDR107L. Students produce design development and representative architectural construction drawings using standard graphic, dimensioning and notation systems. (45 theory + 180 lab hours per term) | 7 |
| ARDR 119L – Architectural CAD Drafting III (Prerequisites: ARDR 115, 213 and 214L) Applies concepts and techniques of AutoCAD 3D modeling resulting in presentation drawings in AutoCAD and 3D Studio Viz. (45 theory + 180 lab hours per term) | 7 | ARDR 215 – Mechanical/Electrical Systems Analysis (Prerequisite: ARDR 119L; Corequisite: ARDR 212L) 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 180 – Fundamentals of Computer-Assisted Drafting (Prerequisite: IT 101 or equivalent) Introduces the fundamentals of computer-assisted drafting using AutoCAD. (30 theory + 45 lab hours per term) | 3 | ARDR 221L – Architectural/Engineering Drafting Seminar (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. Is taken in the student's last semester. (45 lab hours per term) | 1 |
| ARDR 181 – Intermediate Computer-Assisted Drafting (Prerequisite: ARDR 180) Continues ARDR 180 with practical applications to architectural projects. (30 theory + 45 lab hours per term) | 3 | ARDR 296 – Topics (Prerequisite: permission of program chair) Offers topics based on requests from the community and available instructors. | 1–7 |
| ARDR 182L – Advanced Computer-Assisted Drafting (Prerequisites: ARDR 213, 214L or ARDR 181) Introduces 3rd-party CAD software-concepts and applications using Architectural Desktop. (75 lab hours per term) | 2 | ARDR 297 – Special Problems (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 185 – Customizing Auto Cad (Prerequisites: ARDR 182L) Introduces AutoCAD customization concepts and applications. (30 theory + 45 lab hours per term) | 3 | ARDR 298 – Internship (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 201 – Structural Systems Analysis (Prerequisite: ARDR 119L; Corequisite: ARDR 203L) Introduces structural design and graphics in wood, steel and concrete and elementary beam design problems. (60 theory + 15 lab hours per term) | 4 | ARDR 299 – Cooperative Education (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 203L – Structural Systems CAD Drafting (Prerequisite: ARDR 119L; Corequisite: ARDR 201) Develops representative structural engineering drawings in steel, concrete and/or wood structural systems. (15 theory + 180 lab hours per term) | 5 | ART – Art Courses (Communication, Humanities & Social Sciences Division) | |
| ARDR 208L – Architectural Design (Prerequisite: ARDR 107L) Presents design principles, theories, methods and process. Facilitates learning through student-designed project. (75 lab hours per term) | 2 | ART 101 – Introduction to Art Presents fundamental concepts of visual arts—the language of form and media of artistic expression. Possible museum exhibition attendance. | 3 |
| ARDR 212L – Mechanical/Electrical Systems CAD Drafting (Corequisite: ARDR 215) 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 | ART 102 – Introduction to Studio Arts 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 |
| ARDR 213 – CAD Analysis (Corequisite: ARDR 214L or division approval) Applies beginning to advanced CAD concepts and commands to the production and coordination of A/E construction drawings. (45 theory + 45 lab hours per term) | 4 | ART 106 – Drawing I (Recommended: ART 101) Explores basic drawing concepts with dry and wet media—still life, landscape, portraiture and drawing the figure/the nude figure. | 3 |
| | | ART 121 – Two-Dimensional Design (Recommended: ART 101 and ART 106) 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 |

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**

| | |
|---|----------|
| ART 122 – Three-Dimensional Design (Prerequisite: ART 106 and ART 121) 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 |
| ART 201 – History of Art I Surveys Near Eastern, Egyptian, Greek, Roman, early Christian, Byzantine, early Medieval, Romanesque and Gothic art and architecture. <i>Fall, summer only</i> | 3 |
| ART 202 – History of Art II Surveys Italian and Northern Renaissance, Baroque, Rococo and 19th century Western European painting, sculpture and architecture. <i>Spring, summer only</i> | 3 |
| ART 204 – Life Drawing I (Prerequisite: ART 106) 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 |
| ART 205 – Drawing II (Prerequisite: ART 106) Continues course of study initiated in ART 106, 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 |
| ART 206 – Printmaking I (Prerequisite: ART 106, ART 121, or approval of instructor.) Introduces the fundamental methods of printmaking. Explores techniques and creative aspects of monotype, collagraph, relief and intaglio printmaking. Discusses lithography and screen printmaking. | 3 |
| ART 207 – Painting I (Prerequisites: ART 106 and ART 121) Explores the tradition of paint as a medium for artistic expression. Focuses on materials/media, tools, techniques, history and concepts of painting. | 3 |
| ART 211 – Portraiture (Prerequisites: ART 106) 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 |
| ART 214 – Life Drawing II (Prerequisite: ART 204) Continues course of study begun in ART 106 and 204. | 3 |
| ART 217 – Painting II (Prerequisite: ART 207) Continues course of study begun in ART 207. 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 |
| ART 250 – Modern Art Surveys major figures, movements and stylistic developments in Western art from 1850 to the present. | 3 |

Course Subject Code/Course number – Course Name**Credit Hours**

| | |
|--|----------|
| ART 251 – Art of the American Southwest Presents interrelationships of three Southwestern cultures emphasizing major forms of expression in pottery, textiles, jewelry, architecture, painting and photography. | 3 |
| ART 260 – Architectural History: Ancient through Modern 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 |
| ART 296 – Topics in Art Presents various topics. See Schedule of Classes . | 3 |

ASTR – Astronomy Courses (Math, Science & Engineering Division)

| | |
|---|----------|
| ASTR 101 Introduction to Astronomy I (Prerequisite: RDG 100 or Accuplacer score of 80 or equivalent, recommended: MATH 100B or Accuplacer Elementary Algebra score of 81) Introduces the science of astronomy, focusing on the solar system – the sun, planets, comets and meteors. | 3 |
| ASTR 102 – Introduction to Astronomy II (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, MATH 100B or Accuplacer Elementary Algebra score of 81) 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 |
| ASTR 111L – Astronomy Laboratory (Pre- or corequisite: ASTR 102) Investigates in optional laboratory setting the principles discussed in ASTR 102. | 1 |
| ASTR 296 – Topics in Astronomy (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Presents various topics. See Schedule of Classes . | 3 |

AUTC – Automotive Technology Courses (Applied Technologies Division)

| | |
|---|----------|
| AUTC 121L – Brake Systems (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) 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. (30 theory + 75 lab hours per term) | 4 |
| AUTC 122L – Suspension and Alignment (Prerequisites RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) 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. (30 theory + 75 lab hours per term) | 4 |
| AUTC 123L – Manual Transmissions (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) 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. (30 theory + 90 lab hours per term) | 4 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| AUTC 126L – Automotive Electrical (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) 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. (30 theory + 75 lab hours per term) | 4 | AUTC 231L – ENGINE PERFORMANCE I (Prerequisite: AUTC 126L and AUTC 133L 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 gives 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) | 4 |
| AUTC 131L – Engine Repair (Prerequisites: AUTC 126L or division approval) 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. (30 theory + 90 lab hours per term) | 4 | AUTC 232L – ENGINE PERFORMANCE II (Prerequisite: AUTC 126L, AUTC 133L and AUTC 231L or division approval) Provides intermediate 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. It provides more advanced mastery of ASE/NATEF engine performance program standards. (30 theory + 90 lab hours) | 4 |
| AUTC 132L – Automatic Transmissions (Prerequisite: AUTC 126L or equivalent or division approval) 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. (30 theory + 90 lab hours per term) | 4 | AUTC 233L – ENGINE PERFORMANCE III (Prerequisite: AUTC 126L, AUTC 133L and AUTC 232L and completed graduation application or division approval.) Provides advanced information to test and repair computer controlled automotive drive trains. It concentrates on advanced diagnostic procedures, OBD II design and function and an overview of hybrid systems. The course includes a forty-hour industry shadow assignment. It provides further advanced mastery of the ASE/NATEF engine performance program standards. (30 theory + 75 lab hours) | 4 |
| AUTC 133L – Automotive Electronics (Prerequisite: AUTC 126L or division approval) Builds on skills developed in AUTC 126L. 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) | 4 | AUTC 295 – Automotive Technology Capstone Course (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 |
| AUTC 134L – Air Conditioning and Heating (Prerequisite: AUTC 126L 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. (15 theory + 75 lab hours per term) | 3 | AUTC 296 – Special Topics (Prerequisite: division approval) Presents various problems and current automotive subjects. | 1–6 |
| AUTC 170 – Transportation Trades Machining 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) | 3 | AUTC 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem while working with an instructor. | Variable |
| AUTC 172 – Air Care Inspector Covers the procedures for becoming a certified air care inspector for the City of Albuquerque Vehicle Pollution Management program along with city and federal regulations governing air pollution and emissions inspections. (7.5 theory + 30 lab hours per term) | 1 | AVIA – Aviation Courses (Applied Technologies Division) | |
| AUTC 174L – Alternative Fuels (Prerequisites: AUTC 231L, 232L, 233L or equivalent or ASE certification in engine performance) Introduces diagnosis, repair and conversions for compressed natural gas (CNG) and liquefied petroleum gas (LPG) fueled light and medium vehicles. Includes personal and environmental safety, LPG/CNG fuel handling and air/fuel management. (15 theory + 37.5 lab hours per term) | 2 | AVIA 101A – Introduction to Aircraft Structural Assembly 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 | 3 |
| AUTC 175L – Service Fundamentals 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. Prepares students to perform basic service operations to prepare basic service technicians. (30 theory + 75 lab hours per term) | 4 | AVIA 101B – Aircraft Structural Assembly Manufacturing 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 | 3 |
| | | AVIA 101L – Aircraft Structural Assembly Lab 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 | 3 |

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

AVIA 104L – Electrical Systems Installation

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. *Program fee: \$100*

3

AVIA 105L – Plumbing, Hydraulic and Pneumatic System Installation

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. *Program fee: \$100*

3

AVIA 106L – Flight Control Cable and Rigging Assembly

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. *Program fee: \$100*

3

AVIA 125 – Introduction to Modern Commercial Air Operations

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.

2

AVIA 132 – Private Pilot

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. *(45 theory hours per term) Private Pilot Kit (includes \$84.00 exam fee) Program fee: \$359*

3

AVIA 132L – Private Pilot

(Pre- or co requisite: AVIA 132)

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 138 – Instrument Rating and Commercial Pilot I

(Prerequisite: AVIA 132 and/or a Private Pilot License)

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 138L – Instrument Rating and Commercial Pilot I Lab

(Prerequisite or corequisite: AVIA 138)

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 140 – Meteorology

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. *(45 theory hours per term)*

3

AVIA 144 – Aircraft, Engines and Maintenance

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. *(45 theory hours per term)*

3

AVIA 160 – Aviation Electricity

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.

2

AVIA 170 – Commercial Pilot II

(Prerequisite: AVIA 138L and/or Pilot Instrument Rating with some Commercial instruction)

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

AVIA 170L – Commercial Pilot II Lab

(Pre or corequisite: AVIA 170)

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 241 – Aerodynamics for Pilots

(Prerequisite: AVIA 138 L; Corequisites: AVIA 242)

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 242 – Aerobatics, Spin and Up-Set Flight

(Prerequisite: AVIA 138L, Corequisite: 241)

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

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| AVIA 243 – CFI and CFII Ratings (Prerequisite: AVIA 170L and/or SE Commercial Rating) 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 254– Crew Resource Management (CRM) 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. | 2 |
| AVIA 243L – CFI and CFII Ratings (Pre or corequisite: AVIA 243) 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 255– Management of Air Operations 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. | 2 |
| AVIA 245 – Modern Avionics 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 256– Turbine Aircraft Systems (Prerequisite: AVIA 243L) Introduces the student to complex systems associated with modern turbine powered aircraft (turbo-prop/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. | 6 |
| AVIA 246 – Introduction to Air Traffic Control 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 260L – Advanced Flight Labs (Cessna 172) (Prerequisite: AVIA 132L) 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 | 1 |
| AVIA 248 – Multi-Engine (ME) Commercial/ME Certified Flight Instructor (MEI) (Prerequisite: AVIA 243L and/or SE Commercial Rating and SE CFI-CFII Ratings) 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 | AVIA 261L – Advanced Flight Labs (BE-95) (Prerequisite: AVIA 243L) Enables the student to build instructor supervised advanced proficiencies and flight experience in multi-engine 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 | 1 |
| AVIA 248L – Multi-Engine (ME) Commercial/ME Certified Flight Instructor (MEI) (Pre or corequisite: AVIA 248) 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. Program Fee; \$11,342.00 | 3 | AVIA 262A – Advanced Flight Labs (Frasca SE FTD) (Prerequisite: AVIA 132L) 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 | 1 |
| AVIA 250 – Global Air Navigation 3 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. | 3 | AVIA 262B – Advanced Flight Labs (Frasca ME FTD) (Prerequisite: AVIA 243L) Enables the student to build instructor supervised advanced proficiencies and flight experience in multi-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: \$3,019.00 | 1 |
| AVIA 253 – Aviation Physiology 2 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. | 2 | AVMT – Aviation Maintenance Courses (Applied Technologies Division) | |
| | | AVMT 124 – Aircraft Forms and Regulations, Weight and Balance, Drawings, Ground Operations and Federal Aviation Maintenance Publications, Forms and Records (Prerequisites: ENG 099, RDG 100, MATH 100B; Corequisites: AVMT 126, AVMT 128 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 | 5 |

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**

AVMT 126 – Fundamentals of Mathematics and Electricity 4
(Prerequisites: ENG 099, RDG 100, MATH 100B; Corequisites: AVMT 124, AVMT 128 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 128 – Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittings 4
(Prerequisites: ENG 099, RDG 100, MATH 100B; Corequisites: AVMT 124, AVMT 126 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 220 – Fundamentals of Aircraft Wood Structures, Covering and Finishing and Bonded Structures: Part 65 3
(Prerequisites: AVMT 124, AVMT 126, AVMT 128 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 222 – Atmosphere Control, Fire Detection, Ice and Rain Protection Systems: Part 65 3
 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

AVMT – 224 – Aircraft Sheet Metal: Part 65 5
(Prerequisites: AVMT 124, AVMT 126, AVMT 128 or permission of program director)
 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

AVMT 226 – Aircraft Landing Gear, Hydraulic, Pneumatic, Fuel, Position and Warning Systems: Part 65 3
(Prerequisites: AVMT 124, AVMT 126, AVMT 128 or permission of program director)

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

AVMT 228 – Aircraft Electrical Systems, Instruments, Fuel, Communication and Navigation Systems: Part 65 3
(Prerequisites: AVMT 124, AVMT 126, AVMT 128 or permission of program director)

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

Course Subject Code/Course number – Course Name**Credit Hours**

AVMT 230 – Airframe Assembly, Inspection and Welding: Part 65 3
(Prerequisites: AVMT 124, AVMT 126, AVMT 128 or permission of program director)
 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

AVMT 263 – Aircraft Turbine Engines: Part 65 5
(Prerequisites: AVMT 124, AVMT 126, AVMT 128; Corequisites: AVMT 266, AVMT 268 or permission of program director)

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

AVMT 266 – Engine Fuel Systems, Fuel Metering and Induction System: Part 65 6
(Prerequisites: AVMT 124, AVMT 126, AVMT 128; Corequisite: AVMT 263, AVMT 268 or permission of program director)

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

AVMT 268 – Engine Electrical, Ignition and Starter Systems: Part 65 6
(Prerequisites: AVMT 124, AVMT 126, AVMT 128; Corequisite: AVMT 263, AVMT 266 or permission of program director)

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

AVMT 270 – Engine Instruments, Fire Protection and Lubrication, Cooling and Exhaust Systems: Part 65 5
(Prerequisites: AVMT 124, AVMT 126, AVMT 128; Corequisite: AVMT 272 or permission of program director)

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

AVMT 272 – Propeller Systems and Engine Inspections: Part 65 4
(Prerequisites: AVMT 124, AVMT 126, AVMT 128; Corequisite: AVMT 270 or permission of program director)

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

BA – Business Administration Courses *(Business & Information Technology Division)*

BA 101 – Introduction to Quality Management 1
(Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval)
 Presents concepts and theories of quality improvement. (5 weeks)
 Distance Learning option available (see page 49).

BA 102 – Fundamentals of Continuous Quality Improvement (CQI) 1
(Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval)
 Focuses on data gathering for process improvement and organizational culture change. (5 weeks)
 Distance Learning option available (see page 49).

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|--|--------------|
| BA 103 – Quality Tools (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) Examines the tools and techniques such as the cause and effect diagram, brainstorming, control charts and Pareto diagrams. (5 weeks) Distance Learning option available (see page 49). | 1 | BA 165 – Personal Finance (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) Focuses on the personal and financial planning process. | 1 |
| BA 104 – Team Building for Quality (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) Presents group process as it applies to team building. (5 weeks) Distance Learning option available (see page 49). | 1 | BA 166 – Personal Investment Management (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) Presents the basics of investment, securities markets, stocks and bonds, mutual funds, risk associated with each and sources of investment information. | 1 |
| BA 105 – Re-engineering for Quality (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) Integrates tools and techniques to formulate action plans for process improvements. (5 weeks) Distance Learning option available (see page 49). | 1 | BA 167 – Retirement Investment (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) Focuses on retirement and estate planning. | 1 |
| BA 106 – Quality Leadership (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) Focuses on mission statement, goals and strategies to implement quality leadership throughout an organization. (5 weeks) Distance Learning option available (see page 49). | 1 | BA 211 – Business Law (Prerequisites: BA 113 or BA 133 or division approval) 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... Distance Learning option available (see page 49). | 3 |
| BA 113 – Introduction to Business (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent and ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent or division approval) 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. Distance Learning option available (see page 49). | 3 | BA 222 – Principles of Marketing (Prerequisites: BA 113 and BA 121 or division approval) 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. Distance Learning option available (see page 49). | 3 |
| BA 121 – Business English (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent and ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) Focuses on the principles of effective written communication in the business environment. Emphasizes correct grammar, punctuation, sentence structure and vocabulary. Distance Learning option available (see page 49). | 3 | BA 230 – Employment Law for Business (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent and ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent or division approval) 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 122 – Business Writing (Prerequisite: BA 121; 25 wpm typing skill recommended) Builds on principles presented in BA 121 and integrates those principles in composing effective business letters, memos and reports; Students develop oral presentation skills. Distance Learning option available (see page 49). | 3 | BA 233 – Organizational Behavior (Prerequisites: BA 121 and BA 133 or division approval) Covers the fundamentals of human behavior within business organizations, organizational relationships and communication processes that affect motivation and human behavior. Distance Learning option available (see page 49). | 3 |
| BA 131 – Business Interpersonal Skills (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent and ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) Focuses on developing interpersonal skills appropriate for the business environment. Topics include: Attitude, Diversity, Communication Skills, Teamwork/teambuilding, Meeting Management, Conflict Resolution and Presentation Skills. Incorporates training for Teamwork Work Keys. Distance Learning option available (see page 49). | 3 | BA 234 – Business Ethics (Prerequisites: BA 113 and BA 121 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 49). | 3 |
| BA 133 – Principles of Management (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent) 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. Distance Learning option available (see page 49). | 3 | BA 236 – Human Resource Management (Prerequisites: BA 121 and BA 133 or division approval) 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, E.E.O., affirmative action, training and development and other related topics. Distance Learning option available (see page 49). | 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 | Course Subject Code/Course number – Course Name | Credit Hours |
|---|---------------------|---|---------------------|
| BA 238 – Leadership and Group Dynamics (Prerequisite: BA 233 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 49). | 3 | BA 274 – Real Estate Investment (Prerequisites: BA 270 and BA 271) Introduces the principles for investment decisions, assessment of property potential and an awareness of the marketplace and the needs of the public. | 3 |
| BA 251 – Retail Management (Pre- or corequisite: BA 222 or division approval) 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. Distance Learning option available (see page 49). | 3 | BA 275 – Property Management 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 252 – Customer Relations (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent and ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent or division approval) Focuses on the relationship of self to customers, problem solving and communicating with customers, understanding customers, anticipating customers' needs and offering assistance. Distance Learning option available (see page 49). | 3 | BA 279 – The National Uniform Standards of Professional Appraisal Practice (Prerequisite: BA 272 or division approval) Focuses on the requirements for ethical behavior and competent performance by appraisers. (7.5 weeks) | 2 |
| BA 255 – Supervision (Prerequisite: BA 113 or 133 or division approval) 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. Distance Learning option available (see page 49). | 3 | BA 282 – Appraising the Single Family Residence (Prerequisite: BA 272 or division approval) 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 |
| BA 260 – Purchasing (Prerequisites: ACCT 101A and ACCT 101B or division approval) 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 284 – Sales 3 (Prerequisite: BA 222 or division approval) 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. Distance Learning option available (see page 49). | 3 |
| BA 270 – Real Estate Law 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 License Exam. Distance Learning option available (see page 49). | 3 | BA 285 – Broker Basics (Prerequisites: BA 270 and 271 or division approval) 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. Required course for the New Mexico State Real Estate Brokers Exam. | 3 |
| BA 271 – Real Estate Principles and Practice (Pre- or corequisite: BA 270) 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 License Exam. Distance Learning option available (see page 49). | 3 | BA 286 – Advertising (Prerequisite: BA 222 or division approval) Covers the history of advertising 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. Distance Learning option available (see page 49). | 3 |
| BA 272 – Real Estate Appraisal (Recommended prerequisite: BA 271) Presents methods for estimating the value of real property that includes real estate appraisal techniques of both land and improved residential property. | 3 | BA 289 – Strategic Management (Prerequisite: BA 113 or BA 133 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 49). | 3 |
| BA 273 – Real Estate Finance (Prerequisite: BA 271) 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 295 – Capstone Course (Prerequisites: ACCT 201A and 255 or BA 211 and 222 or CIS 186, 251, 231 and 274 or FIN 248 and 249 or OTEC 231 and 260) 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 49). | 1 |
| | | BA 296 – Business Topics Explores current topics in business. | 1–3 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|--|--------------|
| BA 297 – Special Problems (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. | Variable | BGC 203 – Production Photoshop (Prerequisite: BGC 200; recommended prerequisite: CIS 193) Discover print production skills using Photoshop for the practical aspects of halftone and separation production including color theory, dot gain, dot range, linescreen and other production techniques. (30 theory + 45 lab hours per term) Distance Learning option available (see page 49). | 3 |
| BA 298 – Internship (Prerequisite: division approval) 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 | BGC 204 – Digital Printing Production (Prerequisites: BGC 201 and BGC 202; Pre- or corequisite: BGC 203) 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 49). | 3 |
| BA 299 – Cooperative Education (Prerequisite: division approval) 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 | BGC 296 – Topics Course Explores current topics in business graphics and communication. | 1–3 |
| BA 299A – Cooperative Education I Requires a minimum of 40 hours to qualify for credit. Students employed in an ongoing governmental or non-governmental cooperative program enroll in this course for the first term of employment. Students are paid by the employers and are supervised jointly by CNM and the employer. | 1 | BGC 297 – Special Problems (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. | Variable |
| BA 299B – Cooperative Education II (Prerequisite: BA 299A) Requires a minimum of 40 hours to qualify for credit. Builds on experiences attained in BA 299A for students in their second term of cooperative education. | 1 | BGC 298 – Internship (Prerequisites: BGC 201, 202, 203 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. | 4 |
| BA 299C – Cooperative Education III (Prerequisite: BA 299B) Requires a minimum of 40 hours to qualify for credit. Builds on experiences attained in BA 299A and BA 299B for students in their third term of cooperative education. | 1 | BGC 299 – Cooperative Education (Prerequisites: BGC 201, 202, 203 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. | 4 |
| BA 299D – Cooperative Education IV (Prerequisite: BA 299C) Requires a minimum of 40 hours to qualify for credit. Builds on experiences attained in BA 299A, BA 299B and BA 299C for students in their fourth term of cooperative education. | 1 | | |
| BGC – Business Graphics Courses (Business & Information Technology Division) | | | |
| BGC 200 – Introduction to Digital Publishing (Prerequisite: IT 101) Introduces students to computing on a Mac, professional graphics software, printing terminology and graphic design history. (30 theory + 45 lab hours per term) Distance Learning option available (see page 49). | 3 | | |
| BGC 201 – Advanced Digital Publishing (Prerequisite: BGC 200) Explores design layout with professional software. Presents design concepts, introduction to typography and print production techniques. (30 theory + 45 lab hours per term) Distance Learning option available (see page 49). | 3 | | |
| BGC 202 – Digital Drawing (Prerequisite: BGC 200; recommended prerequisite: CIS 274) Examine and practice vector-based illustration. Skills are taught as they relate to a production and PDF workflow. Advanced typography. (30 theory + 45 lab hours per term) Distance Learning option available (see page 49). | 3 | | |
| BIO – Biology Courses (Division of Educational & Career Advancement) | | | |
| | | BIO 100 – Introduction to Biology (Prerequisites: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent and RDG 099 or Accuplacer Reading score of 69 or equivalent, recommended: RDG 100) 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 100. (60 theory/lab hours per term) | 3 |
| BIO – Biology Courses (Math, Science & Engineering Division) | | | |
| | | BIO 110 – Biology for Non-Majors (Prerequisite: RDG 100 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. | 3 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|---|--------------|
| BIO 111 – Environmental Science (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) 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. Distance Learning option available (see page 49). | 3 | BIO 203/203L -- Ecology and Evolution (Prerequisite: BIO201/201L & 202/202L; Pre- or corequisite: MATH 162 or 180) 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. Required enrollment in a 3-hour lecture and a 3-hour lab. | 4 |
| BIO 111L – Environmental Science Laboratory (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Investigates in optional laboratory setting the principles discussed in BIO 111; emphasizes analysis of water, soil and air pollutants. Moderately strenuous field trips to special interest sites may be scheduled outside regular laboratory hours. | 1 | BIO 204/204L -- Plant and Animal Form and Function (Prerequisite: BIO201/201L & 202/202L) 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. Required enrollment in a 3-hour lecture and a 3-hour lab. | 4 |
| BIO 112L – Biology for Non-Majors Laboratory (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent; Pre- or corequisite: BIO 110) Provides in optional laboratory setting lab the use of microscopes, culturing bacteria, chemical analysis of biomolecules, plant and animal behavior. | 1 | BIO 224/224L – Southwestern Natural History (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Presents in lecture and labs or field trips (one or more overnight) the natural history and identification of southwestern flora and fauna. Required enrollment in a 3-hour lecture and a 3-hour lab. | 4 |
| BIO 123 – Biology for Health Sciences (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent; Recommended: either CHEM 111, BIO 100 or CHEM 100) Presents principles of cell biology, cell chemistry, genetics and organismic biology with an emphasis on human systems. | 3 | BIO 237 – Human Anatomy and Physiology I (Prerequisites: BIO 123/124L or BIO 202/202L (pre or co-requisite) and either CHEM 111/112L or 121/121L; or a passing score of 64 on the Biology Placement Exam) Presents integrated study of human structure and function covering the integumentary, skeletal, muscular and nervous systems. | 3 |
| BIO 124L – Biology for Health Sciences Laboratory (Prerequisite: MATH 99 or Accuplacer Arithmetic score of 57; Pre- or corequisite: BIO 123) Introduces exercises and demonstrations related to cell biology, biochemical processes and genetics. | 1 | BIO 238 – Human Anatomy and Physiology II (Prerequisite: BIO 237) Continues course of study begun in BIO 237, covering structure and function of the cardiovascular, respiratory, digestive, urinary, reproductive and endocrine systems. | 3 |
| BIO 136 – Human Anatomy and Physiology for Non-Majors (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent; Recommended: BIO 100 or CHEM 100) 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 on-line. Distance Learning option available (see page 49). | 3 | BIO 239 – Microbiology (Prerequisites: BIO 123/124L or BIO 202/202L (pre- or corequisite) and either CHEM 111/112L or 121/121L or a passing score of 64 on the Biology Placement Exam; Pre- or corequisite: BIO 239L) Introduces concepts of microbiology, host-parasite relationships, infection and immunity. Distance Learning option available (see page 49). | 3 |
| BIO 139L – Human Anatomy and Physiology for Non-Majors Laboratory (Pre- or corequisite: BIO 136) Introduces lab exercises, which complement concepts presented in BIO 136, including histological study, biochemical processes, mammal organ dissections and use of models to illustrate anatomical arrangement. Course available on-line. Distance Learning option available (see page 49). | 1 | BIO 239L – Microbiology Laboratory (Prerequisites: BIO 123/124L or BIO 202/202L (pre- or corequisite) and either CHEM 111/112L or 121/121L or a passing score of 64 on the Biology Placement Exam; Pre- or corequisite: BIO 239) Investigates a variety of techniques designed to facilitate the growth, identification and control of microorganisms. | 1 |
| BIO 201/201L – Molecular and Cell Biology (Pre- or corequisite: CHEM 121/121L) 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. Required enrollment in a 3-hour lecture and a 3-hour lab. | 4 | BIO 240 – Pathophysiology I (Prerequisites: BIO 237, 238, 239 and 239L) Focuses on building a basic understanding of pathophysiology for health science students. Presents diseases of the circulatory, nervous, musculoskeletal and dermal systems. | 3 |
| BIO 202/202L – Genetics (Prerequisite: BIO201/201L; Pre- or corequisite: CHEM 122/122L) Builds upon concepts presented in Bio 201/201L 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. Required enrollment in a 3-hour lecture and a 3-hour lab. | 4 | BIO 241 – Pathophysiology II (Prerequisite: Successful completion of BIO 240) Continues course of study begun in BIO 240, covering pathology of cardiovascular, pulmonary, gastrointestinal, urinary and endocrine systems. | 3 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|---|--------------|
| BIO 247L – Human Anatomy and Physiology I Laboratory 1 (Prerequisites: BIO 123/124L or BIO 202/202L (pre or co-requisite) and either CHEM 111/112L or 121/121L; or a passing score of 64 on the Biology Placement Exam; Pre- or corequisite: BIO 237) Introduces lab exercises in anatomy and physiology, which complement topics covered in BIO 237, including specimen dissection and cadaver study | 1 | BIO 265/265L – Biotechnology Laboratory Techniques III (Prerequisites: BIOT 264/264L; Pre- or corequisite: PHIL 245M; Corequisite: BIOT 164D and BIOT 274L) Applies concepts and techniques begun in 264/264L 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. (45 theory + 90 lab hours per term). | 5 |
| BIO 248L – Human Anatomy and Physiology II Laboratory (Prerequisites: BIO 247L; Pre- or corequisite: BIO 238) Provides lab exercises in anatomy and physiology, which complement BIO 238, including specimen dissection and cadaver study. | 1 | BIO 274L – Bioinformatics and Proteomics (Prerequisites: BIOT 264/264L, IT 101, MATH 145; Pre- or corequisite: PHIL 245M; Corequisites: BIOT 164D and 265/265L) 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). | 3 |
| BIO 296 – Topics in Biology (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Presents various topics. See Schedule of Classes . | 3 | BIOT 280 – Biotechnology Seminar (Prerequisite: BIOT 274L; Corequisite: BIOT 298) 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. | 2 |
| BIOT – Biotechnology Courses (Health, Wellness & Public Safety Division) | | BIOT 296 – Biotechnology Topics Explore various topics of interest in the field of Biotechnology. | 1–6 |
| BIOT 164A – Biotechnology Seminar I 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. | 2 | BIOT 298 – Internship (Prerequisite: BIOT 265/265L and 274L; Corequisite: BIOT 280) 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) | 8 |
| BIOT 164B – Biotechnology Seminar II (Prerequisite: BIOT 164A; Corequisite: BIOT 263/263L; Pre- or corequisite: BIO 202/202L) Continues topics presented in BIOT 164A. Current issues and topics related to biotechnology will be explored. Current literature will be read, reviewed and discussed. | 1 | BKNG – Baking Courses (Business & Information Technology Division) | |
| BIOT 164C – Biotechnology Seminar III (Prerequisite: BIOT 164B; Corequisite: BIOT 264/264L) Continues topics presented in BIOT 164B. Current issues and topics related to biotechnology will be explored. Current literature will be read, reviewed and discussed. | 1 | BKNG 101, 102, 103L, 104L, 105L and 106L (See CULN courses on page 302) FOR BKNG COURSES AFTER FALL 2006 TERM, SEE CULN COURSES ON PAGE 302 | |
| BIOT 164D – Biotechnology Seminar IV (Prerequisite: BIOT 164C; Corequisite: BIOT 265/265L, 274L) Continues topics presented in BIOT 164C. Current issues and topics related to biotechnology will be explored. Current literature will be read, reviewed and discussed. Class visits to various laboratory sites. | 1 | BKNG 111 – Baking Theory II (Prerequisites: BKNG 101, 102, 103L, 104L, 105L and 106L, or division approval) Introduces the principles of baking with emphasis on baking chemistry and advanced production procedures. Covers international pastries and desserts with advanced decorating techniques. Distance Learning option available (see page 49). | 2 |
| BIOT 170 – Math in the Biotechnology Laboratory (Corequisite: BIOT 164A) 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. | 3 | BKNG 112L – Yeast Doughs (Pre- or corequisites: BKNG 111 and FSMG 101B or division approval) Introduces supervision, safety techniques and advanced production procedures of a variety of breads, sweet doughs and croissants. (75 lab hours per term) | 2 |
| BIOT 263/263L – Biotechnology Laboratory Techniques I (Prerequisites: BIOT 164A, 170, program director approval; Pre- or corequisite: BIO 219/219L or 201/201L, 221/222 or 202/202L and CHEM 212; Corequisite: BIOT 164B) Presents theory and techniques of volumetric, gravimetric, chromatographic and spectrophotometric analysis, laboratory safety, documentation and GLP (good laboratory practices) are emphasized. (45 theory + 45 lab hours per term) [Previously offered as Biotechnology Laboratory Instrumentation] | 4 | BKNG 113L – Advanced Cake Batters (Pre- or corequisite: BKNG 112L or division approval) Explores advanced production procedures of a variety of international cakes and tortes with emphasis on baking chemistry and safety as well as production of tiered, special-occasion and sculptured cakes and decorations. (75 lab hours per term) | 2 |
| BIOT 264/264L – Biotechnology Laboratory Techniques II (Prerequisites: BIO 221/222 or 202/202L, BIOT 263/263L; pre- or corequisites: BIO 239/239L; Corequisite: BIOT 164C) 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) | 5 | BKNG 114L – Pastries and Cookies (Pre- or corequisite: BKNG 113L or division approval) Presents advanced production techniques of international pastries, pies and petit fours. Emphasizes the seven different methods of cookie production. (75 lab hours per term) | 2 |

Course Subject Code/Course number – Course Name**Credit Hours****BKNG 115L – Icings and Fillings** 2*(Pre- or corequisite: BKNG 114L or division approval)*

Presents advanced production techniques of international butter creams, fondants, ganache and marzipan. (75 lab hours per term)

BKNG 295 – Baking Capstone Course 1*(Prerequisite: Division Approval)*

Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term).

BT – Building Trades Courses *(Applied Technologies Division)***BT 177L – Metal Framing** 3

Introduces commercial and residential construction design, Uniform Building Code requirements, job site and tool safety and erection of metal buildings. (15 theory + 75 lab hours per term)

BT 178 – Remodeling 3

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)

BT 179 – Advanced Remodeling 3*(Prerequisite: BT 178 or division approval)*

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)

CARP – Carpentry Courses *(Applied Technologies Division)***CARP 101 – Carpentry Blueprint Reading I** 4*(Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval)*

Covers lumber sizing, scaling, centering and triangle theory, interpretation of elevation drawings, floor plans, symbols, notations, dimensions and structural information.

CARP 111 – Carpentry Blueprint Reading II 4*(Prerequisites: CARP 101 or division approval)*

Introduces blueprint applications for residential homes, multiple family dwellings and commercial buildings, along with material estimating and volume measure.

CARP 121 – Introduction to Carpentry 1*(Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval)*

Introduces students to the construction trade and demonstrates the correct and safe use of hand and power tools commonly used in the construction trades.

CARP 122 – Structural Systems I 1*(Pre- or corequisite: CARP 101 or division approval)*

Explains concrete and concrete reinforcing materials, foundations and flatwork, concrete forms and handling and finishing concrete.

CARP 123 – Structural Systems II 1*(Pre- or corequisite: CARP 101 or division approval)*

Explains floor framing systems, wall, ceiling, stair and roof framing and the installation of exterior doors and windows.

Course Subject Code/Course number – Course Name**Credit Hours****CARP 124A – Construction Lab A** 2*(Pre- or corequisite: CARP 101 and 121 or division approval)*

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)

CARP 124B – Construction Lab B 2*(Pre- or corequisite: CARP 101 and 121 or division approval)*

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)

CARP 124C – Construction Lab C 2*(Pre- or corequisite: CARP 101 and 121 or division approval)*

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)

CARP 126 – Furniture Making 3

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)

CARP 127 – Advanced Furniture Making 3*(Prerequisite: CARP 126 or division approval)*

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)

CARP 128 – Cabinetmaking 3

Fundamentals of cabinet construction. Emphasis is on safety and use of tools. European construction is emphasized. (15 theory + 75 lab hours per term)

CARP 131 – Exterior Finishes 1*(Pre- or corequisite: CARP 111 or division approval)*

Introduces common materials and methods used for thermal and moisture protection, exterior siding and roofing.

CARP 132 – Interior Finishes I 1*(Pre- or corequisite: CARP 111 or division approval)*

Introduces metal framing for interior walls, drywall installation and finishing.

CARP 133 – Interior Finishes II 1*(Pre- or corequisite: CARP 111 or division approval)*

Introduces the installation of doors, windows, flooring, ceiling trim and cabinet installation.

CARP 134A – Construction Lab A 2*(Pre- or corequisite: CARP 111 and 121 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)

CARP 134B – Construction Lab B 2*(Pre- or corequisite: CARP 111 and 121 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)

CARP 134C – Construction Lab C 2*(Pre- or corequisite: CARP 111 and 121 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)

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|--|--------------|
| CARP 170 – Carpentry Fundamentals 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 | CDV 107 – Art and Play (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) Focuses on the importance of play and art in the development of children. Students will be introduced to basic analysis techniques. | 3 |
| CARP 171 – Construction Trades Blueprint Reading 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 | CDV 108C – Family Studies Practicum I (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) 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. (90 hours per term) | 2 |
| CARP 172 – Manufactured Housing Set-Up Provides instruction in manufactured housing carpentry work, set-up, leveling and blocking to satisfy NMMHD industry standards. Work practices and safety are emphasized. | 1 | CDV 120 – Introduction to CDA Training (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) 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 |
| CARP 295 – Carpentry Capstone Course (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 | CDV 120B – 45-Hour Entry-level Course 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 |
| CARP 296 – Special Topics Provides an in-depth study of methods and advanced techniques. | 1-6 | CDV 124 – Supervised Field Experience (Pre- or corequisites: Director approval, CDV 120 and CDV 120B) Provides on-site experience that includes working with children at various early childhood settings, as well as home visitor and bilingual settings serving children birth through age six. Credential requires 480 documented clock hours. One credit equals 45 contact hours. The number of credit hours will be determined jointly by the program director and the student. | 1-5 |
| CARP 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem while working with an instructor. | Variable | CDV 201 – Middle Childhood Growth and Development (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) Presents the principles of growth and development for 6- to 11-year-old children in cognitive, physical and social-emotional areas. | 3 |
| CCAP – Commercial Carpentry Apprenticeship (Applied Technologies Division) | | CDV 202 – Adolescent Growth and Development (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) Examines the development and communication patterns of adolescents within the family setting. | 3 |
| CCAP 198 – Commercial Carpentry Apprenticeship (Prerequisite: current full-time employment in the carpentry industry or division approval) Covers 600 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. | 40 | CDV 207 – Management of Early Childhood Programs (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) Presents information and skills to develop an effective early childhood program. Students examine staff responsibilities, program development, scheduling, behavioral observation and evaluation techniques. | 3 |
| CDV – Child, Youth & Family Development Courses (Communication, Humanities & Social Sciences) | | CDV 208C – Family Studies Practicum II (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) 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. (90 hours per term) | 2 |
| CDV 101 – Parents and Young Children Examines interactions of parents and children and diverse family configurations throughout the life cycle. | 3 | | |
| CDV 103 – Preschool Growth and Development (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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 105L – Infant Growth and Development Theory and Lab (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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 | | |
| CDV 106 – Healthy Young Children (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) 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 | | |

Course Subject Code/Course number – Course Name**Credit Hours****CDV 218 – Strengthening Family Structures** 3

(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent)

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.

CDV 219 – Marriages and Families 3

(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent)

Provides insights into contemporary marriage and family situations. Focus on decision making for better understanding of families and the broader society.

CDV 296 – Topics 1–3

Various special topics in the field are offered as elective hours.

CDV 297 – Independent Study 1–3

(Prerequisite: program director approval)

Defines and studies a specific problem while working with the instructor.

CDV 299 – Cooperative Education 1–3

(Prerequisite: permission of director)

Works for one term on a cooperative basis in an appropriate training program with local employers. The position is paid.

CHEM – Chemistry Courses (Division of Educational & Career Advancement)**CHEM 100 – Basics of Chemistry** 3

(Prerequisite: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, Recommended: MATH 100A)

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 111, BIO 123 and BIO 136.

(60 theory/lab hours per term)

CHEM – Chemistry Courses (Math, Science & Engineering Division)**CHEM 111 – Introduction to Chemistry** 3

(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent and MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent)

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. Distance Learning option available (see page 49).

CHEM 112L – Introduction to Chemistry Laboratory 1

(Pre- or corequisite: CHEM 111)

Introduces experiments complementing CHEM 111. (45 lab hours per term)

CHEM 121/121L – General Chemistry I 4

(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent and MATH 120 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 3-hour lecture and a 3-hour lab. (45 theory + 45 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours****CHEM 122/122L – General Chemistry II** 4

(Prerequisite: CHEM 121/121L within past 3 years and MATH 121)

Emphasizes acids and bases, equilibrium, kinetics, thermodynamics, solubility, electro- and nuclear chemistry. Introduces coordination and organic chemistry. Required enrollment in a 3-hour lecture and a 3-hour lab. (45 theory + 45 lab hours per term)

CHEM 212 – Organic Chemistry and Biochemistry 4

(Prerequisite: CHEM 111/112L or 121/121L)

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 291 – Organic Chemistry I 3

(Prerequisite: CHEM 122/122L)

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 293L – Organic Chemistry I Laboratory 1

(Pre- or corequisite: CHEM 291)

A three-hour per week laboratory class containing experiments complementing the CHEM 291 lecture class. (45 lab hours per term)

CHEM 296 – Topics in Chemistry 3

(Prerequisite: RDG 100 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)

CIS – Computer Information Systems Courses (Business & Information Technology Division)**CIS 105 – MS Office Integration** 3

(Recommended prerequisite: IT 101)

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 49).

CIS 119 – Introduction to Personal Digital Assistant (PDA) 1

Covers uses and applications of the PDA. Students are required to provide a PDA and an account with a service provider. (5 weeks; 10 theory + 15 lab hours per term)

CIS 120 – WordPerfect for Windows 3

(Recommended prerequisite: IT 101)

Focuses on word processing using WordPerfect for Windows with emphasis on functions and practical office applications. (30 theory + 45 lab hours per term)

CIS 121 – Word Fundamentals 1

(Recommended prerequisite: CIS 130)

Focuses on creating, editing, enhancing and merging documents.

(5 weeks; 10 theory + 15 lab hours per term)

Distance Learning option available (see page 49).

CIS 123 – Microsoft Word 3

(Recommended prerequisite: IT 101)

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 49).

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|---|--------------|
| CIS 126 – Desktop Publishing Using Word (Recommended prerequisites: knowledge of Word and IT 101) Integrates Word graphics and text to produce newsletters, instructional materials and other documents. (5 weeks; 10 theory + 15 lab hours per term) | 1 | CIS 147 – Introduction to Information Management (Recommended prerequisite: IT 101) 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 49). | 3 |
| CIS 130 – Beginning Windows 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 49). | 1 | CIS 150 – Excel Fundamentals (Recommended prerequisites: 25 wpm typing skill and CIS 130) Stresses concepts such as creating, editing and enhancing worksheets, formatting cells, basic formulas and charts. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |
| CIS 137 – Windows Professional for Systems Administrators (Recommended prerequisite: CIS 145) 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 151 – Intermediate Excel (Recommended prerequisite: CIS 150 or division approval) Manages multiple worksheets and workbooks, manage data and design forms. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |
| CIS 138 – Windows Operating System User Support and Troubleshooting (Prerequisite: CIS 137) 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 152 – Advanced Excel (Recommended prerequisite: CIS 151 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) Distance Learning option available (see page 49). | 1 |
| CIS 139 – Windows Operating System Desktop Applications Support and Troubleshooting (Prerequisite: CIS 137) 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 153 – Excel Complete, DL Only 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 150, CIS 151 and CIS 152. | 3 |
| CIS 140 – PowerPoint Fundamentals (Recommended prerequisites: 25 wpm typing skill and CIS 130) Focuses on basic text charts and graph charts. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 | CIS 155 – Access Fundamentals (Recommended prerequisites: 25 wpm typing skill and CIS 130) Focuses on creating database tables, queries, forms and reports. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |
| CIS 142 – Microsoft PowerPoint (Recommended prerequisite: IT 101) 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 49). | 2 | CIS 156 – Intermediate Access (Recommended prerequisite: CIS 155 or division approval) 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) Distance Learning option available (see page 49). | 1 |
| CIS 143 – MS Outlook (Recommended prerequisite: CIS 130) Covers concepts such as managing messages, appointments, contacts and tasks, as well as track activities. (5 weeks; 10 theory + 15 lab hours per term) | 1 | CIS 157 – Advanced Access (Recommended prerequisite: CIS 156 or division approval) Examines concepts such as Access macros, advanced reports, data filters using parameters and sharing databases. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |
| CIS 145 – Introduction to Computer Networking (Recommended prerequisite: IT 101) Offers concepts of data communications theory. Concepts include data communications networking terms, topologies, media, components and applications. Distance Learning option available (see page 49). | 3 | CIS 158 – Access Complete, DL Only 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 155, CIS 156 and CIS 157. | 3 |
| | | CIS 164 – Beginning XHTML (Recommended pre- or corequisites: CIS 130) Focuses on the concepts of a format used for writing documents to be viewed with a World Wide Web browser. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |

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 | Course Subject Code/Course number – Course Name | Credit Hours |
|--|---------------------|--|---------------------|
| CIS 165 – Intermediate XHTML (Recommended prerequisite: CIS 164) Applies the concepts of advanced HTML markup such as forms, image maps and review of different programming languages. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 | CIS 191 – Intermediate FrontPage (Prerequisite: CIS 190 or division approval) Focuses on advanced forms, database connectivity, advanced image mapping, e-commerce and secured transactions. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |
| CIS 166 – Advanced XHTML (Recommended prerequisite: CIS 165) Introduces concepts such as letting a Web page change itself once it is already loaded into the browser thereby improving response time and interactivity as well as controlling the layout of the page. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 | CIS 192 – FrontPage Complete Surveys concepts such as planning, creating, publishing and managing web sites using MS FrontPage Editor, Explorer and Image Composer. Develop and publish projects that include text, images, hyperlinks, forms, tables and frames. Second half of course focuses on advanced forms, database connectivity, advanced image mapping, e-commerce and secured transactions. This course may substitute for CIS 190 and CIS 191. | 2 |
| CIS 170 – Introduction to Multimedia (Recommended prerequisites: IT 101, knowledge of Windows) Explores concepts of how text, graphics, sound, images and video come together in a multimedia program. Distance Learning option available (see page 49). | 3 | CIS 193 – PhotoShop (Prerequisite: IT 101 or division approval) 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) Distance Learning option available (see page 49). | 3 |
| CIS 171 – Digital Sound Processing (Recommended prerequisite: CIS 170) Focuses on integrating and editing sound files for a multimedia program. (5 weeks; 10 theory + 15 lab hours per term) | 1 | CIS 201 – Hardware and Software Administration (Prerequisites: CIS 130 or CIS 137 or division approval) 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 172 – Adobe Acrobat (Prerequisite: IT 101) 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) Distance Learning option available (see page 49). | 1 | CIS 202 – Advanced Hardware and Software Management (Prerequisite: CIS 201 or division approval) 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 173 – Visual Communication for Business Design 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 220 – Word Certification Prep (Recommended prerequisite: CIS 123) 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) Distance Learning option available (see page 49). | 1 |
| CIS 183 – Extensible Markup Language (Recommended prerequisite: CIS 164) 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 221 – MS Outlook Certification Prep (Recommended prerequisite: CIS 143) 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 186 – Project Management Software (Recommended prerequisites: IT 101 and CIS 130) Focuses on planning, scheduling, managing and communicating project information. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 | CIS 222 – PowerPoint Certification Prep (Recommended prerequisite: CIS 142) 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) Distance Learning option available (see page 49). | 1 |
| CIS 190 – Beginning FrontPage (Recommended prerequisites: CIS 130 and ECM 176 and knowledge of HTML) Surveys concepts such as planning, creating, publishing and managing web sites using MS FrontPage Editor, Explorer and Image Composer. Develop and publish projects that include text, images, hyperlinks, forms, tables and frames. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 | CIS 224 – Excel Certification Prep (Recommended prerequisite: CIS 152) 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) Distance Learning option available (see page 49). | 1 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| CIS 226 – Access Certification Prep (Recommended prerequisite: CIS 157) 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) Distance Learning option available (see page 49). | 1 | CIS 246 – Windows Directory Services Management (Prerequisites: CIS 243 or CP 182 and CP 183 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) | 3 |
| CIS 230 – Business Database Management (Prerequisite: CIS 157) 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) Distance Learning option available (see page 49). | 3 | CIS 247 – Designing Windows Directory Services/Network (Prerequisites: CIS 243 or CP 182 and CP 183 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 | 3 |
| CIS 231 – Excel Advanced Business Applications (Prerequisites: CIS 152 or ACCT 254) 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) Distance Learning option available (see page 49). | 3 | CIS 249 – Designing Windows Network Security (Prerequisites: CIS 243 or CP 182 and CP 183 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) | 3 |
| CIS 232 – Database Design: MS SQL Server (Recommended prerequisites: CIS 137 and CIS 157; recommended pre- or corequisite: CIS 243) Focuses on using logical modeling and physical modeling to design a relational database management system independent model. This course may assist in preparation for MCP certification. (30 theory + 45 lab hours per term) | 3 | CIS 251 – Windows Network Environment (Recommended prerequisites: CIS 137 and 243 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) | 3 |
| CIS 237 – Spreadsheet Macro Programming (Pre- or corequisite: ACCT 254 or CIS 152) Provides students with basic procedures for writing and running a macro. (5 weeks; 10 theory + 15 lab hours per term) | 1 | CIS 252 – MS Visio (Recommended prerequisite: IT 101) 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 239 – Foundations of Network+ (Recommended prerequisites: IT 101 and CIS 145) 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) Distance Learning option available (see page 49). | 3 | CIS 254 – Project Management (Corequisite: CIS 186) 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) Distance Learning option available (see page 49). | 3 |
| CIS 243 – Windows Server Management (Recommended pre- or corequisites: CIS 137 and CIS 145) 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 255 – Desktop Publishing (QuarkXPress) (Prerequisites: IT 101 and CIS 130 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 245 – Windows Network Infrastructure Management (Prerequisites: CIS 243 or CP 182 and CP 183 or division approval) 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 257 – Principles of Information Security (Prerequisite: CIS 243; recommended prerequisite: CIS 245) 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 49). | 3 |
| | | CIS 258 – Computer Security+ (Prerequisite: CIS 243; recommended prerequisite: CIS 245) 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) | 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 |
|---|--------------|
| CIS 260 – Beginning PhotoShop (Prerequisite: IT 101 or divisional approval) Focuses on concepts such as using painting and color-correction tools to manipulate images for print and the Web. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |
| CIS 261 – Intermediate PhotoShop (Prerequisite: CIS 260 or division approval) Focuses on concepts such as using paths, channels, clipping groups, special effects, masks with finer selections to produce high-quality digital images for print and the Web. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |
| CIS 262 – Advanced PhotoShop (Prerequisite: CIS 261 or division approval) Focuses on concepts such as using the Web tools in Image Ready for optimizing images and creating GIF animations. (5 weeks; 10 theory + 15 lab hours per term) Distance Learning option available (see page 49). | 1 |
| CIS 263 – PhotoShop Practicum (Prerequisite: CIS 193 or CIS 262 or division approval) 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) | 2 |
| CIS 265 – Fireworks (Recommended prerequisites: IT 101 and CIS 130) Covers concepts such as preparing graphics for the Web. (5 weeks; 10 theory + 15 lab hours per term) | 1 |
| CIS 270 – Macromedia Authorware (Recommended prerequisite: CIS 170) 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 271 – Macromedia Director (Recommended prerequisite: CIS 170) 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 272 – Macromedia Dreamweaver (Recommended prerequisites: IT 101) Explores concepts such as building web sites using rollovers, tables and style sheets. (10 weeks; 20 theory + 30 lab hours per term) Distance Learning option available (see page 49). | 2 |
| CIS 273 – Macromedia Flash (Recommended prerequisites: IT 101 and CIS 170) 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 49). | 3 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| CIS 274 – Adobe Illustrator (Prerequisites: CIS 193 or CIS 262 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 49). | 3 |
| CIS 275 – Adobe Premiere (Corequisite: CIS 273; Pre- or corequisite: CIS 274) 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 49). | 3 |
| CIS 276 – Business Web Graphics (Prerequisites: ECM 176, CIS 262 and CIS 165, or CIS 190 or CIS 272) Analyzes production techniques for design and creation of professional business web sites and optimize the appearance of business web sites 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 web sites 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 290 – MS SQL Server (Recommended prerequisites: CIS 137 and CIS 157; recommended pre- or corequisite: CIS 243) Provides student with an overview of Microsoft SQL Server. Instruction is provided on SQL installation, configuration, security and performance and database management. This course may assist in preparation for MCP certification. (30 theory + 45 lab hours per term) | 3 |
| CIS 291 – MS Exchange Server (Recommended prerequisite: CIS 137; recommended pre- or corequisite: CIS 243) 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 |
| CIS 296 – Topics Course Explores current topics in computers. | 1–3 |
| CIS 297 – Special Problems (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. | Variable |
| CIS 298 – Internship (Prerequisites: CIS 152 or CIS 157 or CIS 254 or CIS 243 or CIS 273 and division approval) 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 299 – Cooperative Education (Prerequisites: CIS 152 or CIS 157 or CIS 254 or CIS 243 or CIS 273 and division approval) 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 |

CJ – Criminal Justice Courses *(Health, Wellness & Public Safety Division)*

| | |
|---|----------|
| CJ 101 – Criminal Law <i>(Prerequisites: ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 099 or Accuplacer Elementary Algebra score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Covers the historical development, elements and goals of common and statutory criminal laws which control actions in the criminal justice system. | 3 |
| CJ 102 – Juvenile Law and Procedure <i>(Prerequisites: ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 099 or Accuplacer Elementary Algebra score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Covers the juvenile court and justice system including the Children’s Code and the Rules of Procedure. | 3 |
| CJ 104L – Patrol Procedures <i>(Prerequisites: ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 099 or Accuplacer Elementary Algebra score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> Introduces basic patrol function and the problems faced by law enforcement officers. <i>(30 theory + 37.5 lab hours per term)</i> <i>Hybrid option available (see page 49).</i> | 3 |
| CJ 107 – Criminal Procedure <i>(Prerequisites: ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 099 or Accuplacer Elementary Algebra score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)</i> 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. <i>Distance Learning option available (see page 49).</i> | 3 |
| CJ 109 – Introduction to Security Services <i>(Prerequisites: ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 099 or Accuplacer Elementary Algebra score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, 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 118 – Report Writing <i>(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval)</i> Covers criminal justice reports, including writing and use of forms. <i>Distance Learning option available (see page 49).</i> | 3 |
| CJ 203– Probation and Parole <i>(Prerequisites: CJ 101 and 107 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. | 3 |
| CJ 208 – Community-Oriented Policing <i>(Prerequisites: CJ 101 and 107 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 210 – Rules of Criminal Evidence <i>(Prerequisites: CJ 101 and 107 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. | 3 |
| CJ 211 – White Collar Crimes <i>(Prerequisites: CJ 101 and 107 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 212 – Criminal Investigation <i>(Prerequisites: CJ 101, 107 and 118 or division approval)</i> Presents basic criminal investigation from the preliminary investigation to final preparation and presentation in court. | 3 |
| CJ 212L – Criminal Investigation Laboratory <i>(Pre- or corequisite: CJ 212 or division approval)</i> Introduces exercises and practical demonstrations related to the investigations of crime. <i>(45 lab hours per term)</i> | 1 |
| CJ 213– Organized Crime and Terrorism <i>(Prerequisites: CJ 101 and 107 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 215 – Management for Criminal Justice Professionals <i>(Prerequisites: CJ 101 and 107 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 216– Correctional Services <i>(Prerequisites: CJ 101 and 107 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 49).</i> | 3 |
| CJ 217– Public Policies and Strategies <i>(Prerequisites: CJ 101 and 107 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 49).</i> | 3 |
| CJ 295 – Criminal Justice Capstone Course <i>(Prerequisite: division Approval)</i> Preparation of a professional portfolio that demonstrates student’s mastery of technical and core competencies. <i>(Taken during student’s last term).</i> | 1 |
| CJ 296 – Special Topics <i>(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 297 Special Problems <i>(Prerequisite: division approval)</i> Focuses on a specific problem while working with an instructor. | Variable |

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**

CJ 298 – Internship **3**
(Prerequisite: division approval)
 Provides opportunity for student to work as a volunteer in an appropriate criminal justice division. Position is not paid. (135 lab hours per term)

CJ 299 – Cooperative Education **3**
(Prerequisite: division approval)
 Employs the student at an approved program-related work site and applies learned theory based on goals and objectives.

CLA – Clinical Laboratory Assistant Courses (Health, Wellness & Public Safety Division)

CLA 101L – Introduction to Laboratory Technique **3**
(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, Corequisites: CLA 104L)
 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: \$11.
Distance Learning option available (see page 49).

CLA 103C – Clinical Experience **3**
(Prerequisites: CLA 101L, 104L, 106L, HLTH 102, PHLB 110, 110L, 122C 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)

CLA 104L – Basic Hematology/Coagulation **2**
(Corequisite: CLA 101L)
 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)

CLA 106L – Basic Chemistry/Microbiology **2**
(Corequisite: CLA 103C, 104L)
 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)

CLA 296 – Special Topics in Clinical Lab Assistant **1–6**
 Explore various topics of interest in the field of Clinical Lab Assistant.

CM – Construction Management Courses (Applied Technologies Division)

CM 130 – Construction Detailing **3**
 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 49).

CM 132L – Computer Aided Construction Drafting/Engineering **3**
(Prerequisite IT 101 or division approval)
 Introduces principles and techniques of computer graphic applications used in the construction industry. (15 theory + 75 lab hours per term)

Course Subject Code/Course number – Course Name**Credit Hours**

CM 171 – Construction Materials and Techniques **3**
 Introduction to the construction industry, educational opportunities, materials, techniques and terminology of construction.
Distance Learning option available (see page 49).

CM 175 – General Contractor Preparation **3**
 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 49).

CM 202 – Commercial Construction Theory **3**
(Prerequisites: CM 171 and IT 101 or division approval)
 Covers UBC plan check and survey of the Construction Specifications Institute. (15 theory + 75 lab hours per term)
Distance Learning option available (see page 49).

CM 203 – Commercial Construction Theory **3**
 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. (45 theory)

CM 256 – Statics **3**
(Pre- or corequisite: MATH 120 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 257 – Construction Estimating **3**
(Prerequisites: CM 130, CM 132L, CM 171 or division approval. MATH 100B 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 49).

CM 260 – Computerized Estimating Techniques **3**
(Prerequisite CM 257 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 261L – Construction Surveying **3**
(Prerequisite MATH 120 or GIS 110 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)

CM 262 – Estimating and Bidding **3**
(Prerequisites: CM 257, CM 260)
 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)

CM 263 – Construction Equipment and Methods **3**
 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 49).

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| CM 267 – Introduction to Construction Project Management 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) <i>Distance Learning option available (see page 49).</i> | 3 |
| CM 277 – Construction Scheduling (Prerequisite: CM 257; Corequisite: CM 277L or division approval) Includes introduction to construction processes, techniques for transforming contract documents and estimating into accurate project schedules. Surveys state-of-the-art scheduling techniques, include 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. <i>Distance Learning option available (see page 49).</i> | 2 |
| CM 277L – Construction Scheduling Lab Provides laboratory for CM 277. During the course students will apply theory, knowledge and techniques learned to actual projects using computer scheduling programs. | 1 |
| CM 279 – Mechanical Electrical Systems and Construction Introduces materials and equipment associated with the mechanical and electrical systems used in commercial and residential buildings. <i>Distance Learning option available (see page 49).</i> | 3 |
| CM 280 – Computerized Project Management and Scheduling (Prerequisites: CM 171, IT 101, CM 277, CM 277L 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) | 3 |
| CM295 – Construction Management Capstone Course (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 |
| CM 296 – Topics (Prerequisite: permission of program chair) Provides in-depth study of topics related to construction management. | 1–4 |
| CM 297 – Special Problems (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. | 2–4 |
| CM 298 – Internship (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. | 3 |
| CM 299 – Cooperative Education (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. | 3 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| COMM – Communication Courses (Communication, Humanities & Social Sciences) | |
| COMM 110 – Mass Media and Society (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110) Examines the roles media play in American society and their effects on other forms of communication. | 3 |
| COMM 130 – Public Speaking (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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 130 is required in the UNM Core Curriculum, Liberal Arts students intending to transfer to UNM may want to take COMM 130. <i>Distance Learning option available (see page 49).</i> | 3 |
| COMM 221 – Interpersonal Communication Studies (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent and ENG 101 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 130 is required in the UNM Core Curriculum, Liberal Arts students intending to transfer to UNM may want to take COMM 130 in addition to COMM 221 to fulfill this requirement. | 3 |
| COMM 223 – Introduction to Nonverbal Communication Studies (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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. | 3 |
| COMM 225 – Small-Group Communication Studies (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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. | 3 |
| COMM 232 – Business and Professional Communication Studies (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110) Emphasizes developing, organizing and supporting ideas in interpersonal business encounters, groups, teams, meetings, interviews and platform presentations. <i>Distance Learning option available (see page 49).</i> | 3 |
| COMM 240 – Organizational Communication Studies (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110) Focuses on communication networks, power and authority, manager/employee relationships, leadership and interviewing in organizational contexts. | 3 |
| COMM 270 – Communication Studies for Teachers (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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. | 3 |

GETTING STARTED

ACCESSING CMM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

Course Subject Code/Course number – Course Name **Credit Hours**

COMM 289 – Listening **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110 and COMM 221)

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.

COMM 290 – Gender Communication Studies **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110 and COMM 221)

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.

COMM 291 – Intercultural Communication Studies **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110 and COMM 221)

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 292 – Family Communication Studies **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110 and COMM 221)

Examines family systems theory, communication patterns, rules, roles, themes, power, intimacy, ethnicity and conflict in families.

COMM 293 – Topics in Communication Studies **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110 and COMM 221)

Presents various topics. See **Schedule of Classes**.

COS – Cosmetology Courses *(Health, Wellness & Public Safety Division)*

COS 101 – Orientation **2**
 Introduces cosmetology. Presents theory in the areas of professional image, first aid and work ethics.

COS 102A – Sterilization/Sanitation Bacteriology **2**
(Pre- or corequisite: COS 101 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 103A – Shampoo/Rinses/Scalp Treatment **2**
(Pre- or corequisites: COS 101 & 102, 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 104A – Chemical Rearranging **2**
(Pre- or corequisites: COS 101, 102A, & 103A 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)*

Course Subject Code/Course number – Course Name **Credit Hours**

COS 105A – Cutting/Hairstyling **2**
(Pre- or corequisites: COS 101, 102A, & 103A 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)*

COS 106A – Hair Coloring **2**
(Pre- or corequisites: COS 101, 102A, & 103A 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 107A – Manicuring/Pedicuring **2**
(Pre- or corequisites: COS 101 & 102A 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 112A – Facials **2**
(Prerequisites: COS 101, 102A, 103A, 104A, 105A, 106A & 107A 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 electrotherapy; 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 113L – Sterilization/Sanitation/Bacteriology Lab II **1**
(Prerequisite: COS 102A or division approval)

Continues basic application of sterilization, sanitation and bacteriology techniques in a supervised lab setting. *(37.5 lab hours per term)*

COS 114L – Shampoo/Rinses/Scalp Treatments Lab II **1**
(Prerequisite: COS 103A 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 115L – Chemical Rearranging: Perms and Relaxers Lab II **2**
(Prerequisite: COS 104A or division approval)
 Continues basic application of chemical rearranging, perms and relaxers techniques in a salon setting. *(75 lab hours per term)*

COS 116L – Cutting/Coloring/Hairstyling Lab II **3**
(Prerequisites: COS 105A & 106A 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 117L – Manicuring/Pedicuring Lab II **2**
(Prerequisite: COS 107A 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 201L – Chemical Rearranging: Perms and Relaxers Lab III (Prerequisite: COS 115L or division approval) Provides intermediate application of chemical rearranging, perms and relaxers in a supervised salon setting. (75 lab hours per term) | 2 | COS 213L – Advanced Salon Lab (Pre- or corequisite: COS 213 or division approval) 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 |
| COS 202L – Hair Cutting Lab III (Prerequisite: COS 116L or division approval) 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 214L – Hair Cutting Lab IV (Pre- or corequisite: COS 202L or division approval) 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 203L – Hair Coloring Lab III (Prerequisite: COS 116L or division approval) 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 215L – Hair Styling Lab IV (Pre- or corequisite: COS 204L or division approval) 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 204L – Hairstyling Lab III (Prerequisite: COS 116L or division approval) 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 | COS 216L – Facials/Manicuring/Pedicuring Lab IV (Pre- or corequisite: 205L or division approval) 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 205L – Facials/Manicuring/Pedicuring Lab III (Prerequisites: COS 112A & 117L or division approval) 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 | COS 296 – Special Topics (Prerequisite: division approval) Provides an in-depth study of problems and advanced techniques. | 1–6 |
| COS 211 – State Laws/Regulations (Prerequisites: COS 201L, 202L, 203L, 204L, & 205L or division approval) 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 | COS 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem while working with an instructor. | Variable |
| COS 212 – Salon Operation Theory (Pre- or corequisite: COS 211 or division approval) 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 | CP – Computing Technology Courses (Business & Information Technology Division) | |
| COS 212L – Salon Operation Lab (Externship) (Pre- or corequisite: COS 212 or division approval) 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 | CP 106 – Overview of Web Technologies (Prerequisite: IT 101 or permission of director) 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 |
| COS 213 – Advanced Salon Theory (Pre- or corequisites: COS 212 and 212L or division approval) 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 | CP 107 – Programming Logic and Design (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent and MATH 100B or Accuplacer Elementary Algebra score of 81 or equivalent, Pre- or corequisite: IT 101) 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. 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 |
| | | CP 117 – Web Site Maintenance (Prerequisite: CP 106 or permission of director) Covers the ease of use ratings, link verifiers, performance tuning and site statistics. (10 theory + 15 lab hours per term) | 1 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|---------------------|---|---------------------|
| CP 128 – Personal Computer Operating Systems (Prerequisites: IT 101 or challenge exam) Introduces PC hardware/software components while preparing students for the software portion of the A+ certification exam. Includes MS-DOS, Windows and UNIX concepts. [Previously CP 216L] (30 theory + 45 lab hours per term) | 3 | CP 188 – Networked Video Applications (Co- or Prerequisite: CP 187) Focuses on the design, planning, implementation, operation and troubleshooting of networked video, IP/TV type applications. (30 theory + 45 lab hours per term) | 3 |
| CP 132 – Web Programming with JavaScript (Prerequisites: CP 106, 107 and CIS 165 or permission of director) 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) Distance Learning option available (see page 49). | 3 | CP 205 – Basic Router Config./Cisco Academy Semester 2 (Prerequisite: CP 182) 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 |
| CP 133 – Survey of Active Server Pages (Prerequisite: CP 132 or permission of director) Covers aspects of server side scripting using Active Server Pages. (10 theory + 15 lab hours per term) | 1 | CP 206 – Local Area Network Management/Cisco Academy Semester 3 (Prerequisite: CP 205) 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 |
| CP 134 – Survey of ColdFusion (Prerequisite: CP 132 or permission of director) Provides an introduction to one of the most common forms of “middle ware” in the Web environment. The focus will be on data manipulation via Allaire’s ColdFusion. (10 theory + 15 lab hours per term) | 1 | CP 207 – Wide Area Network Management/Cisco Academy Semester 4 (Prerequisite: CP 206) 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 |
| CP 135 – Web Programming with PHP (Prerequisite: CP 132) 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 | CP 213 – Database Design and Management (Prerequisite: IT 101 or permission of director) This course is an introduction to the design and manipulation of database systems. Entity Relationship diagrams will be introduced to show relationships among the different entities. Keys, Constraints/ Properties will be discussed. Basic SQL commands will be used in an Access and Oracle environment. Students will also learn to incorporate form/report design to show the data stored in different formats. A final project will have the students create tables, QBE queries, SQL queries, Forms and Reports. (30 theory + 45 lab hours per term) Distance Learning option available (see page 49). | 3 |
| CP 182 – Network Topologies/Cisco Academy Semester 1 (Prerequisite: CP 128 or ELEC 221 as alternative prerequisite or permission of director) 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 | CP 218 – Oracle IDS Build Internet Forms I (Prerequisites: CP 221 or permission of director) Build and test interactive Internet applications. Working in a graphical user interface (GUI) environment, students learn to customize Forms with user input items such as check boxes, list items and radio groups; learn to modify data access by creating event-related triggers. (30 theory hours + 45 lab hours per term) | 3 |
| CP 183 – Network Operating Systems (Network+ Certification Prep) (Prerequisite: CP 128 or ELEC 221 as alternative prerequisite or permission of director) 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 | CP 220 – Advanced Database Concepts (Prerequisite: CP 213 or permission of director) Continues CP 213 in a multi-user network environment with emphasis on relational databases, custom forms, intermediate report design, OLE objects, advanced queries, SQL, macros and incorporating Visual Basic within Access. (30 theory + 45 lab hours per term) | 3 |
| CP 184 – Fundamentals of Voice & Data Cabling (Prerequisite: IT 101) 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 | CP 221 – Introduction to ORACLE SQL (Prerequisites: CP 213 or permission of director) Designs and creates database structures to move, retrieve, update and display data in a relational database with SQL language. (30 theory hours + 45 lab hours per term) | 3 |
| CP 185 – Fundamentals of Wireless LANs (Co- or Prerequisite: CP 205) Focuses on the design, planning, implementation, operation and troubleshooting of wireless networks. (30 theory + 45 lab hours per term) | 3 | CP 222 – Develop Oracle PL/SQL Program Units (Prerequisites: CP 221 or permission of director) Introduces PL/SQL and helps in understanding the benefits of this powerful programming language. Creates PL/SQL blocks of application code that can be shared by multiple forms, reports and data management applications. Uses SQL*Plus to develop these program units, learn to manage PL/SQL program units and database triggers, to manage dependencies, to manipulate large objects, handle exceptions and to use Oracle-supplied packages. (30 theory hours + 45 lab hours per term) | 3 |
| CP 186 – Convergent Technologies I (Co- or Prerequisite: CP 182) 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 | | |
| CP 187 – Convergent Technologies II (Co- or Prerequisite: CP 182) Expands upon the convergence technologies covered in CP 186. (30 theory + 45 lab hours per term) | 3 | | |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| CP 223 – Oracle IDS Build Internet Forms II (Prerequisites: CP 218 or permission of director) Builds application skills using Oracle Forms. Students create multiple-form Internet applications and learn to manage multiple transactions across modules. By adding custom menus, reports and charts. Enhance their applications using Java Beans. Implement triggers that respond to function keys, mouse movement and mouse button actions and window manipulation. (30 theory hours + 45 lab hours per term) | 3 | CP 237 – JAVA Programming II (JCert Exam Prep) (Prerequisite: CP 235) Provides advanced coverage of the JAVA programming language. Course covers enterprise application programming for the Internet with a focus on the business layer of the distributed object model. Topics include JSP, EJB and JDBC database connectivity. (30 theory + 45 lab hours per term) | 3 |
| CP 224 – Oracle Reports (Prerequisite: CP 221) Covers Oracle Internet report generation technology. Prepares students for the Oracle OCP exams. (30 theory + 45 lab hours per term) | 3 | CP 238 – JAVA Database Applications (Oracle JDeveloper) (Prerequisite: CP 237) Provides advanced coverage of the JAVA programming language. Course covers enterprise application programming with a focus on the data layer of the distributed object model. Topics include advanced JSP, EJB and JDBC database connectivity and object-oriented database implementation using Oracle. (30 theory + 45 lab hours per term) | 3 |
| CP 225 – Oracle Database Fundamentals I (Prerequisites: CP 221 or permission of director) Gain a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Use commands needed to perform the DBA tasks. Students will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner. (30 theory hours + 45 lab hours per term) | 3 | CP 240 – Intrusion Detection Systems & Firewalls (Prerequisites: CP 182 and CP 183) 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 |
| CP 226 – Oracle Database Fundamentals II (Prerequisites: CP 225 or permission of director) Develop network configuration and recovery techniques through various workshop scenarios. Describe the database utilities (Export and Import) and the situations where they can be used. Define networking requirements and the solutions provided by Oracle to implement these requirements. Perform database and datafile backups with and without Recovery Manager (RMAN). (30 theory hours + 45 lab hours per term) | 3 | CP 260L – Open GL Programming (Prerequisites: CP 278A or permission of director) 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 viewports. 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 |
| CP 227 – Oracle Performance Tuning (Prerequisites: CP 226 or permission of director) Introduces participants to the importance of good initial database design and the method used to tune a production Oracle database. The focus is on Database and Instance tuning rather than specific operating system performance issues. Participants will gain practical experience tuning an Oracle database. Using the available Oracle tools, such as Oracle Enterprise Manager (with the Diagnostics and Tuning Packs) and STATSPACK participants also learn how to recognize, troubleshoot and resolve common performance related problems in administering an Oracle database. (30 theory hours + 45 lab hours per term) | 3 | CP 261L – Image Processing (Prerequisite: CP 278A or permission of director) Presents use and application of PC and UNIX-based development environments. Includes applications on image processing, data manipulation and scientific visualization. (30 theory + 45 lab hours per term) | 3 |
| CP 231 – Networking and Security Administration (Prerequisite: CP 275) Introduces Unix configuration for networking and maximization of performance through network security. Prepares students for Linux certification. (30 theory + 45 lab hours per term) | 3 | CP 274L –Linux Essentials / Red Hat Academy (Prerequisites: CP 107, CP 128 or CIS 145 or permission of director) 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 |
| CP 232 – Linux Application Installation and Troubleshooting (Prerequisite: CP 275) 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) | 3 | CP 275 –Linux System Administration / Red Hat Academy (Prerequisite: CP 274L or permission of director) 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) | 3 |
| CP 235 – JAVA Programming I (Prerequisite: CP 278A or permission of director) 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 | CP 278A – C++ Programming I (Prerequisite: CP 107 or permission of director) Includes structured programming techniques, programming logic and control using C++. Covers data types, variables, arithmetic, control statements, basic functions, pointers, arrays and structures. Students who have successfully completed similar introductory C++ programming courses, such as those at APS/CEC, may have this course waived and proceed to CP 278B. (30 theory + 45 lab hours per term) | 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**

| | |
|--|----------|
| CP 278B – C++ Programming II (Object-Oriented Programming) (Prerequisites: CP 278A or permission of director) 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 |
| CP 278C – C++ Programming III (Advanced OOP) (Prerequisite: CP 278B or permission of director) Covers advanced programming including stacks, queues, linked lists and other computer science problems. (30 theory + 45 lab hours per term) | 3 |
| CP 280 – C# Programming (Prerequisite: CP 278B or CP 235) Explores program development topics using Microsoft's C#.net development environment. Topics include the .net environment and the .net Framework, 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 rich multiple platform environment. Some applications will manipulate a relational database and involve web service technologies (XML, SOAP, IIS). (30 theory + 45 lab hours per term) | 3 |
| CP 284 – Visual Basic .net I (Prerequisite: CP 107 or permission of director) 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 classes and user defined and built 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 49).</i> | 3 |
| CP 285 – Troubleshooting Networks (Prerequisite: CP 206 or permission of director) 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 |
| CP 287 – Visual Basic .net II (Prerequisites: CP 280 or 284 or permission of director) Course focuses on development of advanced ASP.net web applications and ASP.net web services. A substantial portion of the course curriculum includes applications that manipulate a relational database. (30 theory + 45 lab hours per term) | 3 |
| CP 290 – Windows MFC Programming in C++ (Prerequisites: CP 278B or permission of director) Provides an introduction to writing Windows-based programming applications using both Microsoft Foundation Class (MFC) on Windows operating systems and GNOME and Anjuta on Linux operating systems. The course covers Graphical User Interface design and implementation, object-oriented design topics, The OO design topics include examination of GUI classes, application development, exception handling, file input/output, inheritance and polymorphism. (30 theory + 45 lab hours per term) | 3 |
| CP 291 – High Performance Computing Configuration (Prerequisite: CP 275) Focuses on configuring computer clusters to act in unison in an HPC environment. (30 theory + 45 lab hours per term) | 3 |

Course Subject Code/Course number – Course Name**Credit Hours**

| | |
|--|------------|
| CP 292 – System Development (Demo Portfolio) (Prerequisite: CP 235 or CP 236 or CP 278C or permission of director) Provides opportunities for students to propose, design, build, document, test and demonstrate a working application. Students may choose to complete a project of limited scope for an external organization or to create a demo that solves a common business-computing problem. This demo portfolio will be posted on the Technologies web site and/or archived for presentation to potential employers. Students work under the guidance of a computer-programming instructor. Course can be replaced with approved cooperative education experience, with appropriate assessment from employer. Students working toward associate degree are encouraged to defer this course until completion of advanced programming courses. (45 lab hours per term) | 1 |
| CP 293 – Demo Reel Production (Demo Portfolio) (Prerequisite: CP 262 or permission of director) Allows students to 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. (45 lab hours per term) | 1 |
| CP 295 – Web Site Implementation (Prerequisite: CP 133 or CP 134 or CP 135 or permission of director) Allows students to create a web site from conceptualization to implementation. Completed web site and portfolio will be presented to an academic team. (45 lab hours per term) | 1 |
| CP 296 – Topics (Prerequisite: permission of director) Topics vary based on the requests from the community and available software, hardware and instructors. <i>Distance Learning option available (see page 49).</i> | 1–6 |
| CP 297 – Special Problems (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. | 1–6 |
| CP 298 – Internship (Prerequisite: permission of 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. | 3 |
| CP 299 – Cooperative Education (Prerequisite: permission of director) Provides the opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is paid. | 3 |

CR – Court Reporting Courses (Business & Information Technology Division)

| | |
|--|----------|
| CR 111 – Introduction to Court Reporting (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent) 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 |
|--|----------|

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|--|--------------|
| CR 113 – Machine Shorthand II (Prerequisite: CR 111) Presents vocabulary building along with a review of conflict-free, realtime machine shorthand theory principles. Open-exit course. Students may advance to CR 211 after reaching speeds of 60 and 80 wpm. The speedbuilding and five-minute takes will be comprised of literary, jury charge and testimony dictation. All takes must be passed with 95% accuracy or better. CAT and real-time translation are introduced. Enrollment is limited to 45 weeks or three terms. | 3 | CR 298 – Internship (Prerequisite: CR 213, passage of one five-minute dictation take at 200 wpm on testimony material and division approval) Provides students the opportunity to work in Court or freelance firm under the supervision of a certified court reporter. Arranged by program chair in student's final term. 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. Intern is required to record and transcribe a 40-page saleable transcript or two 20-page transcripts. | 3 |
| CR 211 – Machine Shorthand III (Prerequisite: CR 113) Covers continued vocabulary building of steno outlines and English. Open-entry, open-exit course. Students may advance to CR 212 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% 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 | CSCI – Computer Science Courses (Business & Information Technology Division) | |
| CR 212 – Machine Shorthand IV (Prerequisite: CR 211) Emphasizes medical terminology and dictation, vocabulary building and speedbuilding. Open-entry, open-exit course. Students may advance to CR 213 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% 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 3 terms. | 3 | CSCI 151 – Introduction to Programming for Non-Computer Science Majors (Prerequisite: MATH 150 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 programs written in C and C++. | 4 |
| CR 213 – Machine Shorthand V (Prerequisite: CR 212) 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 5-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% 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. | 3 | CSCI 163 – Intermediate Computer Literacy (Prerequisite: IT 101 or permission of instructor) Emphasizes creating graphics and Web documents; research using the Internet. | 3 |
| CR 251 – Stenotranscription (Prerequisites: CR 113) Provides instruction on the functions and applications of stenotranscription software. This software allows students to transcribe tapes by entering any command that is used by Microsoft Word to produce documents directly from the steno machine. Grading is done on the production of medical and legal documents from audio tapes. | 3 | CSCI 201 – Mathematical Foundations of Computer Science (Prerequisites: CSCI 151 and MATH 162) 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. | 4 |
| CR 296 – Topics Course Explores current topics in court reporting and stenotranscription. | 1–3 | CSCI 251 – Intermediate Computer Programming (Prerequisite: CSCI 151) Continues course of study begun in CSCI 151, 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. | 4 |
| CR 297 – Special Problems (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. | Variable | CSCI 296 – Topics in Computer Science (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent and permission of instructor) Presents various topics. See Schedule of Classes . | 3 |
| | | CSE – College Success Experience Courses (Division of Educational & Career Advancement) | |
| | | CSE 094 – Career Options 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. | 2 |
| | | CSE 095 – Study Skills Introduces essential components of study skills and self-management techniques needed for academic success. | 2 |
| | | CSE 096 – Special Topics Presents various topics in study skills. | 1–3 |

Course Subject Code/Course number – Course Name **Credit Hours****CSE 099 – College Survival** **3**

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 100 – Student Success **3**

(Pre- or corequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
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)*

CSE 101 – Career Exploration **1**

(Pre- or corequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
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.

CSE 102 – Learning Strategies **1**

(Prerequisite: CSE 101 OR pre- or corequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
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.

CSE 103 – Research Techniques **1**

(Prerequisite: CSE 101 or CSE 102 OR pre- or corequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
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.

CSE 296 – Special Topics **1-3**

(Pre- or corequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent)
Presents various topics on career exploration, learning strategies and/or study skills.

CST – Cultural Studies Courses *(Communication, Humanities & Social Sciences Division)***CST 150 – Introduction to Cultural Studies** **3**

(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
Explores cultural constructions of differences, including but not limited to gender, race, ethnicity, social class and sexual orientation in contemporary U.S. society.

CST 250 A,H,N,S – Ethnic Studies **3**

(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
Investigates present-day perspectives and historical and social conditions that have shaped and affected the lives of a specific group of American people. Emphasizes how these groups create a mosaic of philosophy, art and identity. A: African American Studies; H: Chicano Studies; N: Native American Studies; S: Asian American Studies.

CST 260 – Popular Culture and Cultural Identity **3**

(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
Examines ways in which popular culture, from film and television to formula fiction, art and music, define and reveal cultural values.

Course Subject Code/Course number – Course Name **Credit Hours****CST 265 – Introduction to Women's Studies** **3**

(Prerequisite: RDG 100)
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.

CST 296 – Topics in Cultural Studies **3**

(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
Presents various topics. See **Schedule of Classes**.

CTRG – Catering Course *(Business & Information Technology Division)***CTRG 170L – Catering** **10**

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 – Culinary Arts Courses *(Business & Information Technology Division)***CULN 101 – Introduction to Culinary Arts** **1**

(Prerequisite RDG 099 or Accuplacer Reading score of 69 or equivalent)
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.

CULN 102 – Applied Culinary Math **1**

(Prerequisite MATH 099 or Accuplacer Arithmetic score of 57 or equivalent)
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. *[Previously offered as BKNG 102]*
Distance Learning option available (see page 49).

CULN 103 – Food Sanitation Principles **3**

(Prerequisite RDG 099 or Accuplacer Reading score of 69 or equivalent and MATH 099 or Accuplacer Arithmetic score of 57 or equivalent)
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. *[Previously offered as FSMG 101A and FSMG 101B]*
Distance Learning option available (see page 49).

CULN 111 – Cooking Fundamentals-I **5**

Prerequisite CULN 101, CULN 102, pre- or corequisite CULN 103 or division approval)
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 cooking, quick breads, sandwiches, custards, soufflés and desserts, beef, veal, pork, game, poultry, seafood, potatoes, grains, pasta and fruits and vegetables. *(15 theory + 150 lab hours per term) [Previously offered as QUFD 101, QUFD 103L, QUFD 105L]*

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| CULN 112 – Cooking Fundamentals-II (Pre- or corequisite CULN 111 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) [Previously offered as QUFD 101, QUFD 107L, QUFD 108L] | 5 | CULN 295 – Capstone (Prerequisite: division approval) Focuses on developing portfolios, resume writing, job interviewing, developing menus and assessing program exit competencies and CNM core competencies. | 1 |
| CULN 211 – International Cuisines – Classical European (Prerequisite CULN 112 or division approval) Introduces flavor principles of international cuisines and their cooking techniques, ingredients and cultural menus. Topics include charcuterie, as well as French, American and Russian service techniques; meals are served to the public in a student-operated restaurant. Emphasis is on classical and contemporary menu design, production and dining room service. (15 theory + 150 lab hours per term) [Previously offered as QUFD 111, QUFD 112L, QUFD 113L] | 5 | CULN 296 – Culinary Topics Explores current topics in Culinary Arts. | 1–3 |
| CULN 212 – International Cuisines – Mediterranean, Asian, & Pacific Rim (Pre- or corequisite CULN 211 or division approval) Introduces flavor principles of international cuisines and their cooking techniques, ingredients and cultural menus. Topics include the production and service of the Mediterranean, Asian and Pacific Rim regional cuisines. Meals are served to the public in a student-operated restaurant. Emphasis is on classical and contemporary menu design, production and dining room service. (15 theory + 150 lab hours per term) [Previously offered as QUFD 111, QUFD 114L, QUFD 115L] | 5 | CULN 297 – Special Problems (Prerequisite: department 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. | Variable |
| CULN 130 – Introduction to Baking Fundamentals (Prerequisites CULN 101, CULN 102, Pre- or corequisite CULN 103 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) [Previously offered as BKNG 101, 103L, 104L] | 5 | DA – Dental Assistant Courses (Health, Wellness & Public Safety Division) | |
| CULN 132 – Applied Baking Principles (Pre- or corequisite CULN 130 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) [Previously offered as BKNG 101, 105L, 106L] | 5 | DA 101L – Dental Science I (Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent and MATH 99 or Accuplacer Arithmetic score of 57 or equivalent, ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent) 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. (30 theory + 45 lab hours per term) | 3 |
| CULN 230 – Baking and Pastry Fundamentals (Prerequisite CULN 132 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) [Previously offered as BKNG 111, 112L, 113L] | 5 | DA 102T/L – Dental Materials and Application (Prerequisite: DA 101L, ENG 101, HLTH 102; Corequisites: 104, 106T/L, 108T/L; Pre- or corequisite: COMM 221) 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: \$70 | 3 |
| CULN 232 – Advanced Baking and Pastry Techniques (Pre- or corequisite CULN 230 or division approval) Continues to emphasize advanced theory topic, skills and techniques of classical and contemporary pastry arts. Specialty topics will include genoise, international buttercreams, icings, sugar and chocolate decoration. (15 theory + 150 lab hours per term) [Previously offered as BKNG 111, 114L, 115L] | 5 | DA 104 – Tooth Morphology, Histology and Recordings (Prerequisite: DA 101L; Corequisites: 102T/L, 106T/L, 108T/L) 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. | 3 |
| | | DA 106T/L – Chairside Procedures I (Prerequisite: DA 101L; Corequisites: 102T/L, 104, 108T/L) Presents theory and care of dental equipment, identification of instruments and their use, tray set-up, four-handed dentistry techniques and preparation for assisting in a clinical setting. (30 theory + 45 lab hours per term) | 3 |
| | | DA 108T/L – Dental Radiology I (Prerequisite: DA 101L; Corequisites: 102T/L, 104, 106T/L) 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: \$30 | 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****DA 110T/L – Dental Practice Management and Patient Care** **2***(Pre or Corequisite: COMM 221; Corequisites: DA 114, 124T/C)*

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)

DA 112 – Dental Science II **3***(Corequisites: DA 116T/L, 118T/L, 120T/C)*

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.

DA 114 – Dental Specialties **3***(Corequisites: DA 110 T/L, 124 T/C)*

Provides introduction into dental specialties with an emphasis on hands-on practice of DA functions that can be delegated in dental specialty offices.

DA 116T/L – Chairside Procedures II **3***(Corequisites: DA 112, 116L, 118T/L, 120T/C)*

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)

DA 118T/L – Dental Radiology II **3***(Corequisites: DA 112, 116T/L, 118L, 120T/C)*

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: \$30

DA 120T/C – Clinical Application I **6***(Corequisites: DA 112, 116T/L, 118T/L and 120T/C)*

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) Program fee: \$30

DA 124T/C – Clinical Application II **5***(Prerequisite: DA 120T/C; Corequisites: DA 110T/L, 114)*

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: \$30.

DA 296 – Special Topics in Dental Assistant **1–6**

Explores various topics of interest in the field of Dental Assistants.

DETC – Diesel Equipment Technology Courses *(Applied Technologies Division)***DETC 110L – Introduction to Diesel Technology** **4***(Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval; MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval.)*

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.)

Course Subject Code/Course number – Course Name **Credit Hours****DETC 121L – Heavy Duty Brake Systems** **4***(Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval; MATH 099 or Accuplacer Arithmetic score of 57 or equivalent or division approval)*

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)

DETC 122L – Heavy Duty Suspension & Steering **4***(Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval; MATH 099 or Accuplacer Arithmetic score of 57 or equivalent or division approval)*

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)

DETC 123L – Manual Shift Transmissions & Axles **4***(Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval; MATH 099 or Accuplacer Arithmetic score of 57 or equivalent or division approval)*

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)

DETC 131L – Heavy Duty Engine Repair **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)

DETC 132L – Automatic Transmissions & Hydraulics **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)

DETC 175L – Preventive Maintenance **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)

DETC 233L – Diesel Engine Performance **4**

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 295 – Diesel Equipment Technology Capstone Course **1***(Prerequisite: division approval)*

Preparation of a professional portfolio that demonstrates student's mastery of technical and core competencies. (Taken during student's last term).

DETC 296 – Special Topics **1–6***(Prerequisite: division approval)*

Provides an in-depth study of advanced techniques.

DETC 297 – Special Problems **Variable***(Prerequisite: division approval)*

Focuses on a specific problem while working with an instructor.

DMS – Diagnostic Medical Sonography Courses *(Health, Wellness & Public Safety Division)*

| | |
|--|----------|
| DMS 101 – Introduction to Diagnostic Medical Sonography | 1 |
| <i>(Prerequisites: program director approval, MATH 121; pre- or corequisites: BIO 237/247L, ENG 101, humanities elective, PHYS 151/151L; Corequisite: DMS 102L, DMS 104/104L, DMS 113L, HLTH 102)</i> | |
| 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 102L – Medical Concepts | 4 |
| <i>(Pre- or corequisites: BIO 237/247L, ENG 101, humanities elective, PHYS 151/151L; Corequisite: DMS 101, 104/104L, 113L)</i> | |
| 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 structures. <i>(30 theory + 90 lab hours per term) Program fee: \$60</i> | |
| DMS 103 – DMS Pathophysiology I | 3 |
| <i>(Prerequisites: DMS 101, 102L, 104/104L; Pre- or corequisite: BIO 238/248L; Corequisites: DMS 120/120C, 130L)</i> | |
| 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 104/104L – Cross Sectional Anatomy | 3 |
| <i>(Pre- or corequisites: BIO 237/247L, ENG 101, humanities elective, PHYS 151/151L; Corequisite: DMS 101, 102L, HLTH 102, 113L)</i> | |
| 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. <i>(30 theory + 45 lab hours per term)</i> | |
| DMS 113L – Intro to Sonographic Physics | 2 |
| <i>(Corequisites: DMS 101, 102L, 104/104L, HTHL 102)</i> | |
| 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. <i>(15 theory + 45 lab hours per term)</i> | |
| DMS 120/120C – General Sonography I | 6 |
| <i>(Prerequisites: DMS 101, 102L, 104/104L, HLTH 102; Pre- or corequisite: BIO 238/248L; Corequisites: DMS 103, 130L)</i> | |
| 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. <i>(15theory + 225 lab/clinical hours per term)</i> | |

| | |
|--|------------|
| DMS 130L – Sonographic Physics I | 2 |
| <i>(Prerequisites: DMS 101, 102L, 104/104L, 113L, HLTH 102; Corequisites: DMS 103, 120/120C, 230L)</i> | |
| 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. <i>(15 theory + 45 lab hours per term)</i> | |
| DMS 203 – DMS Pathophysiology II | 3 |
| <i>(Prerequisites: DMS 103, 120/120C, 130L; Corequisites: DMS 220L/220C, 230L)</i> | |
| 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 220L/220C – General Sonography II | 7 |
| <i>(Prerequisites: COMM 221, DMS 103, 120/120C, 130; Corequisites: DMS 203, 230L)</i> | |
| 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. <i>(75 lab + 240 clinical hours per term)</i> | |
| DMS 230L – Sonography Physics II | 2 |
| <i>(Prerequisites: DMS 103, 130L, 120/120C, 130L; Corequisites: DMS 203, 220L/220C)</i> | |
| 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 in-vitro 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. <i>(15 theory + 45 lab hours per term)</i> | |
| DMS 260C – General Sonography Internship | 10 |
| <i>(Prerequisites: DMS 203, 220/220C, 230; Corequisite: DMS 270L)</i> | |
| Provides supervised clinical experiences within a healthcare setting. <i>(450 clinical hours per term)</i> | |
| DMS 270L – Clinical Seminar | 1 |
| <i>(Prerequisites: DMS 203, 220/220C, 230; Corequisite: DMS 260C)</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. <i>(45 lab hours per term)</i> | |
| DMS 296 – Special Topics in Diagnostic Medical Sonography | 1–6 |
| Explore various topics of interest in the field of sonography. | |

ECM – E-Commerce Courses *(Business & Information Technology Division)*

THIS PROGRAM IS BEING DISCONTINUED AND WILL NOT ACCEPT NEW STUDENTS

| | |
|--|----------|
| ECM 101 – Web Accounting | 3 |
| <i>(Prerequisites: ACCT 101A and ECM 105 and 176 or division approval)</i> | |
| Introduces Web-based accounting terminology, accounting transactions, credit card accounting, inventory, purchasing, auditing and billing. | |

ECM 102 – Internet Customer Service **3**

(Pre-or corequisite: ECM 176 or division approval)
 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.
Distance Learning option available (see page 49).

ECM 105 – Web Business **3**

(Pre- or corequisite: ECM 176 or division approval)
 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.
Distance Learning option available (see page 49).

ECM 140 – Web Catalogs **3**

(Prerequisites: ECM 105 and 176 and CIS 165 or 191 and CIS 155 or division approval)
 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.
Distance Learning option available (see page 49).

ECM 150 – Wireless Web **3**

(Prerequisites: ECM 105 and 176 and CIS 165 or 191 and CIS 156 or division approval)
 Focuses on how to design and manage a Web Site 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.

ECM 160 – Business Web Site Development **3**

(Prerequisites: ECM 176 and CIS 165 or 191 or 272)
 Uses web design elements supported by HTML to create professional business web sites 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.
Distance Learning option available (see page 49).

ECM 176 – Introduction to Internet Commerce **1**

Introduces e-commerce business models and payment systems. Internet operation and concepts including domain naming, ISP, ASP, FTP, email, routing, bandwidth and security are presented.
(5 weeks; 10 theory + 15 lab hours per term) [Previously offered as MMS 176]
Distance Learning option available (see page 49).

ECM 201 – E-Commerce Business Planning **3**

(Prerequisites: ECM 105 and 176 or division approval)
 Presents planning to start a web business or add a website to an existing business. The students look at the technology and business issues facing a business owner and how to take advantage of the web to make the business more successful. Students begin the process of developing a business plan and collecting the information needed to complete the plan.
Distance Learning option available (see page 49).

ECM 220 – Web Marketing **3**

(Pre- or corequisite: ECM 176 or division approval)
 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.
Distance Learning option available (see page 49).

ECM 223 – Web Shopping Carts **3**

(Prerequisites: ECM 105 and 176 or division approval)
 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.
Distance Learning option available (see page 49).

ECM 224 – Knowledge Management **3**

Introduces the management of information in an organization. How to use an organization's knowledge to solve business problems such as creating and delivering products/services, customer relations, supplier relations or improving work processes are discussed.
Distance Learning option available (see page 49).

ECM 226 – Legal Issues in E-Commerce **3**

(Prerequisites: ECM 105 and 176 or division approval)
 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.
Distance Learning option available (see page 49).

ECM 235 – Web Stores **3**

(Prerequisite: ECM 105 or division approval)
 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.
Distance Learning option available (see page 49).

ECM 260 – Business Web Security **3**

(Prerequisites: ECM 105 and 176 or division approval)
 Focuses on installing, managing and configuring web servers for secure operations. Security, policies and practices to minimize risk to business web sites are discussed. Introduces approaches for managing security and authentication. Both IIS and Apache servers will be used.

ECM 270 – Web Site Management **3**

(Prerequisites: ECM 105 and 176 or division approval)
 Focuses on installing, configuring and managing IIS and Apache web servers to host websites developed by e-commerce students (see ECM 140, 160 and 278). Students setup the security and manage the content for websites designed by e-commerce students to become familiar with the issues, problems and concerns for businesses operating websites.

ECM 278 – Business Web Site Design **2**

(Prerequisites: ECM 105 and 140 and 160 and 176 and CIS 165 or CIS 191)
 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.
[Previously offered as CIS 278] (15 theory + 45 lab hours per term)
Distance Learning option available (see page 49).

ECM 280 – Web Customer Identification **3**

(Prerequisites: ECM 102 and 105 and 176 or division approval)
 Employs techniques for collecting and managing customer data. The design of cookies, mailbots, active forms and customer databases are introduced. Policies and practices to address customer privacy issues are presented.

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|--|--------------|
| ECM 296 – Topics Course Examines current topics in e-commerce. | 1–3 | ECME 202 – Professionalism (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. [Previously offered as ECME 203] | 2 |
| ECM 297 – Special Problems (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. | Variable | ECME 204 – Assessment of Children and Evaluation (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. [Previously offered as CDV 217] | 3 |
| ECM 298 – Internship (Prerequisite: division approval) 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 | ECME 206 – Family and Community Collaboration I (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. [Previously offered as ECME 205] | 3 |
| ECM 299 – Cooperative Education (Prerequisite: division approval) 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 | ECME 212 – Curriculum Development and Implementation II (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, Corequisite: ECME 212C) 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. [Previously offered as ECME 209] | 3 |
| ECME – Early Childhood Multicultural Education Courses (Communication, Humanities & Social Sciences) | | | |
| ECME 104 – Child, Growth and Development (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. [Previously offered as ECME 105 and ECME 106] | 3 | ECME 212C – Curriculum Development and Implementation Practicum II (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, Corequisite: ECME 212) 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. [Previously offered as ECME 208C] (90 hours per term) | 2 |
| ECME 108 – Health, Safety and Nutrition (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) Provides information related to standards and practices that promote children’s physical and mental well-being, sound nutritional practices and maintenance of safe learning environments. Examines nutritional factors important to children’s total development. | 2 | ECME 213 – Guiding Young Children (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. [Previously offered as ECME 210] | 3 |
| ECME 109 – Curriculum Development and Implementation I (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, Corequisite: ECME 109C) Focuses on developmentally appropriate content in early childhood programs. Curriculum development in all areas, birth through eight is emphasized. [Previously offered as ECME 107] | 3 | ECME 250 – Foundations of Early Childhood Education (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. | 3 |
| ECME 109C – Curriculum Development and Implementation Practicum I (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. [Previously offered as CDV 108C] (90 hours per term) | 2 | | |
| ECME 201 – Introduction to Reading and Literacy Development (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. | 3 | | |

Course Subject Code/Course number – Course Name**Credit Hours****ECME 252 – Teaching Young Children** 3*(Prerequisite: 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 254 – Developmentally Appropriate Early Childhood Multicultural Curriculum 3*(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 260 – Observation & Assessment of Young Children 3*(Prerequisite: 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.

ECME 262 – Emergent Literacy: Theories and Principles of Multicultural Emergent Literacy 3*(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 264 – Emergent Literacy: Methods & Materials for Early Literacy Instruction 3*(Prerequisite: 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 298L – Early Childhood Classroom Field Experience 3*(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 101 – Introduction to Economics** 3*(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*

Introduces the theories, history and relationships of economics.

Course Subject Code/Course number – Course Name**Credit Hours****ECON 200 – Macroeconomics** 3*(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent and MATH 100A)*

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 49).

ECON 201 – Microeconomics 3*(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent and MATH 100A)*

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 49).

ECON 296 – Topics in Economics 3*(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*

Presents various topics. See **Schedule of Classes**.

EDT – Engineering Design Technology Courses *(Applied Technologies Division)***EDT 102 – Introduction to Engineering Technology** 3

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 103 – Introduction to CAD 3

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 2D technical drawings.
(30 theory +45 lab hours per term)

EDT 104 – Mechanical Design I 3*(Prerequisite: EDT 103)*

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 105 – Intermediate CAD 3*(Prerequisites: EDT 103 or permission of division)*

Allows the students to acquire more advanced CAD skills. Techniques for producing, viewing and editing 2D and 3D drawings will be presented. The course is geared toward mechanical design.
(30 theory +45 lab hours per term)

EDT 114 – Mechanical Design II 3*(Prerequisites: EDT 103, EDT 104)*

Allows students to advance their knowledge of view projections including auxiliary views and section views, tolerancing and dimensioning. Both 2D and 3D CAD tools will be used following each lecture to solve typical engineering design problems. *(30 theory +45 lab hours per term)*

EDT 116 – Basic Electronic and Electrical Design Drafting 3*(Prerequisite: EDT 103)*

Presents electronic design drafting fundamentals including symbolic representation of electronic and electrical components and devices, block and connection diagramming, cable drawings and circuit schematics. Includes basic electrical and electronics theory and mathematics applications.
(30 theory +45 lab hours per term)

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|--|--------------|
| EDT 117 – Materials and Manufacturing Processes 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) | 3 | EDT 297 – Special Problems (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. | 2–5 |
| EDT 201 – Applied Mathematics in Mechanics (Prerequisites: MATH 123, Corequisite: EDT 102 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) | 3 | EDT 298 – Internships (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. | 3 |
| EDT 205 – Advanced CAD/Solid Modeling (Prerequisites: EDT 105, EDT 104) 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 3D solid models. (30 theory +45 lab hours per term) | 3 | EDT 299 – Cooperative Education (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. | 3 |
| EDT 206 – Tooling Design (Prerequisites: EDT 102, EDT 104) 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) | 3 | EDUC – Elementary Education Courses (Communication, Humanities & Social Sciences Division) | |
| EDT 210 – Mechanics of Materials (Prerequisites: EDT 201 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) | 5 | EDUC 101 – Introduction to Teaching in Elementary and Secondary Education (Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, ENG 100 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 100A 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. | 3 |
| EDT 215 – Design of Machine Elements (Prerequisites: EDT 102, EDT 117, Corequisite: EDT 114) 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) | 3 | EDUC 203 – Introduction to Classroom Management, Grades K–5 (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) Introduces students to practical classroom rules and procedures. Students will learn about classroom set-up, cognitive learning styles, managing student behavior and working with diverse populations. | 3 |
| EDT 221 – System Design (Prerequisites: EDT 215, EDT 116, 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) | 3 | EDUC 204 – Child Development for Teachers (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. | 3 |
| EDT 284 – Geometric Dimensioning and Tolerancing (GDT) (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. | 3 | EDUC 205 – Introduction to Classroom Management, Grades 6–12 (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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. | 3 |
| EDT 296 – Topics (Prerequisite: permission of program chair) Offers topics based upon requests from community and available instructors. [Previously offered as DDET 296] | 1–5 | | |

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

EDUC 206C – Education Practicum **2**

(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, ENG 100 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 100A 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. (90 hours per term)

EDUC 207 – Educational Psychology **3**

(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, ENG 100 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 100A 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 210 – Educational Assistant Assessment Portfolio Development **3**

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 250 – Foundations of Education **3**

(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 252 – Teaching & Learning Theory **3**

(Prerequisites: 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 260 – Fundamentals of Reading Instruction **3**

(Prerequisite: 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 262 – Methods and Materials for Reading Instruction **3**

(Prerequisite: 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 264 – Reading and Writing across the Curriculum in Secondary Education **3**

(Prerequisite: 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 265 – Computers in Schools **3**

(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 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.

EDUC 272 – The Adolescent Learner **3**

(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 293 – Effective Teaching Methods & Strategies for Elementary Education **3**

(Prerequisites: Acceptance into the alternative licensure program)

Develop a rationale and learn to plan and create classroom procedures, routines and structures that lead to increased student learning through best practices in all areas including mathematics and science in the elementary classroom. Current research in the field and learning theories that result in the design of physically and psychologically safe environments is explored. The principles involved in motivating students and overcoming resistance to learning are also covered.

EDUC 294 – Effective Teaching Methods and Strategies in Secondary Education **3**

(Prerequisite: Acceptance into alternative licensure program)

Course utilizes the content knowledge student has acquired in bachelor’s, master’s, or doctoral work. Explores how to implement pedagogy, methods and materials appropriate to secondary environment and emphasizes alternatives to lecture only. Student will carefully examine cooperative learning, teaching critical thinking skills and the best practices related to secondary education.

EDUC 295: Curriculum Development, Assessment, and Evaluation **3**

(Prerequisites: 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 296 – Topics **1–5**

Various special topics in the field are offered as elective hours.

EDUC 297 – Special Problems **1–5**

(Prerequisite: permission of director)

Studies a specific problem while working with assigned instructor.

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| EDUC 298L – Supervised Field Experience (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. | 3 | EET 209L – Electronic Devices (Pre- or corequisite: EET 119L) Presents diodes, bipolar transistors, FETs and circuits including rectifiers, zener diode regulators, clippers, clampers and amplifiers. Transistor modeling and circuit analysis/design are stressed along with computer use for circuit analysis, spreadsheet preparation, graphics and word processing. (45 theory + 90 lab hours per term) | 5 |
| EET – Electronics Engineering Technology Courses (Applied Technologies Division) THIS PROGRAM IS BEING ELIMINATED AND WILL NOT ACCEPT NEW STUDENTS | | EET 218L – Microprocessor Interfacing (Prerequisites: EET 208L, 209L) Presents I/O devices and protoboard circuits interfaced to a microcomputer. Each student makes an oral presentation and prepares documentation describing system operation and organization along with block diagrams, schematics and structured software. (30 theory +45 lab hours per term) | 3 |
| EET 107L – Graphics and Analytical Methods (Pre- or corequisite: MATH 150 or 121) Covers mechanical and electronic drafting methods including schematic preparation, printed circuit layout, chassis definition and wiring are studied. Lab time is devoted to techniques required to prepare drawings. Students gain experience in word processing, spreadsheet preparation, graphics, data base preparation and CAD. (30 theory + 45 lab hours per term) | 3 | EET 219L – Electronic Systems (Prerequisite: EET 209L) Presents electronic system schematics along with frequency considerations, decibel usage, differential and operational amplifiers, power supplies, thyristors, PLLs, oscillators and feedback concepts. Each student prepares a technical manual for a computer-controlled system. Video monitor basics and introductory transmission line theory are presented. Computers are used for advanced circuit analysis, instrument control, data logging and word processing. (45 theory + 90 lab hours per term) | 5 |
| EET 109L – Circuit Analysis I (Pre- or corequisites: ENG 101, EET 107L) Analyzes passive DC circuits using Ohm's Law, Kirchhoff's Laws, source conversions, network theorems and branch/mesh/nodal analysis. Transient analysis of R-C and R-L circuits is presented along with concepts of energy, power and efficiency. Computers are used for spreadsheet preparation, graphics and word processing. (45 theory + 90 lab hours per term) | 5 | EET 296 – Topics (Prerequisite: open to advanced Electronics students) The topics depend on the requests from the community. | 1-5 |
| EET 113L – Structured Computer Programming (Prerequisite: MATH 121 or 150) Introduces beginning computer programming using engineering applications. (30 theory + 45 lab hours per term) | 3 | EET 297 – Special Problems (Prerequisite: enrolled only in 200-level technical courses and/or permission of program chair) Allows the student and instructor define a specific problem directly related to the program in the area of the student's interest. Develop and execute a solution using analytical and computer-aided techniques appropriate to the problem. An oral presentation may be required. | 3-5 |
| EET 117L – Digital Electronics I (Prerequisite: EET 109L) Analysis and design of combinational logic and integrated circuits using Boolean algebra, Karnaugh maps and logic diagrams. Number systems, binary codes and code conversions are studied along with flip flops, multivibrators and circuit applications. Lab work emphasizes circuit wiring and troubleshooting techniques. (30 theory + 45 lab hours per term) | 3 | EET 298 – Internship (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. | 3 |
| EET 119L – Circuit Analysis II (Prerequisite: EET109L; Pre- or corequisites: ENG 119, MATH 162 or MATH 180) Presents passive AC circuits with dependent and independent sources along with network theorems, phasor analysis, AC measurements, power factor analysis/correction, sweep generation usage and Fourier series. Computers are used for complex mathematical problem solving, spreadsheet preparation, graphics, word processing and CAD. (45 theory + 90 lab hours per term) | 5 | EET 299 – Cooperative Education (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 paid. | 3 |
| EET 207L – Digital Electronics II (Prerequisite: EET 117L) Presents logic circuit decoders, encoders, multiplexers, counters and registers along with ADCs, DACs, RAM, ROM, PLDs and applications. Lab work emphasizes circuit wiring, troubleshooting techniques and PLD programming. (30 theory + 45 lab hours per term) | 3 | ELEC – Electronics Courses (Applied Technologies Division) | |
| EET 208L – Microprocessors (Prerequisite: EET 113L; Pre- or corequisite: EET 207L) Presents microprocessors and microcomputers in depth with emphasis on machine and assembly language programming. Interrupts and DOS entry points are introduced. (45 theory + 45 lab hours per term) | 4 | ELEC 103A – Electronics Fundamentals A 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) | 4 |
| | | ELEC 103B – Electronics Fundamentals B (Prerequisite: ELEC 103A) 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) | 4 |

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**

| | |
|--|----------|
| ELEC 104 – Electronics Mathematics (Prerequisite: MATH 100B 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. | 4 |
| ELEC 105A – Digital Circuits I 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) | 3 |
| ELEC 105B – Digital Circuits II (Prerequisite: ELEC 105A) 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) | 3 |
| ELEC 114L – Semiconductor Devices (Prerequisites: ELEC 103B) 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) | 6 |
| ELEC 118L – Electromechanical Devices (Prerequisites: ELEC 103B, ELEC 105B) 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) | 6 |
| ELEC 203L – Intro to Embedded Systems—Microcontrollers (Prerequisites: ELEC 118L) 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) | 4 |
| ELEC 205L – Analog Circuits (Prerequisite: ELEC 114B or ELEC 114L) 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) | 4 |
| ELEC 217 – Upgrading and Repairing PCs Covers basic aspects of computer repair, troubleshooting techniques with and without software, modification and replacement. Emphasizes microcomputers and related hardware. (30 theory hours + 45 lab hours per term) | 3 |
| ELEC 221 – Advanced Upgrading and Repairing PC's (Prerequisite: ELEC 217) Includes a more advanced aspect of computer troubleshooting techniques, repair and modifications. Emphasizes A+ Certification, which is an industry-recognized credential. (30 theory hours + 45 lab hours per term) | 3 |

Course Subject Code/Course number – Course Name**Credit Hours**

| | |
|---|------------|
| ELEC 223 – RF/Consumer Electronics (Prerequisites: ELEC 114B or ELEC 114L, ELEC 205L) Introduces radio frequency communication theory, circuits and problems. Covers analog and digital video and audio transmission, recording and playback methods and equipment with emphasis on alignment, troubleshooting and repair. (60 theory hours + 90 lab hours per term) | 6 |
| ELEC 275L – Soldering Techniques 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) | 3 |
| ELEC 279 – Electronics Refresher Reviews electronics fundamentals, including basic components, semiconductors, op-amps, digital electronics and microprocessors. | 3 |
| ELEC 296 – Topics The topics depend on the requests from the community. | 2–8 |
| ELEC 297 – Special Problems (Prerequisite: permission of director) Allows the student to investigate and solve a problem. The student designs the solution using a combination of techniques. | 2–8 |
| ELEC 298 – Internship (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. | 3 |
| ELEC 299 – Cooperative Education (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. | 3 |

ELEM – Elementary Education Courses (Communication, Humanities & Social Sciences Division)

| | |
|--|----------|
| ELEM 128 – Directed Experience with Children for Auxiliary Personnel: Level I (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, Corequisites: ELEM 192, 200) Provides classroom experience to adults working with children. Student has opportunity to develop skills in theory and practice accommodating the learning styles of children. | 2 |
| ELEM 192 – The Paraprofessional in the Classroom (Corequisites: ELEM 128) Provides the cognitive referents for classroom experiences. Enables the student to gain practical and theoretical knowledge. | 2 |
| ELEM 200 – Directed Experience with Children for Auxiliary Personnel: Level II (Corequisites: ELEM 128) Provides the sequel necessary to extend skills introduced in ELEM 128 and the opportunity for students to initiate extensive development of activities, classroom management and teacher skills. | 2 |
| ELEM 205 – Balanced Literacy (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, CSCI 100 (recommended)) An introduction to the elements of a balanced literacy. Course provides strategies to teach reading and writing in a balanced framework. | 2 |

Course Subject Code/Course number – Course Name **Credit Hours**

ELEM 233 – Language Arts Methods for Paraprofessionals **3**
(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent)
 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.

ELEM 261 – Mathematics Methods for Paraprofessionals **3**
(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent)
 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.

ELTR – Electrical Trades Courses *(Applied Technologies Division)*

ELTR 101 – Electrical Theory I **4**
(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval; Pre- or corequisite: ELTR 102)
 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.

ELTR 102 – Electrical Math I **3**
(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval)
 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.

ELTR 103L – Electrical DC/AC Lab **3**
(Pre- or corequisites: ELTR 101 and 102 or division approval)
 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)*

ELTR 104L – AC Circuitry, Motors, Generators **3**
(Pre- or corequisites: ELTR 101 and 102 or division approval)
 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)*

ELTR 112 – Blueprint Reading I **3**
(Pre- or corequisite: ELTR 101 or division approval)
 Provides instruction in reading and interpreting blueprints and specifications. Emphasizes terminology, symbols, notations, scaling, dimensioning and basic blueprint drawing techniques.

ELTR 113 – Electrical Theory II **4**
(Pre- or corequisite: ELTR 112 or division approval)
 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.

Course Subject Code/Course number – Course Name **Credit Hours**

ELTR 114L – Residential Wiring Lab **3**
(Pre- or corequisites: ELTR 112 and 113 or division approval)
 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)*

ELTR 115L – Residential Electrical Services **3**
(Pre- or corequisites: ELTR 112 and 113 or division approval)
 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)*

ELTR 170 – Electrical Wiring Circuitry **2**
 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.

ELTR 171L – Conduit Hand Bending Fundamentals **1**
 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)*

ELTR 173 – Industrial Motor Control Circuitry **2**
 Presents the design, interpretation, drawing and installation of electromechanical relay type motor controls in accordance with the National Electrical Code.

ELTR 174L – Industrial PC Motor Control **3**
 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)*

ELTR 175 – Fiber Optical Cable Installation **2**
 Introduces the installation of fiber optical cable in various systems. Emphasizes proper installation and termination.

ELTR 176 – Electrical Journeyman Preparation **3**
 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.

ELTR 201 – Electrical Theory III **4**
(Pre- or corequisites: ELTR 112, 113, 114L and 115L or division approval)
 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.

ELTR 203 – Electrical Motor Control Theory **3**
(Pre- or corequisites: ELTR 112, 201, 204L or division approval)
 Introduces students to the symbology and method of interpreting and drawing electromechanical motor control circuitry. NEMA standards are studied in detail.

ELTR 204L – Industrial Motor Control Lab **3**
(Pre- or corequisite: ELTR 203 or division approval)
 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)*

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****ELTR 205L – Industrial Power Distribution***(Pre- or corequisites: ELTR 201 and 204L or division approval)*

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 211 – Industrial Electrical Circuitry and Safety***(Prerequisites: ELTR 201, 203, 204L and 205L or department approval)*

Emphasizes safety principles and standards used in the electrical field and techniques for electrical troubleshooting.

3**ELTR 212 – Programmable Logic Controller Theory***(Pre- or corequisites: ELTR 204L, ELEC 103A&B and 105A&B or division approval)*

Introduces the principles of operation of a programmable controller, the numbering systems used by controllers, logic fundamentals and basics of programming.

4**ELTR 213L – PLC Installation and Operation***(Pre- or corequisites: ELTR 204L, 212 or ELEC 103A & B and 105A & B or division approval)*

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 214L – PLC Systems Operation and Troubleshooting***(Pre- or corequisites: ELTR 211 and 212 or department approval)*

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 295 – Electrical Trades Capstone Course***(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**ELTR 296 – Special Topics**

Provides advanced, in-depth study and research into methods and current technological equipment used in the electrical trades.

1–6**ELTR 297 – Special Problems***(Prerequisite: division approval)*

Focuses on a specific problem while working with an instructor.

Variable**EMS – Emergency Medical Technician Courses** *(Health, Wellness & Public Safety Division)***EMS 120 EMS First Responder***(Pre- or corequisites: RDG 099)*

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 160L – Basic Emergency Medical Technician Skills***(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent)*

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**Course Subject Code/Course number – Course Name****Credit Hours****EMS 162 – EMS Pharmacology***(Prerequisite: High School Diploma or equivalent, Math 100A or Accuplacer score of 72 or equivalent, Reading 100 or Accuplacer score of 80, EMS 160L or EMT-B license; pre- or corequisites: BIO 136 or 238)*

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 163/163C – Advanced Trauma***(Prerequisite: EMS 160L or EMT-B license)*

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) Program fee: \$11

5**EMS 180/180C – Cardiovascular System***(Prerequisite: EMS 162/162C, 163/163C; Corequisite: EMS 180C, 182, 184/184C, 186, 298)*

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 182 – Medical/Legal and Charting***(Corequisites: EMS 180/180C, 184/184C, 186, 298)*

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 184/184C Pediatric and Gynecology Emergencies***(Corequisites: EMS 180/180C, 182, 186, 298)*

To prepare the paramedic to 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**EMS 186 – EMS Endocrine and GI/GU Systems***(Corequisite: EMS 180/180C, 182, 184/184C, 298)*

To prepare the paramedic to student to recognize, assess and properly treat patients with various endocrine, gastrointestinal, genitourinary disease states. They will use pathophysiology principals to formulate a treatment plan for each patient.

1**EMS 190 – Behavioral Emergencies in EMS and Communication***(Prerequisite: EMS 298; Corequisite: EMS 192/192C, 194/194C, 195/195C, 295, 298A)*

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

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| EMS 192/192C – Respiratory System (Corequisites: EMS 190, 192C, 194/194C, 195/195C, 295, 298A) 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. The student will have clinical time outside of class in local hospitals as well as local EMS Services. (30 theory + 45 lab + 45 clinical hours per term) | 4 | EMS 295L – Competency Finals (Prerequisite: EMS 180/180C, 182, 184/184C, 186, 298; Corequisites: EMS 190, 192/192C, 194/194C, 195/195C, 298A) 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. Program Fee: \$45 | |
| EMS 194/194C – Neurological System (Corequisites: EMS 190, 192/192C, 195/195C, 295, 298A) 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. They will learn the skill of intubations as well as other airway techniques. The student will have clinical time outside of class in the local hospitals. (15 theory + 45 lab + 45 clinical hours per term) | 3 | EMS 296 – EMT Topics Explores various topics of interest in the field of emergency medical services. | Varies |
| EMS 195/195C – Environmental Emergencies (Corequisites: EMS 190, 192/192C, 194/194C, 295, 298A) 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 Haz-Mat Awareness. (30 theory + 45 clinical hours per term) | 3 | EMS 298 – Field Internship One (Corequisite: EMS 180/180C, 182, 184/184C, 186) 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. (3 weeks; 90 clinical hours per term) | 2 |
| EMS 260T/L – EMT Intermediate (Prerequisites: Current proof of professional CPR and passing score of the intermediate pretest, RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, EMS 160L) 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) Program Fee: \$11 | 5 | EMS 298A – Field Internship Two (Prerequisite: EMS 298; Corequisite: EMS 190, 192/192C, 194/194C, 195) 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. (3 weeks; 90 clinical hours per term) | 2 |
| EMS 260C – EMT Intermediate Clinical (Prerequisite: EMT 260T/L) 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 | ENG – English Courses (Division of Educational & Career Advancement) | |
| EMS 270/270L – Emergency Department Technician (Prerequisite: division approval, Current NM or National EMT-B certificate or Intermediate License, current proof of professional CPR, RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, Corequisite: EMS 270C) Provides training to assist the staff of the emergency division in the care of critical 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 | ENG 096 – Special Topics Presents various topics in developmental English. | 1–3 |
| EMS 270C – Emergency Division Technician Clinical (Corequisite: EMS 270/270L) Provides practice of the emergency division technician skills in the clinical setting. (90 clinical hours per term) Program Fee: \$11 | 2 | ENG 098 – Basic Writing and Reading Skills (Prerequisite: Students enrolling in ENG 098 should have placement test scores within the respective range of BOTH of the following tests: Accuplacer Reading 30–58 AND Accuplacer Sentence Skills 30–52.) 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) | 3 |
| | | ENG 098W – Workshop for Non-Native English Speakers 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) | 1 |
| | | ENG 099 – Practical Writing (Prerequisite: ENG 098 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 49). | 3 |
| | | ENG 099W – Workshop for Non-Native English Speakers 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) | 1 |

Course Subject Code/Course number – Course Name**Credit Hours****ENG 100 – Essay Writing***(Prerequisite: ENG 099 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 49).***3****ENG 100W – Workshop for Non-Native English Speakers**

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)***1****ENG – English Courses** *(Communication, Humanities & Social Sciences Division)***ENG 101 – College Writing***(Prerequisite: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, RDG 100 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 49).***3****ENG 102 – Analytic and Argumentative Writing***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent)*

Emphasizes analytic and argumentative writing with readings and research in exposition and literature.

3**ENG 119 – Technical Communications***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent)*

Introduces study of written and verbal communication in business and industry.

3**ENG 150 – Study of Literature***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Introduces the academic study of literature.

3**ENG 206 D,F,S,W – Popular Literature***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Analyzes a popular literary form. S: Espionage Fiction; D: Detective Novel; F: Science Fiction; W: Western.

3**ENG 210 – Film as Literature***(Prerequisite: ENG 101 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.

3**ENG 211 – Topics in Literature***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Presents various topics. See **Schedule of Classes**.

3**ENG 212 – Topics in Language and Writing***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Presents various topics. See **Schedule of Classes**.

3**Course Subject Code/Course number – Course Name****Credit Hours****ENG 213 D, F, H – Film Genres***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Surveys film genres or national cinemas. D: Comedy; F: Film Noir; H: Hitchcock/Kubrick.

3**ENG 219 – Technical Writing***(Prerequisite: ENG 102)*

Emphasizes writing in industry, research laboratories, business and other professional settings.

3**ENG 220 – Expository Writing***(Prerequisite: ENG 102)*

Focuses on advanced composition, concentrating on critical reading of prose, writing expository and argumentative essays.

3**ENG 221 – Creative Writing: Fiction***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Introduces fiction writing as a creative process.

3**ENG 222 – Creative Writing: Poetry***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Introduces poetry writing as a creative process.

3**ENG 240 – Traditional Grammar***(Recommended prerequisite: C or better in ENG 101)*

Surveys traditional grammar, introducing linguistic terminology and methods for identifying and understanding parts of speech, parts of sentences and basic sentence patterns.

3**ENG 250 – Analysis of Literature***(Prerequisite: ENG 102 or equivalent)*

Emphasizes methods of literary analysis and critical writing applied to literary techniques, conventions and themes.

3**ENG 251 – Introduction to Dramatic Literature***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Introduces structure and nature of drama as a literary form: Greek, Renaissance, Enlightenment and Modern eras.

3**ENG 252 – Introduction to Shakespeare***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Introduces study of Shakespeare's work: sonnets, tragedies, comedies and histories. *Fall only*.

3**ENG 262 – Survey of Earlier World Literature***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Surveys poetry, fiction and drama from primarily non-English cultures: ca. 1500 B.C.–A.D. 1650.

3**ENG 263 – Survey of Later World Literature***(Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor)*

Surveys poetry, fiction and drama from primarily non-English cultures: ca. 1650 to present. *Spring only*.

3

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| ENG 270 – Modern Literature (Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor) Surveys American and European literature of the 20th century. | 3 |
| ENG 282 – Modern Latin American Literature (Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor) Emphasizes chronicles, diaries, drama, poetry, essays and fiction of Latin America from late 19th century to the present. | 3 |
| ENG 290 – Introduction to Professional Writing (Prerequisite: ENG 219) 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 294 – Survey of Earlier English Literature (Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor) Surveys British literature from Old English to 1798. Fall only. | 3 |
| ENG 295 – Survey of Later English Literature (Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor) Surveys English literature from the late 18th century to the present. Spring only. | 3 |
| ENG 297 – Earlier American Literature (Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor) Introduces short stories, poetry, drama and nonfiction from colonial U.S. to 1865. | 3 |
| ENG 298 – Later American Literature (Prerequisite: ENG 101 or Accuplacer Sentence Skills score of 110 or equivalent, or permission of instructor) Continues study of American literature begun in ENG 297. Focuses on short stories, poetry, drama, the novel and nonfiction from 1865 to the present. | 3 |
| ENGR – Engineering (Math, Science & Engineering Division) | |
| ENGR 101 – Survey of Engineering Fields (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent and MATH 120 or Accuplacer College Level Math score of 60 or equivalent.) Introduces the engineering design process and exploration of careers in engineering. | 1 |
| ENGR 202 – Engineering Statics (Prerequisites: PHYS 160/160L and MATH 163) 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 203 – Circuit Analysis (Prerequisites: CSCI 151; Pre or corequisites: PHYS 161/161L and MATH 285) Through lecture and laboratory experience, this course introduces the following concepts: basic elements and sources, energy and power, Ohm's law and Kirchoff's law, resistive networks, node and loop analysis, sinusoidal sources and complex representations and three phase circuits. | 4 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| ENTR – Entrepreneurship Courses (Business & Information Technology Division) | |
| ENTR 101A – Entrepreneurship IA (Prerequisite: RDG 099 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. Distance Learning option available (see page 49). | 3 |
| ENTR 101B – Entrepreneurship IB (Prerequisite: ENTR 101A) Continues ENTR 101A. Students use the market research and feasibility assessment from ENTR 101A 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. Distance Learning option available (see page 49). | 3 |
| ENTR 101 – Entrepreneurship (Prerequisite: RDG 099 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. Distance Learning option available (see page 49). | 6 |
| ENTR 102 – Entrepreneurship in a Global Setting (Prerequisite: RDG 099 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 49). | 3 |
| ENTR 104 – Introduction to Entrepreneurship (Prerequisite: RDG 100 or Accuplacer Reading Score of 80 or equivalent, ENG 100 or Accuplacer sentence skills score of 85 or equivalent, or division approval) 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. | 3 |
| EPT – Environmental Safety & Health Courses (Health, Wellness & Public Safety Division) | |
| EPT 111L – Environmental Technology I (Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 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) | 3 |
| EPT 113A – Hazards and Protection Training Offers standard first aid and cardiopulmonary resuscitation with Red Cross certification. Also includes material sufficient to satisfy 8 hours of refresher training in accordance with 1910.120 requirements for hazardous materials site workers. (7.5 theory + 18.75 lab hours per term) | 1 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| EPT 113B – Hazards and Protection Training II (Prerequisite: EPT 113A or division approval) 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. (15 theory + 37.5 lab hours per term) | 2 |
| EPT 120A Occupational Safety for Construction 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. | 1 |
| EPT 120B Occupational Safety for Construction II 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 |
| EPT 121 Radiation Protection I (Pre-requisite: MATH 100A or division approval) 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 |
| EPT 122 Radiation Protection II (Prerequisite: EPT 121 or division approval) Develops concepts introduced in EPT 121 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 |
| EPT 123 Watershed Protection (Prerequisites: EPT 111L, EPT 132, or division approval) 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. Distance Learning option available (see page 49). | 3 |
| EPT 124 Air Quality Protection (Prerequisites: EPT 111L, EPT 132, MATH 119, or division approval) 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. Distance Learning option available (see page 49). | 3 |
| EPT 125 Water/Wastewater Math Presents methods to analyze and solve mathematical problems associated with water and waste water system operations, focusing on certification exam requirements | 3 |
| EPT 132 – Environmental Chemistry 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 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| EPT 171 – Introduction to Safety Management Presents behavioral and management techniques for safety in today's demanding workplace. Topics include planning, budgeting, communications, motivation and people skills. Distance Learning option available (see page 49). | 3 |
| EPT 173 – Water Quality Protection (Prerequisites: EPT 111L, CHEM 111/112L, 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) | 3 |
| EPT 174 – Basic Site Remediation Technology Emphasizes major remedial technologies for site cleanup under federal, state and local regulations. Presents physical, biological, chemical and thermal treatments in common use. | 3 |
| EPT 176 – Food Resources and the Environment 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. | 3 |
| EPT 214A – Occupational Safety 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. Distance Learning option available (see page 49). | 1 |
| EPT 214B – Occupational Safety II Covers lock-out/tag-out, material handling, hazardous communication (MSDS & labeling), machine guarding, welding/cutting/brazing, confined spaces, hearing conservation and general environmental controls. Distance Learning option available (see page 49). | 1 |
| EPT 214C – Occupational Safety III 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 214 A, B and C. Distance Learning option available (see page 49). | 1 |
| EPT 215 – Environmental Instrumentation and Analysis (Prerequisites: EPT 111L 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) | 3 |
| EPT 295 – Environmental Safety & Health Capstone Course (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 |
| EPT 296 – Special Topics (Prerequisite: division approval) Covers an in-depth study of problems and advanced techniques. | 1–6 |
| EPT 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem and studied while working with an instructor. | Variable |

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| EPT 299 – Cooperative Education (Prerequisite: division approval) Employs the student at an approved program-related work site and applies learned theory based on goals and objectives. | 3 |
| ESL – English as a Second Language (Division of Educational and Career Advancement) | |
| ESL 096 – Special Topics Presents various topics in English as a Second Language. See current Schedule of Classes . | 1-3 |
| ESL 296 – Special Topics Presents various topics in English as a Second Language. See current Schedule of Classes . | 1-3 |
| ETAP – Electrical Trades Apprenticeship (Applied Technologies Division) | |
| ETAP 198 – Electrical Trades Apprenticeship (Prerequisite: current full-time employment in the electrical trades industry or division approval) Requires 600–720 hours of related classroom instruction covering safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls. | 40 |
| FILM – Film Technician Training Courses (Applied Technologies Division) | |
| FILM 101 – Film Crew 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. (405 lab hours per term) Course fee: \$490 | 9 |
| FILM 102 – Film Crew II (Prerequisite: FILM 101 or division approval) This second-term course continues with the training initiated in the Film Crew 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. (405 lab hours per term) Course fee: \$490 | 9 |
| FILM 103 – Film Crew III (Prerequisite: FILM 102 or division approval) In the final term of the Film Technician training program, students will take on 100% of the duties necessary to produce professional quality film/television content. A significant time investment of approximately 100 hours outside of class will be required to participate in this course. (405 lab hours per term) Course fee: \$490 | 9 |
| FILM 296 – Special Topics (Prerequisite: division approval) Explores specialized areas of the movie industry. | 1-9 |
| FILM 297 – Special Problems (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. | 1-9 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| FILM 298 – Internship (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. | 1-9 |
| FILM 299 – Cooperative Education (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 paid. | 1-9 |
| FIN – Financial Services Courses (Business & Information Technology Division) | |
| FIN 101 – Principles of Banking Surveys major aspects of banking from the fundamentals of negotiable instruments to contemporary issues. [Previously offered as BANK 101] | 3 |
| FIN 102 – Financial Literacy Introduces students 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. | 3 |
| FIN 102A – Financial Literacy 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 |
| FIN 102B – Financial Literacy 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 102C – Financial Literacy 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 105 – Consumer Lending (Recommended prerequisite: FIN 101) Covers regulations governing credit practices, loan processing, cross-selling and collections. [Previously offered as BANK 105] | 3 |
| FIN 107 – Analyzing Financial Statements (Prerequisite: ACCT 101A) Introduces financial analysis and skills needed to assess a borrower’s ability to repay loans. [Previously offered as BANK 107] | 3 |
| FIN 109 – Bank Accounting (Recommended prerequisite: ACCT 101A) Describes accounting and reporting system specifically for commercial banks in the context of their special reporting requirements. [Previously offered as BANK 109] (5 weeks) | 1 |
| FIN 111 – Basics of Strategic Planning Focuses on budgeting and planning concepts on a personal level for eventual use in business situations. (5 weeks) | 1 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| FIN 115 – Commercial Lending (Recommended prerequisite: FIN 101) Covers technical side of commercial lending and important human relations skills. [Previously offered as BANK 115] | 3 |
| FIN 248 – Finance (Prerequisites: ACCT 101A, ACCT 101B, ACCT 111; recommended prerequisite: ACCT 102) Presents an overview of the major concepts of finance focusing on the financial system and investments. [Previously offered as BA 248] | 3 |
| FIN 249 – Fundamentals of Risk Management and Insurance Explores the business and personal exposures to risk and the concepts and methods of minimizing and insuring against those risks. [Previously offered as BA 249] | 3 |
| FIN 296 – Financial Services Topics Explores current topics in financial services. [Previously offered as BANK 296] | 1–3 |
| FIN 297 – Special Problems (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. [Previously offered as BANK 297] | Variable |
| FIN 298 – Internship (Prerequisites: ACCT 101B and FIN 101 and division approval) 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. [Previously offered as BANK 298] | 4 |
| FIN 299 – Cooperative Education (Prerequisites: ACCT 101B and FIN 101 and division approval) 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. [Previously offered as BANK 299] | 4 |

FITT – Fitness Courses (Health, Wellness & Public Safety Division)

| | |
|--|---|
| FITT 150 – 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 |
| FITT 151 – Body Sculpting 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 152 – Boxing Conditioning 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 153 – Candidate Physical Ability Test (CPAT) Preparation 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 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| FITT 154 Step/Circuit Combo 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. (3 lab hours per week = 45 lab hours per term.) | 1 |
| FITT 155 Step-Kick Combo Uses a combination of step-aerobics and cardio kickboxing training for individuals looking for a cross-training effect. No previous step experience is required. (3 lab hours per week = 45 lab hours per term.) | 1 |
| FITT 160 – Beginning Country Western Dance 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 170 – Physical Fitness 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 171 – Physical Fitness II (Prerequisite: FITT 170) Continuation of FITT 170. (45 lab hours per term) | 1 |
| FITT 172 – Fitness for Older Adults (Prerequisite: Physician release indicating student's ability to safely participate in moderate intensity physical activity is required.) 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 173 – Circuit Training Covers structured strength training and aerobics to provide a total body workout within a single format. (45 lab hours per term) | 1 |
| FITT 174 – Weight Training for Women 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 |
| FITT 175 – Beginning Step Aerobics 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 177 Fall Prevention Training for Older Adults (Prerequisite: Physician release indicating student's ability to safely participate in moderate intensity physical activity is required) 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. (3 lab hours per week = 45 lab hours per term.) | 1 |
| FITT 178 Fitness for Older Adults II (Prerequisite: Physician release indicating student's ability to safely participate in moderate intensity physical activity is required and FITT 172.) Continuation of FITT 172 and is designed specifically for individuals 50 years of age and older. (3 lab hours per week = 45 lab hours per term.) | 1 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|---|--------------|
| FITT 180 – Flexibility Training Increases and maintains joint range of motion as well as facilitates relaxation; includes abdominal training. (45 lab hours per term) | 1 | FITT 211 – The Business of Personal Fitness Training (Prerequisite: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent) 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 |
| FITT 181 – Fit Ball Training 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 225 – Applied Nutrition for Sport and Exercise (Prerequisites: FITT 209 and ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent) 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 182 – Fundamental of Fitness Yoga Introduces various techniques of fitness Yoga. Students are responsible for purchasing their own mats. (45 lab hours per term.) | 1 | FITT 277 – Kinesiology (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, Pre- or corequisite: FITT 209) 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 |
| FITT 183 – Fundamentals of Pilates-Style Mat Training 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 289 – Fitness Assessment and Exercise Prescription (Prerequisites: FITT 209, 277 and MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent) 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 184 Fitness Yoga (Prerequisite: FITT 182) Continuation of FITT 182: Fundamentals of Fitness Yoga. Students are responsible for purchasing their own mat. (3 lab hours per week = 45 lab hours per term.) | 1 | FITT 290 – Exercise Prescription for Special Populations (Pre- or corequisite: FITT 289) 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 185 Pilates-Style Mat Training (Prerequisite: FITT 183) Continuation of FITT 183: Fundamentals of Pilates-Style Mat Training. Students are responsible for purchasing their own mat. (3 lab hours per week = 45 lab hours per term.) | 1 | FITT 296 – Special Topics (Prerequisite: division approval) Covers fitness problems and the advanced techniques that fitness professional's use in responding to them. | 1–6 |
| FITT 186 Pilates-Style Mat Training and Fitness Yoga Combo Introduction to the various techniques of Pilates-style mat training and fitness Yoga. Students are responsible for purchasing their own mat. (3 lab hours per week = 45 lab hours per term.) | 1 | FITT 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem while working with an instructor. | Variable |
| FITT 187 Gentle Fitness Yoga 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. (3 lab hours per week = 45 lab hours per term.) | 1 | FITT 298 – Fitness Technician Field Experience (Prerequisite: division approval) Provides students with a supervised field experience in a fitness setting. (112.5 hours per term) | 3 |
| FITT 190 – Ultimate Frisbee 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 299 – Cooperative Education 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 199 – Sport Safety Training 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. (15 theory hours per term) | 1 | | |
| FITT 201 – Group Exercise Leadership Preparation (Prerequisite: Participation in 100 level group exercise course) Offers theoretical and practical skills and experience in guiding groups to safely participate in exercise classes. Will help prepare students for national certification exams in various fields of group exercise. (45 lab hours per term) | 1 | | |
| FITT 209 – Foundations of Exercise Science (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, BIO 136/139L) 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 | | |
| FREN – French Courses (Communication, Humanities & Social Sciences Division) | | | |
| | | FREN 101 – Beginning French I Introduces development of French language skills emphasizing listening, comprehension and speaking. | 4 |
| | | FREN 102 – Beginning French II (Prerequisite: FREN 101 or permission of instructor) Continues course of study begun in FREN 101. | 4 |

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**

FREN 201 – Intermediate French 4
(Prerequisite: FREN 102 or permission of instructor)
 Emphasizes enhancement of skills from FREN 102 and further knowledge of the language and culture of France.

FREN 202 – Intermediate French II 4
(Prerequisite: FREN 201 or permission of instructor)
 Continues course of study begun in FREN 201.

FREN 296 – Topics in French 3
(Prerequisite: varies)
 Presents various topics. See **Schedule of Classes**.

FS – Fire Science Courses *(Health, Wellness & Public Safety Division)*

FS 103 – Introduction to Fire Science 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval)
 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.
Distance Learning option available (see page 49).

FS 104 – Wild Land Firefighting 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Elementary Algebra Accuplacer score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval.)
 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.

FS 112 – Building Construction 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval)
 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.
Distance Learning option available (see page 49).

FS 201 – Fire Protection Systems 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval)
 Presents an in-depth study of fire protection system design and operation. Discusses a variety of fire suppression and detection systems.

FS 202 – Managing Community Fire Protection 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent or program director approval)
 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.
Distance Learning option available (see page 49).

Course Subject Code/Course number – Course Name**Credit Hours**

FS 203A Hazardous Materials I 1
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, RDG 100 or Accuplacer score of 80 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, ENG 100 or Accuplacer sentence skills score of 85 or division approval)
 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 certification.

FS 203B Hazardous Materials II 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, RDG 100 or Accuplacer score of 80 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, ENG 100 or Accuplacer Sentence Skills score of 85 or division approval) (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.

FS 205 Public Safety Response to Terrorism 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval)
 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

FS 212 – Fire Investigation 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval)
 Focuses on investigative techniques to determine fire cause and origin for structural, vehicle, wildland and hazardous materials fires as well as explosions.

FS 213 – Industrial Fire Protection 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval)
 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.

FS 214 – Facilities Inspection 3
(Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval)
 Emphasizes inspections conforming to NFPA 101: Life Safety Code and applicable NFPA fire codes. Covers general and occupancy-specific requirements.

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| FS 220 – Fire Protection Hydraulics and Water Supply (Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval) 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 222 – Fire Behavior and Combustion (Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval) Explores the theories and fundamentals of how and why fires start, spread and how they are controlled. | 3 |
| FS 224A – Command Strategy and Tactics I (Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval) 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 224B – Command Strategy and Tactics II (Prerequisites: ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, RDG 100 or Accuplacer Reading score of 80 or equivalent, or division approval) Includes structural fire fighting operations, urban search and rescue, aircraft emergencies and firefighter safety. | 1 |
| FS 224C – Command Strategy and Tactics III (Prerequisites: RDG 099 or equivalent, MATH 099 or equivalent or division approval) Covers specific incident management techniques including basic fireground operations involving high occupancy use and mass casualty incidents. | 1 |
| FS 295 – Fire Science Capstone Course (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 |
| FS 296 – Special Topics (Prerequisite: division approval) Presents current topics in fire protection and emergency services. | 1–6 |
| FS 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem working with an instructor. | Variable |
| FS 298 – Fire Service Internship (Prerequisite: division approval) Provides opportunity for the student to work as a volunteer in an appropriate fire division. Position is not paid. | 3 |
| FS 299 – Cooperative Education Employs students at an approved program-related worksite and applies learned theory based upon goals/objectives of the Fire Science program. | 3 |

FSMG – Food Service Management Courses (Business & Information Technology Division)

See *CULN Courses* on page 302

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| GEOG – Geography Courses (Communication, Humanities & Social Sciences Division) | |
| GEOG 101 – Physical Geography (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) 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 |
| GEOG 102 – Human Geography (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) 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 |
| GEOG 201 – World Regional Geography (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Combines elements of GEOG 101 and 102 to study the global inter-relationships of the physical environment and cultural characteristics, including ethnicity, population and development, on a regional basis. | 3 |
| GEOG 275 – Cartography (Prerequisite: GEOG 101 or 102) 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 |
| GEOG 296 – Topics in Geography (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Presents various topics. See Schedule of Classes . | 3 |
| GIS – Geographic Information Systems Courses (Applied Technologies Division) | |
| GIS 110 – Intro to Geographic Information Systems Theory (Corequisite: GIS 110L) Introduces the concepts of Geographic Information Systems including applications, components, mapping, topology, data and data capture. [Previously offered as GIS 101] | 2 |
| GIS 110L – Intro to Geographic Information Systems Lab (Corequisite: GIS 110) Compliments the GIS 110 course by providing lab exercises, which clearly demonstrates a number of the typical uses for a commonly available GIS software application package. Emphasis is placed on understanding the types of general software knowledge that will allow cross over to any number of packages that are currently being used in the field. [Previously offered as GIS 101L] | 1 |
| GIS 123 – CAD for GIS/Surveying (Prerequisites: ARDR 180. Pre- or corequisite: CM 261L) Computer-aided drafting for civil engineering, surveying and land development to: create and edit point data, parcel area computations and boundary information. | 3 |
| GIS 202 – Geographic Information Systems Software Applications I (Prerequisite: GIS 101, GIS 110L, CP213) Builds upon concepts introduced in GIS 110, covering 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 |

Course Subject Code/Course number – Course Name **Credit Hours****GIS 203 – Geographic Information Systems Software Applications II** **3***(Prerequisite: GIS 202, programming language or permission of the program chair)*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)***GIS 207 – Remote Sensing** **3***(Prerequisite: GIS 110, GIS 110L. Pre- or corequisite: ARDR 180, CM 261L, MATH 123)*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 and GPS. *(30 theory +45 lab hours per term)***GIS 220L – Intro to 3D Computer Visualization Techniques** **3***(Prerequisite: GIS 110, GIS 110L or division permission)*Uses currently accepted computer visualization software in related fields of study to give the student a broad base from which to create effective presentation materials strongly influenced by GIS applications. Additional lab hours outside the regular class time are required. *(30 theory +45 lab hours per term)***GIS 296 – Topics** **1–6***(Prerequisite: permission of program chair)*

Topics vary based on the requests from the community and available software, hardware and instructors.

GIS 297 – Special Problems **1–6***(Prerequisite: permission of program chair)*

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.

GIS 298 – Internship **3***(Prerequisite: permission of program chair)*

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.

GIS 299 – Cooperative Education **3***(Prerequisite: permission of program chair)*

Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. The position is paid.

GNED – General Education Courses *(Division of Educational & Career Advancement)***GNED 196 – Prior Learning Assessment Portfolio** **3**

Prepares a portfolio, which describes and documents college-level learning acquired through life and work experience. Portfolio can then be submitted to appropriate division(s) for evaluation to determine the amount of credit to be awarded. Based upon the learning documentation provided in the portfolio, students may be awarded up to 30 credits.

GNHN – General Honors Courses *(Communication, Humanities & Social Sciences Division)***GNHN 121A – General Honors: The Ancient Legacy** **3***(Prerequisites: See page 42 for details; permission of instructor)*

Introduces analysis of classic texts of the Greek, Hebrew, Roman and Christian traditions: ideas about virtue, knowledge, politics, religious faith and education.

Course Subject Code/Course number – Course Name **Credit Hours****GNHN 121M – General Honors: The Modern Legacy** **3***(Prerequisites: See page 42 for details; permission of instructor)*

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.

GNHN 221 – Topics in General Honors **3***(Prerequisites: See page 42 for details; permission of instructor)*Presents various topics. See **Schedule of Classes**.**GTAP – General Trades Apprenticeship** *(Applied Technologies Division)***GTAP 198 – General Trades Apprenticeship** **40–50***(Prerequisite: current full-time employment in the general trades industry or division approval)*

Consists of 600–750 hours of classroom instruction covering safety, shop math, code, blueprint reading and other related instruction.

HIST – History Courses *(Communication, Humanities & Social Sciences Division)***HIST 101 – Western Civilization I** **3***(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110)*

Emphasizes events, personalities, issues, rises and falls, covering ancient times through 1648.

HIST 102 – Western Civilization II **3***(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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 161 – History of the United States I **3***(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110)*

Surveys economic, political, intellectual and social development of the U.S. from 1492 to 1877.

HIST 162 – History of the United States II **3***(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110)*

Continues study begun in HIST 161, covering 1865 to the present.

HIST 230 – Twentieth-Century Russia **3***(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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 240 – Vietnam: War, Politics and Culture **3***(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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.

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| HIST 260 – History of New Mexico (Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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. | 3 |
| HIST 270 – The American West (Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 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. | 3 |
| HIST 282 – Modern Latin American History (Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110) Introduces Latin American history from the beginning of the revolutionary period in 1810 to the present. | 3 |
| HIST 296 – Topics in History (Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101 or Accuplacer Sentence Skills score of 110) Presents various topics. See Schedule of Classes . | 3 |

HIT – Health Information Technology Courses (Business & Information Technology Division)

| | |
|---|---|
| HIT 101 – Introduction to Health Information Technology (Prerequisite: RDG 099 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 healthcare 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. <i>Distance Learning option available (see page 49).</i> | 1 |
| HIT 110 – Medical Terminology and Anatomy (Prerequisite: RDG 099 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. [Previously offered as CR 132] <i>Distance Learning option available (see page 49).</i> | 3 |
| HIT 120 – Health Data Content and Structure (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent and ENG 100 or Accuplacer Sentence Skills score of 85 or equivalent, Pre- or corequisite: HIT 101 or division approval) Presents an overview of healthcare delivery and examines the role of various providers and disciplines throughout the continuum of healthcare 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. <i>Distance Learning option available (see page 49).</i> | 4 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| HIT 130 – Principles of Diseases (Prerequisites: BIO 136/139L and HIT 110 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. <i>Distance Learning option available (see page 49).</i> | 3 |
| HIT 140 – Health Information Management Systems (Prerequisites: IT 101, CIS 151 and 156 and HIT 120 or division approval) Provides an introduction to the use of information technology in the healthcare 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. SoftMed applications are demonstrated for HIM-division specific applications and students have access to practice throughout the term. A database is used for the performance of HIPAA-related healthcare 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) | 3 |
| HIT 150 – Legal/Ethical Aspects of Health Information (Prerequisites: HIT 120 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. <i>Distance Learning option available (see page 49).</i> | 3 |
| HIT 160 – Pharmacology and Laboratory Procedures (Prerequisites: BIO 136/139L and HIT 110 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. | 2 |
| HIT 200 – Classification of Diseases I (ICD – CM) (Prerequisites: BIO 136/139L and HIT 110 and 120 and 130 and 160 or division approval) (FOR MEDICAL CODING STUDENTS, pre- or corequisites: HIT 130 and 160) 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) | 3 |
| HIT 210 – CPT Coding (Prerequisites: HIT 215 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 payor 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) | 3 |

HIT 215 – Classification of Diseases II **3**

(Prerequisites: HIT 200 and 120 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). (30 theory + 45 lab hours per term)

HIT 220 – Professional Practice Experience I **1**

(Prerequisite: HIT 120; Pre- or corequisite: HIT 140 and 150 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 division may contact the program director regarding the process to waive 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 230A – Reimbursement Methodologies **2**

(Prerequisites: IT 101 and HIT 120 and 200; Pre- or corequisite: HIT 210 or division approval)

This course concentrates on current processes and support practices for healthcare 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 and apply DRGs, APCs, ACSs and RBRVS (prospective payment systems) and calculate case-mix. Reimbursement methods, the concept of managed care, various payment systems, fee schedules, chargemaster description master and fraud and abuse are emphasized.

Distance Learning option available (see page 49).

HIT 240 – Health Information Data Analysis **3**

(Prerequisites: IT 101 and HIT 120 and 140 and 220 or division approval; MATH 119 recommended)

Focuses on healthcare statistics and research and the practical application of health information concepts as they apply to health record systems and the healthcare industry. Institutional Review Board polices and processes, collection and retrieval and computation of hospital statistical data are covered as well as vital statistics and reportable diseases and conditions.

HIT 245 – Coding Applications **2**

(Prerequisites: HIT 120 and 215 and 210 and 230A 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 246 – Coding Professional Practice Experience I **2**

(Prerequisites: HIT 120 and 215 and 210 and 230A 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 246A – Coding Professional Practice Experience II **2**

(Prerequisite: HIT 246 and division approval)

Builds on experiences attained in HIT 246. This is an unpaid work experience of a minimum of 80 hours.

HIT 250 – Health Information Supervision **3**

(Prerequisites: HIT 120 and 140 and 220 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 49).

HIT 260 – Professional Practice Experience II **2**

(Pre- or corequisites: HIT 210 and 230A and 250 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 295 – Health Information Technology Seminar **1**

(Prerequisite: Candidate for graduation and division approval; Pre- or corequisite: HIT 260)

Focuses on reflection of clinical experiences, AHIMA exam preparation and current topics in healthcare.

HIT 296 – Special Topics **1–3**

Explores current topics in Health Information Technology.

HIT 297 – Special Problems **Variable**

(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.

HLTH – Health Courses *(Division of Educational & Career Advancement)*

HLTH 100 – Introduction to Health Occupations **3**

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 102 – Clinical Preparation **1**

Designed to prepare Health Occupation 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: \$10

HT – Hospitality and Tourism Courses *(Business & Information Technology Division)*

HT 101 – Introduction to Hospitality and Tourism Today **3**

(Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent)

Presents organization and structure of hotels, restaurants and clubs, business ethics, franchising, management contracts and areas of management responsibility. Course equivalency EI 103.

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|---|--------------|
| HT 102 – The Lodging and Food Service Industry (Prerequisite: RDG 099 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. Course equivalency EI 100. <i>Distance Learning option available (see page 49).</i> | 3 | HT 144 – Hospitality Sales and Marketing (Prerequisite: HT 102 or division approval) 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. Course equivalency EI 472. | 3 |
| HT 104 – Tourism and the Hospitality Industry (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent) Focuses on how and why people travel, how travel acts to satisfy needs and wants and how marketing efforts can influence travel decisions. Course equivalency EI 321. | 3 | HT 146 – Convention Management and Service (Prerequisite: HT 102 or 104 or division approval) Focuses on convention and group business markets. Marketing and sales strategies and techniques are presented. Course equivalency EI 478. | 3 |
| HT 106 – Front Office Procedures (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent) 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. Course equivalency EI 333. (45 theory + 15 lab hours per term) | 3 | HT 161 – Hotel/Motel Food and Beverage Management (Prerequisite: HT 102 or division approval) Covers the challenges and responsibilities involved in managing a food and beverage operation. Course equivalency EI 241. | 3 |
| HT 108 – Hospitality Supervision (Prerequisite: HT 102 or division approval) Focuses on managing people from a supervisor viewpoint, controlling labor costs, time management, increasing productivity and managing change. Course equivalency EI 250. <i>Distance Learning option available (see page 49).</i> | 3 | HT 164 – Food and Beverage Service (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) 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. Course equivalency EI 349. <i>Distance Learning option available (see page 49).</i> | 3 |
| HT 124 – Leadership and Management in the Hospitality Industry (Prerequisite: HT 102 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. Course equivalency EI 303. | 3 | HT 166 – Quality Sanitation Management (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent) Covers sanitation management and risk reduction techniques. Quality sanitation and cost-control techniques, compliance strategies and sanitation control points are emphasized. Course equivalency EI 244. | 3 |
| HT 128 – Hotel/Motel Housekeeping Management (Prerequisite: HT 102 or division approval) Covers the systematic approach to managing housekeeping operations in the hospitality industry. Course equivalency EI 338. | 3 | HT 168 – Food and Beverage Controls (Prerequisite: HT 102 or division approval) 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. Course equivalency EI 464. | 3 |
| HT 131 – Club Management (Prerequisite: HT 102 or division approval) Introduces club management. Topics include club boards of directors, service excellence, leadership, strategic management, club marketing, food and beverage operations, financial and computer systems. Course equivalency EI 313 | 3 | HT 172 – Hospitality Purchasing Management (Prerequisite: HT 102 or division approval) Focuses on the development and implementation of an effective purchasing program involving issues such as supplier relations, supplier selection, negotiation and evaluation. Course equivalency EI 446. <i>Distance Learning option available (see page 49).</i> | 3 |
| HT 132 – Hotel/Motel Human Resources Management (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval) Presents a systematic approach to human resources management in the hospitality industry and analyzes contemporary issues, practices and trends within the hospitality industry. Course equivalency EI 357. <i>Distance Learning option available (see page 49).</i> | 3 | HT 201 – Financial Accounting for the Hospitality Industry (Prerequisite: ACCT 101A or AA 112 or division approval) 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. Course equivalency EI 260. | 3 |
| HT 136 – Hospitality Industry Training (Prerequisite: HT 102 or 104 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. Course equivalency EI 354. | 3 | HT 206 – Hospitality Industry Computer Systems (Prerequisite: IT 101 and HT 102 or division approval) 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. Course equivalency EI 468. (45 theory + 15 lab hours per term) | 3 |
| HT 141 – Marketing of Hospitality Services (Prerequisite: HT 102 or division approval) Employs concepts to develop, implement and evaluate a marketing plan to identify and reach prospective customers using marketing tactics specific to hospitality services. Course equivalency EI 370. <i>Distance Learning option available (see page 49).</i> | 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****HT 221 – Hospitality Law** **3***(Prerequisite: HT 102 and 132 or division approval)*

Focuses on the various legal considerations facing the tourism and hospitality industry. Topics include contractual obligations, torts, labor law, ADA and privacy issues.

Course equivalency EI 391. *Offered fall term only.***HT 253 – Gaming Operations and Management** **3***(Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent 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 254 – Gaming Controls **3***(Prerequisite: RDG 099 or Accuplacer Reading Score of 69 or equivalent 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 295 – Managerial Decisions in the Hospitality Industry **3***(Prerequisite: HT 104 and 108 and 132 and 141 or 144 or division approval)*

Focuses on communication, resourcefulness, professionalism, industry knowledge and decision making. Students will be encouraged to make managerial judgments based on case study work. Assessment is primarily based on the steps taken to reach decisions.

HT 296 – Topics Course **1–3**

Covers current topics in hospitality and tourism.

HT 297 – Special Problems **Variable***(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.

HT 298 – Internship **4***(Prerequisite: division approval)*

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.

HUC – Health Unit Coordinator Courses *(Health, Wellness & Public Safety Division)***HUC 101L – Health Unit Coordinator Theory and Lab** **8***(Prerequisites: IT 100 or program director approval, RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, Corequisite: HUC 131C)*

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 131C – Health Unit Coordinator Clinical Practice **3***(Corequisite: HUC 101L)*

Includes clinical experience in local hospitals and hospital out-patient clinics. (5 weeks; 135 clinical hours per term) Program fee: \$37

HUC 296 – Topics in Health Unit Coordinator **1–6**

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 111 – Early World Civilizations** **3***(Prerequisite: RDG 100 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 121 – Modern World Civilizations **3***(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*

Continues course of study begun in HUM 111: history, art, literature, music and ideas of world civilizations from the Renaissance to present.

HUM 247 – Topics in Humanities **3***(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)*Presents various topics. See **Schedule of Classes**.**IB – International Business Courses** *(Business & Information Technology Division)***IB 101 – Introduction to International Business** **3***(Prerequisite: RDG 099 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 49).***IB 201 – International Marketing** **3***(Prerequisite: RDG 099 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 49).***IB 202 – International Management** **3***(Prerequisite: RDG 099 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 49).***IB 203A – Alternative Sources of Financing** **1***(Prerequisite: ACCT 101A 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 203B – Financing and Import/Export Business **1***(Prerequisite: ACCT 101A 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 205A – Basics of Importing **1***(IB 101 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.

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| IB 205B – Basics of Exporting (IB 101 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. | 1 |
| IB 296 – Topics Concentrates on current topics in international business. <i>Distance Learning option available (see page 49).</i> | 1–3 |
| IB 297 – Special Problems (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. | Variable |
| IMAP – Industrial Plant Maintenance Apprenticeship (Applied Technologies Division) | |
| IMAP 198 – Industrial Plant Maintenance Apprenticeship (Prerequisite: current full-time employment in the industrial plant maintenance field or division approval) Consists of 450-750 hours of classroom instruction covering safety; industrial rules, policies and regulations; maintaining equipment and preventive measures and troubleshooting. | 30-50 |
| IT – Information Systems Courses (Division of Educational & Career Advancement) | |
| IT 090 – Beginning Computer Basics Provides basic computer vocabulary, hands-on mouse skills and computer confidence for students with no computer experience. | 1 |
| IT 091 – Introductory Word Processing 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 | 1 |
| IT 092 – Introductory Operating Systems 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 | 1 |
| IT 093 – Introductory Email Provides opportunities to develop beginning electronic mail skills. Students will learn how to use CNM PassPort as well as other email systems. Recommended for entry-level students | 1 |
| IT 094 – Introductory Internet 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 | 1 |
| IT 095 – Software Topics 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. | 1 |
| IT 096 – Special Topics Presents various topics in computer science. | 1–3 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| IT 098 – Computer Basics (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. | 2 |
| IT 099 – Basic Keyboarding (Self-Paced) Emphasizes beginning keyboarding using the touch method. Recommended for entry-level students. | 2 |
| IT 100 – Basic Keyboarding/Computer Skills Emphasizes beginning keyboarding, computer concepts, internet skills, and basic word processing. Recommended for entry-level students. (45 theory + 15 lab hours per term) | 3 |
| IT – Information Systems Courses (Business & Information Technology Division) | |
| IT 101 – Introduction to Computers (Recommended prerequisite: IT 100) 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). <i>Distance Learning option available (see page 49).</i> | 3 |
| IT 102 – Introduction to Enterprise Architecture (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent and ENG 099 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. <i>Distance Learning option available (see page 49).</i> | 3 |
| IWAP – Iron Worker Apprenticeship (Applied Technologies Division) | |
| IWAP 198 – Iron Worker Apprenticeship (Prerequisite: current full-time employment in the iron worker industry or division approval) Provides 450 to 540 hours of related classroom instruction covering orientation, safety, shop and trade math, tools, equipment, supplies, blueprint reading, layout and code interpretation. | 30–36 |
| JOUR – Journalism Courses (Communication, Humanities & Social Sciences Division) | |
| JOUR 171 – Writing for the Media I (Prerequisite: ENG 101 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 news writing for print and broadcast media. | 3 |
| JOUR 271 – Writing for the Media II (Prerequisite: JOUR 171 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. | 3 |
| JOUR 296 – Topics in Journalism (Prerequisite: JOUR 171, ENG 101, or permission of instructor) Covers various topics related to the theory and practice of journalism. | 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**

JOUR 298 – Journalistic Practice **3**
(Prerequisite: JOUR 171 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. *[Previously offered as JOUR 253]*

JUD – Judicial Studies Courses *(Business & Information Technology Division)*

JUD 101 – Introduction to Judicial Studies **3**
(Prerequisites: ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval)
 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.
Distance Learning option available (see page 49).

JUD 102 – Introduction to Court Operations and Ethics **2**
(Prerequisites: ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent or division approval)
 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.
Distance Learning option available (see page 49).

JUD 296 – Topics Course **1–3**
(Prerequisite: division approval)
 Explores current topics in judicial studies.

JUD 297 – Special Problems **Variable**
(Prerequisite: division approval)
 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.

JUD 298 – Internship **4**
(Prerequisites: JUD 101 and JUD 102 or division approval)
 Requires students to work a minimum of 150 hours at court sites. CNM and the employer jointly supervise the student.

JUD 299 – Cooperative Education **4**
(Prerequisites: JUD 101 and JUD 102 or division approval)
 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.

LAND – Landscaping Courses *(Applied Technologies Division)*

LAND 101 – Plant Science **3**
(Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval)
 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.

LAND 101L – Plant Science Lab **1**
 Introduces the fundamentals practices of horticulture. Covers plant collecting and identification, classification, growth and development, practical propagation and planting techniques.
(45 lab hours a term)

Course Subject Code/Course number – Course Name **Credit Hours**

LAND 102 – Soil Science **3**
(Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval)
 Introduces the student to soils and their various classifications, function and analysis. Covers soils biology, root zone interactions, nutrient cycling and safety.

LAND 102L – Soil Science Lab **1**
 Introduces the student to soil analysis techniques, practical nutrient management, basic field exercises, labs and field safety. *(45 lab hours a term)*

LAND 103 – Landscape Irrigation **3**
(Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval)
 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.

LAND 103L – Landscape Irrigation Lab **1**
 Introduces the student to the fundamentals of irrigation system assembly, maintenance and repair with an emphasis on water conservation and system auditing. *(45 lab hours a term)*

LAND 104 – Integrated Pest Management **3**
(Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval)
 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.

LAND 105 – Landscape Design **3**
(Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval)
 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.

LAND 296 – Special Topics **1–6**
 Covers problems and the advanced techniques that landscaping professionals use in responding to them.

LAND 297 – Special Problems **Variable**
(Prerequisite: division approval)
 Focuses on a specific problem while working with an instructor.

LAND 299 – Cooperative Education **3**
(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 155L – Refresher Theory/Lab **7**
 Covers medical-surgical and specialty-nursing trends, procedures and pharmacology. (6 weeks; 94 theory + 10 lab hours per term) *Program fee: \$25.*
Distance Learning option available (see page 49).

LPNR 165C – Refresher Clinical Experience **2**
(Prerequisite: must have had a valid LPN license, professional CPR certified; Pre- or corequisite: LPNR 155L)
 Includes medical-surgical clinical experiences, administration of medications and patient care. This course is offered for credit/no credit.
Distance Learning option available (see page 49).

MATH – Mathematics Courses *(Division of Educational & Career Advancement)*

| | |
|---|------------|
| MATH 092 – Math Anxiety | 1 |
| Offers students a chance to gain understanding of math anxiety and develop various techniques to modify related behaviors through the use of group discussion, journal entries and math study skills. | |
| MATH 094 – Introduction to Calculators | 1 |
| Prepares students in MATH 100 and below for calculator use in their classes and everyday life. | |
| MATH 096 – Special Topics | 1–3 |
| Presents various topics in developmental math. | |
| MATH 097 C or S* – Basic Mathematics | 3 |
| <i>(Prerequisite: Accuplacer Arithmetic score between 0–30 or equivalent)</i> | |
| Reviews whole numbers and decimals. Presents fractions, ratio and proportion and percents. Introduces basic geometry and measurement concepts. <i>(45 theory hours + 15 lab hours per term)</i> | |
| MATH 099 C, S or P* – Basic College Mathematics | 3 |
| <i>(Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent)</i> | |
| Integrates topics from basic mathematics, geometry and algebra. Helps prepare students to enter programs in Business Occupations, Technologies, Trades & Service Occupations, Health Occupations or MATH 100A. <i>(45 theory hours + 15 lab hours per term)</i> <i>Distance Learning option available (see page 49).</i> | |
| MATH 100A C or S* – Algebraic Problem Solving I | 3 |
| <i>(Prerequisite: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent)</i> | |
| Presents the first of a two-course series in elementary algebra. Includes signed numbers, solving linear equations, formulas and graphing. Satisfies prerequisite for MATH 100B, MATH 111 (MATH 100B is recommended) and MATH 119. <i>(45 theory hours + 15 lab hours per term)</i> <i>Distance Learning option available (see page 49).</i> | |
| MATH 100B C or S* – Algebraic Problem Solving II | 3 |
| <i>(Prerequisite: MATH 100A or equivalent)</i> | |
| Presents the second of a two-course series in elementary algebra. Includes exponents and polynomials, factoring and quadratics. Satisfies prerequisite for MATH 120. <i>(45 theory + 15 lab hours per term)</i> | |
| MATH 100 – Algebraic Problem Solving | 3 |
| <i>(Prerequisite: appropriate placement by exam [Accuplacer Elementary Algebra score of 72] or equivalent)</i> | |
| Covers same material as MATH 100A and MATH 100B at a faster pace. One-term course designed for students with demonstrated ability in basic algebra. Satisfies prerequisite for MATH 111, 119 and 120. <i>(45 theory hours + 15 lab hours per term)</i> | |

* **C– Collaborative:** A traditional/lecture style class that incorporates lecture, individual and group work and individual and group projects to cover course material.

S – Self-Paced: Students work at their own pace to move through the material required to complete the course. Self-paced courses are open entry/open exit.

P – Project-Based: This approach uses 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.

MATH – Mathematics Courses *(Math, Science & Engineering Division)*

| | |
|---|----------|
| MATH 111 – Mathematics for Elementary and Middle School Teachers I | 3 |
| <i>(Prerequisite: MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent)</i> | |
| Introduces the intuitive and logical background of arithmetic, sets, arithmetic algorithms, bases, integer properties, number theory and problem solving. | |
| MATH 112 – Mathematics for Elementary and Middle School Teachers II | 3 |
| <i>(Prerequisite: MATH 111)</i> | |
| Continues course of study begun in MATH 111, emphasizing properties of rational and irrational numbers, real numbers as fractions and decimals, intuitive geometry and measurement. | |
| MATH 119 – Methods of Problem Solving | 4 |
| <i>(Prerequisite: MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent)</i> | |
| Presents strategies for solving mathematical problems relying heavily on data patterns; sequences, set theory, combinatorics, probability, descriptive statistics, linear and quadratic modeling. | |
| MATH 120 – Intermediate Algebra | 4 |
| <i>(Prerequisite: MATH 100B or Accuplacer Elementary Algebra score of 81 or MATH 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. <i>Distance Learning option available (see page 49).</i> | |
| MATH 121 – College Algebra | 3 |
| <i>(Prerequisite: MATH 120 or Accuplacer College Math score of 60 or equivalent)</i> | |
| Focuses on functions and their graphs; investigation of linear, quadratic, polynomial, rational, exponential, and logarithmic functions. <i>Distance Learning option available (see page 49).</i> | |
| MATH 122 – College Algebra Workshop | 1 |
| <i>(Corequisite: MATH 121 and permission of instructor)</i> | |
| Provides opportunity to explore advanced topics and applications of college algebra through collaborative problem solving. | |
| MATH 123 – Trigonometry | 3 |
| <i>(Prerequisite: MATH 121 or 150)</i> | |
| 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 129 –A Survey of Mathematics | 3 |
| <i>(Prerequisite: MATH 119 or 120 or Accuplacer College Level Math score of 60 or equivalent)</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. | |
| MATH 145 – Introduction to Probability and Statistics | 3 |
| <i>(Prerequisite: MATH 119 or 120 or Accuplacer College Level Math score of 60 or equivalent)</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. | |

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

MATH 150* – Advanced Algebra **4**

(Prerequisite: MATH 121 or Accuplacer College Level Math score of 86 or equivalent)
Explores functions (particularly exponential and logarithmic), conics, sequences and series and systems of equations using graphing calculators.

MATH 162* – Calculus I **4**

(Prerequisites: MATH 123 and 150 or Accuplacer College Level Math score of 100 or equivalent)
Introduces derivatives and definite integrals using graphing calculators: differentiation, antidifferentiation, limits, extrema, curve sketching and applications.

MATH 163* – Calculus II **4**

(Prerequisite: MATH 162)
Continues course of study begun in MATH 162. Emphasizes use of graphing calculators to cover integration techniques, numerical integration, improper integrals, some differential equations, series and applications.

MATH 180* – Elements of Calculus I **3**

(Prerequisite: MATH 121 or 150 or Accuplacer College Level Math score of 86 or equivalent)
Emphasizes use of graphing calculators to study limits, derivatives, applications to graphing, extrema, antiderivatives, definite integrals in business and biological applications.

MATH 181* – Elements of Calculus II **3**

(Prerequisite: MATH 180)
Continues course of study begun in MATH 180. Presents intensive study of substitution, integration by parts, numerical integration; introduces multivariate calculus and some differential equations.

MATH 206 – Geometry for Design **3**

(Prerequisite: High-school Geometry, MATH 120)
Presents the mathematical basis of geometric practices used in structural and decorative design. Surveys the major historical approaches to geometric study: Euclidean, descriptive, transformational, combinatorial, ornamental. Aesthetic-technological connections in cultural context.

MATH 215 – Mathematics for Elementary and Middle School Teachers III **3**

(Prerequisite: MATH 112)
Continues course of study begun in MATH 112. Presents topics from later elementary and middle school curricula: probability, descriptive statistics, algebra, coordinate geometry, logic and LOGO software.

MATH 264* – Calculus III **4**

(Prerequisite: MATH 163)
Continues course of study begun in MATH 163, including multivariate and vector calculus: level curves and surfaces, partial derivatives, gradients, tangent planes, directional derivatives, multiple integrals, cylindrical and spherical coordinates, applications.

MATH 280: Applied Linear Algebra **3**

(Prerequisite: Math 163)
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.

MATH 285 – Applied Ordinary Differential Equations **3**

(Prerequisite: MATH 163; recommended: MATH 264)
Includes the elementary theory of ordinary differential equations, numerical methods, phase plane analysis, introduction to transform methods.

MATH 296 – Topics in Mathematics **3**

(Prerequisite: varies)
Presents various topics. See **Schedule of Classes**.

* Students are required to use graphing calculators in this class.

MATT – Machine Tool Technology Courses (Applied Technologies Division)

MATT 101 – Metals Math I **2**

(Prerequisites: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)
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 102 – Metals Blueprint Reading I **2**

(Prerequisites: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)
Covers the interpretation of basic manufacturing and fabrication drawings, terminology, orthographic projection, sectional views, dimensions, tolerances, symbols and drawing standards.

MATT 103L – Basic Lathe Principles **2**

(Prerequisites: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)
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)

MATT 104L – Basic Milling Machine Principles **2**

(Prerequisites: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)
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)

MATT 105L – Basic Supporting Machine Tool Principles **2**

(Prerequisites: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)
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)

MATT 108L – Basic Measurement and Inspection **2**

(Prerequisites: MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval)
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)

MATT 111 – Metals Math II **2**

(Prerequisite: MATT 101 or division approval)
Provides basic shop algebra, formulas, geometry and triangulation. Covers calculation of areas, volumes, material requirements, angles, applied trigonometry and advanced shop math applications.

MATT 113 – Metals Blueprint Reading II **2**

(Prerequisite: MATT 102 or division approval)
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.

MATT 117L – Intermediate Lathe Principles **2**

(Prerequisite: MATT 103L or division approval)
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)

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| MATT 120L – Intermediate Milling Machine Principles (Prerequisite: MATT 104L or division approval) 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 295 – Machine Tool Technology Capstone Course (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 |
| MATT 121L – Intermediate Supporting Machine Tool Principles (Prerequisite: MATT 105L or division approval) Presents concentrated training in safety, surface grinding, tool reconditioning, production support and advanced quality assurance methods. (75 lab hours per term) | 2 | MATT 296 – Special Topics (Prerequisite: division approval) 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 122L – Computer Numerical Control I (Prerequisites: MATT 101 and 102 or division approval) 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 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem while working with an instructor. | Variable |
| MEMS – Micro-Electro-Mechanical Systems Courses (Applied Technologies Division) | | | |
| MATT 173 – Machine Tool Technology Skills 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 | MEMS 101 – Introduction to MEMS 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. [Previously offered as PC 210] (30 theory + 45 lab hours per term) | 3 |
| MATT 174 – Advanced Machine Tool Technology Skills (Prerequisite: MATT 173 or division approval) Provides advanced instruction in safety, lathe, mill, blueprint reading and shop math. (15 theory + 75 lab hours per term) | 3 | MEMS 220 – MEMS Manufacturing Process (Prerequisites: MEMS 101, ELEC 104 or permission of director) 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 |
| MATT 202 – Metallurgy 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 | MEMS 221 – MEMS Design I (Prerequisites: MEMS 101, MEMS 220, ARDR 180 or equivalent or permission of director) Introduces MEMS design techniques and standards via MEMS CAD software. Students will design simple MEMS components using industrial and research MEMS software. (30 theory + 45 lab hours per term) | 3 |
| MATT 208L – Advanced Lathe Principles (Prerequisite: MATT 117L or division approval) 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 | MEMS 222 – MEMS Design II (Prerequisites: MEMS 221 or permission of director) 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. (30 theory + 45 lab hours per term) | 3 |
| MATT 214 – Machine Tool Technology CAD/CAM (Prerequisite: MATT 122L) 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 | MEMS 225 – MEMS Manufacturing Technology Theory (Prerequisites: SMT 204/204L or permission of director; Corequisite: MEMS 226) 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 |
| MATT 216L – Advanced Milling Machine Principles (Prerequisite: MATT 120L or division approval) 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 | MEMS 226L – MEMS Manufacturing Technology Lab (Prerequisites: SMT 204/204L or permission of director; Corequisite: MEMS 225) Provides lab course for MEMS 225. Laboratory exercises conducted in a clean room. Students meet twice per week. (90 lab hours per term) | 2 |
| MATT 217L – Advanced Supporting Machine Tool Principles (Prerequisite: MATT 121L or division approval) 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 218L – Computer Numerical Control II (Prerequisite: MATT 122L or division approval) Reviews programming, manuscript and tape preparation and editing. Presents various programming languages, subroutines and interactive graphic programming. (75 lab hours per term) | 2 | | |
| MLT – Medical Lab Technician Courses (Health, Wellness & Public Safety Division) | | | |
| | | MLT 101 – Introduction to Medical Laboratory Sciences 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. | 1 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| MLT 102 – Clinical Urinalysis (Pre- or Corequisite: : MLT 101, 102L, 104, 114/114C, 151C) Introduces principles and procedures of physical, chemical and microscopic analysis of urine. | 2 |
| MLT 102L – Clinical Urinalysis Laboratory (Pre- or Corequisite: MLT 101, 102, 114/114C, 151CL) Introduces basic medical laboratory techniques in urinalysis. It provides clinical experience in urinalysis in an affiliated medical laboratory. (45 lab hours per term) Program fee: \$25. | 1 |
| MLT 103L – Clinical Coagulation (Prerequisites: MLT 101, 102/102L, 104, 114/114C, 151C; Pre- or Corequisites: MLT 209/209L, 211/211L) Presents basic coagulation concepts with practice performing the procedures. Also introduces advanced principles and procedures performed in the coagulation laboratory. (45 lab hours per term) | 1 |
| MLT 104- Student Success Seminar (Corequisite: MLT 101/102L, 114/144C, 151C) Includes analysis of student learning needs, prepares students to read complex medical information and procedure manuals on subjects such as Immunohematology. Helps students to practice locating information on Hematology scatterplots and histograms and others. Prepares students for clinical rotations in a medical lab. | 1 |
| MLT 114 – Immunology (Prerequisite: BIO 123/124L or 121/121L, BIO 136/139L or BIO 237/247L and BIO 238/248L, BIO 239/239L, ENG 101 or ENG 102, CHEM 111/112L or CHEM 121/121L, CHEM 212, MATH 145 or higher except MATH 215 or 296, Humanities or Social Science elective; Pre or corequisites: MLT 101, 102/102L, 104, 114C 151C) Teaches the basics of the body's immune response and introduction to diseases involving deficiencies in the immune system. | 1 |
| MLT 114C – Clinical Immunology (Pre- or corequisites: MLT 101, 104, 114, 102/102L, 151C) Provides experience in serological testing on specimens from hospital patients using current methodologies. (45 clinical hours per term). | 1 |
| MLT 151C – Clinical Experience Phlebotomy (Pre or corequisites: MLT 101, 102/102L, 104, 114/114C) 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. (135 clinical hours per term) | 3 |
| MLT 205C – Clinical Experience 1 (Prerequisites: MLT 102/102L, 103L, 104, 114/114C, 151C, 206/206C, 207/207L, 209/209L, 211/211L) 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: \$35 | 2 |
| MLT 206 – MLT Microbiology (Prerequisites: MLT 103L, 209/209L, 211/211L; Pre or corequisites: MLT 206C, 207/207L) 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 206C – Clinical MLT Microbiology (Prerequisites: MLT, 103L, 209/209L, 211/211L; Pre or corequisites: MLT 206,207/207L) Identifies the microorganisms of clinical significance from specimens obtained from patients. Students utilize current methodologies and identification techniques. (135 clinical hours per term). | 3 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|
| MLT 207 – Clinical Chemistry (Prerequisite: MLT103L, 209/209L, 211/211L; Pre or corequisites: MLT 206/206C, 207L) Presents the principles and methods used in testing for chemical components in blood and other body fluids including basic instrumentation. | 3 |
| MLT 207L – Clinical Chemistry Laboratory (Prerequisite: MLT103L, 209/209L, 211/211L; Pre or corequisites: MLT 206/206C, 207) Presents experiences for performing the basic procedures used in a clinical chemistry laboratory including basic chemistry instrumentation. (45 lab hours per term). | 1 |
| MLT 209 – Clinical Hematology (Prerequisites: MLT 102/102L, 104, 114/114C, 151C ; Pre- or corequisites: MLT 103L, 209L, 211/211L) Teaches normal and abnormal blood cell morphology and the principles of routine procedures in a hematology laboratory. | 3 |
| MLT 209L – Clinical Hematology Laboratory (Prerequisites: MLT 102/102L, 104, 114/114C, 151C; Pre or corequisites: MLT103L, 209, 211/211L) 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 211 – Clinical Immunohematology (Prerequisite: MLT 102/102L, 104, 114/114C, 151C; Pre or corequisite: MLT 103L, 209/209L, 211L) Examines the theory principles for determining blood group typing, antibody detection and identification, cross matching and component therapy. | 2 |
| MLT 211L – Clinical Immunohematology Laboratory (Prerequisites: MLT 102/102L, 104,114/114C, 151C; Pre or corequisites: MLT103, 209/209L, 211) Provides experience in clinical blood bank. (90 lab hours per term) | 2 |
| MLT 296/296A – Topics in Laboratory Medicine (Prerequisites: may vary) Presents various topics in laboratory medicine. | 1–4 |

MSL – Military Science & Leadership Courses (Army ROTC) (Communication, Humanities & Social Sciences)
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)
Anna V. Lucero, Lt. Col., U.S. Army
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.

| | |
|---|---|
| MSL 101 – Foundations of Officership Introduces students to issues and competencies that are central to a commissioned officer's responsibilities. These initial lessons establish a framework for understanding officership, leadership and Army Values. Additionally, the semester addresses "life skills" including fitness and time management. | 1 |
| MSL 101L – Foundations of Officership Lab (Corequisite: MSL 101) Training on basic soldier tasks and skills, 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 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|---|--------------|
| MSL 102 – Basic Leadership Focuses on learning and applying leadership, as well as relating organizational ethics to effective leadership using communication skills to improve individual performance. | 1 | MT 290 – Materials Science I (Prerequisites: CHEM 121/121L) 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) | 3 |
| MSL 102L – Basic Leadership Lab I (Corequisite: MSL 102) Continuation of MSL 101L. | 1 | MT 291 – Materials Science II (Prerequisites: MT 290) 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) | 3 |
| MSL 201 – Individual Leadership Studies Explores leadership by learning how to influence, how to communicate, how and when to make decisions, how to engage in creative problem solving and how to plan and organize. Additionally, this course focuses on building character. | 2 | MT 296 – Topics (Prerequisite: advanced manufacturing student) The topics depend on the requests of the community. | 2-6 |
| MSL 201L – Individual Leadership Studies Lab (Corequisite: MSL 201) Builds on the topics covered in MSL 101L and MSL 102L. Further in-depth training on basic soldier tasks and skills, 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 | MT 297 – Special Problems (Prerequisite: advanced manufacturing student) Allows the student to investigate and solve a problem. The student designs the solution using a combination of manufacturing techniques. | 2-6 |
| MSL 202 – Leadership and Teamwork Continues leadership development and techniques for training others. Students are introduced to individual and team aspects of military tactics in small unit operations. In addition, use of radio, movement, planning for safety, planning for security and pre-execution checks are covered. | 2 | MT 298 – Internship (Prerequisite: permission of the director or associate dean) Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. Position is not paid. | 3 |
| MSL 202L – Leadership and Teamwork (Corequisite: MSL 202) Continuation of MSL 201L. | 1 | MT 299 – Cooperative Education (Prerequisites: permission of the director or associate dean) Provides an opportunity for the student to work for one term on a cooperative basis in an appropriate training program. Position is not paid. | 3 |
| MSL 229 – Military Fitness 1 (Corequisite: MSL 102 or 202) Teaches cadets the principals of fitness, proper nutrition and healthy lifestyle while exposing them to various methodologies of personal fitness. | 1 | | |
| MSL 230 – Military Fitness 2 (Corequisite: MSL 102 or 202) Continuation of MSL 229. Cadets who wish to continue this course of study at an advanced level should contact UNM. | 1 | | |
| MT – Manufacturing Technology Courses (Applied Technologies Division) | | | |
| MT 105 – Manufacturing Concepts (Prerequisite: ENG 101) 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) | 4 | | |
| MT 205 – Applied Science (Prerequisite: ELEC 104) 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) | 6 | | |
| MT 281 – Statistical Controls (Prerequisite: MATH 100B or higher, or Accuplacer Elementary Algebra score of 81 or equivalent) 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) | 3 | | |
| MUS – Music Courses (Communication, Humanities & Social Sciences Division) | | | |
| | | MUS 103 – Fundamentals of Music (Recommended: Experience with voice or instrument) 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. | 4 |
| | | MUS 139 – Early Music Appreciation Surveys basic musical elements and their development from early Greece to the Classical period. Nontechnical; required attendance at live musical performances. | 3 |
| | | MUS 140 – Modern Music Appreciation Emphasizes study of symphonic music, chamber music and vocal literature from the Romantic period to the 20th century. Nontechnical; required attendance at live musical performances. | 3 |
| | | MUS 172 – Introduction to Jazz Introduces jazz as a modern musical form and emphasizes its evolution during the 20th century. | 3 |
| | | MUS 296 – Topics in Music Presents various topics. See Schedule of Classes . | 3 |

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

NA – Nursing Assistant Courses *(Health, Wellness & Public Safety Division)*

| | |
|--|------------|
| NA 101 – Nursing Assistant Theory Courses <i>(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer English score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, Corequisites: NA 110L, 121C, 131, 161, 171)</i> Provides information covering basic nursing skills used in health care agencies and homes. Other topics covered are medical terminology, home care issues and community resources. <i>(9 weeks)</i> | 3 |
| NA 110L – Nursing Assistant Lab <i>(Corequisites: NA 101)</i> Provides the opportunity to practice basic nursing skills in the laboratory. <i>(9 weeks; 45 lab hours per term)</i> Program fee: \$55 | 1 |
| NA 121C – Nursing Assistant Clinical Experiences <i>(Pre- or corequisite: NA 101)</i> Requires successful completion of NA 101, 110L, 131, 161L and 171 before going to clinical. These last six weeks of the program include supervised practice of nursing skills in hospitals, long-term care centers and patient homes throughout the city. <i>(6 weeks; 135 clinical hours per term)</i> | 3 |
| NA 131 – Health Communications <i>(Corequisites: NA 101)</i> Includes introductions to anatomy and physiology and nutrition. Covers basic structure and normal functions of the body systems and some of the aging problems, which can occur in those systems. <i>(9 weeks)</i> | 3 |
| NA 160L – Nursing Assistant Issues <i>(Corequisites: NA 101)</i> Covers special topics such as nutrition labs, blood pressure practice, lab practice and lab finals. <i>(9 weeks; 90 hours per term)</i> | 2 |
| NA 171 – Nursing Assistant-Applications <i>(Corequisite: NA 101)</i> Reviews basic math for part of the term with practice working selected problems. Tests cover eight areas of concentration. The other part of the term deals with geriatric issues and the application of nursing assistant theory to them. <i>(9 weeks)</i> | 3 |
| NA 296 – Nursing Assistant Topics Various topics. See Schedule of Classes . | 1–3 |

NAHA – Nursing Home/Home Health Attendant Courses *(Health, Wellness & Public Safety Division)*

| | |
|--|----------|
| NAHA 102L – Nursing Home/Home Health Attendant Theory/Lab <i>(Corequisite: NAHA 102C)</i> Includes basic nursing 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. <i>(55 theory + 45 lab hours per term)</i> Program fee: \$25 | 5 |
| NAHA 102C – Nursing Home/Home Health Attendant Clinical <i>(Corequisite: NAHA 102L)</i> Provides the opportunity to practice supervised basic nursing skills in a long-term care setting. <i>(50 clinical hours per term)</i> | 1 |

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
LT Roland Sasaki, USN
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 010 – Naval Professional Laboratory Offers drills and information for NROTC students. <i>(30 hours each term) Fall, Spring only</i> | 0 |
| NAVS 101 – Principles and Concepts of Naval Science Introduces the naval service, customs, traditions, courtesies and naval officers' communities. <i>Fall only.</i> | 3 |
| NAVS 105 – Naval Ship Systems I Introduces naval engineering systems concepts and practices. <i>Spring only.</i> | 3 |
| NAVS 201 – Naval Ship Systems II Explores the principles of naval weapons systems. <i>Spring only</i> | 3 |
| NAVS 202 – Sea Power Surveys US naval history from the American Revolution to the present. <i>Fall only.</i> | 3 |
| NAVS 203 – Navigation Offers theory, principles and procedures of ship coastal and celestial navigation. <i>Fall only.</i> | 3 |
| NAVS 204 – Naval Operations Explores naval ship operations, tactical formations and dispositions; relative motion tactical plots and maneuvering boards are analyzed. <i>Spring only.</i> | 3 |
| NAVS 231 – Evolution of Warfare Surveys evolution of the basic principles and techniques of warfare throughout history. <i>Fall only, even years.</i> | 3 |
| NAVS 241 – Leadership and Management Explores the structure and principles of naval leadership and management. <i>Fall only.</i> | 3 |
| NAVS 247 – Principles of Naval Leadership Examines the structure and principles of naval leadership and management. <i>Spring only.</i> | 3 |
| NAVS 251 – Amphibious Warfare Explores the concepts, techniques and history of amphibious warfare. <i>Fall only, odd years.</i> | 3 |

NS – Natural Science Courses *(Math, Science & Engineering Division)*

| | |
|---|----------|
| NS 261 – Physical Science for Teachers <i>(Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent)</i> 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. | 4 |
|---|----------|

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|--|--------------|
| NS 262 – Life Science for Teachers (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 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. | 4 | NURS 160C – Nursing Care of the Adult Client (Prerequisites: BIO 238/248, NURS 115, NURS 120C, PSY 105, Pre- or corequisite: PHIL 245M, PSY 220, NURS 231) 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: \$66. | 9 |
| NS 263 – Environmental Science for Teachers (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer Sentence Skills score of 69 or equivalent) 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. | 4 | NURS 185C Family Nursing Across the Lifespan (Prerequisites: Calculation Exam II with score of 90% or better, NURS 160C, NURS 231, PSY 105) 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 \$61. | 7 |
| NURS – Nursing Courses (Health, Wellness & Public Safety Division) | | NURS 190C – Introduction to Nursing Process (Prerequisites: program director approval, BIO 237/247L, ENG 101, NURS 120C, NUTR 244 and PSY 105) Introduces philosophy and conceptual framework of the nursing program. Studies the nursing process, including an in-depth focus on physical assessment. (7.5 theory + 22.5 clinical hours per term) | 1 |
| NURS 107L – Supplemental Lab (CR/NC) (Prerequisite: program director approval; Corequisite: NURS 120C) Designed to provide nursing students the opportunity for additional practice of nursing skills in the campus laboratory before going into the clinical setting. | 1 | NURS 202C – Concepts for Transition Students (ADN Students: prerequisites: ENG 101, PSY 105, BIO 238/248L, NUTR 244 and credit for NURS 120C and NURS 160C. Pre- or corequisites: PSY 220, NURS 115, NURS 231; LPN Students: pre- or corequisites: ENG 101, NUTR 244, BIO 238/248L, PSY 220, NURS 115, NURS 231) 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 |
| NURS 109L – Supplemental Lab (CR/NC) (Prerequisite: program director approval; Corequisite: NURS 160C) Designed to provide nursing students the opportunity for additional practice of nursing skills in the campus laboratory before going into the clinical setting. | 1 | NURS 220C – Family Nursing (Prerequisites: Calculation Exam II with score of 90% or better, NURS 160C, PSY 220; Pre- or corequisite: NURS 231, BIO 239/239L) 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 healthcare settings. (75 theory + 225 clinical hours per term). Program fee: \$61. | 10 |
| NURS 112 – Strategies for Nursing (Pre or Corequisite: NURS 120C) 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 rationale; learning style preferences for personal and client teaching; clinical and life, organization and time management; note-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. | 2 | NURS 227 – Manager of Care (Prerequisite: NURS 220C; Corequisite: NURS 260C) Introduces management principles to prepare the ADN nurse to manage care of groups of clients. Clinical application in NURS 260C. | 1 |
| NURS 115 – Dosage Calculations (Prerequisites: HWPS Basic Math Test and program director approval) Presents methods of dosage calculations for oral and parental medications, including intravenous therapy and pediatric dosages. Offered for CR/NC only. Distance Learning option available (see page 49). | 1 | NURS 231 – Pharmacology in Nursing (Prerequisites: program director approval, BIO 238/248L) 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. | 3 |
| NURS 120C – Introduction to Nursing (Prerequisites: program director approval, BIO 237/247L, ENG 101, NUTR 244; pre- or corequisites: NURS 115, BIO 238/248L, PSY) 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: \$211 | 9 | NURS 260C Complex Health Problems (Prerequisites: Calculation Exam III with score of 90% or better, NURS 220C, NURS 231; Corequisite: NURS 227; Pre- or corequisite: arts & science elective) 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 \$61. | 9 |

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**

NURS 296 – Topics in Nursing 1–10
(Prerequisites: may vary)
 Presents various topics in nursing.

NUTR – Nutrition Courses *(Math, Science & Engineering Division)*

NUTR 120 – Personal and Practical Nutrition 3
 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.
Distance Learning option available (see page 49).

NUTR 244 – Human Nutrition 3
(Prerequisite: One of the following: BIO 123/124L, CHEM 111/112L, CHEM 121/121L or a passing score of 64 on the Biology Placement Exam)
 Introduces nutrition as it affects normal body function and total health. Designed for health majors who will use this information in various professions.
Distance Learning option available (see page 49).

NUTR 293 – Topics in Nutrition 3
 Presents various topics. See **Schedule of Classes**.

OLIT – Online Instructor Course *(Executive Vice President for Academic Affairs)*

OLIT 101 – Online Instructor Certification 3
(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 49).

Otec – Office Technology Courses *(Business & Information Technology Division)*

Otec 101 – Beginning Keyboarding 2
 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) [Previously offered as AA 101]*

Otec 102 – Keyboard Applications 2
(Prerequisite: AA 101 or Otec 101)
 Continues development of speed and accuracy. A minimum average speed of 30 wpm on three five minute timings is required. *(15 theory + 60 lab hours per term) [Previously offered as AA 102]*
Distance Learning option available (see page 49).

Otec 107 – Intermediate Keyboard Skillbuilding 2
(Prerequisite: AA 102 or Otec 102 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 5-minute timings is required. *(75 lab hours per term) [Previously offered as AA 107]*
Distance Learning option available (see page 49).

Otec 112 – Office Accounting Procedures 3
(Recommended prerequisite: ACCT 111)
 Focuses on complete bookkeeping cycle, financial statements and payroll. A computerized practice set is completed in this course. *[Previously offered as AA 112]*

Course Subject Code/Course number – Course Name**Credit Hours**

Otec 143 – Word Processing 3
(Recommended prerequisites: IT 101 and AA 102 or Otec 102 or a minimum typing speed of 35 wpm on a five-minute timing or division approval)
 Presents basic and intermediate features for preparing business documents. *(30 theory + 45 lab hours per term) [Previously offered as AA 143]*
Distance Learning option available (see page 49).

Otec 160 – Records Management 1
(Recommended prerequisite or corequisite: IT 101)
 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) [Previously offered as AA 160]*
Distance Learning option available (see page 49).

Otec 170 – Business Telephone Techniques 1
 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) [Previously offered as AA 170]*

Otec 171 – Working with the Challenging Customer 1
 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) [Previously offered as AA 171]*

Otec 173 – Time Management Skills 1
 Presents principles and activities to aid the student in applying time management skills in a personal and professional environment. *(5 weeks) [Previously offered as AA 173]*
Distance Learning option available (see page 49).

Otec 174 – Computers in the Medical Office 1
(Recommended prerequisite: IT 101)
 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) [Previously offered as AA 174]*

Otec 180 – Work-Site Learning 1
 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) [Previously offered as AA 180]*

Otec 200 – Advanced Word Processing 3
(Prerequisite: AA 143 or Otec 143; recommended prerequisites: AA 107 or Otec 107 or 45 wpm on a five-minute timing and CIS 150, 151 and 155)
 Presents advanced applications for preparing business documents and document integration. *(30 theory + 45 lab hours per term) [Previously offered as AA 200]*
Distance Learning option available (see page 49).

Otec 205 – Advanced Keyboard Skill-building 2
(Prerequisite: AA 107 or Otec 107 or 40 wpm typing speed)
 Focuses on building speed and accuracy. A minimum average speed of 50 wpm on three 5-minute timings is required. *(75 lab hours per term) [Previously offered as AA 205]*
Distance Learning option available (see page 49).

Otec 231 – Business English Applications 3
(Prerequisite: BA 122 or division approval)
 Requires student to compose, transcribe, analyze/edit business documents for correct grammar, punctuation, mechanics and language. Reference materials are used. *[Previously offered as AA 231]*

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|---|--------------|
| OTEC 260 – Business Procedures (Prerequisites: AA 143 or OTEC 143, BA 121; recommended prerequisites: AA 107 or OTEC 107, BA 122) Covers office procedures, technology, records management, human relations, ethics, telecommunications and job portfolio. [Previously offered as AA 260] | 3 | PC 208 – Robot Theory and Construction Applications (Prerequisites: ELEC 103B, ELEC 105B) 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 |
| OTEC 270 – Medical Transcription (Recommended prerequisites: HIT 110 and AA 107 or OTEC 107, or 50 wpm typing speed and AA 143 or OTEC 143, BA 121 and AA 231 or OTEC 231) 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) [Previously offered as AA 270] Distance Learning option available (see page 49). | 3 | PC 211 – Power RF (Prerequisite: ELEC 114L) 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 |
| OTEC 296 – Topics Course Explores current topics in office technology. [Previously offered as AA 296] | 1–3 | PC 212L – Vacuum Systems (Prerequisite: ELEC 118L) 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 |
| OTEC 297 – Special Problems (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. [Previously offered as AA 297] | Variable | PHIL – Philosophy Courses (Communication, Humanities & Social Sciences Division) | |
| OTEC 298 – Internship (Prerequisite: division approval; recommended prerequisites: AA 143 or OTEC 143, BA 121, 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. [Previously offered as AA 298] | 4 | PHIL 102 – Ethics in Society (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) 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 |
| OTEC 299 – Cooperative Education (Prerequisite: division approval; recommended prerequisites: AA 143 or OTEC 143, BA 121, 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. [Previously offered as AA 299] | 4 | PHIL 110 – Introduction to Philosophical Thought (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: ENG 101) 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. | 3 |
| PC – Process Control Courses (Applied Technologies Division) | | PHIL 156 – Logic and Critical Thinking (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) 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. | 3 |
| PC 201 – Electromechanical System Troubleshooting (Prerequisites: ELEC 114L or 118L) 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 | PHIL 241 – Topics in Philosophy (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Presents various topics. See Schedule of Classes . | 3 |
| PC 206 – CIM Theory and Applications and Mobile Robot Design (Prerequisites: ELEC 103B, ELEC 105B) 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 | PHIL 245B – Business Ethics (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Provides a forum for discussion of the ethical and social problems affecting the business community. Differing views of economic justice will be examined. Distance Learning option available (see page 49). | 3 |
| | | PHIL 245M – Biomedical Ethics (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Provides a forum for discussion of the ethical and social problems affecting the medical professional and the practice of medicine. Distance Learning option available (see page 49). | 3 |
| | | PHIL 245T – Ethics of Technology (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Provides a forum for discussion of the ethical and social problems arising from the uses of computers and technology. | 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**

- PHIL 245E – Environmental Ethics** **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
 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.
- PHIL 250 – Philosophy of Education** **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
 Presents critical examination of classical and contemporary educational theories and philosophical movements in education. Emphasizes the relationship of philosophical theory and educational practice.
- PHIL 257 – Formal Logic** **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
 Introduces formal deductive logic: propositional logic, truth tables, argument forms and fallacies, predicate (symbolic) logic and method of proof.

PHLB – Phlebotomy Courses (Health, Wellness & Public Safety Division)

- PHLB 110 – Phlebotomy Theory** **4**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, ENG 100 or Accuplacer English score of 85 or equivalent, MATH 100 or Accuplacer Elementary Algebra score of 72 or equivalent, Corequisites: PHLB 110L, 122C)
 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; 60 hours per term)
- PHLB 110L – Phlebotomy Lab** **2**
(Corequisites: PHLB 110 and PHLB 122C)
 Provides opportunity to practice phlebotomy skills and apply theory using artificial arms and human subjects. (6 weeks; 90 lab hours per term) Program fee: \$47
- PHLB 122C – Clinical Phlebotomy** **3**
(Prerequisite: HLTH 102; Corequisite: PHLB 110 and 110L)
 Provides opportunity for students to practice phlebotomy procedures on actual patients in area hospitals and clinics. (6 weeks; 150 clinical hours per term)
- PHLB 296 – Special Topics in Phlebotomy** **1–6**
 Explore various topics of interest in the field of Phlebotomy.

PHOT – Photonics Courses (Applied Technologies Division)

- PHOT 101L – Introduction to Photonics and Photonics Safety** **4**
(Prerequisite: MATH 100B or Accuplacer Elementary Algebra score of 81 or equivalent)
 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)
- PHOT 111L – Fiber Optics** **3**
(Prerequisite: PHOT 101; Pre- or corequisite: PHOT 201L)
 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)

Course Subject Code/Course number – Course Name**Credit Hours**

- PHOT 201L – Optics** **6**
(Prerequisite: PHOT 101L)
 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)
- PHOT 207L – Introduction to Laser Systems** **4**
(Prerequisite: PHOT 201L and ELEC 103B)
 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)
- PHOT 211L – Advanced Fiber Optics** **3**
(Prerequisite: PHOT 111L; Pre- or corequisite: ELEC 114L)
 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 217L – Advanced Laser Systems With Applications** **6**
(Prerequisites: PHOT 207L)
 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 225L – Photonics Projects** **4**
(Prerequisites: PHOT 217L)
 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 227L – Introduction to Biophotonics** **3**
(Prerequisites: MATH 100B 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 228L – Biophotonics Applications** **3**
(Prerequisites: PHOT 227L)
 Focuses on present-day biophotonics applications. (30 theory + 45 hours per term)
- PHOT 296 – Topics** **1–6**
(Prerequisite: advanced Photonics Technology student)
 The topics depend on the requests from the community.
- PHOT 297 – Special Problems** **1–6**
(Prerequisite: advanced Photonics Technology student)
 Presents a problem to investigate and solve. The student designs the solution using a combination of techniques.
- PHOT 298 – Internship** **3**
(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.

Course Subject Code/Course number – Course Name **Credit Hours**

PHOT 299 – Cooperative Education **3**
(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.

PHYS – Physics Courses *(Math, Science & Engineering Division)*

PHYS 102 – Introduction to Physics **3**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended : MATH 100B or Accuplacer Elementary Algebra score of 81 or equivalent)
 Surveys basic concepts and phenomena of physics.

PHYS 151 – Physics I **4**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent and MATH 121, 150 or 180; Corequisite: PHYS 151L; recommended: working knowledge of trigonometry)
 Introduces mechanics, sound and heat in non-calculus-based format. Satisfies pre-medical, pre-dental, pre-optometry and certain Technologies requirements.

PHYS 151L – Physics I Laboratory **1**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, Corequisite: PHYS 151)
 Emphasizes real-time experiments in mechanics, heat and sound. Introduces computer data collection and analysis. *(Previously offered as PHYS 153L)*

PHYS 152 – Physics II **4**
(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent and PHYS 151; Corequisite: PHYS 152L)
 Focuses on electricity, magnetism and optics in non-calculus-based setting.

PHYS 152L – Physics II Laboratory **1**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, Corequisite: PHYS 152)
 Focuses on experiments in electricity, magnetism and optics. Includes some computer simulations and data collection. *(Previously offered as PHYS 154L.)*

PHYS 160 – General Physics I **4**
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, pre- or corequisite: MATH 162; Corequisite: PHYS 160L)
 Introduces calculus-based study of mechanics and sound waves for science and engineering students.

PHYS 160L – General Physics Lab I **1**
(Corequisite: PHYS 160)
 Focuses on real-time experiments in mechanics and waves. Includes computer and data collection and analysis.

PHYS 161 – General Physics II **4**
(Prerequisite: PHYS 160; Pre- or corequisite: MATH 163; Corequisite: PHYS 161L)
 Emphasizes heat, electricity and magnetism for science and engineering students in calculus-based setting.

PHYS 161L – General Physics Laboratory II **1**
(Corequisite: PHYS 161)
 Focuses on experiments in electricity, magnetism, optics.

PHYS 262 – General Physics III **4**
(Prerequisite: PHYS 161; Pre- or corequisite: MATH 264)
 Emphasizes optics and topics in modern physics for science and engineering students in calculus-based setting.

Course Subject Code/Course number – Course Name **Credit Hours**

PL – Paralegal Studies Courses *(Business & Information Technology Division)*

PL 101 – Introduction to Paralegal Studies **3**
(Prerequisites: ENG 100 or higher; RDG 100 or higher; recommended prerequisite: IT 101)
 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.
Distance Learning option available (see page 49).

PL 102 – Business Organizations **3**
(Prerequisites: PL 124 or division approval)
 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.

PL 111 – American Law and Ethics **3**
(Prerequisites: ENG 100 or higher; RDG 100 or higher; recommended prerequisite: IT 101)
 Covers concepts such as the origins, nature, history and structure of the American legal system and rules of professional conduct for lawyers and paralegals.
Distance Learning option available (see page 49).

PL 123 – Torts **3**
(Prerequisites: PL 101, PL 111)
 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.
Distance Learning option available (see page 49).

PL 124 – Legal Research and Writing I **3**
(Prerequisites: CIS 123, ENG 101, PL 101, PL 111)
 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.

PL 201 – Contract Law **3**
(Prerequisites: PL 124 or division approval)
 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.

PL 203 – Civil Litigation **3**
(Prerequisites: CIS 123, ENG 102, PL 123, PL 124)
 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.

PL 204 – Legal Research and Writing II **3**
(Prerequisites: CIS 123, ENG 102, PL 123, PL 124)
 Continues development of legal research, analysis and writing skills, with the focus on advanced legal research problems.

PL 206 – Criminal Litigation **3**
(Prerequisites: CIS 123, ENG 102, PL 123, PL 124)
 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.

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 | Course Subject Code/Course number – Course Name | Credit Hours |
|--|---------------------|---|---------------------|
| PL 221 – Wills, Probate and Estate Planning (Prerequisites: PL 203 or 206, PL 204, PL 224, PL 233) 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 is included. Distance Learning option available (see page 49). | 3 | PL 234 – Administrative Law (Prerequisites: PL 124 or division approval) Focuses on the policies, practices and procedures of governmental agencies and state and local administrations. | 3 |
| PL 223 – Domestic Relations (Prerequisites: PL 124 or division approval) Focuses on legal issues in family relations with emphasis on local procedures in the domestic relations court and its satellites. | 3 | PL 236 – Employment Law (Prerequisites: PL 124 or division approval) 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 224 – Evidence (Prerequisites: CIS 123, ENG 102, PL 123, PL 124; recommended corequisite: CJ 112) 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 242 – Native American Law (Prerequisites: PL 124 or division approval) 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, which consider interests of individuals as natives or Indian groups. | 3 |
| PL 225 – Constitutional Law (Prerequisites: PL 124 or division approval) 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 243 – Criminal Litigation II (Prerequisites: PL 204, PL 206, PL 224) 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 230 – Civil Litigation II (Prerequisites: PL 203, PL 204, PL 224) 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 244 – Social Security Law (Prerequisites: PL 124 or division approval) 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 231A – Computer-Aided Legal Research (Prerequisites: CIS 123, PL 123, PL 124) 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) (PL 231A, 231B and 231C are the equivalent to LAS 231) | 1 | PL 245 – Bankruptcy Law (Prerequisites: PL 124 or division approval) Focuses on bankruptcy practice, Bankruptcy Code and Rules of Bankruptcy Procedure. (5 weeks) | 1 |
| PL 231B – Computer Applications in Law Practice (Prerequisites: CIS 123, PL 123, PL 124) Covers law-oriented concepts and applications using word processing, spreadsheets and data management programs. (5 weeks; 10 theory + 15 lab hours per course) (PL 231A, 231B and 231C are the equivalent to LAS 231) | 1 | PL 294 – Mediation (Prerequisites: division approval) 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, in 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 |
| PL 231C – Specialized Legal Software (Prerequisites: CIS 123, PL 123, PL 124) 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) (PL 231A, 231B and 231C are the equivalent to LAS 231) | 1 | PL 295 – Public Defender (Prerequisites: division approval) 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 supervising attorney or attorneys designate. | 3 |
| PL 232 – Personal Injury Law (Prerequisites: PL 123 and PL 124, or division approval) Focuses on the medical aspects and documentation of personal injuries in tort, workers' compensation and Social Security disability law. | 3 | PL 296 – Topics Course (Prerequisites: division approval) Explores current topics in the law. | 3 |
| PL 233 – Law Office Management (Prerequisites: CIS 123, ENG 102, PL 123, PL 124) 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. A portion of the course may be taught at the CNM Paralegal Law Center at South Valley Campus. | 3 | | |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|---|--------------|
| PL 297 – Special Problems (Prerequisite: division approval) 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 | PLMB 131 – Backflow Prevention 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 |
| PL 298 – Internship (Prerequisites: all courses in the first three terms and division approval) 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 | PLMB 132 – Commercial Plumbing Presents the different aspects of the commercial plumbing industry. (15 theory + 37.5 lab hours per term) | 2 |
| PL 299 – Cooperative Education (Prerequisites: all courses in the first three terms and division approval) 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 | PLMB 133 – Plumbing Theory and Repair (Pre- or corequisites: PLMB 125, 126 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) | 2 |
| PLAP – Plumbing Apprenticeship (Applied Technologies Division) | | PLMB 134 – Plumbing Code Applications (Pre- or corequisites: PLMB 121, 122 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) | 3 |
| PLAP 198 – Plumbing Apprenticeship (Prerequisite: current full-time employment in the plumbing industry) Covers 600 to 1,050 hours of classroom instruction, which includes safety, shop and trade math, plumbing processes, blueprint reading and mechanical code (plumbing) interpretation. | 40–70 | PLMB 135 – Building Maintenance and Repair (Pre- or corequisites: PLMB 133 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) | 2 |
| PLMB – Plumbing Courses (Applied Technologies Division) | | PLMB 136 – Hydronics & Plumbing Systems (Pre- or corequisites: PLMB 123, 126 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) | 2 |
| PLMB 121 – Plumbing & Safety Fundamentals (Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval) 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 | PLMB 170 – Trades Math Includes basic arithmetic, whole numbers, fractions and decimals. Covers volumes, weight measurements and basic algebra as it applies to electricity. | 1 |
| PLMB 122 – Blueprint Reading 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 | PLMB 171 – Journeyman Preparation 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. | 3 |
| PLMB 123 – Introduction to Gas Fitting and Pipe Laying (Pre- or corequisites: PLMB 121, 122 or division approval) Investigates design layout and installation of piping systems and the fundamentals of gas burning appliances. (15 theory + 37.5 lab hours per term) | 2 | PLMB 174L – Polyvinylidene Fluoride (PVDF) Welding Systems (Prerequisite: PLMB 173L) Presents Asahi Butt Fusion System, UF 2000 infra-red fusion and bead and crevice free system. (15 theory + 75 lab hours per term) | 3 |
| PLMB 124 – Drain, Waste and Vent I (Pre- or corequisites: PLMB 121, 122 or division approval) Emphasizes layout and design of drain and vent systems in residential buildings. (15 theory + 37.5 lab hours per term) | 2 | PLMB 295 – Plumbing Capstone Course (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 |
| PLMB 125 – Drain, Waste and Vent II (Pre- or corequisites: PLMB 121, 124 or division approval) Describes layout and design of drain and vent systems in commercial buildings. (15 theory + 37.5 lab hours per term.) | 2 | PLMB 296 – Special Topics 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. | 1–6 |
| PLMB126 – Piping Systems (Pre- or corequisites: PLMB 121, 123 or division approval) 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 297 – Special Problems (Prerequisite: division approval) Focuses on a specific problem while working with an instructor. | Variable |

GETTING STARTED

ACCESSING CNM

EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

COURSE DESCRIPTIONS

CODES AND POLICIES

GLOSSARY, INDEX, MAPS

PM – Project Management Courses (Business & Information Technology Division)

PM 130 – Project Management Fundamentals 3

(Prerequisite: ENG 100 or Accuplacer Reading score of 80 or equivalent and ENG 100 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 49).

PM 150 – Effective Project Leadership 3

(Prerequisite: IT 101 and PM 130; co- or prerequisite CIS 186 or division approval)
Focuses on the competencies needed to apply project leadership to create a positive project environment. Students complete a project leadership assessment tool, 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 49).

PM 200 – Budget and Resource Management 3

(Prerequisite: IT 101 and PM 130 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.

PM 210 – Contract Management 3

(Prerequisite: ENG 119 and PM 130 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.

PM 220 Managing Multiple Projects 3

(Prerequisite: PM 130, 150, 200, and 210 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.

PM 250 – Advanced Project Management 3

(Prerequisite: PM 130, 150, 200, and 210, 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.

PM 296 – Special Topics 1–6

(Prerequisite: division approval)
Provides in-depth study of special topics in project management.

PM 297 – Special Problems 1–6

(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 298 – Internship 4

(Prerequisite: department 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 TVI and the company.

PM 299 – Cooperative Education 4

(Prerequisite: department 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 TVI and the employer.

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 260L – Perioperative Nurse Specialist Theory/Lab 8

(Prerequisite: program director approval; Corequisite: PRNS 265C)
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: \$80

PRNS 265C – Perioperative Nurse Specialist Clinical Experience 6

(Corequisite: PRNS 260L)
Applies new and previously learned concepts to perioperative nursing in hospital operating rooms. (12 weeks; 270 clinical hours per term)

PRNS 296 – Special Topics in Perioperative Nursing 1–6

Explore various topics of interest in the field of Perioperative Nursing.

PSCI – Political Science Courses (Communication, Humanities & Social Sciences Division)

PSCI 110 – The Political World 3

Introduces politics, emphasizing how people can understand their own political systems and those of others.

PSCI 200 – U.S. Politics 3

Surveys American politics: theory of democracy and political institutions, governmental branches and their bureaucracies.

PSCI 210 – State and Local Politics 3

Analyzes state and local politics, using New Mexico and other states as examples. Fall, spring only.

PSCI 220 – Comparative Government and Politics 3

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.

PSCI 240 – International Politics 3

Examines various significant factors in international politics: nationalism, ideology, deterrence, balance of power, international law and international conflict and collaboration.

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|--|--------------|---|--------------|
| PSCI 260 – Political Ideas Surveys classical and contemporary political ideas and ideologies; introduces many of the enduring political issues, which are presented in descriptive, analytical and normative terms. <i>Fall only.</i> | 3 | PSY 265 – Cognitive Psychology (Prerequisite: PSY 105) Presents theories and research on various mental processes: memory (encoding, storage and retrieval), attention, comprehension, categorization, reasoning, problem solving, language and motor skills. <i>Spring only.</i> | 3 |
| PSCI 296 – Topics in Political Science Presents various topics. See Schedule of Classes . | 3 | PSY 271 – Social Psychology (Prerequisite: PSY 105 or SOC 101) Emphasizes study of social interaction: communication, perception of the self and others, attitudes and leadership. <i>Fall, spring only.</i> | 3 |
| PSY – Psychology Courses (Communication, Humanities & Social Sciences Division) | | | |
| PSY 105 – Introduction to Psychology (Prerequisite: RDG 100 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. <i>Distance Learning option available (see page 49).</i> | 3 | PSY 296 – Topics in Psychology (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Presents various topics. See Schedule of Classes . | 3 |
| PSY 130 – Practical Psychology (Prerequisite: RDG 100 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. | 3 | PSY 299 – Death and Dying (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent) Examines psychological, emotional and sociological aspects of death in American culture. | 3 |
| PT – Pharmacy Technician Courses (Health, Wellness & Public Safety Division) | | | |
| PSY 200 – Statistical Principles (Prerequisite: PSY 105; MATH 100B or Accuplacer Elementary Algebra score of 81 or equivalent) 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. <i>Fall, spring only.</i> | 3 | PT 110 – Introduction to Pharmacy Technology (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, ENG 099 or Accuplacer English score of 69 or equivalent, MATH 100A or Accuplacer Elementary Algebra score of 72 or equivalent, CHEM 100 or CHEM 111/112L or high school Chemistry; Corequisites: PT 111L, 115, 116; pre-or corequisites: IT 101, HLTH 102) 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. | 3 |
| PSY 220 – Developmental Psychology (Prerequisite: PSY 105) Emphasizes physical, social, emotional and intellectual development across the life span, including professional research and applications. <i>Distance Learning option available (see page 49).</i> | 3 | PT 111L – Pharmacy Technician Lab I (Prerequisites: CHEM 100 or CHEM 111/112L; Corequisites: PT 110, 115, 116; pre- or corequisites: IT 101) 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) | 2 |
| PSY 231 – Human Sexuality (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: PSY 105) Surveys and analyzes physiological, cultural, social and individual factors that influence sexual behavior, sex roles and sex identity. | 3 | PT 115 – Pharmacy Technician Anatomy and Physiology (Prerequisite: CHEM 100 or CHEM 111/112L or high school chemistry; Corequisites: PT 111L, 115, 116; Pre- or corequisite: IT 101) Provides an introduction to basic human anatomy and physiology, with emphasis on physiology as the foundation for pharmacology. | 3 |
| PSY 232 – Clinical Psychology (Prerequisite: PSY 105) 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 | PT 116 – Pharmacy Calculations (Prerequisite: CHEM 100 or CHEM 111/112L or high school chemistry; Corequisites: PT 110, 111L, 115; Pre- or corequisite: IT 101) Provides skills in pharmaceutical calculations for oral, parenteral and IV preparations. | 3 |
| PSY 233 – Psychology and Film (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: PSY 105) 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 | PT 120 – Advanced Pharmacy Technology (Prerequisites: PT 110, 111L, 115, 116, CHEM 100 or CHEM 111/112L or high school chemistry, IT 101; Corequisites: PT 121L, 122C, 125; Pre- or corequisite: COMM 130 or 221) Continues study of dosage forms and routes of administration begun in PT 110; 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. <i>Program fee: \$35</i> | 3 |
| PSY 240 – Brain and Behavior (Prerequisite: PSY 105 or BIO 123/124L) Surveys the role of the nervous system in the control of behavior and mental processes. <i>Fall, spring only.</i> | 3 | | |
| PSY 260 – Psychology of Learning and Memory (Prerequisite: PSY 105) Introduces study of learning in the laboratory, ranging from simple processes such as conditioning to complex ones such as transfer, memory and concept formulation. <i>Fall, spring only.</i> | 3 | | |

Course Subject Code/Course number – Course Name **Credit Hours**

PT 121L – Pharmacy Technician Lab II **2**
(Prerequisites: PT 110, 111L, 115, 116, CHEM 100 or CHEM 111/112L or high school chemistry, IT 101; Corequisites: PT 120, 122C, 125; Pre- or corequisite: COMM 130 or 221)

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)

PT 122C – Pharmacy Technician Practicum **5**
(Prerequisite: program director approval; Corequisites: PT 120, 121L, 125; Pre- or corequisite: COMM 130 or 221)

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)

PT 125 – Pharmacology for Pharmacy Technicians **3**
(Corequisites: PT 120, 121L, 122C; Pre- or corequisite: COMM 130 or 221)

Presents study of therapeutic drug categories, how drugs produce their effects and common side effects.

PT 296 – Special Topics in Pharmacy Technician **1–6**

Explore various topics of interest in the field of Pharmacy Technology.

QUFD – Professional Cooking Courses *(Business & Information Technology Division)*

QUFD 101, 103L, 105L, 107L and 108L (See CULN Courses on page 302)

QUFD – QUANTITY FOODS COURSES AFTER FALL 2006 TERM, SEE CULN ON PAGE 302

QUFD 111 – Quantity Food Theory II **2**
(Prerequisites: QUFD 101, 103L, 105L, 107L, 108L, BKNG 102 and FSMG 101B or division approval)

Introduces cooking methods, principles of meat cookery, fabrication, presentation, stocks, sauces, soups, beef, poultry, seafood, charcuterie, game, lamb, pork, potatoes, grains, pasta and vegetables/fruits.

Stresses professionalism and culinary vocabulary.
Distance Learning option available (see page 49).

QUFD 112L – Dining Room Skills **2**
(Pre- or corequisite: QUFD 111 or division approval)

Introduces table setting, napkin folding, table service, money management, teamwork, problem solving, managing a staff in the student-operated dining room, banquet service, restaurant service and operation and customer service. (75 lab hours per term)

QUFD 113L – Cold Preparation II **2**
(Pre- or corequisite: QUFD 111 or division approval)

Introduces safe, sanitary and creative pantry techniques. Students produce appetizers, salads, dressings, fruits/vegetables and starches for the student-operated Student Specialties Restaurant. (75 lab hours per term)

QUFD 114L – Stock and Sauces **2**
(Pre- or corequisite: QUFD 111 or division approval)

Introduces white and brown stocks from scratch and teaches students how to prepare primary and secondary sauces and soups from these stocks. Practice is provided for using various thickening agents. (75 lab hours per term)

QUFD 115L – Entree (Meat and Seafood) Preparation **2**
(Pre- or corequisite: QUFD 111 or division approval)

Introduces production of fabricated cuts of meats and a variety of cooking methods for wholesome, flavorful entrees for the Student Specialties Restaurant. Stresses plate presentation and timely production. (75 lab hours per term)

Course Subject Code/Course number – Course Name **Credit Hours**

QUFD 296 – Special Topics **1–6**
(Prerequisite: division approval)

Covers an in-depth study of problems and advanced techniques.

QUFD 297 – Special Problems **Variable**
(Prerequisite: division approval)

Focuses on a specific problem while working with an instructor.

RADT – Radiologic Technology Courses *(Health, Wellness & Public Safety Division)*

RADT 101 – Introduction to Radiologic Technology **1**
(Prerequisites: program director approval, ENG 101, BIO 237, 247L; Corequisites: RADT 102L, 103L, 120C; pre or corequisites: BIO 238, 248L)

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 \$115*

RADT 102 – Fundamentals of Radiography **3**
(Corequisites: RADT 101, 103L, 120C)

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 103L – Radiographic Positioning I **3**
(Corequisites: RADT 101, 102L, 120C)

Presents the fundamentals of 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 104L – Radiographic Positioning II **3**
(Prerequisite: RADT 103L; Corequisites: RADT 106, 110, 140C)

Continues course of study begun in RADT 103L 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 106 – Patient Care in Radiography **2**
(Pre- or corequisite: PSY 105 or SOC 101; Corequisites: RADT 104L, 110, 140C)

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 110 – Radiobiology and Protection **3**
(Corequisites: RADT 104L, 106, 140C)

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.

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|--|--------------|
| RADT 130C – Clinical Radiography I (Prerequisite: HLTH 102; Corequisites: RADT 101, 102L, 103L) 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: \$30 | 5 | RADT 231 – Radiographic Physics and Instrumentation (Corequisites: RADT 203L, 208, 240C) A study of the physical principles of diagnostic radiography. Topics include atomic structure, electricity, magnetism, electromagnetism, x-ray production and interactions, electrodynamics, x-ray tubes, x-ray circuitry and equipment. | 3 |
| RADT 140C – Clinical Radiography II (Prerequisite: RADT 120C; Corequisites: RADT 104L, 106, 110) Continues course of study begun in RADT 120C 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: \$30 | 4 | RADT 240C – Clinical Radiography IV (Corequisites: RADT 203L, 208, 231) Continues course of study begun in RADT 220C 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: \$30 | 6 |
| RADT 202L – Radiographic Imaging I (Prerequisite: RADT 104L; Corequisites: RADT 206, 220C; Pre- or corequisite: MATH 119 or 120) 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) | 3 | RADT 250C – Clinical Radiography V (Prerequisite: RADT 246C; Corequisite: RADT 280) Continues course of study begun in RADT 240C 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: \$30 | 8 |
| RADT 203 – Radiographic Imaging II (Prerequisite: RADT 202L; Corequisites: RADT 208, 231, 240C) Surveys the special procedures and special imaging modalities (CT, MRI, ultrasound, mammography, nuclear medicine, oncology, PET, SPECT) utilized to explore topics in imaging equipment and image processing. | 1 | RADT 280 – Radiologic Technology Seminar (Prerequisite: RADT 203L, 208, 231, 240C; Corequisite: RADT 260C) 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: \$70 | 2 |
| RADT 205L – Radiographic Film Critique Lab (Corequisites: RADT 104L, 106, 110, 140C; Corequisite: RADT 207, 202L, 220C) 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). | 1 | RADT 296 – Special Topics in Radiologic Technology Explore various topics of interest in the field of Radiologic Technology. | 1–6 |
| RADT 207 – Introduction to Quality Assurance (Prerequisites: RADT 104L, 106, 110, 140C; Corequisites: RADT 205, 202L and 220C) 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. | 2 | RDG – Reading Courses (Division of Educational & Career Advancement) | |
| RADT 208 – Radiographic Pathology (Prerequisites: RADT 206; Corequisites: 203L, 231, 240C) Continues course of study begun in RADT 207. Surveys additional body systems and the relative pathologies affecting them. Radiographic imagine methods will be considered to demonstrate how to best demonstrate these pathologies. | 2 | RDG 096 – Special Topics Presents various topics for reading instruction. | 1–3 |
| RADT 230C – Clinical Radiography III (Corequisites: 202L, 205, 207) Continues course of study begun in RADT 140C. 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: \$30 | 6 | RDG 099 – Reading Improvement (Prerequisite: ENG 098 or Accuplacer Reading score of 59–68) Introduces reading skills required for success in comprehending ideas and applying critical thinking skills to materials in the workplace and the academic setting. (For reading classes below RDG 99, see ENG 098) (45 theory hours + 15 lab hours per term) | 3 |
| | | RDG 100 – Reading and Critical Thinking (Prerequisite: RDG 099 or Accuplacer Reading score of 69 or equivalent) Focuses on reading required for success in college. Includes comprehension, problem solving, note-taking, summarizing and computer-assisted research skills. (45 theory hours + 15 lab hours per term) Distance Learning option available (see page 49). | 3 |
| | | RL – Recreation and Leisure Courses (Health, Wellness & Public Safety Division) | |
| | | RL 101 – Foundations of Recreation (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Presents the history, philosophy and principles of recreation and leisure, the agencies providing programs and an investigation of professional employment opportunities. | 3 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| RL 102 – Recreation Leadership (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Presents theories and facilitation techniques for leading recreation activities for various populations. Special emphasis is placed on recreation activities with children and adolescents. | 3 |
| RL 102L – Recreation Leadership Laboratory (Corequisite: RL 102) Introduces practical recreation facilitation exercises that complement concepts presented in RL 102 – Recreation Leadership. Students are expected to facilitate recreation activities among their peers in class. (37.5 lab hours per term) | 1 |
| RL 103 – Recreation Program Planning (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Presents theories and techniques for developing/creating recreation and leisure activities and programs for various populations. Covers a seven-step model of programming. Presents ideas on program promotion, pricing and evaluation. | 3 |
| RL 105 – Behavior Management (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Covers de-escalation of potential crisis situations and management of aggressive/violent behavior. This professionally based course in crisis prevention and intervention is taught throughout the United States and is useful to any direct care worker in a human service profession. | 3 |
| RL 111– Principles of Outdoor Recreation (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Presents the history and foundation of outdoor recreation in the United States. Emphasizes the local, state, federal and commercial agencies providing outdoor recreation opportunities in the natural environment. This is a field-trip intensive course. | 3 |
| RL 122 – Recreational Sports Management Focuses on the organization and administration of private and public recreational sports. Covers organization of tournament play, programming format and risk management. | 1 |
| RL 132 – Senior Recreation (Prerequisite: RL 103) Emphasizes planning, implementation and evaluation of recreation activities for older adults in a variety of senior recreation settings. | 1 |
| RL 151 – Introduction to Outdoor Adventure Pursuits (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Introduces the basic skills and equipment required for bouldering, rock climbing, rappelling and caving. A moderate level of fitness and travel are required. (75 lab hours per term) | 2 |
| RL 160 – Adventure Games (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Introduces the foundation and background of leading experiential games and activities. Special attention is focused on problem solving activities, cooperative games, initiative activities and those activities that foster trust. (37.5 lab hours per term) | 1 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|
| RL 163 – Orienteering and GPS Use (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Presents fundamentals of backcountry travel-starting with map and compass and ending with the operation and use of global positioning systems (GPS). Class will be conducted in the field. (37.5 lab hours per term) | 1 |
| RL 171 – Recreation Leader Preparation (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Introduces theoretical and practical skills in guiding groups of children and teenagers to safely participate in recreation programs. Introductory course designed for part-time recreation leaders and camp counselors. (37.5 lab hours per term) | 1 |
| RL 191 – Recreation Inclusion (Prerequisites: RDG 099 or Accuplacer Reading score of 69 or equivalent, MATH 099 or Accuplacer Arithmetic score of 57 or equivalent, or division approval) Presents an introduction to inclusive recreation programming and an overview of persons with disabilities (PWD); provides strategies for integrating PWD into the recreation mainstream; studies attitudinal barriers; and provides a legal background for inclusive programs. | 3 |
| RL 223 – Arts and Crafts Facilitation (Prerequisite: RL 103) Focuses on the implementation and planning of arts and crafts activities for populations from children to older adults. (7.5 theory + 18.5 lab hours per term) | 1 |
| RL 227 – Team Building for Professionals Introduces the foundations of leading experiential games and activities that foster team-building within an organization. Students participate in the physical and mental activities that uncover the building blocks of teamwork. (7.5 theory + 18.5 lab hours per term) | 1 |
| RL 229 – Park Management (Prerequisite: RL 101) Introduces foundational concepts for the management of people and recreation park resources. | 1 |
| RL 295 – Directed Trends and Issues in Recreation (Prerequisites: RL 298) Provides a systematic and comprehensive overview of current trends and professional issues affecting community recreation and outdoor recreation in the 21st century. This capstone course must be taken in the term of graduation. | 3 |
| RL 296 – Special Topics (Prerequisite: division approval) Covers special topics and the advanced techniques that recreation and leisure professionals use to respond to them. | 1–6 |
| RL 297 – Special Problems (Prerequisite: division approval) Provides opportunity for independent study. | 1–6 |
| RL 298 – Recreation & Leisure Internship (Prerequisite: division approval) Provides student with a supervised internship in either an outdoor or community recreation setting. Preliminary arrangements for internship should be completed with the instructor the term prior to enrolling in course. (15 theory + 112.5 lab hours per term) | 3 |

RNR – Nurse Refresher Courses (Health, Wellness & Public Safety Division)

RNR 255L – Refresher Theory/Lab 7
 Covers medical-surgical and specialty nursing, pharmacology and procedures. (6 weeks; 94 theory + 10 lab hours per term) Program fee: \$25.
 Distance Learning option available (see page 49).

RNR 265C – Refresher Clinical Experience 2
 (Prerequisite: must have had a valid RN license, professional CPR certification; pre or corequisite: RNR 255L)
 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 49).

RLGN – Religion Courses (Communication, Humanities & Social Sciences Division)

RLGN 107 – Living World Religions 3
 (Prerequisite: RDG 100 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.

RLGN 240 – Ancient Religions 3
 (Prerequisite: RDG 100 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 247 – Topics in Religious Studies 3
 (Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)
 Presents various topics. See **Schedule of Classes**.

RLGN 263 – Eastern Religions 3
 (Prerequisite: RDG 100 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 – Registered Nurse Refresher Courses (Health, Wellness & Public Safety Division)

RNR 255L – Refresher Theory/Lab 7
 Covers medical-surgical and specialty nursing, pharmacology and procedures.
 (6 weeks; 94 theory + 10 lab hours per term) Program fee: \$25
 Distance Learning option available (see page 49).

RNR 265C – Refresher Clinical Experience 2
 (Prerequisite: must have had a valid RN license, professional CPR certification; Pre- or corequisite: RNR 255L)
 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 49).

RT – Respiratory Therapy Courses (Health, Wellness & Public Safety Division)

RT 101/101L – Respiratory Therapy Principles and Practices I 4
 (Prerequisites: program director approval ENG 101, HLTH 102, MATH 119; Corequisites: RT 121C, 133)
 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: \$100

RT 102/102L – Respiratory Therapy Principles and Practices II 4
 (Prerequisites: RT 101/101L, 121C, 133; Corequisites: RT 122C, BIO 237/247L)
 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)

RT 121C – Clinical Experiences I 4
 (Corequisites: RT 101/101L, 133)
 Provides supervised clinical experiences in area hospitals and healthcare facilities related to concepts presented in RT 101/101L. (225 clinical hours per term)

RT 122C – Clinical Experiences II 4
 (Corequisites: RT 102/102L, 140)
 Provides supervised clinical experiences in area hospitals and healthcare facilities related to concepts presented in RT 102/102L. (225 clinical hours per term)

RT 133 – Pharmacology of Respiratory Therapy 3
 (Corequisites: RT 101/101L, 121C)
 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 140 Cardiopulmonary Pathophysiology I 1
 (Corequisites: RT 102/102L, 122C)
 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.

RT 150 Supplemental Skills Lab 1
 (Prerequisite: program director approval)
 Provides first-year Respiratory Therapy students the opportunity for additional learning and practice of respiratory therapy skills in the campus laboratory.

RT 201/201L – Advanced Respiratory Therapy I 4
 (Prerequisites: RT, 102/102L, 122C, 140; Corequisites: RT 221C, 240, PHIL 245M)
 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)

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****RT 202/202L – Advanced Respiratory Therapy II** 4*(Prerequisites: RT 201/201L, 221C, 240; Corequisites: 222C, 241, BIO 238/248L)*

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: \$10

RT 203/203L – Advanced Respiratory Therapy III 4*(Prerequisites: RT 202/202L, 222C, 241; Corequisites: RT 223C, 242, BIO 239/239L)*

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)

RT 221C – Advanced Clinical Experiences I 4*(Corequisite: RT 201/201L, 240)*

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. (225 clinical hours per term)

RT 222C – Advanced Clinical Experiences II 4*(Corequisite: RT 202/202L, 241)*

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. (225 clinical hours per term)

RT 223C – Advanced Clinical Experiences III 4*(Corequisite: RT 203/203L, 242)*

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. (225 clinical hours per term) Program fee: \$125

RT 240 Cardiopulmonary Pathophysiology II 1*(Corequisites: RT 201/20L, 221C)*

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.

RT 241 Cardiopulmonary Pathophysiology III 1*(Corequisites: RT 202/202L, 222C)*

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, cor pulmonale, sepsis syndrome, ekg interpretation.

RT 242 Cardiopulmonary Pathophysiology IV 1*(Corequisites: RT 203/203L, 223C)*

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.

Course Subject Code/Course number – Course Name**Credit Hours****RT 250 Advanced Supplemental Skills Lab** 1

Provides second-year Respiratory Therapy students the opportunity for additional learning and practice of respiratory therapy skills in the campus laboratory.

RT 296 – Special Topics in Respiratory Care 3–6*(Prerequisite: program director approval)*

Provides participation in supervised learning of advanced, specialized practices including cardiopulmonary diagnostics and specialized prenatal/pediatric or adult critical care.

RT 297 – Special Problems 3–6*(Prerequisite: program director approval)*

Provides opportunity for independent study in respiratory care such as preparation for licensing/credentialing exams.

RT 298 – Internship 3–6*(Prerequisite: AS RT Graduate and program director approval)*

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.

SCSE – Sportscraft/Small Engine Courses *(Applied Technologies Division)***SCSE 170L – Small Engine Skills Improvement I** 3

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 171L – Small Engine Skills Improvement II 3*(Prerequisite: SCSE 170L or division approval)*

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 198 – Sheet Metal Apprenticeship** 40*(Prerequisite: current full-time employment in the sheet metal industry or division approval)*

Covers 600 hours of related classroom instruction. Instruction covers safety, trade math, sheet metal processes, triangulation lay-out, 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 204 – Semiconductor Manufacturing Technology Theory** 3*(Prerequisites: ELEC 103B, 105B; Corequisite: SMT 204L)*

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 204L – Semiconductor Manufacturing Technology Lab 2*(Corequisite: SMT 204)*

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 101 – Introduction to Sociology | 3 |
| <i>(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)</i> | |
| Introduces basic concepts and theories of contemporary sociology: culture, socialization, social groups, deviance, race and ethnicity, gender, age, family, medicine and religion. | |
| <i>Distance Learning option available (see page 49).</i> | |
| SOC 111 – Criminal Justice System | 3 |
| <i>(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: SOC 101)</i> | |
| Surveys criminal justice processes. Explores law, law enforcement, prosecution, defense, trial and sentencing. | |
| SOC 211 – Social Problems | 3 |
| <i>(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: SOC 101)</i> | |
| 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. | |
| <i>Distance Learning option available (see page 49).</i> | |
| SOC 212 – Juvenile Delinquency | 3 |
| <i>(Prerequisite: SOC 101)</i> | |
| Emphasizes theories of juvenile delinquency, child abuse, the juvenile justice system, probation, treatment and corrections for juveniles. | |
| SOC 213 – Deviant Behavior | 3 |
| <i>(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: SOC 101)</i> | |
| Examines theories of deviance and behaviors such as rape, murder, theft, drug use, alcoholism, prostitution, mental disorders and suicide. | |
| SOC 214 – Sociology of Corrections | 3 |
| <i>(Prerequisite: RDG 100 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. | |
| SOC 215 – Criminology | 3 |
| <i>(Prerequisite: SOC 101)</i> | |
| Examines causes of crime based on sociological factors, the various faces of crime, the criminal past and present and criminology theory. | |
| SOC 216 – Ethnic and Minority Groups | 3 |
| <i>(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: SOC 101)</i> | |
| Examines relationships among majority and minority and ethnic groups: prejudice, discrimination, stereotyping, pluralism and social mobility. | |
| SOC 225 – Sociology of Family | 3 |
| <i>(Prerequisite: RDG 100 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. | |
| SOC 230 – Society and Personality | 3 |
| <i>(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: SOC 101 or PSY 105)</i> | |
| Introduces topics in social psychology, such as personality theories, concepts of self, human relationships, small group dynamics and organizational theories. | |

| | |
|---|----------|
| SOC 235 – Sociology of Gender | 3 |
| <i>(Prerequisites: RDG 100 or Accuplacer Reading score of 80 or equivalent, recommended: SOC 101 or PSY 105)</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. | |
| SOC 280 – Social Science Research | 3 |
| <i>(Prerequisite: SOC 101)</i> | |
| Introduces decision making processes and tools involved in social science research, including surveys, field research, experiments and use of existing sources. | |
| SOC 296 – Topics in Sociology | 3 |
| <i>(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent)</i> | |
| Presents various topics. See Schedule of Classes . | |
| SPAN – Spanish Courses (Communication, Humanities & Social Sciences Division) | |
| SPAN 101 – Beginning Spanish I | 4 |
| <i>(Prerequisite: RDG 100 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 49).</i> | |
| SPAN 102 – Beginning Spanish II | 4 |
| <i>(Prerequisite: Span101 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. | |
| SPAN 103 – Beginning Spanish I Conversation | 3 |
| <i>(Pre- or corequisite: SPAN 102 or permission of instructor)</i> | |
| Introduces basic conversational skills and practice speaking Spanish. | |
| SPAN 111 – Heritage Spanish Language I | 4 |
| <i>(Prerequisite: RDG 100 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. | |
| SPAN 112 – Heritage Spanish Language II | 4 |
| <i>(Prerequisite: SPAN 101 or 111)</i> | |
| Continues skills acquisition begun in SPAN 111. Emphasizes reading and writing with extension of study of grammatical concepts. | |
| SPAN 201 – Intermediate Spanish I | 3 |
| <i>(Prerequisite: Span 102 or Spanish Placement score of 71 or higher)</i> | |
| Continues course of study begun in Spanish 101 and 102. Emphasizes expansion of conversational, reading and writing skills. Includes an online workbook and lab manual. | |
| SPAN 202 – Intermediate Spanish II | 3 |
| <i>(Prerequisite: Span 201 or Spanish placement score of 81 or higher)</i> | |
| Reviews grammar with an emphasis on writing skills. Provides conversational activities to increase fluency. | |
| SPAN 203 – Intermediate Spanish II Conversation | 3 |
| <i>(Pre- or corequisite: SPAN 202 or permission of instructor)</i> | |
| Emphasizes skills in speaking Spanish. | |

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**

- SPAN 275 – Accelerated Beginning Spanish** 4
(Prerequisite: RDG 100 or Accuplacer Reading score of 80 or equivalent, or permission of instructor)
Combines SPAN 101 and 102 in one term. Recommended for language enthusiasts or those who have had exposure to Spanish either in the home or from previous study.
- SPAN 276 – Accelerated Intermediate Spanish** 3
(Prerequisite: SPAN 102 or SPAN 275 or permission of instructor)
Combines SPAN 201 and 202 in one term. Recommended for language enthusiasts or those who have had exposure to Spanish either in the home or from previous study.
- SPAN 277 – The Art and Skill of Translation** 3
(Prerequisite: SPAN 202 or equivalent, or permission of instructor)
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.
- SPAN 280 – Introduction to Hispanic Literature** 3
(Prerequisite: SPAN 202 or SPAN 276 or permission of instructor)
Presents selected readings from literature written in Spanish by Spanish and Spanish-American authors.
- SPAN 296 – Topics in Spanish** 3
(Prerequisite: varies)
Presents various topics. See **Schedule of Classes**.

SPED – Special Education Courses (Communication, Humanities & Social Sciences Division)

- SPED 201 – Education of the Exceptional Person** 3
(Prerequisites: RDG 100 or Accuplacer Reading score of 69 or equivalent, ENG 100 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 100A of Accuplacer Elementary Algebra score of 76 or equivalent, Corequisite: SPED 204)
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 204 – Introduction to Special Education** 2
(Prerequisites: RDG 100 or Accuplacer Reading score of 69 or equivalent, ENG 100 or Accuplacer Sentence Skills score of 69 or equivalent and MATH 100A of Accuplacer Elementary Algebra score of 76 or equivalent, Corequisite: SPED 201)
Provides field experience and seminar in special education settings.
- SPED 250: Exceptionalities & Placement** 3
(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 thorough 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 256 – Evaluation/Individual Education Plan and Documentation in Special Education** 3
(Prerequisite: Acceptance into alternative licensure program and Pre- or corequisite: SPED 250)
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.

Course Subject Code/Course number – Course Name**Credit Hours**

- SPED 272 – Reading for Special Learners** 3
(Prerequisite: Acceptance into alternative licensure program and Pre- or corequisite: SPED 250)
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.

ST – Surgical Technology Courses (Health, Wellness & Public Safety Division)

- ST 110A – Beginning Surgical Technology I** 3
(Prerequisites: COMM 221, BIO 123/124L, 136/139L or 237/247L and 238/248L, HIT 110; Corequisites: HLTH 102, ST 111L)
Includes scope of practice, technologist role, medical ethics and medical terminology, basic principles of aseptic technique and anatomy and physiology applied to surgical procedures.
- ST 110B – Beginning Surgical Technology II** 3
(Prerequisites: HLTH 102, ST 110A, 111L; Corequisites: ST 113L, 115C)
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.
- ST 111L – Surgical Technology Lab I** 6
(Corequisites: HLTH 102, ST 110A)
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. *Program fee: \$118*
- ST 113L – Surgical Technology Lab II** 2
(Prerequisites: HLTH 102, ST 110A, 111L; Corequisites: ST 110B, 115C)
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.
- ST 115C – Surgical Technology Clinical I** 8
(Prerequisites: HLTH 102, ST 110A, 111L; Corequisites: ST 110B, 113L)
Applies surgical procedure theory and skills in the clinical setting. *Program fee: \$30*
- ST 121 – Surgical Technology III** 3
(Prerequisites: ST 110B, 113L, 115C; Corequisites: ST 124C, 125L)
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.
- ST 124C – Surgical Technology Clinical II** 8
(Prerequisite: program director approval; Corequisites: ST 121, 125L)
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.
- ST 125L – Surgical Technology Lab III** 2
(Corequisite: ST 121, 124C)
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. *Program fee \$30*
- ST 296 – Special Topics in Surgical Technology** 1–6
Explore various topics of interest in the field of Surgical Technology.

SUR – Surveying Courses *(Applied Technologies Division)*

SUR 185 – Introduction to Photogrammetry **3**
(Prerequisite: CM 261L)
 Introduces the techniques and uses of photogrammetry in surveying and mapping. The geometry of stereo models.

SUR 192 – Public Lands Survey System Boundaries **3**
(Prerequisite: CM 261L)
 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 195 - Traffic Control & NSPS Survey Technician Certification prep **2**
(Pre- or corequisite: SUR 192)
 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 120 – Beginning Acting **3**
(Recommended: THEA 122)
 Provides students with the fundamental physical, vocal and imaginative skills for acting and performing.

THEA 121 – Beginning Acting II **3**
(Pre-requisite: Beginning Acting 120 or permission of the instructor)
 Continuation of THEA 120 with emphasis on exploration of the text as the source for theatrical decisions and the effects of those decisions in performance.

THEA 122 – Introduction to Theatre **3**
(Recommended: ENG 101 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 222 – Acting for the Camera **3**
(Prerequisite: THEA 120-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 258 – Beginning Screenwriting: Short Form **3**
(Prerequisite: English 101. Recommended: THEA 122)
 Provides the critical ingredients of great dramatic writing that are then applied to a dramatic form manageable for the emerging screenwriter: the narrative short film.

THEA 296 – Topics in Theatre **3**
(Prerequisite: RDG 100 or equivalent)
 Presents various topics. See **Schedule of Classes**.

TRDR – Truck Driving Courses *(Applied Technologies Division)*

TRDR 101 – Basic Operational Theory **7**
(Prerequisites: MATH 097 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 49).

TRDR 102L – Basic Operational Lab **4**
(Prerequisites: TRDR 101, 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 103L – Advanced Operational Practices **3**
(Prerequisites: TRDR 101 and 102L)
 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.
(135 lab hours per term) Course fee: \$300

TRDR 171 – Material Handling **2**
 Presents basic forklift/hand truck operation and basic material handling along with forklift safety inspections and cost factors of improper handling.
(15 theory + 37.5 lab hours per term)

TRDR 296 – Special Topics **1–6**
 Presents in-depth study of problems and the advanced techniques that experts in the trucking industry use to solve them.

TRDR 297 – Special Problems **Variable**
(Prerequisite: division approval)
 Focuses on a specific problem while working with an instructor.

VICA – SkillsUSA/VICA Courses *(Applied Technologies Division)*

VICA 174 – Professional Development **1**
 Emphasizes development of goals and commitments, personal awareness, time management, organization and communication.

VICA 175 – Leadership **1**
 Reviews committee work including agenda setting, parliamentary procedures, team building; participation in community service projects and improvement of communication skills.

VICA 176 – Career Planning **1**
 Introduces career information, report writing, conducting interviews, employment skills, communication improvement and interaction with business and industry.

VICA 178 – Civic Responsibility **1**
 Covers various community services in planning and carrying out a community project.

VT – Veterinary Technology Courses *(Health, Wellness & Public Safety Division)*

VT 101A – Introduction to Veterinary Technology **2**
(Prerequisite: program director approval, BIO 121/121L or 123/124L, ENG 101, MATH 119 or 120 or 121; Corequisites: VT 102L, 103L, 104, 105, 107)
 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.

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 | Course Subject Code/Course number – Course Name | Credit Hours |
|---|---------------------|--|---------------------|
| VT 102L, Introduction to Veterinary Technology Lab, (Prerequisites: Eng 101, Math 119 or 120 or 121 ; Corequisites: , VT101A, 103L, 104,105, 107) Provides both on campus procedural laboratory time and field trips to various animal facilities, incorporating the theory from VT 101A into hands on experience. (45 lab hours per term) Program fee: \$90 | 1 | VT 110 – Non-Infectious and Infectious Diseases for Veterinary Technicians (Prerequisites: VT106L, 108L, 112L, 114L; Corequisites: VT 109L, 120C) 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 103L – Animal Comparative Anatomy & Physiology I (Prerequisites: BIO 123/124I; CHEM 111/112L or 121/121L, ENG 101, MATH 119 or 120 or 121; Corequisites: VT 101, 102L, 104, 105, 107) 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: \$15 | 3 | VT 112L – Surgical Technology for Veterinary Technicians (Prerequisites: VT 101A, 102L, 103L, 104, 105, 107; Corequisites: VT 106, 108L, 114L) 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) | 2 |
| VT 104, Applied Mathematics for Veterinary Technicians, (Prerequisites: Eng 101, Math 119 or 120 or 121, HWPS Basic Math test; Corequisites: VT 101A, 102L, 103L, 105, 107) 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. | 1 | VT 114L – Radiology for Veterinary Technicians (Prerequisites: VT 101A, 102L, 103L, 104, 105, 107; Corequisites: VT 106, 108L, 112L) 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: \$30 | 2 |
| VT 105 – Veterinary Office Skills (Prerequisites: ENG 101, MATH 119 or 120 or 121; Corequisites: VT 101A, 102L, 103L, 104, 107) 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. | 1 | VT 120C – Veterinary Technology Clinical I (Prerequisites: VT106L, 108L, 112L, 114L; Corequisites: VT 109L, 110) 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: \$30 | 4 |
| VT 106L – Animal Comparative Anatomy & Physiology II (Prerequisites: CHEM 111/112L or 121/121L, PSY 105, VT 101A, 102L, 103L, 104, 105, 107; Corequisites: VT 108L, 112L, 114L) 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) | 3 | VT 203L – Anesthesiology for Veterinary Technicians (Prerequisites: VT 109L, 110, 120C; Corequisites: VT 205L, 207L, 210C) 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 |
| VT107, Veterinary Medical Terminology, (Prerequisites: Eng 101, Math 119 or 120 or 121; Corequisites, VT101A, 102L 103L, 104, 105) 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. | 1 | VT 205L – Applied Therapeutics and Care for Veterinary Technicians I (Prerequisites: VT 109L, 110, 120C; Corequisites: VT 203L, 207L, 210C) 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 |
| VT 108L, Veterinary Office Skills Lab (Prerequisites: VT 101A, 102L, 103L, 104, 105, 107; Corequisites: VT 106, 112L, 114L) 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 on-line services, telephone skills and role-playing in client communication situations. (45 lab hours per term) | 1 | VT 207L – Clinical Pathology for Veterinary Technicians II (Prerequisites: VT 109L, 110, 120C; Corequisites: VT 203L, 205L, 210C) 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 |
| VT 109L – Clinical Pathology for Veterinary Technicians I (Prerequisites: VT 106L, 108L, 112L, 114L; Corequisites: VT 110, 120C) 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 210C – Veterinary Technology Clinical II (Prerequisites: VT 109L, 110, 120C; Corequisites: VT 203L, 205L, 207L) 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: \$30 | 4 |
| | | VT 213 – Pharmacology for Veterinary Technicians (Prerequisites: VT 203L, 205L, 207L, 210C; Corequisites: VT 215L, 217L, 219, 220C) 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 |

| Course Subject Code/Course number – Course Name | Credit Hours | Course Subject Code/Course number – Course Name | Credit Hours |
|---|--------------|---|--------------|
| VT 215L – Dentistry for Veterinary Technicians (Prerequisites: VT 203L, 205L, 207L, 210C; Corequisites: VT 213, 217L, 219, 220C) 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 | WELD 108 – Introduction to Metallurgy 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 217L – Applied Therapeutics and Care for Veterinary Technicians II (Prerequisites: VT 203L, 205L, 207L, 210C; Corequisites: VT 213, 215L, 219, 220C) 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 | WELD 112 – Welding Blueprint Reading II (Prerequisite: WELD 103 or division approval) 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 219 – Avian, Laboratory & Exotic Animal Therapeutics and Care (Prerequisites: VT 203L, 205L, 207L, 210C; Corequisites: VT 213, 215L, 217L, 220C) 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 and fluids of each species, principles of anesthesia for each species, radiography – positioning and technique and common diseases, problems and behavior among species. | 1 | WELD 113 – Welding Math II (Prerequisite: WELD 102 or division approval) Provides instruction in area, perimeter and volumes of common structural shapes and common layout techniques supported with mathematical applications. | 2 |
| VT 220C – Veterinary Technology Clinical III (Prerequisites: VT 203L, 205L, 207L, 210C; Corequisites: VT 213, 215L, 217L, 219) 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: \$30 | 5 | WELD 114L – Advanced SMAW (Pre- or corequisites: WELD 106L or division approval) 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 |
| VT 296 – Special Topics in Veterinary Technology (Prerequisite: program director approval) Explores various topics of interest in the field of veterinary technology. | 1–6 | WELD 115L – Introduction to GMAW and Fabrication Lab (Pre- or corequisite: WELD 106L or division approval) Covers gas metal arc welding (GMAW) safety techniques. Fabrication and repairs are assigned. Teamwork is stressed. (75 lab hours per term) | 2 |
| WELD – Welding Courses (Applied Technologies Division) | | | |
| WELD 102 – Welding Math I (Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval) Presents basic arithmetic, fractions and decimals, shop geometry, surface and direct measurements and the metric systems. | 2 | WELD 116L – Introduction to GTAW and Fabrication Lab (Prerequisite: WELD 106L or division approval) 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 103 – Welding Blueprint Reading I (Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent, RDG 099 or Accuplacer Reading score of 69 or equivalent, or division approval) Covers detail and fabrication drawing interpretation, welding symbols and terminology as applied to the welding industry. | 2 | WELD 117L – Qualifications for GMAW (Pre- or corequisites: WELD 114L, 115L and 206L or division approval) Provides simulated qualification procedures for gas metal arc welding (GMAW) welding in all positions. (75 lab hours per term) | 2 |
| WELD 104L – Oxyacetylene Welding and Cutting (Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval) 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 170 – Welding Skills 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 106L – Introduction to SMAW (Prerequisite: MATH 097 or Accuplacer Arithmetic score of 31 or equivalent or division approval) Covers topics in shielded metal-arc welding (SMAW) safety, basic fabrication and repair and customer relations. (75 lab hours per term) | 2 | WELD 171 – Advanced Welding Skills (Prerequisite: WELD 170 or division approval) 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 |
| WELD 107L – Introduction to SMAW Qualifications and Fabrication (Prerequisite: WELD 114L) 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 202 – Advanced Blueprint Reading (Prerequisite: MATT 113 or division approval) Covers pipe layout and development, structural print reading and design and layout considerations related to fabrication, material and cost estimating. | 2 |
| | | WELD 205L – Pipe Layout and Welding (Prerequisite: WELD 114L, 206L, or division approval) Introduces basic pipe welding and layout, materials testing and industrial safety, as well as welding problems. (75 lab hours per term) | 2 |
| | | WELD 206L – Advanced GMAW and Fabrication (Prerequisite: WELD 115L or division approval) Focuses on instruction in advanced carbon steel gas metal arc welding (GMAW), fabrication/repair, problem solving and teamwork. (75 lab hours per term) | 2 |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|---------------------|
| WELD 207L – Advanced GTAW and Fabrication <i>(Prerequisite: WELD 116L 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. <i>(75 lab hours per term)</i> | 2 |
| WELD 208L – Qualifications for GTAW <i>(Prerequisite: WELD 116L and 207L or division approval)</i> Covers simulated qualification procedures for gas tungsten arc welding (GTAW), in all positions. <i>(75 lab hours per term)</i> | 2 |
| WELD 209L – Project and Fabrication Lab <i>(Prerequisite: WELD 104L, 106L, 114L, 115L, 116L, 205L, 206L, 207L, MATH 97 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. <i>(75 lab hours per term)</i> | 2 |
| WELD 295 – Welding Capstone Course <i>(Prerequisite: division approval)</i> Preparation of a professional portfolio that demonstrates student’s mastery of technical and core competencies. <i>(Taken during student’s last term).</i> | 1 |
| WELD 296 – Special Topics <i>(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 297 – Special Problems <i>(Prerequisite: division approval)</i> Focuses on a specific problem while working with an instructor. | Variable |

| Course Subject Code/Course number – Course Name | Credit Hours |
|--|---------------------|
|--|---------------------|

Codes and Policies

| Topic | Page |
|---|------|
| Student Code of Conduct..... | 358 |
| Academic Dishonesty Policy..... | 363 |
| Information Technology Use Policy | 364 |
| Substance Abuse Policy | 366 |
| Sexual Harassment..... | 367 |
| Military Duty..... | 367 |
| Admission Policy and Procedures | 368 |
| Rules Governing Classrooms and Labs..... | 368 |

Codes and Policies

Student Code of Conduct

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 catalog, policies are published in some division handbooks, especially in the Health, Wellness and Public Safety Division, and in course syllabi. The most current version of the Code of Conduct and other policies can be found at CNM's website.

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 College. 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 Executive 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 Section IV.C, 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 363 of this 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 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 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 – The Dean of Students 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. Associate Vice President for Student Services – The Associate Vice President for Student Services will hear any appeals from decisions of the Dean of Students 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.

5. 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.

Falsehoods/Identification Violations

1. Forgery, counterfeiting, alterations or misuse of any CNM record, document or identification card.

Codes and Policies

1. 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.
2. Making a false report concerning a fire, bomb or other emergency.
3. 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.
4. 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/posted 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:
 - a. Oral or written notice of the charges against the student, and
 - b. 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.
 - c. As a result of the investigation and conference with the student, any of the following actions may be taken:
 - i. The charges may be dismissed as unfounded or for lack of evidence;
 - ii. The student may admit responsibility for violating the Code of Conduct and a sanction will be imposed; or
 - iii. 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;
 - (a) The student may call his/her own witnesses and present relevant information or documentation;
 - (b) 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:
 - i. The charges may be dismissed as unfounded;
 - ii. The student may admit responsibility for violating the Code of Conduct and appropriate sanctions may be imposed; or
 - iii. 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 Associate 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:
 - i. Procedural or prejudicial error was committed. The specific errors alleged must be stated;
 - ii. The facts upon which the decision was based included inaccurate information. The inaccurate information appealed from must be stated;
 - iii. 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);
 - iv. 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;
 - v. The sanction imposed is excessive or inappropriate. The reason for believing this must be stated.
2. Decision on Appeal:
 - a. Upon review of the appeal, the Associate Vice President of Student Services, or his/her designee, may take any of the following actions:
 - i. Deny the appeal request.

Codes and Policies

- ii. 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 Associate 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.
- b. 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.
- c. 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 and/or whose probation has been indefinitely noted on the transcript may petition to have the probation lifted and/or the notation removed from the transcript. 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. A notation of a suspension will be made on the student’s transcript. The notation may be removed in the same manner as stated in V. A. 1., Disciplinary Probation, following the expiration date 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 of 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. A permanent notation of expulsion will be placed on the student’s transcript.

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 Vice President for Student Services.

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 Section 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 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 Section 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 of 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.

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 358 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)

Codes and Policies

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 email) 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 361 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 www.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 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 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 www.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 www.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 364).

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 www.cnm.edu.

Glossary, Index and Maps

| Topic | Page |
|---------------|------|
| Glossary..... | 370 |
| Index | 372 |
| Maps..... | 378 |



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, ART, ASTR, BIO, CHEM, COMM, CST, ECON, ENG, FREN, GEOG, GNHN, HIST, HUM, JOUR, MATH, MUS, NUTR, PHIL, PHYS, PSCI, PSY, RLG, 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 101, 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.

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% of the time is in the classroom and 50% 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 1 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 radio stations.

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 33.

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 (keyboard).

Index

A

| | |
|---|-------------------------------|
| A+ certification | 137 |
| academic calendar | 8 |
| academic dishonesty policy | 363 |
| academic divisions | 38, 46 |
| academic policies | 32 |
| academic renewal | 34 |
| academic standards | 34 |
| academic year | 8, 32 |
| access to student academic records | 35 |
| access, Microsoft Office Specialist (MOS) | 106 |
| Accessing CNM | 23 |
| accounting courses | 270 |
| accounting courses (subject code: ACCT) | 270 |
| accounting | 62 |
| accrediting Agencies (for Programs of Study) | 59 |
| Accuplacer | 11 |
| ACE (Assistance Centers for Education) | 26, 43 |
| achievement coaches | 24 |
| ACT scores | 24 |
| administration (for CNM) | 2 |
| administrative assistant courses (subject code: AA) | 270 |
| admission | 10 |
| adult education courses | 66 |
| Adult Education Learning Centers (AELC) | 26 |
| advanced manufacturing | 196 |
| advanced placement exams | 13 |
| advertising assistant | 88 |
| advisement and counseling | 24 |
| aerospace technology (also see courses under aviation) | 67 |
| aerospace studies courses (ROTC courses) (subject code: AFAS) | 273 |
| air conditioning, heating and refrigeration (ACHR) | 69, 200 |
| air conditioning, heating, & refrigeration courses (subject code: ACHR) | 271 |
| Air Force ROTC | 48 |
| airframe maintenance technician | 78 |
| alternative teacher licensure | 70 |
| Americans with Disabilities Act (ADA) Policy | 36 |
| Anderson Schools of Management, UNM (transferring from CNM) | 237 |
| animation | <i>see computer animation</i> |
| anthropology courses (subject code: ANTH) | 274 |
| Applied Technologies, Division of | 38 |
| applying to CNM | 10 |
| apprenticeships | 72 |
| architectural drafting courses (subject code: ARDR) | 274 |
| architectural/engineering drafting Technology | 73 |
| Army ROTC | 48 |
| art courses (subject code: ART) | 275 |
| articulated credit | 12 |
| arts and sciences | 32 |
| Assistance Centers for Education (ACE) | 26, 43 |
| assessment centers (testing) | 24 |
| associate degree(s) | 10, 54 |
| astronomy courses (subject code: ASTR) | 276 |

| | |
|--|---------|
| attendance | 32 |
| automotive service fundamentals | 257 |
| automotive technology | 75, 258 |
| automotive technology courses (subject code: AUTC) | 276 |
| aviation courses (subject code: AVIA) | 277 |
| aviation maintenance technician | 77 |
| aviation sheet metal assembler technician | 68 |
| aviationsystems installation technician | 68 |
| awards (financial) | 21 |

B

| | |
|--|---------|
| banking courses (See Financial Services, news subject code: FIN) | 319 |
| baking | 80 |
| baking courses (subject code: BKNG) | 285 |
| basic skills courses (subject code: BSK) (non-credit) | 66, 268 |
| bilingual education | 141 |
| biology courses (subject code: BIO) | 283 |
| biotechnology | 82 |
| biotechnology technician courses (subject code: BIOT) | 285 |
| bookkeeping | 84 |
| bookstores | 28 |
| building trades courses (subject code: BT) | 286 |
| business administration | 86 |
| business administration courses (subject code: BA) | 280 |
| business applications design | 104 |
| business graphics | 91 |
| business graphics courses (subject code: BGC) | 283 |
| Business & Information Technology, Division of | 39 |

C

| | |
|---|--------------------------------|
| cancellation of enrollment | 17 |
| calendar, academic (for 2004-05) | 8 |
| call center operations | 93 |
| campus life | 28 |
| career clusters | 58 |
| career resource rooms | 24 |
| carpentry | 94, 117 |
| carpentry courses (subject code: CARP) | 286 |
| catering course (subject code: CTRG) | 302 |
| Cisco Certified Network Associate (CCNA) prep | 211 |
| certificates | 10 |
| certified public accountant preparation | 64 |
| challenge exams | 13 |
| cheating | <i>see academic dishonesty</i> |
| chemistry courses (subject code: CHEM) | 288 |
| child care | 28 |
| child development associate | 95 |
| child, youth and family development | 95 |
| child, youth and family development courses (subject code: CDV) | 287 |
| choice of catalog | 30 |
| classroom rules | 368 |
| clinical laboratory assistant | 98 |
| clinical laboratory assistant courses (subject code: CLA) | 294 |

closed classes *see course overfills*
clubs (for students) *see student clubs/organizations*
club management 177
CNM Westside 382
CNM Workforce Training Center 48, 383
code of conduct 358
College and career-bound program 12
College Level Examination Program (CLEP) 13
college success experience courses 48
college success experience courses (subject code: CSE) 301
commercial carpentry apprenticeship course (subject code: CCAP) 287
commercial carpentry apprenticeship 72
Communication, Humanities & Social Sciences, Division of 42
communications courses (subject code: COMM) 295
community recreation 247
computer animation 111
complaints *see student complaint process*
computer-assisted drafting 74
computer information systems 99
computer information systems courses (subject code: CIS) 288
computer labs 25
computer languages
 C++ 299, 300
 Extensible Markup Language (XML) 290
 JAVA, JavaScript 299
 Oracle 298, 299
 UNIX 298
 Visual Basic 300
computer programming 112
computer science courses (subject code: CSCI) 301
computer software
 Access 289
 CAD (computer-aided design/drafting) 275
 desktop publishing 289
 digital publishing 283
 Excel 289
 Fireworks 292
 FrontPage 290
 HTML 289
 Illustrator 292
 Lightwave 3D 273
 Maya 273
 Office 288
 Photoshop 292
 PowerPoint 289
 Premiere 292
 QuarkXPress 291
 Visio 291
 Windows 289
 Word 288
computer technology courses (subject code: CP) 297
computing technology 110
concurrent enrollment 12
construction estimator 114

construction management technology 113
construction management technology courses (subject code: CM) 294
construction scheduler 114
construction technology 115
continuous enrollment 30
core competencies 5
corequisites 17
cosmetology 118
cosmetology courses (subject code: COS) 296
course load 18
course numbering 32
course overfills 18
course descriptions 269
course repetition limit 18
course substitutions and waivers 14
court reporting 120
court reporting courses (subject code: CR) 300
credit 12
credit course descriptions 270
credit for life experience *see prior learning*
criminal justice 122
criminal justice courses (subject code: CJ) 293
culinary arts 124
cultural studies courses (subject code: CST) 302

D

database management 105
dean of students 36, 358
dean's list 34
degrees 10
dental assisting 126
dental assistant courses (subject code: DA) 303
design drafting engineering technology *see engineering design drafting*
designed skill sets *see skill sets*
developmental education 128
diagnostic medical sonography 129
diagnostic medical sonography courses (subject code: DMS) 305
diesel equipment technology 131, 259
diesel equipment technology courses (subject code: DETC) 304
digital media 100
digital publishing 92
disabilities, services for people with 25
distance learning 49
drop-in program 12
dropping a course 18
dual credit 12

E

early childhood multicultural education 96
early childhood multicultural education courses (subject code: ECME) 307
e-commerce 132
e-commerce courses (subject code: ECM) 305
economics courses (subject code: ECON) 308

Index

| | |
|--|----------|
| Educational & Career Advancement, Division of | 43 |
| Educational Options..... | 47 |
| electrical construction technology | 115 |
| electrical trades | 72, 134 |
| electrical trades courses (subject code: is ELTR) | 313 |
| electrical trades apprenticeship course (subject code: ETAP) | 319 |
| electrical trades apprenticeship..... | 72 |
| electronics courses (subject code: ELEC) | 311 |
| electronics engineering technology..... | 134 |
| electronics engineering technology courses (subject code: EET) | 311 |
| electronics technology | 137 |
| elementary education courses (subject codes: ELEM, EDUC) | 309, 312 |
| elementary education | 140 |
| e-mail/web accounts..... | 28 |
| emergency medical services..... | 144 |
| emergency medical technician courses (subject code: EMS) | 314 |
| Emeritus Academy | 48 |
| Engineering (subject code: ENGR) | 317 |
| engineering design technology | 149 |
| engineering design technology courses (subject code: EDT) | 308 |
| English as a second language (ESL)..... | 66 |
| English as a second language courses (subject code: ESL) (non-credit)..... | 268 |
| English courses (subject code: ENG) | 315 |
| enrolled agent preparation | 64 |
| enrollment options | 10 |
| enrollment status | 10 |
| entrepreneurship..... | 89 |
| entrepreneurship courses (subject code: ENTR) | 317 |
| environmental safety and health | 151 |
| environmental safety and health compliance | 152 |
| environmental safety and health courses (subject code: EPT) | 317 |
| equal opportunity policy | 36 |
| ESL (English as a second language)..... | 66, 319 |
| examination credit..... | 13 |
| Excel, Microsoft Office Specialist (MOS)..... | 106 |
| experiential education | 48 |

F

| | |
|--|-------------------------------|
| faculty/staff listing | <i>see academic divisions</i> |
| FAFSA (Free Application for Federal Student Loan)..... | 21 |
| family studies | 97 |
| fees | 20 |
| FERPA | 35 |
| film crew technician | 153 |
| financial aid authorization form..... | 22 |
| financial services | 155 |
| financial services courses (subject code: FIN)..... | 319 |
| fire science | 160 |
| fire science courses (subject code: FS) | 322 |
| fitness courses (subject code: FITT) | 320 |
| fitness technician | 162 |
| food and beverage management..... | 176 |
| food service management | 164 |

| | |
|--|-----|
| food service management courses (subject code: FSMG) | 323 |
| food services (on campus) | 28 |
| framing | 117 |
| French courses (subject code: FREN) | 321 |

G

| | |
|--|-----|
| gaming operations and casino management | 176 |
| GED exam..... | 24 |
| general admission requirements | 10 |
| general business | 89 |
| general construction | 117 |
| general electronics | 138 |
| general education courses (subject code: GNED) | 324 |
| general honors program | 42 |
| general honors courses (subject code: GNHN) | 324 |
| general studies..... | 166 |
| general trades apprenticeship | 72 |
| general trades apprenticeship course (subject code: GTAP) | 324 |
| geographic information technology | 168 |
| geographic information systems courses (subject code: GIS) | 323 |
| geography courses (subject code: GEOG) | 323 |
| Geomatics technology..... | 170 |
| Getting Started | 9 |
| glossary | 370 |
| Governing Board for CNM..... | 2 |
| grades | 32 |
| grade appeals..... | 33 |
| grade options | 33 |
| grade point average | 33 |
| graduate job placement | 6 |
| graduation | 30 |
| grants (for students, financial aid)..... | 21 |

H

| | |
|---|--|
| healthcare/health center for students..... | 28 |
| health courses (subject code: HLTH) | 326 |
| health information technology | 172 |
| health information technology courses (subject code: HIT) | 325 |
| health insurance | 28 |
| Health, Wellness & Public Safety, Division of | 45 |
| health unit coordinator | 174 |
| health unit coordinator courses (subject code: HUC) | 328 |
| high school-aged student enrollment programs | 12 |
| history courses (subject code: HIST) | 324 |
| home page | www.cnm.edu |
| honor roll..... | 34 |
| honor society | <i>see Phi Theta Kappa</i> |
| honors classes..... | <i>see general honors program</i> |
| hospitality and tourism..... | 175 |
| hospitality and tourism courses (subject code: HT) | 326 |
| hospitality operations and hotel management..... | 176 |
| housing | 28 |
| human resources | 178 |

human assistant 89
 humanities courses (subject code: HUM) 328

I
 ID cards 28
 incomplete grade assignment and removal 33
 individualized plan 51
 information security 105
 information technology (IT) academy 179
 information technology (IT) careers 179
 information technology use policy (ITUP) 364
 instructional departments 37
 integrated studies 180
 international business 182
 international business courses (subject code: IB) 328
 international business fundamentals 184
 international e-commerce 184
 international entrepreneurship/finance 185
 introductory courses (developmental courses) 128
 iron worker apprenticeship 72
 iron worker apprenticeship course (subject code: IWAP) 329
 IRS enrolled agent prep 64

J
 job/life skills courses (subject code: JLS) (non-credit) 268
 Joseph M. Montoya Campus *see Montoya Campus*
 journalism courses (subject code: JOUR) 329
 judicial studies 186
 judicial studies courses (subject code: JUD) 330
 judicial studies fundamentals 187

K
 keyboarding courses 338
 KeyTrain™ 49

L
 landscaping 188
 landscaping courses (subject code: LAND) 330
 leadership development (career) 90
 leadership development program (for students) 29
 learning communities 46
 legal, office administration 219
 legal assistant studies *see paralegal studies*
 liberal arts 190
 libraries 25
 licensed practical nurse refresher 193
 licensed practical nurse refresher courses (subject code: LPNR) 330
 literacy volunteers 27
 loans 21

M
 machine tool technology 194, 209

machine tool technology courses (subject code: MATT) 332
 Main Campus map 379
 management 87
 manicure/pedicure 119
 manufacturing technology 195
 manufacturing technology courses (subject code: MT) 335
 maps 378
 marketing and sales 178
 Math Learning Centers (MLC) 26
 mathematics courses (subject code: MATH) 331
 Math, Science & Engineering, Division of 46
 MCSA 106
 MCSE 106
 mechanical technology 199
 medical coding 202
 medical laboratory technician 204
 medical lab technician courses (subject code: MLT) 333
 medical office assistant 206
 MEMS designer 197
 MEMS technician 198
 metals technology 208
 micro-electro-mechanical systems courses (subject code: MEMS) 333
 Microsoft Certified Systems Administrator (MCSA) 106
 Microsoft Certified Systems Engineer (MCSE) 106
 Microsoft Office Specialist (MOS) certification prep for
 Access, Excel, PowerPoint and Word 106
 Microsoft software support 107
 military duty 367
 military science and leadership courses (subject code: MSL) 334
 mission, vision, values for CNM 4
 Montoya Campus 380
 multimedia development 107
 music courses (subject code: MUS) 335

N
 natural science courses (subject code: NS) 336
 naval science studies courses (subject code: NAVS) 336
 Navy ROTC 48
 networking technology 211
 New Mexico Highlands University (transferring from CNM) 237
 New Mexico residents 19
 new student orientation 11
 non-credit courses descriptions 268
 non-residents 19
 non-traditional credit 13
 nursing 213
 nursing assistant 217
 nursing assistant courses (subject code: NA) 336
 nursing courses (subject code: NURS) 337
 nursing home/home health attendant 218
 nursing home/home health attendant courses (subject code: NAHA) 337
 nutrition courses (subject code: NUTR) 338

Index

O

| | |
|---|----------|
| office administration (see administrative assistant for courses)..... | 219 |
| office assistant..... | 222 |
| office technology..... | 221, 224 |
| Open Computer Lab (OCL)..... | 26 |
| orientation..... | 11 |
| overfills..... | 18 |
| overview of student codes and policies..... | 36 |

P

| | |
|--|--------------------------------|
| paralegal studies..... | 228 |
| paralegal studies courses (subject code: PL)..... | 341 |
| paramedic..... | 145 |
| parking..... | 29 |
| payroll clerk..... | 65 |
| pedicure..... | 119 |
| perioperative nursing..... | 230 |
| perioperative nursing courses (subject code: PRNS)..... | 344 |
| permission to enroll..... | 18 |
| pharmacy technician..... | 231 |
| pharmacy technician courses (subject code: PT)..... | 345 |
| Phi Theta Kappa..... | 28 |
| philosophy courses (subject code: PHIL)..... | 339 |
| phlebotomy..... | 233 |
| phlebotomy courses (subject code: PHLB)..... | 340 |
| photonics technology..... | 234 |
| photonics courses (subject code: PHOT)..... | 340 |
| physics courses (subject code: PHYS)..... | 341 |
| placement tests..... | 13 |
| plagiarism..... | <i>see academic dishonesty</i> |
| plumbing..... | 201, 236 |
| plumbing courses (subject code: PLMB)..... | 343 |
| plumbing apprenticeship..... | 72 |
| plumbing apprenticeship course (subject code: PLAP)..... | 343 |
| political science courses (subject code: PSCI)..... | 344 |
| portfolio course..... | 48 |
| Powerplant maintenance technician..... | 79 |
| PowerPoint, Microsoft Office Specialist (MOS)..... | 106 |
| practical nursing (also see licensed practical nurse refresher)..... | 216 |
| practical nursing courses (subject code: PN)..... | 344 |
| pre-management..... | 237 |
| pre-professional writing..... | 192 |
| prerequisites and corequisites..... | 17 |
| prior learning assessment..... | 48 |
| process control..... | 139 |
| process control courses (subject code: PC)..... | 339 |
| professional cooking..... | 239 |
| professional cooking courses (subject code: QUFD)..... | 346 |
| professional pilot and flight instruction..... | 67 |
| program placement requirements..... | 11 |
| programs of study (listings)..... | 54 |
| project management technology..... | 241 |

| | |
|--|-----|
| project management courses (subject code: PM)..... | 344 |
| psychology courses (subject code: PSY)..... | 345 |
| public universities and colleges (New Mexico)..... | 15 |

Q

| | |
|--------------------------------|---------------------------------|
| quantity food preparation..... | <i>see professional cooking</i> |
|--------------------------------|---------------------------------|

R

| | |
|---|----------|
| radiologic technology..... | 243 |
| radiologic technology courses (subject code: RADT)..... | 346 |
| reading courses (subject code: RDG)..... | 347 |
| real estate..... | 245 |
| real estate courses..... | 282 |
| records, academic..... | 35 |
| recreation and leisure..... | 247 |
| recreation and leisure core competencies..... | 247 |
| recreation and leisure courses (subject code: RL)..... | 347 |
| Red Hat Certified Technician (RHCT)..... | 108 |
| registered nurse refresher..... | 249 |
| registered nurse refresher courses (subject code: RNR)..... | 349 |
| registration..... | 16 |
| religion courses (subject code: RLGN)..... | 349 |
| repayment of federal funds..... | 22 |
| repeat course processing..... | 33 |
| residency information..... | 19 |
| residential drafting..... | 74 |
| residential superintendent..... | 114 |
| residential wiring..... | 116, 250 |
| respiratory therapy..... | 251 |
| respiratory therapy courses (subject code: RT)..... | 349 |
| retail/wholesale management..... | 90 |
| rooms division..... | 178 |
| ROTC programs..... | 46 |
| rules governing classrooms and labs..... | 368 |

S

| | |
|---|--|
| sales associate..... | 90 |
| SAT..... | 24 |
| Schedule of Classes..... | 2 |
| scholarships and other aid..... | 22 |
| security..... | 29 |
| semiconductor manufacturing technology..... | 195 |
| semiconductor manufacturing technology courses (subject code: SMT)..... | 350 |
| senior discount..... | 20 |
| sexual harassment policy..... | 367 |
| sheet metal apprenticeship..... | 72 |
| sheet metal apprenticeship course (subject code: SMAP)..... | 350 |
| SkillsUSA/VICA courses (subject code: VICA)..... | 353 |
| skill sets..... | 10 |
| sociology courses (subject code: SOC)..... | 351 |
| sonography..... | <i>see diagnostic medical sonography</i> |

South Valley Campus 387
 Spanish courses (subject code: SPAN) 351
 special education courses (subject code: SPED) 352
 special education 143
 special services..... 25
 sportscraft/small engine courses (subject code: SCSE) 350
 stenotranscription 121
 step-ups/step-backs 18
 student academic records 35
 student activities..... 29
 Student Alliance 29
 student clubs and organizations 29
 student codes and policies, overview 36
 student codes and policies..... 358
 student complaint process 36
 student government 29
 student health center 28
 student job placement 6
 student resources and support 24
 student support services (TRIO program)..... 26
 substance abuse policy 366
 substitution 14
 supplemental instruction program (SIP) 27
 surgical technology 253
 surgical technology courses (subject code: ST) 352

T

tax preparer for individuals 65
 technical competencies 5
 technology management and training 255
 technology use policy 364
 testing *see assessment center*
 textbooks *see bookstores*
 theatre courses (subject code: THEA) 353
 transfer among New Mexico higher education institutions 14
 transfer credit 12
 transportation technology..... 257
 transportation 29
 tres manos child development center 28
 TRIO program 26
 truck driving 260
 truck driving courses (subject code: TRDR) 353
 tuition and fees 20
 Tutorial/Learning Centers (T/LC) 26
 tutoring services 26

U

ultrasound..... *see diagnostic medical sonography*
 University of New Mexico, Anderson School of Management
 (transferring from CNM)..... 237

V

veterinary technology..... 262

veterinary technology (subject code: VT)..... 353
 VICA (Skills USA) courses 353
 voter registration 29

W

waivers 14
 water and wasterwater operator 152
 web graphics Specialist 108
 web technology 264
 website development 109
 welding 210, 266
 welding courses (subject code: WELD) 355
 Westside campus *see CNM Westside*
 withdrawing 18
 word processing 227
 Word, Microsoft Office Specialist (MOS) 106
 WorkKeys@ 49
 work experience *see prior learning*
 work study 21
 verification of completion *see skill set*
 Workforce Training Center *see CNM Workforce Training Center*
 Writing and Reading Assistance Centers (WRAC) 26

X

x-ray technology *see radiologic technology*

GETTING
STARTED

ACCESSING
CNM

EDUCATIONAL
OPTIONS

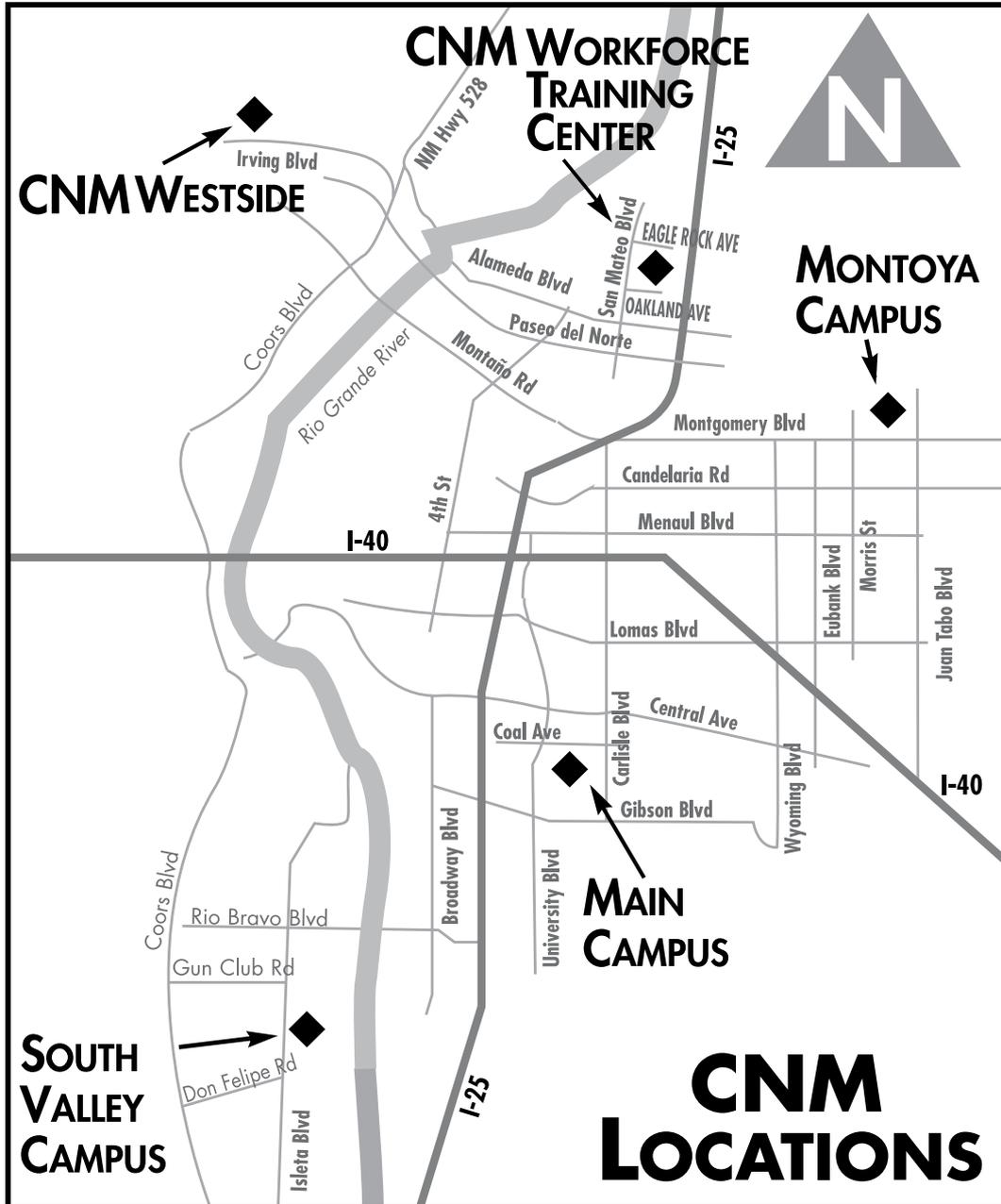
PROGRAMS
OF STUDY

COURSE
DESCRIPTIONS

CODES AND
POLICIES

GLOSSARY,
INDEX, MAPS

Maps



Main Campus

525 Buena Vista SE
Albuquerque, NM 87106-4096
(505) 224-3160

Joseph M. Montoya Campus

4700 Morris NE
Albuquerque, NM 87111-3704
(505) 224-5551

South Valley Campus

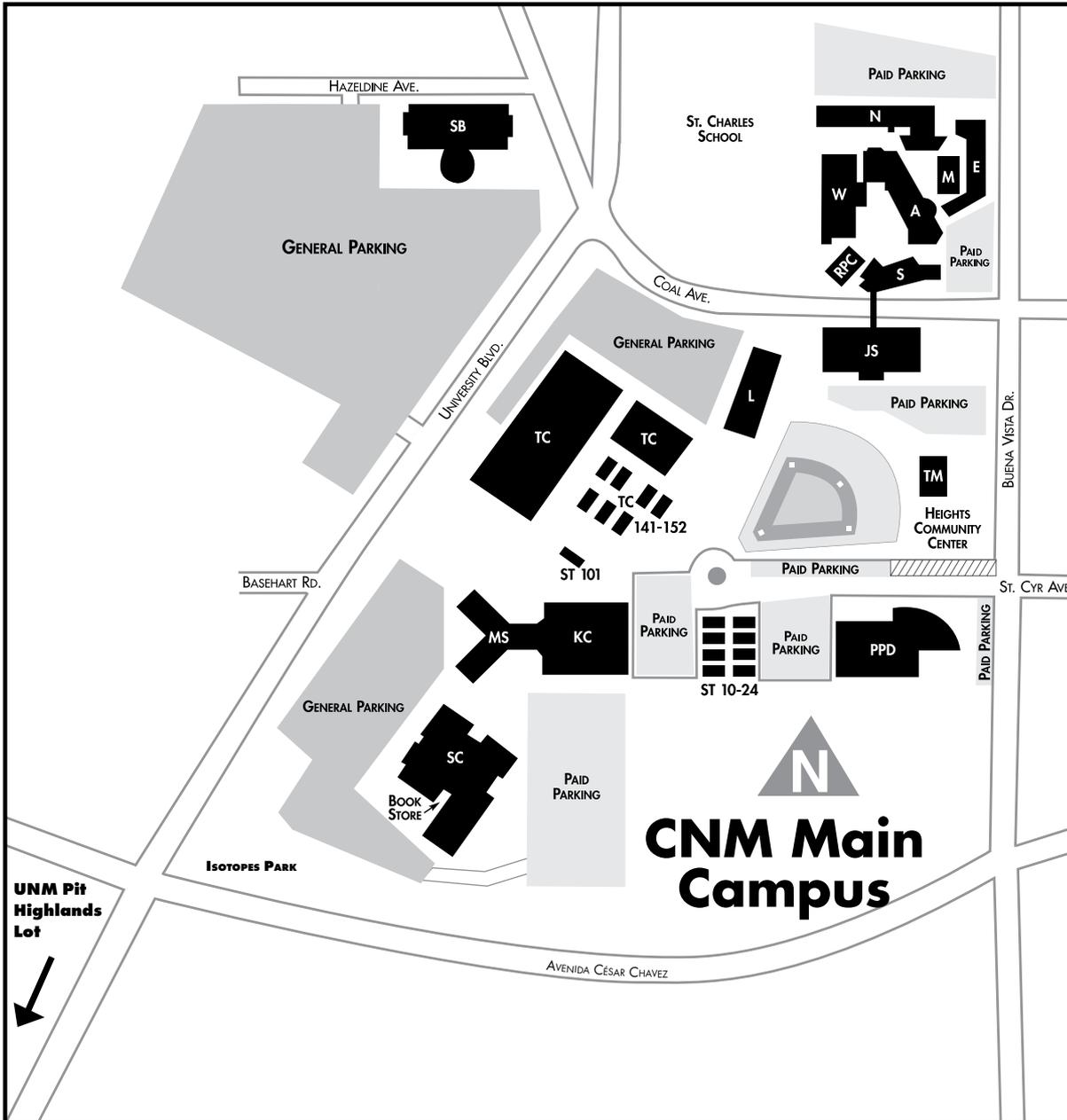
5816 Isleta SW
Albuquerque, NM 87105
(505) 224-5000

CNM Westside

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

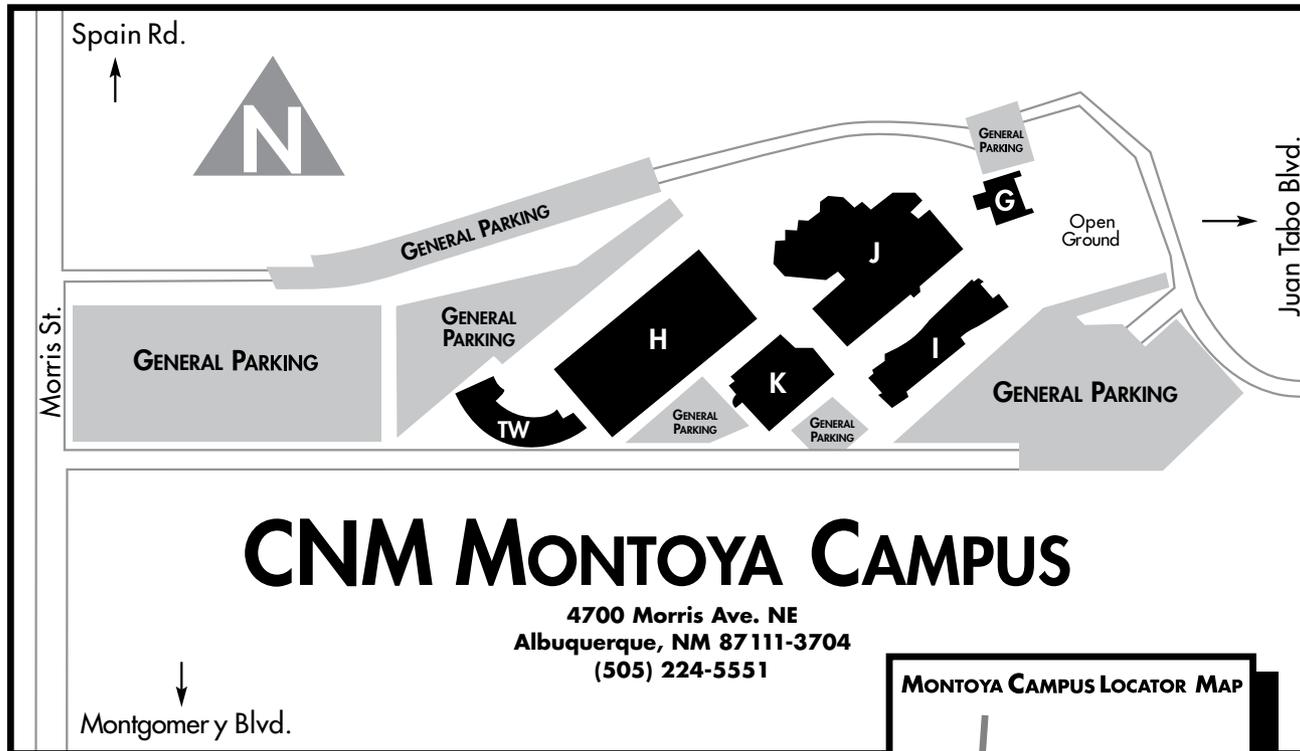
EDUCATIONAL OPTIONS

PROGRAMS OF STUDY

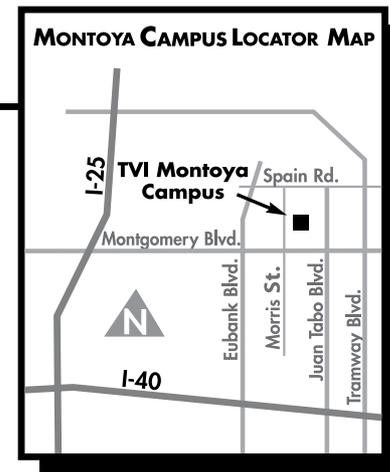
COURSE DESCRIPTIONS

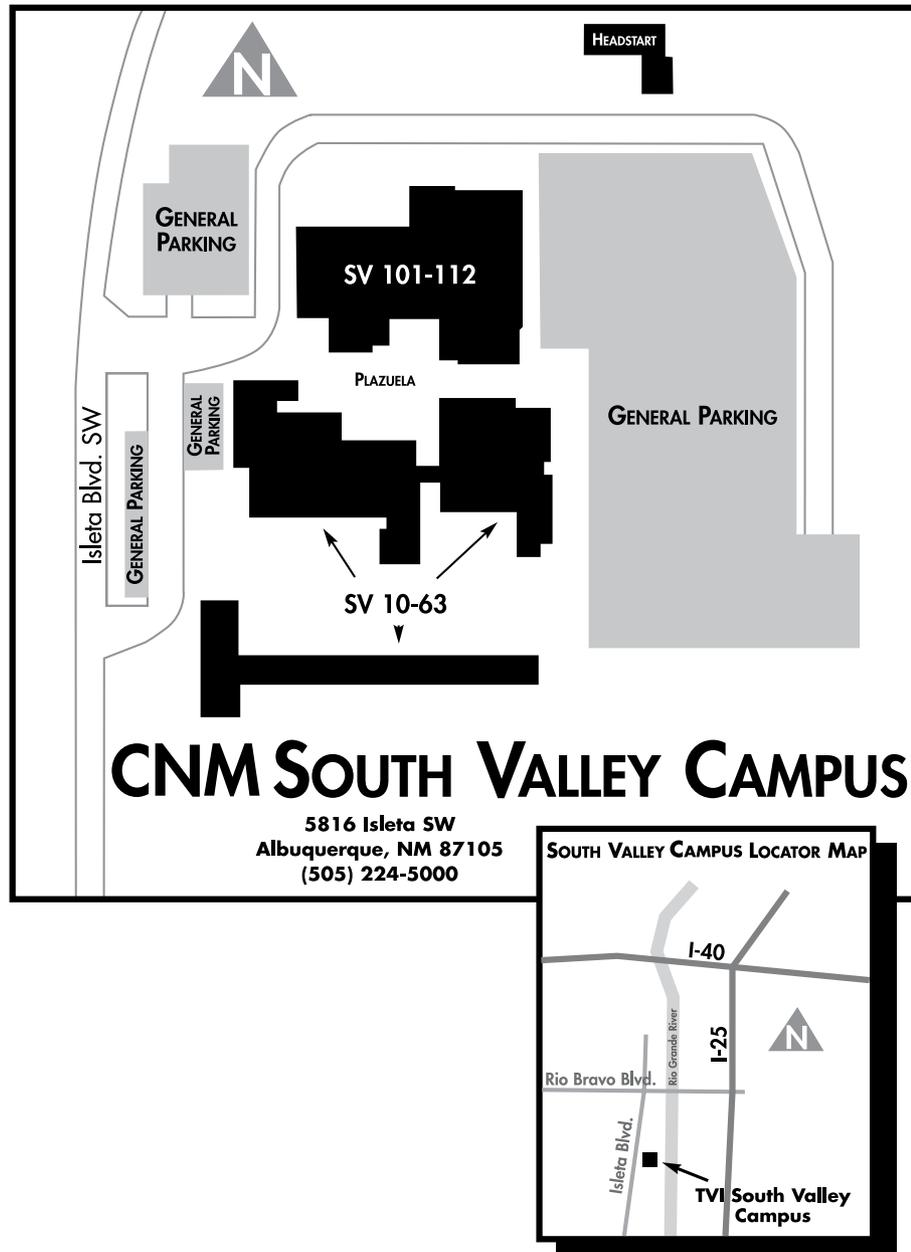
CODES AND POLICIES

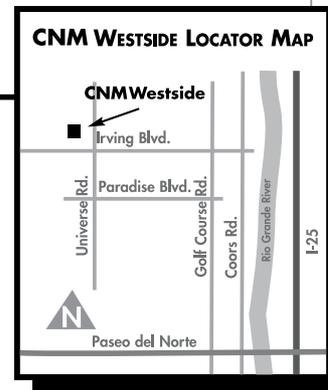
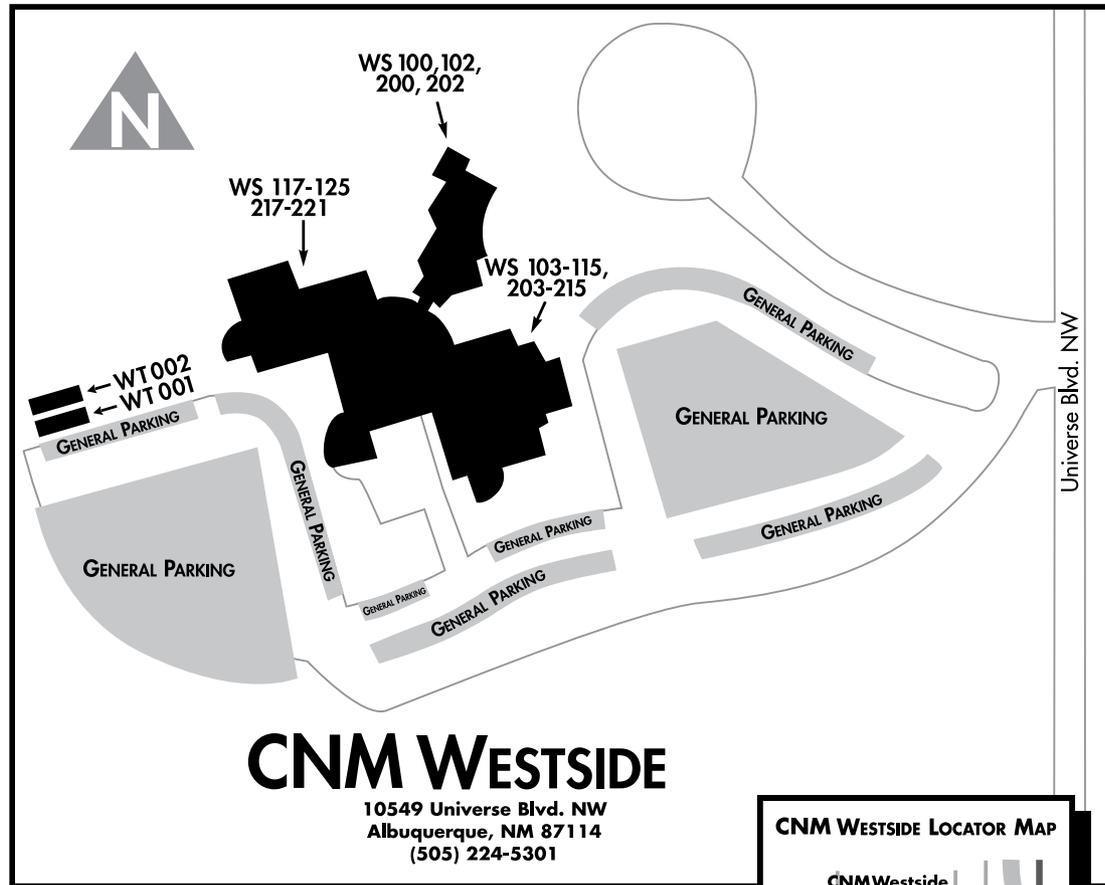
GLOSSARY, INDEX, MAPS



- G:** G Building (Maintenance)
- H:** H Building
- I:** I Building
- J:** J Building
- K:** K Building
- TW:** Tom Wiley Hall









Thanks

CNM would like to thank the staff and faculty for their work on the CNM catalog. Specifically:

The catalog task team:

Jeremy Agor, Jane Campbell, Rosemary Chavez, Monique Chenoweth, Holly DeWees, Kris Ford, Sydney Gunthorpe, Jackie Lamourex, Cristina Macias, Lidia Muñiz, Arlene Odenwald, Samantha Ortiz Schriver, Angela Padilla, Sally Pearson, Linda Pope, Paul Quan, Julia Romero and DeAnn Sena O'Connor

The following individuals:

Annette Chavez y De La Cruz, Audrey Gramstad and Sionna Phillips

Coordination, layout, design and production:

Jeremy Agor, DeAnn Sena O'Connor

Cover design and production:

Rick Johnson and Company

Photography:

Jim Thompson